

Detailed Project Report

Pimpri-Chinchwad Continuous (24/7) Pressurized Water Supply Project

Volume II: Design of Distribution System Results



Project
Client

Pimpri-Chinchwad 24/7 Pressurized Water Supply Project
Pimpri-Chinchwad Municipal Corporation

Project
Consultant

Administrative Staff College of India,
Bela Vista, Raj Bhavan Road, Hyderabad- 500082

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Volume II

Design of Distribution Pipe Network

Results of Operational Zones

1. Zone A2

Table A2(a): Pipe results

Label	Start Node	Stop Node	Material	Hazen-Williams C	Diameter (mm)	Length (m)	Flow (ML/day)	Velocity (m/s)	Pipe type (new/existing)
P-1260	J-420	J-415	DI	140	400	208	20.02	1.84	New
P-930	DJ-980	DJ-769	DI	140	400	19	19.97	1.84	New
P-3351	DJ-284	DJ-2531	DI	140	200	34	4.919	1.81	New
P-1242	DJ-2400	J-415	DI	140	400	27	19.42	1.79	New
P-2289	J-769	PNJ-145	DI	140	500	46	29.52	1.74	New
DP-8012	DJ-2531	DJ-284	CI	100	300	33	10.47	1.71	E
P-3354	DJ-5969	DJ-8382	HDPE	145	99.3	28	1.143	1.71	New
PNP-946	J-315	PNJ-145	MS	140	400	201	17.99	1.66	E
P-1261	PNJ-144	J-420	DI	140	450	452	22.36	1.63	New
P-932	J-311	DJ-2531	CI	100	300	3	9.852	1.61	E
P-929	DJ-2400	DJ-980	DI	140	450	32	21.69	1.58	New
DP-7090	DJ-445	DJ-1519	CI	100	450	399	21.69	1.58	E
P-3352	DJ-8382	DJ-8383	DI	140	100	51	1.039	1.53	New
P-935	J-312	J-311	CI	100	300	7	9.101	1.49	E
P-2290	DJ-1519	J-770	CI	100	450	5	20.2	1.47	E
P-942	DJ-1483	DJ-5969	HDPE	145	144.4	7	2.075	1.47	New
P-1152	DJ-547	J-368	DI	140	450	6	19.98	1.45	New
P-2328	DJ-769	J-784	DI	140	350	925	11.97	1.44	New
DP-8289	DJ-547	DJ-445	CI	100	450	26	19.68	1.43	E
PNP-948	J-316	J-315	MS	140	400	161	15.48	1.43	E
P-3350	J-783	DJ-5686	DI	140	100	11	0.962	1.42	New
DP-1428	DJ-8313	DJ-8312	CI	100	100	51	0.947	1.4	E
P-934	DJ-4033	J-312	CI	100	300	108	8.495	1.39	E
PNP-947	PNJ-144	J-316	MS	140	400	197	14.93	1.37	E
P-3349	PNJ-145	PNJ-144	DI	140	350	560	11.42	1.37	New
DP-6959	DJ-1919	DJ-1348	CI	100	150	55	2.063	1.35	E
DP-	DJ-234	DJ-2867	CI	100	100	151	0.899	1.32	E

6844									
DP-7656	DJ-1527	DJ-4033	CI	100	300	332	8.086	1.32	E
DP-6338	DJ-5686	DJ-5721	CI	100	80	71	0.572	1.32	E
P-1245	DJ-769	J-416	CI	100	300	402	7.969	1.3	E
DP-3202	DJ-1376	DJ-2531	CI	100	250	145	5.526	1.3	E
DP-7824	DJ-8383	DJ-2623	CI	100	100	90	0.874	1.29	E
P-3137	DJ-1527	J-1262	CI	100	200	21	3.423	1.26	E
P-3138	J-1262	DJ-9283	CI	100	200	19	3.423	1.26	E
DP-3759	DJ-1919	DJ-8040	CI	100	200	87	3.361	1.24	E
P-2287	437	J-769	DI	140	600	14	29.77	1.22	New
DP-8859	DJ-9283	DJ-4995	CI	100	200	53	3.23	1.19	E
DP-9249	DJ-5969	DJ-8382	CI	100	100	28	0.795	1.17	E
P-2307	DJ-1905	J-776	CI	100	150	5	1.784	1.17	E
DP-8063	DJ-3163	DJ-519	CI	100	100	36	0.792	1.17	E
P-2331	J-785	J-782	CI	100	300	7	7.041	1.15	E
DP-3407	DJ-5687	DJ-5686	CI	100	100	106	0.776	1.14	E
DP-395	DJ-5836	DJ-1214	CI	100	100	167	0.771	1.14	E
DP-7823	DJ-3321	DJ-8383	CI	100	100	207	0.767	1.13	E
DP-2563	DJ-1813	DJ-2129	CI	100	100	186	0.767	1.13	E
P-2291	J-770	DJ-284	CI	100	450	106	15.51	1.13	E
DP-4748	DJ-5441	DJ-2623	CI	100	100	90	0.762	1.12	E
DP-1387	DJ-8383	DJ-8382	CI	100	100	49	0.761	1.12	E
DP-1168	DJ-6199	DJ-3530	CI	100	100	78	0.76	1.12	E
DP-3531	DJ-519	DJ-981	CI	100	100	357	0.747	1.1	E
DP-6960	DJ-1348	DJ-4060	CI	100	150	154	1.656	1.08	E
DP-6364	DJ-2130	DJ-1510	CI	100	100	89	0.736	1.08	E
P-2294	J-770	J-771	HDPE	145	252.9	270	4.64	1.07	New
DP-5201	DJ-2868	DJ-2867	CI	100	100	186	0.724	1.07	E
P-927	438	DJ-6994	DI	140	600	21	25.97	1.06	New
DP-5477	DJ-4226	DJ-4225	CI	100	100	205	0.71	1.05	E
DP-8860	DJ-4995	DJ-4926	CI	100	200	22	2.829	1.04	E
DP-9452	DJ-1482	DJ-2756	CI	100	100	639	0.697	1.03	E
DP-6648	DJ-2742	DJ-2741	CI	100	100	337	0.694	1.02	E

DP-8899	DJ-5722	DJ-6815	CI	100	100	5	0.681	1	E
DP-10215	DJ-2741	DJ-1376	CI	100	150	58	1.532	1	E
DP-9455	DJ-2342	DJ-155	CI	100	200	40	2.72	1	E
DP-10296	DJ-1584	DJ-6363	CI	100	100	74	0.672	0.99	E
DP-8667	DJ-4926	DJ-5737	CI	100	200	47	2.629	0.97	E
DP-7287	DJ-7063	DJ-4627	CI	100	100	65	0.657	0.97	E
DP-5643	DJ-2569	DJ-2568	CI	100	100	216	0.655	0.97	E
DP-6225	DJ-5689	DJ-1905	CI	100	150	19	1.467	0.96	E
P-2326	J-783	DJ-5686	CI	100	80	9	0.414	0.95	E
DP-3160	DJ-6284	DJ-6283	CI	100	100	98	0.641	0.95	E
P-2329	J-784	J-779	DI	140	350	677	7.833	0.94	New
DP-10661	DJ-4822	DJ-2053	CI	100	150	180	1.413	0.93	E
DP-3200	DJ-8040	DJ-1376	CI	100	250	74	3.917	0.92	E
DP-1610	DJ-324	DJ-6496	CI	100	250	251	3.901	0.92	E
DP-8242	DJ-1519	DJ-2938	CI	100	150	73	1.382	0.91	E
DP-7288	DJ-4627	DJ-9110	CI	100	100	109	0.612	0.9	E
DP-9806	DJ-5737	DJ-5084	CI	100	200	2	2.391	0.88	E
DP-3247	DJ-3162	DJ-1137	CI	100	80	214	0.382	0.88	E
P-2312	DJ-7021	J-778	CI	100	100	28	0.593	0.87	E
DP-5793	DJ-2401	DJ-2400	CI	100	200	224	2.373	0.87	E
DP-9591	DJ-6496	DJ-2401	CI	100	250	100	3.675	0.87	E
P-2324	J-782	DJ-5764	CI	100	300	13	5.292	0.87	E
DP-3378	DJ-5729	DJ-5728	CI	100	100	107	0.587	0.87	E
DP-10244	DJ-2756	DJ-8046	CI	100	100	50	0.576	0.85	E
DP-9619	DJ-5764	DJ-5729	CI	100	300	141	5.124	0.84	E
P-1237	J-412	J-413	HDPE	145	144.4	136	1.182	0.84	New
DP-9414	DJ-5718	DJ-1570	CI	100	150	13	1.266	0.83	E
P-2305	J-771	J-775	HDPE	145	252.9	7	3.597	0.83	New
P-3141	DJ-6994	PRV-5	DI	140	600	16	20.07	0.82	New
P-3142	PRV-5	DJ-6611	DI	140	600	11	20.07	0.82	New
DP-2574	DJ-6612	DJ-6611	CI	100	600	81	20.03	0.82	E
P-1151	J-368	DJ-6612	CI	100	600	208	20.02	0.82	E

P-1227	J-408	DJ-518	CI	100	100	75	0.556	0.82	E
DP-9807	DJ-5084	DJ-4760	CI	100	200	43	2.198	0.81	E
P-1235	DJ-7961	J-412	CI	100	250	109	3.416	0.81	E
P-2325	DJ-545	J-783	CI	100	80	179	0.349	0.8	E
P-1233	J-411	J-401	HDPE	145	203.1	34	2.232	0.8	New
DP-6996	DJ-1511	DJ-544	CI	100	80	251	0.343	0.79	E
DP-5971	DJ-4060	DJ-4059	CI	100	100	240	0.533	0.79	E
DP-7632	DJ-1817	DJ-2624	CI	100	100	56	0.531	0.78	E
DP-4640	DJ-1137	DJ-617	CI	100	200	246	2.124	0.78	E
P-2320	J-779	J-781	HDPE	145	320.7	330	5.445	0.78	New
DP-10354	DJ-5728	DJ-8313	CI	100	100	72	0.526	0.78	E
DP-7741	DJ-1143	DJ-6354	CI	100	200	238	2.105	0.78	E
DP-3244	DJ-1510	DJ-3162	CI	100	80	128	0.333	0.77	E
DP-4387	DJ-1143	DJ-3095	CI	100	200	175	2.07	0.76	E
DP-2533	DJ-9439	DJ-911	CI	100	100	9	0.516	0.76	E
DP-9415	DJ-1570	DJ-5689	CI	100	150	52	1.158	0.76	E
DP-4995	DJ-7063	DJ-7981	CI	100	100	56	0.512	0.76	E
DP-10662	DJ-2053	DJ-1429	CI	100	150	109	1.12	0.73	E
DP-879	DJ-7021	DJ-4000	CI	100	100	364	0.496	0.73	E
DP-179	DJ-5070	DJ-736	CI	100	150	36	1.11	0.73	E
DP-7655	DJ-1558	DJ-1527	CI	100	300	173	4.43	0.73	E
DP-6067	DJ-7957	DJ-2061	CI	100	200	240	1.964	0.72	E
DP-10355	DJ-8313	DJ-545	CI	100	100	5	0.49	0.72	E
DP-8073	DJ-1817	DJ-4691	CI	100	150	60	1.1	0.72	E
DP-799	DJ-2624	DJ-3321	CI	100	100	40	0.485	0.72	E
DP-6767	DJ-4060	DJ-3581	CI	100	150	7	1.09	0.71	E
DP-9620	DJ-5729	DJ-6284	CI	100	300	77	4.349	0.71	E
DP-10521	DJ-4760	DJ-5156	CI	100	200	5	1.921	0.71	E
DP-8898	DJ-5687	DJ-5722	CI	100	100	68	0.48	0.71	E
DP-1404	DJ-2130	DJ-4226	CI	100	100	70	0.478	0.7	E
DP-9370	DJ-4051	DJ-6103	CI	100	100	7	0.474	0.7	E
DP-	DJ-8040	DJ-8039	CI	100	100	56	0.458	0.67	E

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P-2298	J-772	J-773	CI	100	150	15	1.014	0.66	E
P-1252	J-315	J-418	HDPE	145	203.1	18	1.859	0.66	New
DP-10297	DJ-6363	DJ-6371	CI	100	100	22	0.448	0.66	E
DP-1746	DJ-7868	DJ-7867	CI	100	100	59	0.443	0.65	E
P-1216	J-400	J-401	HDPE	145	203.1	368	1.828	0.65	New
DP-3523	DJ-9110	DJ-4311	CI	100	100	29	0.441	0.65	E
DP-10364	DJ-4037	DJ-5069	CI	100	200	52	1.76	0.65	E
P-1253	J-418	J-411	HDPE	145	203.1	37	1.813	0.65	New
DP-4996	DJ-7981	J-313	CI	100	100	20	0.436	0.64	E
P-1238	J-413	J-414	HDPE	145	144.4	85	0.905	0.64	New
P-1256	J-416	J-419	CI	100	300	115	3.908	0.64	E
P-945	PNJ-144	DJ-324	HDPE	145	300	45	3.907	0.64	New
DP-3363	DJ-2755	DJ-3530	CI	100	100	70	0.434	0.64	E
DP-10522	DJ-5156	DJ-5371	CI	100	200	42	1.723	0.63	E
DP-9928	DJ-1429	DJ-5718	CI	100	150	79	0.963	0.63	E
DP-3713	DJ-4701	DJ-8600	CI	100	100	93	0.426	0.63	E
DP-3308	DJ-7064	DJ-9985	CI	100	175	11	1.298	0.62	E
P-2309	J-775	J-776	HDPE	145	252.9	311	2.706	0.62	New
DP-8243	DJ-2938	DJ-3293	CI	100	150	2	0.944	0.62	E
DP-855	DJ-9110	DJ-9109	GI	100	50	35	0.104	0.62	E
P-1221	J-404	DJ-980	CI	100	200	77	1.668	0.61	E
DP-2534	DJ-911	DJ-2053	CI	100	100	244	0.417	0.61	E
DP-8848	DJ-281	DJ-279	CI	100	100	3	0.417	0.61	E
DP-5596	DJ-2866	DJ-2041	CI	100	100	91	0.414	0.61	E
P-1153	DJ-234	J-369	CI	100	100	566	0.413	0.61	E
DP-8929	DJ-5717	DJ-1584	CI	100	100	203	0.406	0.6	E
DP-9279	DJ-1585	DJ-1584	CI	100	100	296	0.406	0.6	E
DP-3865	DJ-8039	DJ-8582	CI	100	100	1	0.406	0.6	E
P-1267	DJ-5562	J-423	CI	100	200	74	1.615	0.59	E
DP-6768	DJ-3581	DJ-6199	CI	100	150	104	0.898	0.59	E
DP-8051	DJ-1813	DJ-1351	CI	100	200	84	1.597	0.59	E
DP-6363	DJ-331	DJ-2130	CI	100	100	99	0.399	0.59	E
P-1241	J-414	DJ-518	HDPE	145	144.4	122	0.83	0.59	New
DP-	DJ-9985	DJ-9684	CI	100	175	65	1.219	0.59	E

8281									
DP-7560	DJ-7477	DJ-7058	CI	100	100	38	0.398	0.59	E
P-2308	J-776	DJ-5698	CI	100	150	42	0.886	0.58	E
DP-8278	DJ-8700	DJ-2352	CI	100	100	131	0.392	0.58	E
DP-8282	DJ-9684	DJ-7063	CI	100	175	5	1.19	0.57	E
DP-3158	DJ-6284	DJ-155	CI	100	300	321	3.475	0.57	E
P-1220	J-402	J-404	CI	100	200	52	1.533	0.56	E
DP-7340	DJ-5562	DJ-5774	CI	100	200	26	1.521	0.56	E
DP-1674	DJ-7958	DJ-7957	CI	100	200	57	1.52	0.56	E
P-1194	DJ-4779	J-391	CI	100	100	47	0.376	0.55	E
DP-8008	DJ-2568	DJ-1137	CI	100	200	75	1.493	0.55	E
DP-5939	DJ-7153	DJ-2044	CI	100	100	15	0.373	0.55	E
DP-8928	DJ-5688	DJ-5717	CI	100	100	66	0.365	0.54	E
DP-4686	DJ-4313	DJ-3958	CI	100	100	51	0.364	0.54	E
DP-4389	DJ-3095	DJ-4196	CI	100	200	374	1.441	0.53	E
DP-869	DJ-4691	DJ-2434	CI	100	150	58	0.81	0.53	E
P-933	DJ-5184	J-311	HDPE	145	144.4	26	0.749	0.53	New
DP-10322	DJ-2434	DJ-3959	CI	100	100	121	0.359	0.53	E
DP-9824	DJ-5371	DJ-5845	CI	100	200	3	1.429	0.53	E
DP-5132	DJ-2938	DJ-5630	CI	100	100	63	0.355	0.52	E
DP-7388	DJ-6320	DJ-7057	CI	100	100	38	0.351	0.52	E
DP-10214	DJ-5312	DJ-2741	CI	100	150	11	0.789	0.52	E
P-1171	DJ-6345	J-379	CI	100	100	23	0.349	0.51	E
P-1224	J-406	J-402	CI	100	200	36	1.387	0.51	E
DP-4655	DJ-4329	DJ-3802	CI	100	250	158	2.156	0.51	E
P-940	DJ-2784	J-313	CI	100	100	68	0.345	0.51	E
P-1211	J-394	J-398	CI	100	100	35	0.342	0.5	E
DP-8039	DJ-4328	J-314	CI	100	400	16	5.452	0.5	E
DP-906	DJ-2784	DJ-6207	CI	100	100	47	0.339	0.5	E
P-2313	J-778	DJ-9082	CI	100	100	13	0.338	0.5	E
P-2321	J-781	DJ-6354	HDPE	145	320.7	341	3.462	0.5	New
DP-2577	DJ-7958	DJ-7064	CI	100	200	82	1.332	0.49	E
DP-6515	DJ-3293	DJ-6224	CI	100	150	60	0.749	0.49	E
P-2332	J-784	J-785	DI	140	350	10	4.074	0.49	New
DP-	DJ-9093	DJ-4196	CI	100	200	108	1.33	0.49	E

4085									
P-2330	J-419	J-785	CI	100	300	402	2.984	0.49	E
DP-5580	DJ-4086	DJ-4085	CI	100	100	212	0.331	0.49	E
P-1236	J-412	DJ-1215	CI	100	250	126	2.07	0.49	E
DP-7822	DJ-6371	DJ-6005	CI	100	100	66	0.33	0.49	E
DP-10567	DJ-1215	DJ-3765	CI	100	100	189	0.328	0.48	E
DP-7559	DJ-2044	DJ-7477	CI	100	100	51	0.327	0.48	E
DP-1969	DJ-445	DJ-3802	CI	100	250	19	2.042	0.48	E
DP-8072	DJ-3686	DJ-1817	CI	100	150	154	0.727	0.48	E
P-2300	DJ-1569	J-773	HDPE	145	99.3	4	0.318	0.48	New
DP-9371	DJ-6103	DJ-7853	CI	100	100	81	0.322	0.48	E
DP-3899	DJ-4995	DJ-4994	CI	100	100	125	0.319	0.47	E
P-1223	DJ-7904	J-406	CI	100	200	33	1.273	0.47	E
DP-986	DJ-8948	DJ-8947	CI	100	100	38	0.318	0.47	E
DP-6526	DJ-1483	DJ-1482	CI	100	150	314	0.712	0.47	E
DP-2242	DJ-1511	DJ-331	CI	100	100	106	0.317	0.47	E
DP-5175	DJ-4001	DJ-4000	CI	100	100	185	0.311	0.46	E
P-1228	J-408	J-409	HDPE	145	99.3	91	0.305	0.46	New
DP-8819	DJ-5845	DJ-7404	CI	100	200	44	1.228	0.45	E
P-2299	J-773	DJ-7058	CI	100	150	23	0.69	0.45	E
DP-2439	DJ-6815	DJ-6814	CI	100	100	78	0.306	0.45	E
DP-6610	DJ-1727	DJ-1919	CI	100	200	2	1.222	0.45	E
DP-6765	DJ-6815	DJ-331	CI	100	100	73	0.304	0.45	E
DP-4935	DJ-4928	DJ-4927	CI	100	100	171	0.303	0.45	E
DP-1170	DJ-3530	DJ-6198	CI	100	100	53	0.302	0.45	E
DP-181	DJ-736	DJ-5069	CI	100	150	88	0.676	0.44	E
P-1157	J-370	DJ-1569	CI	100	100	69	0.299	0.44	E
DP-3128	DJ-5312	DJ-6571	CI	100	100	36	0.298	0.44	E
P-1198	J-391	J-393	CI	100	100	67	0.296	0.44	E
DP-8250	DJ-1429	DJ-6345	CI	100	100	133	0.295	0.43	E
DP-8613	DJ-1905	DJ-7178	CI	100	100	83	0.293	0.43	E
P-1158	DJ-6319	J-371	CI	100	100	60	0.292	0.43	E
DP-6574	DJ-1348	DJ-4313	CI	100	100	87	0.292	0.43	E
P-1172	J-379	DJ-6319	CI	100	100	66	0.292	0.43	E

DP-9756	DJ-1558	DJ-2474	CI	100	100	154	0.289	0.43	E
DP-9089	DJ-1428	DJ-2937	CI	100	150	89	0.649	0.43	E
P-3348	DJ-6354	J-1354	DI	140	100	30	0.288	0.42	New
DP-10163	DJ-7152	DJ-7371	CI	100	100	43	0.288	0.42	E
P-1247	DJ-617	J-416	HDPE	145	284.5	14	2.327	0.42	New
DP-8206	DJ-1687	DJ-5441	CI	100	100	82	0.287	0.42	E
DP-8207	DJ-5441	DJ-1816	CI	100	100	45	0.284	0.42	E
P-1265	J-422	DJ-736	CI	100	150	398	0.63	0.41	E
DP-3772	DJ-5184	DJ-9440	CI	100	150	120	0.63	0.41	E
DP-1540	DJ-227	DJ-3094	CI	100	100	616	0.28	0.41	E
P-2292	DJ-2937	J-771	CI	100	150	69	0.629	0.41	E
DP-7867	DJ-8948	DJ-4051	CI	100	100	21	0.278	0.41	E
P-936	DJ-234	J-312	HDPE	145	144.4	13	0.575	0.41	New
P-2304	DJ-280	DJ-1585	HDPE	145	144.4	5	0.568	0.4	New
DP-5323	DJ-7473	DJ-7868	CI	100	100	34	0.271	0.4	E
DP-4832	DJ-6684	DJ-7473	CI	100	150	166	0.61	0.4	E
DP-8682	DJ-281	DJ-4822	CI	100	150	118	0.606	0.4	E
DP-8050	DJ-4225	DJ-1813	CI	100	200	184	1.077	0.4	E
DP-2275	DJ-7058	DJ-7057	CI	100	100	74	0.267	0.39	E
DP-1495	DJ-8600	DJ-8813	CI	100	100	42	0.267	0.39	E
DP-3386	DJ-5722	DJ-5721	CI	100	100	102	0.266	0.39	E
P-1229	J-315	J-410	CI	100	150	49	0.598	0.39	E
DP-8853	DJ-5698	DJ-280	CI	100	150	58	0.586	0.38	E
DP-1786	DJ-8679	DJ-6684	CI	100	100	60	0.261	0.38	E
DP-7300	DJ-7371	DJ-6320	CI	100	100	23	0.26	0.38	E
DP-4084	DJ-4197	DJ-9093	CI	100	200	99	1.027	0.38	E
P-2311	J-777	DJ-1558	CI	100	400	161	4.054	0.37	E
DP-8336	DJ-4086	DJ-7904	CI	100	200	157	1.01	0.37	E
P-937	DJ-7403	DJ-4701	HDPE	145	144.4	3	0.525	0.37	New
DP-8064	DJ-519	DJ-2569	CI	100	100	52	0.252	0.37	E
DP-10162	DJ-6344	DJ-7152	CI	100	100	22	0.25	0.37	E
DP-2565	DJ-2129	DJ-1812	CI	100	100	73	0.247	0.36	E

DP-8335	DJ-981	DJ-4086	CI	100	200	168	0.984	0.36	E
DP-645	DJ-9440	DJ-9439	CI	100	150	27	0.551	0.36	E
DP-6608	DJ-3686	DJ-1727	CI	100	200	55	0.978	0.36	E
DP-2849	DJ-4329	DJ-4328	CI	100	300	89	2.189	0.36	E
DP-3633	DJ-5371	DJ-5370	CI	100	100	116	0.241	0.36	E
DP-4186	DJ-7404	DJ-4928	CI	100	200	19	0.961	0.35	E
DP-5048	DJ-4037	DJ-4036	CI	100	150	177	0.54	0.35	E
DP-3409	DJ-5689	DJ-5688	CI	100	100	108	0.24	0.35	E
DP-9723	DJ-1215	DJ-323	CI	100	250	93	1.495	0.35	E
DP-6901	DJ-1617	DJ-1616	CI	100	150	392	0.536	0.35	E
DP-457	DJ-6684	DJ-2868	CI	100	200	63	0.945	0.35	E
P-2314	J-777	J-778	HDPE	145	203.1	166	0.968	0.35	New
DP-6995	DJ-5721	DJ-1511	CI	100	80	78	0.149	0.34	E
DP-5325	DJ-7868	DJ-7472	CI	100	100	32	0.232	0.34	E
DP-9335	DJ-5697	DJ-5688	CI	100	100	63	0.231	0.34	E
P-1178	J-380	J-381	HDPE	145	99.3	70	0.227	0.34	New
P-2318	J-779	J-423	HDPE	145	320.7	16	2.341	0.34	New
DP-10365	DJ-5069	DJ-1617	CI	100	200	78	0.901	0.33	E
DP-9410	DJ-6224	DJ-3118	CI	100	150	52	0.502	0.33	E
DP-1240	DJ-8582	DJ-8581	CI	100	100	45	0.221	0.33	E
DP-4080	DJ-4761	DJ-4760	CI	100	100	132	0.22	0.32	E
P-1258	J-419	DJ-544	HDPE	145	203.1	16	0.902	0.32	New
DP-10702	DJ-3764	DJ-2730	CI	100	100	17	0.219	0.32	E
DP-6530	DJ-6177	DJ-4059	CI	100	100	41	0.218	0.32	E
DP-3178	DJ-6005	DJ-6004	CI	100	100	100	0.214	0.32	E
P-2322	J-781	DJ-4037	HDPE	145	284.5	22	1.722	0.31	New
DP-3400	DJ-5698	DJ-5697	CI	100	100	108	0.211	0.31	E
DP-1165	DJ-8700	DJ-8699	CI	100	100	42	0.21	0.31	E
P-1212	J-398	DJ-4051	CI	100	100	59	0.207	0.31	E
DP-873	DJ-9082	DJ-9081	CI	100	100	36	0.207	0.3	E
DP-3390	DJ-5718	DJ-5717	CI	100	100	107	0.207	0.3	E
DP-8490	DJ-7472	DJ-2755	CI	100	100	80	0.206	0.3	E

P-1248	J-416	DJ-1351	HDPE	145	284.5	28	1.657	0.3	New
DP-8643	DJ-10136	DJ-5312	CI	100	150	99	0.46	0.3	E
P-2302	J-774	DJ-4328	CI	100	400	21	3.26	0.3	E
DP-5541	DJ-4123	DJ-4122	CI	100	100	210	0.201	0.3	E
DP-2611	DJ-6556	DJ-7404	CI	100	100	83	0.199	0.29	E
P-1209	J-397	J-394	CI	100	100	32	0.199	0.29	E
DP-6575	DJ-4313	DJ-2434	CI	100	100	184	0.198	0.29	E
DP-9592	DJ-2401	DJ-7961	CI	100	250	17	1.231	0.29	E
DP-4828	DJ-3095	DJ-3094	CI	100	150	166	0.442	0.29	E
DP-9538	DJ-545	DJ-5687	CI	100	100	72	0.196	0.29	E
DP-1756	DJ-7853	DJ-7852	CI	100	100	59	0.196	0.29	E
DP-7633	DJ-2624	DJ-1687	CI	100	100	99	0.192	0.28	E
DP-9425	DJ-5774	DJ-4037	CI	100	200	246	0.764	0.28	E
P-1192	J-390	DJ-4779	CI	100	150	26	0.424	0.28	E
P-1205	J-394	J-395	HDPE	145	99.3	120	0.184	0.28	New
P-1159	J-371	DJ-1428	CI	100	100	28	0.184	0.27	E
DP-3986	J-316	DJ-4891	CI	100	150	126	0.414	0.27	E
DP-3927	DJ-2569	DJ-3162	CI	100	100	75	0.184	0.27	E
DP-6784	DJ-8947	DJ-4123	CI	100	100	32	0.182	0.27	E
P-2310	DJ-2061	J-777	CI	100	400	107	2.9	0.27	E
P-938	DJ-4311	DJ-4122	HDPE	145	144.4	91	0.377	0.27	New
DP-3370	DJ-5737	DJ-5736	CI	100	100	107	0.181	0.27	E
P-2303	DJ-1483	J-774	DI	140	400	4	2.888	0.27	New
DP-1541	DJ-3094	DJ-226	CI	100	100	130	0.18	0.27	E
P-1186	J-386	J-387	HDPE	145	99.3	35	0.177	0.26	New
DP-3340	DJ-6005	DJ-279	CI	100	100	234	0.175	0.26	E
P-1176	DJ-1570	J-381	CI	100	100	93	0.174	0.26	E
DP-2670	DJ-8699	DJ-2729	CI	100	100	96	0.174	0.26	E
P-1268	J-423	DJ-5561	CI	100	200	24	0.696	0.26	E
DP-3028	DJ-6224	DJ-6223	CI	100	100	96	0.174	0.26	E
DP-1123	DJ-1727	DJ-2761	CI	100	100	207	0.173	0.26	E
P-2293	J-771	J-390	CI	100	150	52	0.389	0.25	E
DP-8847	DJ-2867	DJ-281	CI	100	100	303	0.172	0.25	E
P-1164	J-370	J-373	HDPE	145	99.3	25	0.169	0.25	New
DP-	DJ-4059	DJ-2607	CI	100	100	92	0.169	0.25	E

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P-3140	PRV-4	J-314	MS	140	600	70	5.864	0.24	E
P-3139	DJ-6994	PRV-4	MS	140	600	10	5.863	0.24	E
DP-2210	DJ-7153	DJ-7152	CI	100	100	72	0.162	0.24	E
DP-2735	DJ-5065	DJ-3958	CI	100	100	53	0.161	0.24	E
DP-9697	DJ-2342	DJ-5728	CI	100	100	307	0.16	0.24	E
P-1183	J-385	J-386	HDPE	145	99.3	8	0.157	0.23	New
DP-4139	DJ-4691	DJ-4690	CI	100	100	135	0.158	0.23	E
DP-2937	DJ-6354	DJ-6353	CI	100	200	110	0.624	0.23	E
DP-8536	DJ-6198	DJ-3758	CI	100	100	30	0.156	0.23	E
DP-2947	DJ-6345	DJ-6344	CI	100	100	92	0.155	0.23	E
DP-3300	DJ-5845	DJ-5844	CI	100	100	104	0.154	0.23	E
DP-2541	DJ-1585	DJ-7291	CI	100	100	31	0.154	0.23	E
P-1162	J-372	DJ-1428	CI	100	150	54	0.345	0.23	E
DP-8007	DJ-618	DJ-2568	CI	100	200	86	0.611	0.23	E
P-1184	DJ-3118	J-387	CI	100	150	47	0.338	0.22	E
DP-6231	DJ-4993	DJ-10136	CI	100	150	102	0.338	0.22	E
P-1175	J-380	DJ-7153	CI	100	100	64	0.15	0.22	E
P-1173	DJ-7152	J-379	HDPE	145	99.3	93	0.146	0.22	New
P-1155	DJ-547	J-369	HDPE	145	144.4	6	0.307	0.22	New
DP-4188	DJ-4928	DJ-7403	CI	100	200	49	0.579	0.21	E
DP-3792	DJ-5156	DJ-5155	CI	100	100	121	0.143	0.21	E
P-2327	J-782	J-783	di	140	350	11	1.747	0.21	New
DP-6716	DJ-1108	DJ-2342	CI	100	300	327	1.278	0.21	E
DP-3845	DJ-5084	DJ-5083	CI	100	100	124	0.14	0.21	E
DP-2636	DJ-4033	DJ-4300	CI	100	150	53	0.315	0.21	E
DP-4145	DJ-4823	DJ-4822	CI	100	200	135	0.56	0.21	E
DP-8760	DJ-2288	DJ-8947	CI	100	100	164	0.14	0.21	E
DP-6884	DJ-871	DJ-5043	CI	100	150	385	0.314	0.21	E
P-1259	DJ-7961	J-420	DI	140	400	17	2.229	0.21	New
P-2306	J-775	J-772	HDPE	145	252.9	7	0.886	0.2	New
DP-1672	DJ-3293	DJ-6223	CI	100	100	336	0.138	0.2	E
P-2316	DJ-323	DJ-2041	HDPE	145	203.1	26	0.559	0.2	New
P-1199	J-393	DJ-4778	CI	100	100	18	0.134	0.2	E
DP-	DJ-2042	DJ-2866	CI	100	100	162	0.133	0.2	E

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P-1208	DJ-4052	J-397	CI	100	100	48	0.131	0.19	E
DP-2313	DJ-9809	DJ-7002	CI	100	100	74	0.127	0.19	E
DP-3868	DJ-8582	DJ-1687	CI	100	100	293	0.127	0.19	E
DP-2930	DJ-6363	DJ-6362	CI	100	100	92	0.127	0.19	E
P-1243	J-415	DJ-4085	HDPE	145	203.1	54	0.522	0.19	New
DP-2596	DJ-6572	DJ-6571	CI	100	100	82	0.126	0.19	E
P-1255	DJ-544	DJ-1813	HDPE	145	203.1	16	0.519	0.19	New
DP-1128	DJ-9283	DJ-9282	CI	100	100	42	0.125	0.18	E
DP-3091	DJ-6207	DJ-6206	CI	100	100	98	0.124	0.18	E
DP-1497	DJ-8813	DJ-8599	CI	100	100	11	0.124	0.18	E
DP-3963	DJ-4926	DJ-4925	CI	100	100	127	0.123	0.18	E
P-2315	DJ-4104	DJ-2352	HDPE	145	203.1	15	0.505	0.18	New
P-1210	J-396	J-397	HDPE	145	99.3	108	0.12	0.18	New
DP-1491	DJ-2865	DJ-3764	CI	100	150	24	0.275	0.18	E
P-1174	DJ-7178	J-380	CI	100	100	11	0.121	0.18	E
DP-908	DJ-6207	DJ-2783	CI	100	100	158	0.119	0.18	E
DP-6118	DJ-2866	DJ-2865	CI	100	100	244	0.119	0.18	E
DP-10323	DJ-3959	DJ-5064	CI	100	100	41	0.119	0.17	E
DP-6041	DJ-2353	DJ-5836	CI	100	100	135	0.119	0.17	E
P-1200	J-393	DJ-7370	HDPE	145	99.3	75	0.116	0.17	New
P-1154	J-369	DJ-5969	CI	100	100	186	0.117	0.17	E
DP-3110	DJ-6103	DJ-6102	CI	100	100	98	0.117	0.17	E
DP-3307	DJ-5836	DJ-5835	CI	100	100	104	0.116	0.17	E
DP-7067	DJ-2868	DJ-2742	CI	100	200	42	0.454	0.17	E
P-1232	J-410	J-411	HDPE	145	203.1	17	0.462	0.16	New
DP-2668	DJ-2730	DJ-8699	CI	100	100	96	0.111	0.16	E
P-1156	DJ-7057	J-370	CI	100	100	24	0.111	0.16	E
DP-3226	DJ-3118	DJ-3292	CI	100	100	112	0.11	0.16	E
DP-1073	DJ-8813	DJ-8812	CI	100	100	40	0.106	0.16	E
DP-9334	DJ-7291	DJ-5697	CI	100	100	124	0.106	0.16	E
DP-2197	DJ-7178	DJ-7177	CI	100	100	71	0.106	0.16	E
DP-7742	DJ-6354	DJ-383	CI	100	200	255	0.421	0.16	E
DP-	DJ-2608	DJ-2755	CI	100	100	134	0.105	0.15	E

5748									
DP-1730	DJ-1416	DJ-6637	CI	100	100	109	0.104	0.15	E
DP-1479	DJ-383	DJ-227	CI	100	200	53	0.416	0.15	E
DP-5133	DJ-5630	DJ-2937	CI	100	100	174	0.102	0.15	E
DP-9755	DJ-279	DJ-1558	CI	100	100	158	0.101	0.15	E
DP-8713	DJ-2608	DJ-6133	CI	100	100	41	0.101	0.15	E
P-1161	DJ-911	J-372	CI	100	150	58	0.222	0.15	E
DP-8489	DJ-7473	DJ-7472	CI	100	100	66	0.099	0.15	E
DP-10849	DJ-2042	DJ-4433	CI	100	100	92	0.096	0.14	E
DP-3130	DJ-6571	DJ-5311	CI	100	100	121	0.096	0.14	E
DP-4688	DJ-3958	DJ-4312	CI	100	100	161	0.096	0.14	E
DP-5747	DJ-2756	DJ-2608	CI	100	100	51	0.094	0.14	E
DP-1406	DJ-4226	DJ-2129	CI	100	100	177	0.093	0.14	E
P-1166	J-373	J-374	HDPE	145	99.3	23	0.091	0.14	New
DP-7247	DJ-6572	DJ-9809	CI	100	150	39	0.208	0.14	E
DP-6773	DJ-2474	DJ-190	CI	100	100	101	0.092	0.14	E
DP-1489	DJ-3765	DJ-2865	CI	100	150	121	0.207	0.14	E
DP-5084	DJ-9082	DJ-7020	CI	100	100	33	0.091	0.13	E
P-1219	J-402	J-403	HDPE	145	99.3	67	0.09	0.13	New
DP-6157	DJ-7511	DJ-3223	CI	100	100	261	0.089	0.13	E
DP-9696	DJ-332	DJ-2342	CI	100	100	19	0.087	0.13	E
P-1250	J-417	DJ-5561	CI	100	200	16	0.344	0.13	E
DP-3096	DJ-6133	DJ-6132	CI	100	100	98	0.086	0.13	E
P-1182	J-384	J-385	HDPE	145	99.3	22	0.085	0.13	New
DP-3441	DJ-5630	DJ-5629	CI	100	100	109	0.086	0.13	E
DP-3348	DJ-5765	DJ-5764	CI	100	100	97	0.084	0.12	E
DP-5742	DJ-7031	DJ-6951	CI	100	150	2	0.187	0.12	E
DP-7200	DJ-6223	DJ-7436	CI	100	100	24	0.08	0.12	E
DP-9451	DJ-8382	DJ-1482	CI	100	100	276	0.08	0.12	E
DP-4817	DJ-3321	DJ-3320	CI	100	100	165	0.08	0.12	E
DP-	DJ-7371	DJ-7370	CI	100	100	68	0.08	0.12	E

2079									
DP-883	DJ-2353	DJ-5835	CI	100	100	73	0.079	0.12	E
P-1266	J-421	J-422	HDPE	145	284.5	60	0.643	0.12	New
P-1213	J-398	J-399	HDPE	145	99.3	70	0.078	0.12	New
DP-2972	DJ-6320	DJ-6319	CI	100	100	93	0.078	0.12	E
P-1197	DJ-4778	DJ-2044	HDPE	145	99.3	72	0.076	0.11	New
DP-3913	DJ-5775	DJ-5774	CI	100	200	126	0.306	0.11	E
P-1181	J-383	J-384	HDPE	145	99.3	9	0.074	0.11	New
P-1163	J-371	J-372	HDPE	145	99.3	44	0.073	0.11	New
DP-2584	DJ-6637	DJ-6636	CI	100	100	82	0.073	0.11	E
DP-4486	DJ-4884	DJ-4883	CI	100	250	149	0.45	0.11	E
DP-3067	DJ-6177	DJ-6176	CI	100	100	96	0.072	0.11	E
DP-7244	DJ-5311	DJ-6572	CI	100	150	39	0.16	0.11	E
P-1222	J-404	J-405	HDPE	145	99.3	65	0.07	0.1	New
DP-6180	DJ-2761	DJ-2760	CI	100	80	264	0.045	0.1	E
P-1264	DJ-737	J-422	CI	100	150	22	0.159	0.1	E
P-939	DJ-4122	DJ-4159	HDPE	145	144.4	2	0.146	0.1	New
DP-482	DJ-8581	DJ-549	CI	100	100	124	0.07	0.1	E
DP-2047	DJ-7436	DJ-7435	CI	100	100	67	0.069	0.1	E
DP-247	DJ-4993	DJ-5311	CI	100	150	47	0.155	0.1	E
DP-1326	DJ-8052	DJ-4626	CI	100	100	170	0.068	0.1	E
DP-2315	DJ-8052	DJ-8599	CI	100	100	74	0.067	0.1	E
P-1262	DJ-155	J-421	HDPE	145	284.5	69	0.533	0.1	New
DP-5521	DJ-4160	DJ-4159	CI	100	150	208	0.146	0.1	E
P-1225	J-406	J-407	HDPE	145	99.3	65	0.064	0.1	New
DP-8714	DJ-6133	DJ-6177	CI	100	100	40	0.064	0.09	E
DP-7499	DJ-7512	DJ-4160	CI	100	150	31	0.142	0.09	E
DP-1988	DJ-7512	DJ-7511	CI	100	150	66	0.142	0.09	E
DP-4443	DJ-3581	DJ-3580	CI	100	100	147	0.063	0.09	E
P-1193	J-385	J-390	HDPE	145	99.3	41	0.061	0.09	New
DP-888	DJ-5561	DJ-2341	CI	100	200	86	0.246	0.09	E
P-1226	DJ-981	J-408	CI	100	100	95	0.061	0.09	E
P-1215	J-400	DJ-4105	CI	100	450	50	1.23	0.09	E
P-2295	J-387	J-772	CI	100	150	55	0.136	0.09	E
DP-2929	DJ-6371	DJ-6370	CI	100	100	92	0.06	0.09	E
DP-5900	DJ-2291	DJ-6353	CI	100	200	234	0.236	0.09	E
DP-9523	DJ-5064	DJ-4312	CI	100	100	36	0.057	0.08	E

DP-2733	DJ-3959	DJ-5065	CI	100	100	139	0.057	0.08	E
DP-7068	DJ-2742	DJ-6951	CI	100	200	7	0.226	0.08	E
DP-3243	DJ-7853	DJ-3838	CI	100	100	31	0.054	0.08	E
P-1165	J-373	J-371	HDPE	145	99.3	67	0.053	0.08	New
P-1190	J-383	J-389	HDPE	145	99.3	40	0.052	0.08	New
DP-5053	DJ-4823	DJ-3514	CI	100	200	177	0.205	0.08	E
DP-5777	DJ-7472	DJ-7473	CI	100	100	225	0.051	0.08	E
DP-1125	DJ-2761	DJ-1726	CI	100	100	135	0.051	0.08	E
DP-5740	DJ-7030	DJ-7031	CI	100	150	74	0.115	0.08	E
DP-6467	DJ-3759	DJ-6198	CI	100	100	281	0.051	0.07	E
DP-9943	DJ-4036	DJ-8016	CI	100	200	232	0.197	0.07	E
DP-5998	DJ-4883	DJ-2061	CI	100	400	80	0.767	0.07	E
P-3346	DJ-405	J-1354	CI	100	200	224	0.191	0.07	E
DP-10245	DJ-8046	DJ-2288	CI	100	100	4	0.047	0.07	E
P-941	J-313	DJ-8052	CI	100	100	51	0.045	0.07	E
DP-7775	DJ-550	DJ-1816	CI	100	100	108	0.044	0.07	E
P-1167	J-374	J-375	HDPE	145	99.3	17	0.043	0.06	New
P-1239	J-414	DJ-4085	HDPE	145	144.4	48	0.091	0.06	New
DP-8277	DJ-5835	DJ-8700	CI	100	100	24	0.043	0.06	E
DP-3715	DJ-8600	DJ-4700	CI	100	100	43	0.043	0.06	E
DP-877	DJ-2474	DJ-7021	CI	100	100	89	0.043	0.06	E
P-1230	J-410	DJ-5850	CI	100	150	152	0.094	0.06	E
P-954	J-317	J-318	HDPE	145	144.4	1	0.086	0.06	New
DP-4750	DJ-2623	DJ-5440	CI	100	100	24	0.041	0.06	E
P-1177	J-381	DJ-6344	CI	100	100	41	0.041	0.06	E
DP-9456	DJ-155	DJ-737	CI	100	200	43	0.161	0.06	E
P-1169	J-374	J-377	HDPE	145	99.3	35	0.038	0.06	New
DP-1669	DJ-8016	DJ-8015	CI	100	100	57	0.038	0.06	E
DP-7202	DJ-7436	DJ-3292	CI	100	100	42	0.036	0.05	E
DP-781	DJ-3008	DJ-1416	CI	100	200	107	0.137	0.05	E
DP-6466	DJ-7031	DJ-3759	CI	100	100	78	0.034	0.05	E
P-1263	J-421	J-417	HDPE	145	284.5	71	0.272	0.05	New
DP-10848	DJ-3765	DJ-2042	CI	100	100	21	0.031	0.05	E
P-1187	DJ-3292	J-388	CI	100	100	17	0.031	0.05	E
DP-	DJ-7981	DJ-4700	CI	100	100	60	0.031	0.05	E

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DP-3905	DJ-4105	DJ-1214	CI	100	600	61	1.054	0.04	E
DP-8858	DJ-2730	DJ-2353	CI	100	100	43	0.029	0.04	E
DP-8537	DJ-3758	DJ-7030	CI	100	100	138	0.029	0.04	E
DP-2016	DJ-7477	DJ-7476	CI	100	100	66	0.028	0.04	E
DP-2638	DJ-4300	DJ-4032	CI	100	150	123	0.062	0.04	E
DP-2049	DJ-8046	DJ-8045	CI	100	450	68	0.518	0.04	E
DP-7639	DJ-4627	DJ-2784	CI	100	100	9	0.025	0.04	E
DP-4349	DJ-3759	DJ-3758	CI	100	100	144	0.025	0.04	E
DP-264	DJ-9985	DJ-9984	CI	100	150	11	0.056	0.04	E
P-3347	J-1354	J-317	CI	100	200	255	0.097	0.04	E
DP-1718	DJ-7904	DJ-7903	CI	100	200	58	0.094	0.03	E
P-1196	J-391	J-392	HDPE	145	99.3	55	0.023	0.03	New
DP-146	DJ-10136	DJ-10135	CI	100	150	5	0.052	0.03	E
DP-3861	DJ-5065	DJ-5064	CI	100	100	124	0.022	0.03	E
P-1168	J-375	J-376	HDPE	145	99.3	45	0.022	0.03	New
P-2301	DJ-871	J-774	CI	100	400	93	0.347	0.03	E
P-952	DJ-383	J-318	CI	100	200	32	0.086	0.03	E
DP-6476	DJ-8016	DJ-382	CI	100	200	54	0.083	0.03	E
P-1203	DJ-7867	J-395	CI	100	450	16	0.406	0.03	E
P-1170	J-377	J-378	HDPE	145	99.3	30	0.02	0.03	New
DP-4758	DJ-4104	DJ-323	CI	100	600	167	0.706	0.03	E
DP-2176	DJ-1352	DJ-4225	CI	100	200	51	0.072	0.03	E
DP-3871	DJ-5043	DJ-5042	CI	100	150	124	0.038	0.02	E
DP-6213	DJ-4312	DJ-1347	CI	100	100	123	0.016	0.02	E
DP-10701	DJ-4433	DJ-3764	CI	100	100	36	0.016	0.02	E
DP-9942	DJ-2291	DJ-4036	CI	100	200	194	0.062	0.02	E
DP-9999	DJ-3802	DJ-5661	CI	100	250	39	0.095	0.02	E
DP-8851	DJ-227	DJ-2291	CI	100	200	10	0.059	0.02	E
DP-8001	DJ-4052	DJ-8045	CI	100	450	4	0.268	0.02	E
P-1214	DJ-2491	J-400	CI	100	450	176	0.26	0.02	E
P-1180	J-382	J-383	HDPE	145	99.3	21	0.012	0.02	New
P-1188	J-388	DJ-4624	CI	100	100	22	0.011	0.02	E
DP-377	DJ-9809	DJ-9808	CI	100	150	17	0.026	0.02	E

DP-10217	DJ-4779	DJ-3799	CI	100	150	26	0.024	0.02	E
DP-1174	DJ-2112	DJ-4883	CI	100	400	35	0.169	0.02	E
P-944	J-314	DJ-3008	MS	140	600	8	0.37	0.02	E
P-1206	DJ-8045	J-396	CI	100	450	130	0.186	0.01	E
DP-10000	DJ-5661	DJ-7046	CI	100	250	40	0.056	0.01	E
P-1204	J-395	DJ-2287	CI	100	450	98	0.173	0.01	E
DP-1627	DJ-1377	DJ-4993	CI	100	150	169	0.018	0.01	E
DP-5595	DJ-4181	DJ-6993	CI	100	200	214	0.029	0.01	E
DP-3237	DJ-1617	DJ-6353	CI	100	200	83	0.028	0.01	E
DP-2216	DJ-3008	DJ-6993	MS	140	600	3	0.231	0.01	E
P-1189	J-382	J-388	HDPE	145	99.3	123	0.006	0.01	New
P-1249	DJ-737	J-417	CI	100	200	70	0.024	0.01	E
P-1148	DJ-6993	J-367	CI	100	600	277	0.199	0.01	E
P-3150	PRV-9	DJ-4176	CI	100	150	31	0.012	0.01	E
P-3149	DJ-9467	PRV-9	CI	100	150	898	0.012	0.01	E
DP-8000	DJ-2288	DJ-4052	CI	100	450	54	0.108	0.01	E
DP-9595	DJ-9467	DJ-1483	CI	100	450	34	0.096	0.01	E
DP-7776	DJ-1816	DJ-8581	CI	100	100	243	0.004	0.01	E
P-1179	DJ-4625	J-382	HDPE	145	99.3	18	0.004	0.01	New
DP-5558	DJ-4301	DJ-4300	CI	100	150	211	0.007	0	E
DP-6105	DJ-4176	DJ-4175	CI	100	150	261	0.006	0	E
P-915	J-306	DJ-871	CI	100	400	15	0.027	0	E
DP-5718	DJ-4181	DJ-245	CI	100	200	2	0.003	0	E
P-1150	DJ-2295	J-368	CI	100	600	61	0.025	0	E
DP-4195	DJ-4625	DJ-4624	CI	100	100	137	0.001	0	E
P-1207	J-396	DJ-7867	CI	100	450	17	0.013	0	E
P-3143	DJ-4176	PRV-6	CI	100	150	195	0	0	E
P-3144	PRV-6	DJ-7512	CI	100	150	13	0	0	E
P-953	J-318	DJ-421	CI	100	200	75	0	0	E
DP-205	DJ-3799	DJ-910	CI	100	150	27	0	0	E
P-951	J-317	DJ-404	CI	100	200	67	0	0	E

Table A2(b): Junction results

Label	Elevation (m)	Demand (ML/day)	Hydraulic Grade (m)	Pressure (kg/cm ²)
DJ-3759	601.5	0.11	604.7	0.317
DJ-4001	599.2	0.311	603.6	0.445
DJ-3530	600	0.024	604.9	0.493
PNJ-144	614.9	0.07	620	0.509
DJ-6132	599	0.086	604.2	0.516
DJ-6176	599	0.072	604.2	0.518
DJ-7031	599.1	0.038	604.7	0.552
DJ-6951	599.1	0.039	604.7	0.552
DJ-2742	599.1	0.015	604.7	0.552
DJ-2607	598.6	0.169	604.2	0.561
DJ-1687	605.1	0.222	611.1	0.6
DJ-3320	605.2	0.08	611.3	0.604
DJ-4000	598.4	0.185	604.5	0.607
DJ-3758	598.4	0.102	604.7	0.621
DJ-550	605	0.044	611.2	0.623
DJ-7030	598.4	0.143	604.7	0.625
DJ-6198	598.4	0.096	604.7	0.625
DJ-4175	600	0.006	606.4	0.635
DJ-8581	604.9	0.156	611.3	0.638
DJ-1816	604.9	0.236	611.3	0.639
J-316	614.4	0.141	620.8	0.64
DJ-7021	602.1	0.139	608.5	0.643
DJ-4059	597.8	0.145	604.3	0.649
DJ-6199	600.3	0.138	606.9	0.654
DJ-549	604.7	0.07	611.2	0.654
DJ-5441	604.9	0.191	611.4	0.657
DJ-2755	597.7	0.123	604.3	0.666
DJ-8582	604.7	0.057	611.4	0.667
DJ-8039	604.7	0.052	611.4	0.667
DJ-2868	598	0.232	604.7	0.669
DJ-9081	602.1	0.207	608.8	0.671
DJ-7020	602.1	0.091	608.9	0.678
DJ-9082	602.1	0.039	608.9	0.679
DJ-4891	613.8	0.414	620.6	0.681
J-778	602.1	0.038	609	0.688
DJ-4313	602.2	0.125	609.2	0.701
DJ-4690	602.6	0.158	609.6	0.701
DJ-7002	604.1	0.127	611.3	0.718
DJ-1727	603.6	0.071	610.8	0.718
DJ-1919	603.6	0.076	610.8	0.718
DJ-1817	603	0.158	610.2	0.719
DJ-3686	603.5	0.25	610.7	0.723
DJ-4884	601.8	0.45	609	0.723
DJ-6571	604.1	0.076	611.4	0.733
DJ-5440	606.3	0.041	613.6	0.734
DJ-1348	602.2	0.115	609.6	0.734
DJ-3581	600	0.129	607.3	0.735
DJ-10135	604.1	0.052	611.5	0.736

DJ-10136	604.1	0.07	611.5	0.736
DJ-4060	600	0.034	607.4	0.74
DJ-5312	604.1	0.031	611.6	0.748
DJ-6133	596.7	0.078	604.2	0.75
DJ-6177	596.7	0.083	604.2	0.751
DJ-2741	604.1	0.048	611.6	0.752
DJ-6370	601.6	0.06	609.2	0.758
DJ-6004	601	0.214	608.6	0.761
DJ-1376	604.7	0.076	612.4	0.766
DJ-6362	601.6	0.127	609.3	0.771
DJ-8679	596.6	0.261	604.4	0.779
DJ-8040	604.1	0.099	611.9	0.781
DJ-6363	601.6	0.097	609.4	0.782
DJ-8312	598.8	0.947	606.7	0.787
DJ-2624	603	0.146	610.9	0.789
DJ-5065	600.9	0.196	608.8	0.791
DJ-7177	605	0.106	613	0.793
DJ-3958	600.9	0.107	608.9	0.799
DJ-6684	596.6	0.075	604.6	0.799
DJ-5697	604.9	0.086	613	0.802
DJ-7291	605	0.048	613.1	0.804
DJ-324	611.9	0.006	620	0.808
DJ-1585	605	0.008	613.1	0.808
DJ-280	605	0.019	613.1	0.809
DJ-4778	605	0.057	613.2	0.816
J-393	605	0.047	613.2	0.817
DJ-3321	603.1	0.202	611.3	0.821
DJ-5850	613.1	0.094	621.3	0.823
DJ-7370	604.9	0.036	613.2	0.823
DJ-2756	596	0.027	604.3	0.823
DJ-4691	601.6	0.132	609.8	0.824
DJ-5698	605	0.088	613.2	0.825
DJ-2434	601.3	0.254	609.6	0.827
DJ-6005	600.6	0.29	608.9	0.827
DJ-5688	604.5	0.105	612.8	0.829
DJ-7178	604.7	0.066	613	0.832
J-380	604.6	0.044	613	0.832
DJ-7152	604.6	0.053	613	0.837
J-391	605	0.057	613.5	0.846
DJ-7153	604.6	0.061	613.1	0.847
DJ-7477	604.9	0.043	613.4	0.849
DJ-2623	605.1	0.07	613.7	0.853
J-392	604.9	0.023	613.5	0.853
DJ-5717	603.8	0.165	612.4	0.855
DJ-2044	604.6	0.031	613.2	0.857
DJ-4301	604.1	0.007	612.7	0.861
DJ-6371	600.6	0.058	609.2	0.861
DJ-2474	599.9	0.154	608.5	0.864
DJ-1905	604.7	0.025	613.3	0.866
DJ-7472	595.5	0.124	604.2	0.868
DJ-5836	607.6	0.536	616.3	0.868
DJ-8313	599.8	0.069	608.5	0.87
J-776	604.7	0.036	613.4	0.871
DJ-545	599.8	0.055	608.6	0.876

DJ-3799	605	0.024	613.8	0.877
DJ-4779	605	0.023	613.8	0.877
DJ-7058	604.9	0.024	613.7	0.877
DJ-910	605	0	613.8	0.878
DJ-4625	605	0.003	613.8	0.88
J-382	605	0.015	613.8	0.88
J-383	605	0.01	613.8	0.88
DJ-6572	602.5	0.078	611.4	0.88
J-384	605	0.011	613.8	0.88
DJ-2353	607.4	0.227	616.2	0.88
J-389	605	0.052	613.8	0.88
J-385	605	0.011	613.8	0.88
DJ-2730	607.4	0.078	616.2	0.88
DJ-5311	602.5	0.091	611.4	0.881
DJ-7435	605	0.069	613.8	0.881
J-386	605	0.02	613.8	0.881
DJ-5718	603.8	0.096	612.6	0.883
DJ-7436	605	0.047	613.8	0.884
DJ-3292	605	0.043	613.8	0.884
DJ-3118	605	0.054	613.9	0.887
J-390	604.9	0.026	613.8	0.89
DJ-1570	603.8	0.067	612.7	0.894
DJ-5630	604.8	0.168	613.8	0.896
J-388	604.8	0.013	613.8	0.897
DJ-2608	595.3	0.098	604.3	0.898
DJ-6224	605	0.074	614	0.898
J-773	604.8	0.006	613.8	0.898
DJ-190	599.5	0.092	608.5	0.899
DJ-6344	603.9	0.054	612.9	0.9
DJ-1569	604.7	0.019	613.8	0.902
J-381	603.8	0.094	612.9	0.902
J-387	604.8	0.026	613.9	0.908
J-772	604.8	0.008	613.9	0.908
DJ-1143	599	0.034	608.1	0.908
DJ-2867	599.7	0.347	608.8	0.909
J-775	604.7	0.005	613.9	0.91
DJ-2112	599.9	0.169	609	0.913
DJ-4883	599.9	0.149	609	0.913
DJ-4624	604.7	0.012	613.8	0.914
J-771	604.7	0.025	613.9	0.914
J-396	594.4	0.079	603.6	0.914
DJ-6223	604.6	0.231	613.8	0.917
DJ-5629	604.6	0.086	613.8	0.917
DJ-2288	594.3	0.016	603.6	0.919
DJ-8045	594.3	0.064	603.6	0.919
DJ-4052	594.3	0.029	603.6	0.919
DJ-8046	594.3	0.011	603.6	0.919
DJ-383	600.2	0.091	609.4	0.92
J-318	600.2	0	609.4	0.92
DJ-421	600.2	0	609.4	0.92
J-317	600.2	0.011	609.4	0.92
DJ-404	600.2	0	609.4	0.92
DJ-3095	598	0.188	607.2	0.921
DJ-1584	601.6	0.14	610.8	0.924

DJ-6283	599.8	0.641	609.1	0.928
DJ-227	600	0.078	609.4	0.931
DJ-7476	604.1	0.028	613.4	0.931
DJ-3293	604.8	0.056	614.2	0.932
DJ-5689	603.8	0.069	613.1	0.933
DJ-2938	604.8	0.083	614.2	0.933
DJ-7057	604.1	0.027	613.4	0.933
DJ-2865	606.8	0.052	616.2	0.937
DJ-382	599.9	0.083	609.3	0.94
DJ-3580	597.9	0.063	607.3	0.942
DJ-3764	606.8	0.04	616.2	0.944
DJ-7867	594.1	0.025	603.6	0.944
DJ-6354	600	0.024	609.4	0.944
DJ-4433	606.7	0.112	616.2	0.948
DJ-7371	603.6	0.052	613.1	0.949
DJ-8016	599.8	0.077	609.3	0.953
DJ-6320	603.6	0.013	613.2	0.957
DJ-234	604.2	0.088	613.8	0.958
J-370	603.8	0.019	613.5	0.962
DJ-8015	599.7	0.038	609.3	0.963
DJ-2291	599.7	0.233	609.4	0.965
J-777	599.4	0.186	609.1	0.968
DJ-5069	599.8	0.184	609.5	0.968
DJ-1429	602.5	0.138	612.2	0.969
DJ-1617	599.7	0.337	609.4	0.971
DJ-2531	604.2	0.014	614	0.971
DJ-2042	606.5	0.068	616.3	0.973
J-315	611.7	0.052	621.4	0.973
DJ-3765	606.5	0.09	616.3	0.974
J-373	603.7	0.025	613.4	0.974
DJ-4312	599.1	0.137	608.8	0.975
DJ-6353	599.6	0.416	609.4	0.976
J-374	603.6	0.01	613.4	0.977
J-1354	599.6	0	609.4	0.98
J-395	593.7	0.049	603.6	0.982
DJ-9808	601.5	0.026	611.4	0.984
DJ-9809	601.5	0.055	611.4	0.984
DJ-5728	599.6	0.221	609.4	0.985
DJ-6611	608.9	0.033	618.8	0.988
DJ-6815	598	0.071	607.9	0.989
DJ-2061	599.1	0.168	609	0.989
DJ-5064	598.9	0.084	608.8	0.993
DJ-5774	599.9	0.45	609.9	0.995
J-770	604.9	0.049	614.9	0.995
J-375	603.5	0.022	613.4	0.996
DJ-1519	605	0.106	614.9	0.996
DJ-3959	598.9	0.183	608.9	0.996
J-311	603.9	0.003	613.9	0.997
DJ-5687	598.7	0.1	608.7	0.999
DJ-5722	598	0.065	608	1
DJ-6345	602.8	0.209	612.8	1.001
DJ-8383	606.5	0.159	616.5	1.001
J-418	611.3	0.046	621.4	1.002
DJ-4993	601.3	0.165	611.4	1.002

DJ-4037	599.6	0.186	609.7	1.003
DJ-5562	599.9	0.094	610	1.003
DJ-5775	599.8	0.306	609.9	1.005
J-781	599.6	0.261	609.7	1.005
DJ-8699	606	0.147	616.1	1.012
J-410	611.1	0.042	621.3	1.015
DJ-332	599.7	0.087	609.8	1.015
DJ-284	604.2	0.119	614.4	1.02
DJ-5835	606	0.08	616.2	1.022
DJ-8700	606	0.139	616.2	1.022
DJ-2937	603.5	0.081	613.7	1.022
DJ-736	599	0.196	609.2	1.025
DJ-5070	598.7	1.11	609	1.025
DJ-737	599.9	0.026	610.2	1.028
DJ-2341	599.9	0.246	610.2	1.028
J-417	599.9	0.048	610.2	1.029
DJ-5561	599.9	0.105	610.2	1.03
DJ-6496	608.2	0.226	618.5	1.03
DJ-6814	597.2	0.306	607.6	1.03
J-397	593.2	0.052	603.5	1.03
J-421	599.9	0.163	610.2	1.03
J-423	599.9	0.031	610.2	1.031
DJ-405	599	0.191	609.4	1.031
J-779	599.9	0.047	610.2	1.031
J-379	602.6	0.089	612.9	1.032
DJ-4176	596	0.007	606.4	1.035
J-422	599.8	0.171	610.2	1.036
J-377	603	0.019	613.4	1.036
DJ-4036	599	0.405	609.4	1.038
DJ-1726	600	0.051	610.4	1.04
DJ-2342	599.4	1.194	609.8	1.044
DJ-2761	600	0.077	610.4	1.046
J-312	603.4	0.031	613.8	1.046
DJ-155	599.7	0.061	610.2	1.046
DJ-1428	603	0.12	613.5	1.047
DJ-9109	593.1	0.104	603.5	1.047
J-411	610.8	0.042	621.3	1.049
DJ-2053	600.9	0.124	611.5	1.049
DJ-331	597.1	0.221	607.6	1.05
DJ-7868	593.6	0.06	604.1	1.05
DJ-2401	607.4	0.072	618	1.056
DJ-5721	597.8	0.157	608.4	1.059
DJ-7473	593.6	0.189	604.2	1.063
J-314	607.8	0.041	618.5	1.068
DJ-1510	594.1	1.069	604.8	1.069
DJ-3008	607.8	0.002	618.5	1.07
J-371	602.7	0.018	613.4	1.072
J-376	602.7	0.022	613.4	1.073
DJ-226	596	0.18	606.8	1.074
DJ-6993	607.8	0.003	618.5	1.075
DJ-9093	595.1	0.303	605.9	1.079
DJ-6612	607.8	0.013	618.7	1.08
DJ-7961	607.1	0.043	618	1.083
DJ-2130	596	0.142	606.9	1.084

DJ-4311	593.1	0.064	603.9	1.085
DJ-3223	592.8	0.089	603.7	1.085
DJ-4196	595.3	0.111	606.2	1.085
J-399	592.3	0.078	603.2	1.09
J-378	602.5	0.02	613.4	1.091
DJ-4823	598.5	0.355	609.5	1.092
DJ-1347	597.9	0.016	608.8	1.095
J-394	592.4	0.041	603.4	1.1
J-401	610.1	0.404	621.2	1.106
DJ-9110	593.1	0.066	604.2	1.11
DJ-4822	598.4	0.247	609.5	1.111
J-420	606.8	0.112	618	1.112
DJ-6319	602	0.079	613.2	1.112
DJ-6284	599.6	0.233	610.8	1.115
DJ-8382	606.5	0.058	617.7	1.12
DJ-1377	600	0.018	611.4	1.135
DJ-1511	596.7	0.176	608.1	1.139
DJ-2760	598.9	0.045	610.3	1.144
J-372	602	0.049	613.4	1.145
DJ-3094	595.5	0.541	607	1.148
DJ-4197	594.1	1.027	605.8	1.163
J-398	591.6	0.057	603.2	1.164
DJ-1616	597	0.536	608.7	1.167
DJ-5729	599.3	0.188	611	1.168
DJ-5184	602	0.119	613.9	1.181
DJ-7852	590.7	0.196	602.5	1.182
DJ-4159	592	0	603.9	1.189
DJ-4122	592	0.03	603.9	1.189
DJ-4761	595.4	0.22	607.3	1.191
J-412	605.5	0.164	617.5	1.193
DJ-3838	590.7	0.054	602.6	1.193
DJ-7853	590.7	0.073	602.6	1.193
DJ-5969	606.5	0.019	618.4	1.194
DJ-2729	604	0.174	616	1.195
J-774	606.5	0.026	618.5	1.198
DJ-911	601.4	0.321	613.4	1.2
DJ-1483	606.5	0.005	618.5	1.203
DJ-9467	606.5	0.083	618.5	1.204
DJ-6207	593.6	0.096	605.7	1.204
DJ-4328	606.5	0.003	618.5	1.204
DJ-2129	595.5	0.427	607.7	1.21
DJ-4329	606.3	0.033	618.5	1.213
DJ-9439	601.3	0.035	613.5	1.22
DJ-2287	591.3	0.173	603.6	1.22
DJ-5736	595.5	0.181	607.7	1.221
DJ-1558	596.9	0.188	609.2	1.224
DJ-9440	601.3	0.079	613.6	1.225
DJ-9985	595.2	0.023	607.4	1.226
DJ-2784	593.6	0.031	606	1.23
DJ-4627	593.6	0.019	606	1.23
DJ-7957	595.5	0.444	607.9	1.231
DJ-4226	595.2	0.324	607.6	1.234
DJ-769	603.8	0.038	616.2	1.236
DJ-6102	590.6	0.117	603	1.237

DJ-2866	603.9	0.161	616.4	1.255
DJ-3514	596.9	0.205	609.5	1.255
DJ-980	603.6	0.053	616.3	1.264
DJ-7063	594.5	0.021	607.2	1.266
DJ-9684	594.5	0.03	607.2	1.268
DJ-5765	598.9	0.084	611.6	1.268
DJ-6206	592.9	0.124	605.6	1.27
DJ-2400	603.7	0.099	616.4	1.273
J-313	593.5	0.047	606.3	1.284
DJ-8052	593.5	0.044	606.3	1.284
DJ-7958	594.8	0.188	607.7	1.285
DJ-6103	590.2	0.034	603	1.285
DJ-8599	593.5	0.056	606.4	1.287
DJ-279	596.3	0.141	609.2	1.291
DJ-4051	590.2	0.011	603.1	1.292
DJ-6556	594.2	0.199	607.2	1.293
DJ-281	596.3	0.017	609.3	1.294
DJ-5084	594.9	0.053	607.9	1.294
DJ-5737	594.9	0.057	607.9	1.296
DJ-9984	594.4	0.056	607.4	1.298
DJ-5156	594.6	0.055	607.6	1.298
DJ-2352	604.1	0.113	617.2	1.299
DJ-4104	604.1	0.201	617.2	1.299
DJ-4300	599.7	0.246	612.7	1.299
DJ-8948	590.2	0.04	603.2	1.3
DJ-4760	594.6	0.057	607.6	1.3
DJ-7981	593.5	0.046	606.5	1.3
DJ-4700	593.5	0.074	606.5	1.302
DJ-7064	594.4	0.034	607.5	1.302
DJ-4033	599.7	0.094	612.7	1.303
DJ-5844	594.2	0.154	607.3	1.306
DJ-5686	598.3	0.027	611.4	1.306
DJ-5083	594.6	0.14	607.7	1.314
DJ-5764	598.4	0.083	611.6	1.32
DJ-7404	594.1	0.068	607.3	1.322
DJ-3162	593.6	0.233	606.8	1.323
J-783	598.4	0.022	611.7	1.325
DJ-4994	594.6	0.319	607.9	1.328
DJ-5370	593.8	0.241	607.1	1.328
DJ-5845	594.1	0.048	607.4	1.331
DJ-5371	594.1	0.053	607.4	1.332
DJ-8947	590	0.004	603.4	1.332
DJ-4926	594.9	0.077	608.3	1.335
DJ-1527	596.3	0.233	609.7	1.335
J-782	598.3	0.003	611.7	1.337
DJ-5043	604.9	0.276	618.3	1.337
DJ-5155	594.1	0.143	607.5	1.337
DJ-4123	590	0.019	603.4	1.337
DJ-4626	592.8	0.068	606.3	1.343
J-785	598.2	0.017	611.7	1.347
J-1262	595.9	0	609.4	1.348
DJ-871	605	0.006	618.5	1.349
DJ-1416	605	0.033	618.5	1.349
DJ-8812	592.8	0.106	606.3	1.351

DJ-8813	592.8	0.037	606.4	1.353
DJ-4032	599.1	0.062	612.7	1.354
DJ-4995	594.9	0.082	608.5	1.356
DJ-5042	604.7	0.038	618.3	1.356
DJ-9282	595.5	0.125	609.1	1.357
DJ-4925	594.6	0.123	608.2	1.357
PNJ-145	608.9	0.116	622.5	1.357
DJ-9283	595.5	0.069	609.1	1.36
DJ-7511	590.2	0.053	603.8	1.363
J-784	598	0.059	611.7	1.365
J-404	602.3	0.065	616	1.367
DJ-8600	592.8	0.116	606.5	1.368
DJ-3163	592.1	0.792	605.9	1.372
J-306	604.7	0.027	618.5	1.376
DJ-7512	590	0	603.8	1.377
DJ-4160	590	0.004	603.8	1.378
J-415	602.8	0.08	616.6	1.381
DJ-4927	592.6	0.303	606.6	1.391
DJ-1812	593.5	0.247	607.4	1.392
DJ-519	592.8	0.207	606.8	1.397
DJ-445	604.1	0.03	618.1	1.4
DJ-3802	604.1	0.018	618.1	1.404
DJ-6994	608.6	0.036	622.7	1.405
DJ-2783	591.5	0.119	605.6	1.406
J-369	604.2	0.012	618.3	1.407
DJ-4701	593.2	0.099	607.3	1.408
DJ-7403	593.2	0.054	607.3	1.408
DJ-4928	593.2	0.078	607.3	1.411
DJ-547	604.1	0	618.3	1.417
DJ-1214	606.2	0.283	620.5	1.426
J-769	608.4	0.251	622.7	1.432
DJ-4105	606.1	0.176	620.5	1.435
J-368	603.9	0.012	618.3	1.436
J-405	601.5	0.07	616	1.45
J-402	601.3	0.056	615.9	1.45
DJ-6637	603.8	0.032	618.5	1.46
DJ-4181	603.8	0.026	618.5	1.467
DJ-245	603.8	0.003	618.5	1.467
J-413	602.1	0.276	616.8	1.467
DJ-1482	602.6	0.096	617.6	1.492
J-400	605.5	0.338	620.5	1.499
J-367	603.5	0.199	618.5	1.503
J-406	600.7	0.049	615.8	1.51
J-416	597.4	0.078	612.6	1.51
DJ-1108	594.6	1.278	609.7	1.514
DJ-1352	596.7	0.072	612	1.527
DJ-7046	602.8	0.056	618.1	1.527
DJ-5661	602.8	0.039	618.1	1.527
J-403	600.5	0.09	615.9	1.537
DJ-617	597.1	0.203	612.6	1.539
DJ-1351	597.1	0.06	612.6	1.548
DJ-2295	602.7	0.025	618.3	1.56
DJ-4085	600.9	0.099	616.6	1.566
DJ-7904	600	0.169	615.7	1.567

DJ-2569	591.2	0.22	607	1.57
DJ-6636	602.7	0.073	618.4	1.574
J-407	599.9	0.064	615.8	1.588
J-419	596.3	0.022	612.3	1.6
DJ-544	596.2	0.04	612.3	1.602
DJ-1813	596.2	0.272	612.3	1.606
DJ-7903	599.5	0.094	615.7	1.622
DJ-4225	595.7	0.295	612	1.626
DJ-2041	600.7	0.146	617.1	1.643
DJ-1137	594.7	0.249	611.2	1.649
J-414	599.9	0.166	616.6	1.663
DJ-1215	600.4	0.247	617.2	1.677
DJ-2491	603.6	0.26	620.5	1.688
DJ-323	600.2	0.23	617.2	1.697
DJ-2568	593.8	0.227	611	1.717
DJ-618	593.6	0.611	610.9	1.729
DJ-4086	597.4	0.357	615.5	1.802
J-408	596.7	0.189	615.3	1.858
DJ-518	597.2	0.275	616.3	1.903
J-409	595.8	0.305	615.1	1.921
DJ-981	595.9	0.298	615.3	1.928

2. Zone B1

Table B1(a): Pipe results

Label	Start Node	Stop Node	Material	Hazen-Williams C	Diameter (mm)	Length (m)	Flow (ML/day)	Velocity (m/s)	Pipe type (new/existing)
DP-7281	DJ-450	DJ-2048	CI	100	100	13	1.279	1.88	E
DP-7282	DJ-2048	DJ-3911	CI	100	100	259	1.186	1.75	E
P-1438	J-486	J-487	HDPE	145	144.4	244	2.326	1.64	New
P-1403	J-471	DJ-450	CI	100	100	3	0.852	1.26	E
DP-387	174	J-56	CI	100	300	24	7.664	1.25	E
P-3153	J-56	PRV-11	CI	100	300	12	7.624	1.25	E
P-3154	PRV-11	DJ-9735	CI	100	300	45	7.624	1.25	E
P-1395	DJ-9735	J-468	CI	100	300	18	7.544	1.24	E
P-1396	J-468	DJ-705	CI	100	300	3	7.538	1.23	E
P-1427	J-484	J-482	HDPE	145	99.3	36	0.806	1.21	New
P-1446	J-490	DJ-2829	CI	100	150	263	1.837	1.2	E
P-1441	J-487	J-488	HDPE	145	144.4	43	1.695	1.2	New
P-1435	J-486	DJ-3518	CI	100	200	78	3.185	1.17	E
P-2665	DJ-811	J-996	HDPE	145	284.5	46	6.15	1.12	New
P-2666	J-996	J-994	HDPE	145	284.5	50	6.061	1.1	New
P-2663	J-994	DJ-7190	HDPE	145	284.5	10	6.015	1.1	New
P-2669	J-998	DJ-7190	HDPE	145	284.5	34	5.905	1.08	New
P-2668	DJ-135	J-998	HDPE	145	284.5	31	5.875	1.07	New
DP-6559	DJ-705	DJ-4960	CI	100	300	219	6.431	1.05	E
DP-189	DJ-4960	DJ-1575	CI	100	300	29	6.396	1.05	E
DP-7854	DJ-1575	DJ-811	CI	100	300	233	6.213	1.02	E
P-2661	DJ-3457	J-993	HDPE	145	99.3	365	0.68	1.02	
P-1452	J-492	DJ-2047	HDPE	145	99.3	166	0.655	0.98	New
DP-1266	DJ-3518	DJ-2166	CI	100	200	185	2.653	0.98	E
P-1437	J-487	DJ-838	CI	100	150	357	1.448	0.95	E
P-1394	173	J-467	DI	140	300	33	5.598	0.92	New
P-1392	DJ-2166	J-467	CI	100	300	15	5.556	0.91	E
P-3158	PRV-13	J-489	HDPE	145	284.5	15	4.965	0.9	New
P-3157	173	PRV-13	HDPE	145	284.5	117	4.965	0.9	New
P-1436	DJ-170	J-487	CI	100	150	638	1.307	0.86	E
P-1440	J-488	DJ-200	CI	100	100	411	0.571	0.84	E
P-2671	DJ-135	J-1000	CI	100	300	10	5.139	0.84	E
P-2672	J-1000	DJ-5834	CI	100	300	78	4.838	0.79	E
P-2675	DJ-5834	J-1003	CI	100	300	457	4.727	0.77	E
DP-5135	DJ-3911	DJ-3910	CI	100	100	134	0.5	0.74	E
P-1431	J-479	J-484	HDPE	145	144.4	115	1.038	0.73	New
P-1412	J-474	J-475	HDPE	145	144.4	118	1.029	0.73	New
P-1055	DJ-3372	J-349	CI	100	150	140	1.085	0.71	E
P-1422	DJ-838	J-479	CI	100	150	190	1.032	0.68	E
P-1439	DJ-1374	J-488	CI	100	100	389	0.45	0.66	E

P-3155	J-1003	PRV-12	CI	100	300	38	4.043	0.66	E
P-3156	PRV-12	DJ-869	CI	100	300	38	4.043	0.66	E
P-1408	J-473	DJ-450	CI	100	100	13	0.432	0.64	E
P-1058	DJ-3372	DJ-3517	HDPE	145	144.4	12	0.893	0.63	New
DP-3395	DJ-705	DJ-829	CI	100	150	128	0.941	0.62	E
P-1373	DJ-829	J-461	CI	100	150	27	0.914	0.6	E
P-1450	J-475	J-492	HDPE	145	144.4	11	0.836	0.59	New
DP-5284	DJ-3458	DJ-8771	CI	100	200	74	1.527	0.56	E
P-1443	J-489	J-470	HDPE	145	284.5	300	2.913	0.53	New
P-2677	J-1003	J-1004	HDPE	145	99.3	66	0.355	0.53	
DP-4657	DJ-3518	DJ-3517	CI	100	150	158	0.81	0.53	E
P-2658	DJ-2166	J-992	HDPE	145	284.5	13	2.873	0.52	New
DP-5232	DJ-2829	DJ-5586	CI	100	150	187	0.791	0.52	E
DP-5285	DJ-8771	DJ-3457	CI	100	200	79	1.377	0.51	E
P-3160	PRV-14	J-472	HDPE	145	284.5	17	2.743	0.5	New
P-3159	J-470	PRV-14	HDPE	145	284.5	492	2.743	0.5	New
DP-7111	DJ-135	DJ-8745	CI	100	150	121	0.733	0.48	E
P-1374	J-461	DJ-4959	CI	100	150	173	0.733	0.48	E
P-1402	DJ-1373	J-471	CI	100	100	51	0.325	0.48	E
DP-5605	DJ-869	DJ-6613	CI	100	300	68	2.906	0.48	E
P-1056	J-349	173	CI	100	150	53	0.725	0.47	E
DP-2579	DJ-6613	DJ-136	CI	100	300	83	2.843	0.47	E
DP-1853	DJ-136	DJ-3458	CI	100	300	17	2.841	0.47	E
P-1417	J-477	DJ-2047	CI	100	50	166	0.074	0.44	E
P-2660	J-992	DJ-9345	HDPE	145	284.5	439	2.383	0.43	New
DP-7605	DJ-2829	DJ-837	CI	100	150	38	0.624	0.41	E
DP-9001	DJ-8745	DJ-8991	CI	100	150	33	0.62	0.41	E
P-2673	J-1000	J-1001	HDPE	145	99.3	88	0.271	0.41	
P-1429	J-482	DJ-599	HDPE	145	144.4	193	0.55	0.39	New
DP-9002	DJ-8991	DJ-7766	CI	100	150	4	0.581	0.38	E
P-1410	J-472	J-474	HDPE	145	300	8	2.226	0.36	New
DP-5196	DJ-9345	DJ-3344	CI	100	300	187	2.206	0.36	E
P-1447	J-489	J-490	HDPE	145	284.5	7	1.909	0.35	New
DP-1711	DJ-3344	DJ-170	CI	100	300	168	2.091	0.34	E
DP-6371	DJ-7766	DJ-8735	CI	100	150	30	0.497	0.33	E
DP-1903	DJ-7646	DJ-7645	CI	100	100	63	0.205	0.3	E
DP-4977	DJ-2048	DJ-600	CI	100	50	104	0.049	0.29	E
DP-9911	DJ-8735	DJ-8516	CI	100	150	4	0.405	0.27	E
P-1413	DJ-600	J-476	CI	100	50	7	0.045	0.26	E
DP-9912	DJ-8516	DJ-7646	CI	100	150	32	0.376	0.25	E
P-1425	J-480	DJ-599	CI	100	50	250	0.039	0.23	E
DP-3925	DJ-5051	DJ-5050	CI	100	50	126	0.038	0.23	E
DP-3478	DJ-5586	DJ-5585	CI	100	150	110	0.328	0.21	E
DP-4805	DJ-5051	DJ-1373	CI	100	100	131	0.145	0.21	E
DP-6893	DJ-869	DJ-868	CI	100	250	388	0.84	0.2	E
P-3161	J-474	J-471	DI	140	300	4	1.195	0.2	New
P-1407	DJ-837	J-473	CI	100	100	508	0.132	0.19	E
DP-1955	DJ-838	DJ-1374	CI	100	100	6	0.13	0.19	E
P-1434	DJ-2167	J-486	CI	100	200	164	0.486	0.18	E
DP-1855	DJ-3458	DJ-6352	CI	100	300	75	1.044	0.17	E
DP-6565	DJ-5586	DJ-5585	CI	100	100	110	0.113	0.17	E
P-1061	DJ-1071	J-350	HDPE	145	144.4	6	0.226	0.16	New
P-1423	J-479	DJ-837	CI	100	150	697	0.222	0.15	E
DP-2189	DJ-7190	DJ-7189	CI	100	100	71	0.099	0.15	E

DP-4905	DJ-4959	DJ-828	CI	100	150	252	0.217	0.14	E
P-1424	J-476	J-480	CI	100	50	242	0.022	0.13	E
P-1432	J-484	J-480	HDPE	145	144.4	39	0.176	0.12	New
DP-1140	DJ-8735	DJ-8734	CI	100	100	42	0.084	0.12	E
DP-1821	DJ-7766	DJ-7765	CI	100	100	61	0.076	0.11	E
DP-1712	DJ-170	DJ-3287	CI	100	300	30	0.669	0.11	E
DP-1131	DJ-8745	DJ-8744	CI	100	100	42	0.07	0.1	E
P-1415	J-475	J-476	HDPE	145	144.4	10	0.144	0.1	New
DP-8834	DJ-7646	DJ-2262	CI	100	150	18	0.155	0.1	E
P-2667	J-996	J-997	HDPE	145	99.3	58	0.063	0.09	
DP-4871	DJ-3287	DJ-1071	CI	100	300	246	0.549	0.09	E
P-1451	J-492	J-477	HDPE	145	144.4	4	0.125	0.09	New
P-2659	J-992	J-349	HDPE	145	284.5	3	0.478	0.09	New
P-1409	J-472	J-473	HDPE	145	284.5	4	0.457	0.08	New
DP-3930	DJ-4960	DJ-4959	CI	100	200	126	0.213	0.08	E
P-2674	DJ-811	J-1002	HDPE	145	99.3	75	0.029	0.04	
P-2664	J-994	J-995	HDPE	145	99.3	92	0.029	0.04	
DP-950	DJ-8991	DJ-8990	CI	100	100	38	0.029	0.04	E
DP-4874	DJ-1071	DJ-1962	CI	100	300	132	0.241	0.04	E
P-2670	J-998	J-999	HDPE	145	99.3	90	0.022	0.03	
DP-1286	DJ-8516	DJ-8515	CI	100	100	46	0.021	0.03	E
P-1416	DJ-600	J-477	CI	100	50	6	0.005	0.03	E
P-1449	J-491	J-490	CI	100	150	14	0.034	0.02	E
DP-1107	DJ-8771	DJ-8770	CI	100	250	41	0.083	0.02	E
DP-440	DJ-9735	DJ-9734	CI	100	300	19	0.05	0.01	E
P-2656	J-467	J-991	CI	100	300	21	0.017	0	E
DP-6134	DJ-1962	DJ-1961	CI	100	300	259	0.001	0	E
P-3163	PRV-15	DJ-5051	CI	100	100	24	0	0	E
P-3162	DJ-1374	PRV-15	CI	100	100	160	0	0	E

Table B1(b): Junction results

Label	Elevation (m)	Demand (ML/day)	Hydraulic Grade (m)	Pressure (kg/cm ²)
DJ-200	582.5	0.571	587.6	0.505
DJ-705	586.5	0.166	592.7	0.617
J-468	586.3	0.006	592.7	0.636
DJ-3911	566.2	0.686	573.2	0.698
DJ-9735	585.2	0.031	592.8	0.763
DJ-3910	564	0.5	571.7	0.764
DJ-9734	585	0.05	592.8	0.778
DJ-829	583.5	0.026	592	0.849
DJ-1575	582.7	0.182	591.2	0.85
J-461	583.3	0.182	591.9	0.86
DJ-4960	582.7	0.249	591.4	0.867
DJ-2829	580.2	0.421	589.1	0.884
DJ-7646	579.4	0.016	588.7	0.933
DJ-8734	579.4	0.084	588.7	0.935
DJ-837	579.5	0.27	589	0.946
DJ-1961	590	0.001	599.8	0.972
DJ-4959	581.6	0.303	591.4	0.975
DJ-8990	579	0.029	588.8	0.977
DJ-8744	579	0.07	588.9	0.984

DJ-7645	578.5	0.205	588.6	1.001
J-489	583.6	0.144	593.7	1.007
J-490	583.5	0.038	593.7	1.01
J-491	583.5	0.034	593.7	1.01
DJ-2262	578.6	0.155	588.7	1.014
DJ-9345	589.9	0.177	600.1	1.019
DJ-8515	578.5	0.021	588.7	1.023
DJ-8516	578.5	0.008	588.7	1.023
DJ-8735	578.5	0.008	588.7	1.023
DJ-7765	578.5	0.076	588.8	1.026
DJ-5585	578	0.441	588.3	1.032
DJ-5586	578	0.35	588.4	1.037
DJ-869	570.2	0.296	580.7	1.047
DJ-7766	578.2	0.009	588.8	1.059
DJ-8991	578.2	0.01	588.8	1.06
DJ-8745	578.2	0.043	588.9	1.067
DJ-7189	578.5	0.099	589.4	1.094
J-1002	578.8	0.029	589.9	1.099
DJ-828	579.9	0.217	591.3	1.134
DJ-3457	568.6	0.697	580	1.138
DJ-6613	568.7	0.064	580.6	1.188
DJ-8770	568.2	0.083	580.2	1.196
DJ-8771	568.2	0.067	580.2	1.196
DJ-7190	577.3	0.011	589.5	1.213
J-994	577.4	0.018	589.5	1.213
J-996	577.5	0.026	589.7	1.217
DJ-3344	587.7	0.115	599.9	1.221
DJ-811	577.6	0.035	589.9	1.222
J-998	577	0.008	589.4	1.233
J-997	577.3	0.063	589.7	1.238
DJ-135	576.7	0.003	589.3	1.252
J-1000	576.6	0.03	589.2	1.258
DJ-5834	575.9	0.11	588.9	1.305
DJ-1071	586.6	0.082	599.8	1.312
DJ-3458	567.3	0.27	580.4	1.313
DJ-136	567.3	0.001	580.5	1.315
J-350	586.6	0.226	599.8	1.317
DJ-868	567.1	0.84	580.5	1.337
DJ-1962	586.3	0.24	599.8	1.346
DJ-6352	566.9	1.044	580.4	1.351
J-1001	575.4	0.271	589.1	1.367
J-999	575.6	0.022	589.4	1.373
J-470	579.6	0.17	593.4	1.381
J-995	575.6	0.029	589.5	1.385
DJ-3517	584.9	0.084	599.4	1.447
DJ-3372	584.9	0.192	599.4	1.451
J-488	578.6	0.673	593.5	1.485
DJ-3518	583.9	0.278	598.8	1.489
J-56	585.2	0.04	600.3	1.508
DJ-3287	584.6	0.119	599.8	1.519
DJ-170	584.6	0.116	599.8	1.519
J-991	585.2	0.017	600.4	1.524
DJ-2167	582.5	0.486	597.8	1.53
J-1004	571.8	0.355	587.2	1.536

J-467	585	0.024	600.4	1.544
J-349	584.7	0.118	600.3	1.56
J-992	584.7	0.011	600.3	1.561
DJ-2166	584.7	0.03	600.4	1.563
J-487	578.1	0.49	593.9	1.574
J-1003	571.3	0.329	587.4	1.604
J-486	581.6	0.373	597.9	1.623
DJ-838	572.3	0.546	589.9	1.757
DJ-1374	572.3	0.32	589.9	1.758
DJ-599	569.9	0.589	587.6	1.771
J-482	569.4	0.256	587.8	1.841
DJ-5051	569.6	0.106	588.1	1.842
DJ-5050	569.3	0.038	587.7	1.843
J-484	569.3	0.056	588.3	1.901
J-479	569.7	0.216	588.8	1.902
J-480	569	0.115	588.3	1.933
DJ-2048	567.8	0.141	587.6	1.972
DJ-1373	568.1	0.18	588.3	2.007
J-472	568.1	0.06	588.5	2.037
J-473	568.1	0.157	588.5	2.037
DJ-450	567.8	0.006	588.4	2.053
J-474	567.9	0.002	588.5	2.056
J-471	567.9	0.018	588.5	2.061
DJ-600	567.4	0	588.1	2.067
J-475	567.4	0.049	588.1	2.067
J-476	567.3	0.121	588.1	2.071
J-492	567.3	0.055	588.1	2.074
J-477	567.2	0.046	588.1	2.078
DJ-2047	564.9	0.73	586.5	2.155

3. Zone B5

Table B5(a): Pipe results

Label	Start Node	Stop Node	Material	Hazen-Williams C	Diameter (mm)	Length (m)	Flow (ML/day)	Velocity (m/s)	Pipe type (new/existing)
DP-9477	DJ-1950	DJ-4578	CI	100	450	28	24.61	1.79	E
P-495	J-165	DJ-3263	CI	100	100	52	1.207	1.78	E
P-1496	DJ-4578	J-505	CI	100	450	30	23.6	1.72	E
P-2812	J-1073	DJ-4876	di	140	350	131	14.11	1.7	New
P-2811	J-1073	DJ-800	CI	100	350	50	14.03	1.69	E
P-1498	J-505	DJ-2766	DI	140	450	95	23.17	1.69	New
P-3357	DJ-2766	DJ-4589	di	140	350	156	13.98	1.68	New
P-511	193	J-171	DI	140	500	29	28.21	1.66	New
P-3361	DJ-4589	DJ-4876	di	140	350	45	13.76	1.66	New
P-515	J-171	J-172	DI	140	500	18	28.03	1.65	New
P-1495	J-172	DJ-1950	di	140	400	144	17.34	1.6	New
P-1481	J-501	J-502	DI	140	400	428	17.28	1.59	New
DP-9487	DJ-1917	DJ-3240	DI	140	300	48	9.592	1.57	E
P-1479	194	J-501	DI	140	450	128	21.2	1.54	New
DP-2896	DJ-6423	DJ-6422	CI	100	80	91	0.665	1.53	E
DP-9488	DJ-3240	DJ-950	DI	140	300	25	9.333	1.53	E
P-509	J-170	DJ-1949	CI	100	150	64	2.332	1.53	E
P-508	DJ-3264	J-170	CI	100	150	29	2.256	1.48	E
DP-1869	DJ-2888	J-165	CI	100	100	66	0.989	1.46	E
DP-6678	DJ-800	DJ-326	CI	100	350	7	12.09	1.45	E
DP-3070	DJ-3222	DJ-4754	CI	100	100	24	0.978	1.44	E
DP-2689	DJ-8535	DJ-7344	CI	100	80	31	0.596	1.37	E
P-2837	J-1085	J-1086	HDPE	145	99.3	51	0.908	1.36	
P-513	DJ-1950	J-172	DI	140	300	144	8.132	1.33	E
P-3356	DJ-3264	J-165	HDPE	145	144.4	119	1.818	1.28	New
DP-10246	DJ-950	DJ-3309	DI	140	300	8	7.828	1.28	E
DP-10247	DJ-3309	DJ-5361	DI	140	300	15	7.75	1.27	E
DP-1347	DJ-4876	DJ-8456	CI	100	200	69	3.438	1.27	E
DP-	DJ-800	DJ-3127	CI	100	150	5	1.922	1.26	E

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DP-10065	DJ-326	DJ-3598	CI	100	350	38	10.46	1.26	E
DP-4595	DJ-3441	DJ-3440	CI	100	100	155	0.85	1.25	E
P-2696	J-1010	J-1011	HDPE	145	284.5	533	6.872	1.25	New
P-2686	J-502	DJ-6247	di	140	350	125	10.36	1.25	New
DP-10467	DJ-3127	DJ-8708	CI	100	150	73	1.884	1.23	E
DP-10066	DJ-3598	DJ-344	CI	100	350	136	10.25	1.23	E
DP-9359	DJ-5361	DJ-4021	DI	140	300	53	7.523	1.23	E
DP-7603	DJ-8456	DJ-3441	CI	100	200	3	3.328	1.23	E
DP-7900	DJ-4562	DJ-10235	CI	100	150	17	1.821	1.19	E
DP-10468	DJ-8708	DJ-8030	CI	100	150	4	1.793	1.17	E
DP-9157	DJ-344	DJ-1917	CI	100	350	30	9.721	1.17	E
DP-6155	DJ-1044	DJ-2395	CI	100	250	78	4.873	1.15	E
P-3366	J-502	J-1010	di	140	300	14	6.876	1.13	New
DP-10693	DJ-4245	DJ-1082	CI	100	200	21	3.049	1.12	E
DP-9894	DJ-8030	DJ-8444	CI	100	150	39	1.701	1.11	E
P-2847	J-1091	J-177	CI	100	150	6	1.674	1.1	E
DP-7846	DJ-338	DJ-7350	CI	100	150	129	1.67	1.09	E
DP-10067	DJ-4021	DJ-3139	DI	140	300	33	6.654	1.09	E
DP-4669	DJ-950	DJ-6024	DI	140	150	215	1.661	1.09	E
DP-8158	DJ-949	DJ-3479	CI	100	150	8	1.656	1.08	E
DP-10209	DJ-4602	DJ-4245	CI	100	200	169	2.923	1.08	E
DP-10207	DJ-8444	DJ-8250	CI	100	150	4	1.642	1.08	E
DP-4411	DJ-5290	DJ-1132	CI	100	250	66	4.538	1.07	E
DP-10068	DJ-3139	DJ-1202	DI	140	300	48	6.473	1.06	E
DP-6663	DJ-8922	DJ-337	CI	100	150	233	1.59	1.04	E
DP-10208	DJ-8250	DJ-8008	CI	100	150	39	1.59	1.04	E
DP-5255	DJ-2914	DJ-3585	CI	100	150	69	1.585	1.04	E
DP-5941	DJ-2766	DJ-7417	CI	100	250	34	4.393	1.04	E
P-2695	J-1011	J-1009	HDPE	145	252.9	5	4.477	1.03	New
P-2697	DJ-1314	DJ-1313	HDPE	145	99.3	380	0.683	1.02	New

P-2808	J-1072	DJ-1950	HDPE	145	99.3	138	0.682	1.02	
DP-10695	DJ-7417	DJ-7244	CI	100	250	43	4.268	1.01	E
DP-7856	DJ-1931	DJ-9272	CI	100	150	37	1.536	1.01	E
P-2848	J-1091	DJ-4020	HDPE	145	99.3	84	0.669	1	
DP-8869	DJ-3803	DJ-4602	CI	100	200	4	2.706	1	E
DP-10696	DJ-7244	DJ-5502	CI	100	250	14	4.145	0.98	E
DP-1700	DJ-3440	DJ-3407	CI	100	100	111	0.634	0.93	E
DP-8599	DJ-2395	DJ-2848	CI	100	250	99	3.942	0.93	E
DP-8876	DJ-4589	DJ-4999	CI	100	250	7	3.935	0.93	E
DP-10374	DJ-5502	DJ-4589	CI	100	250	63	3.924	0.93	E
DP-4711	DJ-5881	DJ-8525	CI	100	150	63	1.41	0.92	E
P-527	J-177	J-176	CI	100	150	6	1.405	0.92	E
DP-947	DJ-4999	DJ-4876	CI	100	250	42	3.869	0.91	E
DP-8170	DJ-1132	DJ-2795	CI	100	250	19	3.834	0.9	E
DP-8892	DJ-3441	DJ-7182	CI	100	200	32	2.453	0.9	E
DP-2309	DJ-8922	DJ-9108	CI	100	100	3	0.609	0.9	E
DP-10205	DJ-1202	DJ-6369	DI	140	300	72	5.447	0.89	E
DP-9382	DJ-4562	DJ-6247	CI	100	300	129	5.415	0.89	E
P-1483	DJ-1044	DJ-6246	HDPE	145	284.5	14	4.861	0.88	New
P-2739	DJ-1603	J-1034	CI	100	150	158	1.299	0.85	E
DP-2824	DJ-9453	DJ-4362	DI	140	100	88	0.574	0.85	E
P-525	J-175	J-176	HDPE	145	144.4	7	1.192	0.84	New
P-2690	J-1009	J-1005	HDPE	145	252.9	254	3.608	0.83	New
P-2741	J-1033	J-1034	HDPE	145	99.3	59	0.552	0.83	
DP-10442	DJ-2848	DJ-5881	CI	100	250	25	3.5	0.83	E
DP-2311	DJ-9108	DJ-8921	CI	100	100	39	0.559	0.82	E
DP-9322	DJ-7350	DJ-5949	CI	100	150	55	1.256	0.82	E
DP-8893	DJ-7182	DJ-9962	CI	100	200	44	2.183	0.8	E
DP-3024	DJ-6247	DJ-6246	CI	100	300	95	4.898	0.8	E
P-3355	DJ-9962	DJ-338	HDPE	145	144.4	10	1.133	0.8	New
P-2779	J-1054	J-1056	CI	100	150	28	1.219	0.8	E
P-3166	J-1263	DJ-5938	DI	140	200	174	2.166	0.8	
DP-7488	DJ-5618	DJ-3803	CI	100	200	105	2.129	0.78	E
P-1490	DJ-1287	DJ-451	HDPE	145	144.4	20	1.104	0.78	New

DP-8879	DJ-7099	DJ-451	CI	100	150	73	1.185	0.78	E
DP-7857	DJ-9272	DJ-7453	CI	100	150	174	1.183	0.77	E
P-2679	J-1005	DJ-1314	CI	100	200	17	2.102	0.77	E
DP-1733	DJ-3263	DJ-5705	CI	100	150	61	1.148	0.75	E
DP-7589	DJ-8525	DJ-8020	CI	100	150	3	1.145	0.75	E
P-2790	J-1062	DJ-5614	CI	100	100	74	0.509	0.75	E
P-2780	J-1056	DJ-5938	CI	100	150	49	1.142	0.75	E
DP-7416	DJ-1129	DJ-1288	CI	100	200	108	2.021	0.74	E
DP-4671	DJ-6024	DJ-949	DI	140	150	155	1.135	0.74	E
DP-6782	DJ-1314	DJ-1313	CI	100	100	364	0.491	0.72	E
DP-5257	DJ-3585	DJ-2913	CI	100	150	164	1.101	0.72	E
P-2789	DJ-5938	J-1062	CI	100	100	47	0.485	0.72	E
P-2776	DJ-5939	J-1054	CI	100	150	22	1.092	0.71	E
DP-636	DJ-9454	DJ-9453	DI	140	150	27	1.082	0.71	E
P-2783	DJ-5938	J-1059	CI	100	100	29	0.477	0.7	E
P-494	DJ-3264	J-165	CI	100	100	120	0.475	0.7	E
DP-3598	DJ-5414	DJ-5413	DI	140	150	115	1.05	0.69	E
DP-9808	DJ-8008	DJ-7526	CI	100	150	34	1.046	0.68	E
P-2761	J-1044	J-1045	HDPE	145	99.3	172	0.458	0.68	
DP-5261	DJ-5491	DJ-3222	CI	100	150	99	1.037	0.68	E
P-2833	J-1080	J-1085	CI	100	150	17	1.036	0.68	E
P-2850	J-1092	J-1091	CI	100	150	74	1.035	0.68	E
DP-10129	DJ-5949	DJ-5861	CI	100	150	12	1.032	0.68	E
DP-5518	DJ-338	DJ-9962	CI	100	150	8	1.029	0.67	E
DP-2106	DJ-7344	DJ-7343	CI	100	80	69	0.29	0.67	E
DP-4156	DJ-2795	DJ-2503	CI	100	150	5	1.008	0.66	E
P-3164	DJ-2795	J-1263	CI	100	250	18	2.796	0.66	E
P-2809	J-1072	DJ-1241	HDPE	145	99.3	187	0.438	0.65	
P-2813	DJ-4578	J-1074	CI	100	150	54	0.993	0.65	E
DP-3071	DJ-4754	DJ-3221	CI	100	100	137	0.441	0.65	E
DP-2692	DJ-7344	DJ-8534	CI	100	80	15	0.275	0.63	E
DP-4515	DJ-4754	DJ-4753	CI	100	100	151	0.413	0.61	E
DP-6902	DJ-1931	DJ-5618	CI	100	200	112	1.648	0.61	E
P-2849	DJ-1202	J-1092	CI	100	150	102	0.927	0.61	E
DP-9809	DJ-7526	DJ-6646	CI	100	150	59	0.927	0.61	E

P-1480	J-501	DJ-1082	DI	140	300	6	3.699	0.61	New
DP-998	DJ-2888	DJ-7406	CI	100	150	147	0.92	0.6	E
DP-10827	DJ-3194	DJ-3245	CI	100	150	58	0.919	0.6	E
DP-748	DJ-2503	DJ-3704	CI	100	150	77	0.91	0.6	E
DP-1606	DJ-326	DJ-5491	CI	100	200	258	1.607	0.59	E
DP-4525	DJ-3479	DJ-3810	CI	100	150	151	0.887	0.58	E
DP-9381	DJ-320	DJ-4562	CI	100	300	331	3.484	0.57	E
DP-8482	DJ-6296	DJ-10235	CI	100	150	74	0.871	0.57	E
DP-7590	DJ-8020	DJ-5880	CI	100	150	126	0.864	0.57	E
DP-8846	DJ-6646	DJ-6623	CI	100	150	2	0.864	0.57	E
P-2806	J-1071	DJ-2766	CI	100	350	244	4.679	0.56	E
P-521	DJ-6211	J-175	DI	140	150	88	0.852	0.56	E
P-2805	DJ-5290	J-1071	CI	100	350	15	4.582	0.55	E
DP-4262	DJ-3810	DJ-3809	CI	100	150	140	0.841	0.55	E
DP-10130	DJ-5861	DJ-5414	CI	100	150	72	0.838	0.55	E
DP-7901	DJ-10235	DJ-6297	CI	100	150	20	0.835	0.55	E
P-3168	J-1264	J-1011	HDPE	145	252.9	360	2.374	0.55	New
P-3169	DJ-451	J-1264	DI	140	252.9	6	2.374	0.55	
DP-5301	DJ-6832	DJ-2395	CI	100	150	24	0.831	0.54	E
P-2838	DJ-6024	J-1087	CI	100	100	57	0.366	0.54	E
DP-5051	DJ-4021	DJ-4020	DI	140	150	177	0.819	0.54	E
P-2760	J-1044	J-1005	CI	100	200	18	1.442	0.53	E
DP-10719	DJ-6623	DJ-7953	CI	100	150	40	0.805	0.53	E
DP-6166	DJ-320	DJ-3709	CI	100	300	10	3.151	0.52	E
P-2822	J-1074	J-1080	CI	100	150	59	0.775	0.51	E
P-496	DJ-9247	DJ-2887	HDPE	145	144.4	38	0.71	0.5	New
DP-10828	DJ-3245	DJ-3025	CI	100	150	58	0.761	0.5	E
DP-1000	DJ-7406	DJ-2887	CI	100	150	39	0.76	0.5	E
P-2835	DJ-8794	J-1086	CI	100	150	134	0.758	0.5	E
DP-8648	DJ-3709	DJ-1234	CI	100	300	245	3.012	0.49	E
DP-8224	DJ-2396	DJ-6702	CI	100	150	151	0.748	0.49	E
P-2751	J-1039	DJ-7099	CI	100	150	48	0.747	0.49	E
P-2821	J-1078	J-1079	HDPE	145	99.3	29	0.327	0.49	
DP-4436	DJ-1288	DJ-6422	CI	100	150	83	0.737	0.48	E
DP-10443	DJ-5881	DJ-6686	CI	100	250	23	2.046	0.48	E

DP-10720	DJ-7953	DJ-7949	CI	100	150	2	0.736	0.48	E
P-2737	J-1027	J-1033	HDPE	145	99.3	8	0.318	0.48	
DP-10206	DJ-6369	DJ-5867	DI	140	300	18	2.812	0.46	E
DP-7167	DJ-3763	DJ-5939	CI	100	200	70	1.248	0.46	E
P-2841	J-1088	DJ-949	CI	100	150	60	0.683	0.45	E
P-2840	DJ-3221	J-1088	CI	100	150	119	0.68	0.45	E
DP-2219	DJ-7453	DJ-8535	CI	100	150	60	0.675	0.44	E
P-2824	J-1079	J-1080	HDPE	145	99.3	40	0.294	0.44	
P-2750	DJ-3203	J-1039	CI	100	150	30	0.67	0.44	E
DP-7418	DJ-1288	DJ-2914	CI	100	200	84	1.186	0.44	E
P-1028	DJ-1234	J-341	CI	100	300	61	2.667	0.44	E
DP-1949	DJ-6297	DJ-4837	CI	100	150	88	0.666	0.44	E
DP-9880	DJ-6686	DJ-5131	CI	100	250	45	1.835	0.43	E
DP-10612	DJ-7949	DJ-7088	CI	100	150	44	0.659	0.43	E
DP-9865	DJ-5867	DJ-6018	DI	140	300	14	2.611	0.43	E
DP-8762	DJ-799	DJ-3062	CI	100	150	61	0.648	0.42	E
DP-4660	DJ-1132	DJ-5906	CI	100	150	32	0.647	0.42	E
DP-4862	DJ-6459	DJ-1082	CI	100	150	132	0.639	0.42	E
DP-791	DJ-9248	DJ-9247	CI	100	150	32	0.637	0.42	E
P-514	J-172	J-166	DI	140	300	35	2.5	0.41	E
P-2714	DJ-1602	J-1022	HDPE	145	99.3	126	0.272	0.41	
P-3171	DJ-6369	DJ-8922	DI	140	300	9	2.474	0.41	
DP-7923	DJ-3203	DJ-2929	CI	100	150	16	0.618	0.4	E
P-1033	J-344	DJ-1241	CI	100	150	314	0.616	0.4	E
DP-8279	DJ-5131	DJ-5601	CI	100	250	34	1.689	0.4	E
DP-9866	DJ-6018	DJ-6193	DI	140	300	29	2.411	0.39	E
P-498	J-166	DJ-1949	DI	140	300	93	2.407	0.39	E
DP-10459	DJ-3025	DJ-2951	CI	100	150	4	0.589	0.39	E
DP-4311	DJ-3763	DJ-3762	CI	100	150	142	0.588	0.39	E
DP-8159	DJ-3479	DJ-389	CI	100	150	199	0.582	0.38	E
DP-570	DJ-2502	DJ-775	CI	100	150	515	0.581	0.38	E
DP-9280	DJ-5705	DJ-390	CI	100	150	107	0.574	0.38	E
P-2786	J-1059	J-1060	CI	100	100	52	0.254	0.37	E
P-1032	DJ-9168	J-344	CI	100	150	65	0.57	0.37	E
DP-10527	DJ-5809	DJ-3194	CI	100	150	2	0.568	0.37	E

P-2758	J-1042	J-1043	HDPE	145	99.3	141	0.247	0.37	
DP-8699	DJ-390	DJ-5809	CI	100	150	53	0.56	0.37	E
DP-7936	DJ-3703	DJ-2502	CI	100	150	47	0.556	0.36	E
DP-3042	DJ-6211	DJ-6210	DI	140	150	96	0.546	0.36	E
DP-10074	DJ-7088	DJ-7084	CI	100	150	2	0.546	0.36	E
P-2855	DJ-6193	J-1094	DI	140	300	41	2.176	0.36	E
DP-8225	DJ-6702	DJ-6832	CI	100	150	54	0.543	0.36	E
P-2851	J-1092	DJ-5866	HDPE	145	99.3	91	0.236	0.35	
P-1029	J-341	DJ-1603	CI	100	300	57	2.085	0.34	E
P-2798	J-1067	J-1065	CI	100	150	20	0.518	0.34	E
P-2759	J-1042	J-1044	CI	100	200	28	0.915	0.34	E
P-2763	J-1046	DJ-9168	CI	100	150	40	0.506	0.33	E
DP-1639	DJ-8008	DJ-9411	DI	140	150	56	0.505	0.33	E
DP-8280	DJ-5601	DJ-1129	CI	100	250	86	1.401	0.33	E
DP-4212	DJ-5906	DJ-5905	CI	100	100	137	0.224	0.33	E
P-2820	J-1077	J-1078	HDPE	145	99.3	13	0.22	0.33	
P-2738	J-1033	J-1031	HDPE	145	99.3	48	0.218	0.33	
P-2740	J-1034	DJ-1602	CI	100	150	131	0.497	0.33	E
DP-4931	DJ-2951	DJ-2950	CI	100	100	171	0.221	0.33	E
P-2857	J-1094	J-1095	HDPE	145	99.3	138	0.215	0.32	
DP-1277	DJ-8525	DJ-8524	CI	100	100	58	0.218	0.32	E
DP-5517	DJ-9963	DJ-338	CI	100	150	4	0.489	0.32	E
DP-10174	DJ-9248	DJ-5808	CI	100	150	69	0.481	0.31	E
DP-3466	DJ-5601	DJ-5600	CI	100	100	110	0.213	0.31	E
DP-10606	DJ-4753	DJ-3221	CI	100	150	24	0.473	0.31	E
DP-2102	DJ-7350	DJ-7349	CI	100	100	69	0.206	0.3	E
DP-7402	DJ-344	DJ-343	CI	100	150	572	0.463	0.3	E
DP-6975	DJ-7084	DJ-799	CI	100	150	55	0.452	0.3	E
DP-573	DJ-9704	DJ-9544	CI	100	100	25	0.198	0.29	E
DP-681	DJ-9389	DJ-9388	CI	100	80	28	0.125	0.29	E
DP-3041	DJ-7182	DJ-7181	CI	100	100	96	0.195	0.29	E
P-2762	J-174	J-1046	CI	100	150	142	0.434	0.28	E
P-2856	J-1094	DJ-9454	DI	140	300	358	1.734	0.28	E
DP-1637	DJ-8020	DJ-8019	CI	100	100	87	0.192	0.28	E
DP-2036	DJ-7453	DJ-7452	CI	100	150	67	0.431	0.28	E

P-2799	DJ-3704	J-1068	CI	100	150	60	0.431	0.28	E
DP-4433	DJ-5705	DJ-3195	CI	100	150	112	0.429	0.28	E
DP-4742	DJ-3195	DJ-3194	CI	100	150	162	0.427	0.28	E
DP-7968	DJ-3879	DJ-9963	CI	100	150	24	0.426	0.28	E
DP-7935	DJ-776	DJ-3703	CI	100	150	213	0.423	0.28	E
P-2845	J-1089	J-1090	HDPE	145	99.3	168	0.185	0.28	
P-2785	J-1057	J-1059	HDPE	145	99.3	51	0.184	0.28	
DP-4853	DJ-3062	DJ-3061	CI	100	150	167	0.417	0.27	E
DP-8230	DJ-1241	DJ-8794	CI	100	150	45	0.416	0.27	E
P-3170	DJ-950	DJ-7350	DI	140	100	5	0.185	0.27	
DP-8958	DJ-6213	DJ-9410	CI	100	150	77	0.413	0.27	E
DP-4438	DJ-6422	DJ-1287	CI	100	150	332	0.413	0.27	E
P-2819	J-1075	J-1077	HDPE	145	99.3	18	0.179	0.27	
P-2797	DJ-3704	J-1067	CI	100	150	87	0.408	0.27	E
DP-3280	DJ-5867	DJ-5866	CI	100	100	106	0.181	0.27	E
DP-3215	DJ-5949	DJ-5948	CI	100	100	101	0.176	0.26	E
P-2815	J-1074	J-1075	HDPE	145	99.3	12	0.173	0.26	
DP-3171	DJ-6018	DJ-6017	CI	100	100	104	0.175	0.26	E
DP-3057	DJ-6193	DJ-6192	CI	100	100	98	0.172	0.25	E
P-2816	DJ-2021	J-1076	DI	140	150	54	0.382	0.25	E
DP-7924	DJ-2929	DJ-6157	CI	100	150	16	0.371	0.24	E
DP-4218	DJ-3803	DJ-9415	DI	140	150	41	0.371	0.24	E
P-2795	J-1065	DJ-2502	CI	100	150	66	0.369	0.24	E
DP-3290	DJ-5861	DJ-5860	CI	100	100	104	0.164	0.24	E
DP-5761	DJ-2432	DJ-2431	DI	140	100	224	0.164	0.24	E
P-2753	DJ-9705	J-1041	CI	100	150	62	0.354	0.23	E
P-2727	J-1028	J-1027	CI	100	100	22	0.151	0.22	E
DP-8481	DJ-9389	DJ-6296	CI	100	150	479	0.339	0.22	E
DP-2545	DJ-6702	DJ-6701	CI	100	150	81	0.338	0.22	E
DP-5360	DJ-4589	DJ-4588	CI	100	100	196	0.15	0.22	E
P-2839	J-1087	DJ-6023	CI	100	100	43	0.148	0.22	E
DP-4662	DJ-5906	DJ-2978	CI	100	150	368	0.332	0.22	E
P-2754	J-1041	DJ-2847	CI	100	150	50	0.33	0.22	E
P-2829	J-1076	J-1083	DI	140	150	31	0.328	0.22	E
DP-	DJ-2848	DJ-2847	CI	100	150	186	0.328	0.21	E

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DP-8228	DJ-6157	DJ-6241	CI	100	150	23	0.326	0.21	E
DP-3231	DJ-5289	DJ-6976	CI	100	200	355	0.579	0.21	E
DP-1087	DJ-8794	DJ-8793	CI	100	150	41	0.325	0.21	E
DP-10460	DJ-2951	DJ-799	CI	100	150	37	0.314	0.21	E
P-2749	DJ-4282	J-1022	HDPE	145	99.3	31	0.137	0.2	
DP-3484	DJ-9705	DJ-7940	CI	100	150	7	0.311	0.2	E
DP-6930	DJ-7080	DJ-2396	CI	100	150	46	0.311	0.2	E
P-2801	J-1067	J-1068	HDPE	145	99.3	43	0.135	0.2	
P-2756	DJ-2914	J-1042	CI	100	200	89	0.54	0.2	E
P-522	J-175	DJ-1459	DI	140	150	205	0.303	0.2	E
P-2843	DJ-5491	J-1089	CI	100	200	356	0.539	0.2	E
DP-5019	DJ-2978	DJ-2977	CI	100	150	174	0.297	0.19	E
P-528	DJ-2432	J-177	HDPE	145	144.4	32	0.265	0.19	New
DP-9327	DJ-4837	DJ-6701	CI	100	150	45	0.283	0.19	E
P-2736	J-1031	J-1032	HDPE	145	99.3	40	0.124	0.19	
P-2781	J-1056	J-1057	HDPE	145	99.3	25	0.124	0.19	
P-2788	J-1060	J-1061	HDPE	145	99.3	39	0.123	0.18	
P-2842	J-1087	J-1088	HDPE	145	99.3	156	0.123	0.18	
P-2689	DJ-1129	J-1009	HDPE	145	252.9	126	0.798	0.18	New
P-2828	J-1078	J-1082	HDPE	145	99.3	42	0.122	0.18	
DP-9802	DJ-776	DJ-8793	CI	100	150	44	0.277	0.18	E
P-2731	J-1029	J-1030	HDPE	145	99.3	34	0.121	0.18	
P-2802	J-1068	J-1069	CI	100	150	5	0.275	0.18	E
DP-6661	DJ-5414	DJ-8922	CI	100	150	94	0.274	0.18	E
DP-3325	DJ-6459	DJ-6458	CI	100	100	104	0.12	0.18	E
DP-4157	DJ-6241	DJ-6240	CI	100	100	135	0.12	0.18	E
DP-1019	DJ-9411	DJ-9410	CI	100	200	39	0.474	0.17	E
DP-1698	DJ-3408	DJ-3440	CI	100	100	102	0.118	0.17	E
P-2830	J-1083	J-1082	DI	140	150	12	0.255	0.17	E
DP-4440	DJ-3585	DJ-3584	CI	100	150	147	0.255	0.17	E
P-2735	J-1032	DJ-5856	CI	100	100	27	0.113	0.17	E
P-2854	DJ-6192	J-1093	HDPE	145	99.3	34	0.111	0.17	
DP-4121	DJ-4837	DJ-4836	CI	100	150	134	0.248	0.16	E
DP-7003	DJ-5808	DJ-1317	CI	100	150	97	0.243	0.16	E
P-2852	DJ-5866	DJ-6017	HDPE	145	99.3	16	0.106	0.16	
P-2755	J-1041	J-342	HDPE	145	99.3	79	0.105	0.16	
DP-763	DJ-9415	DJ-9414	DI	140	100	31	0.106	0.16	E

P-2715	J-1022	J-1023	HDPE	145	99.3	48	0.104	0.16	
DP-7609	J-341	J-342	CI	100	150	350	0.235	0.15	E
P-520	DJ-4215	J-174	HDPE	145	144.4	16	0.215	0.15	New
DP-756	DJ-9272	DJ-9271	CI	100	150	31	0.228	0.15	E
P-3165	J-1263	DJ-5289	CI	100	250	16	0.629	0.15	E
DP-2933	DJ-6369	DJ-6368	CI	100	100	92	0.1	0.15	E
DP-3486	DJ-7940	DJ-9704	CI	100	150	13	0.223	0.15	E
P-2728	J-1028	J-1029	HDPE	145	99.3	57	0.095	0.14	
P-2787	J-1060	DJ-5613	CI	100	100	29	0.097	0.14	E
P-2725	J-1024	J-1027	HDPE	145	99.3	89	0.095	0.14	
DP-2477	DJ-6832	DJ-6831	CI	100	150	79	0.214	0.14	E
P-2778	J-1054	J-1055	HDPE	145	99.3	56	0.093	0.14	
DP-5198	DJ-10266	DJ-2929	CI	100	150	114	0.21	0.14	E
DP-4788	DJ-3139	DJ-3138	CI	100	100	164	0.092	0.14	E
P-2791	J-1061	J-1062	HDPE	145	99.3	83	0.09	0.13	
DP-8957	DJ-5704	DJ-6213	CI	100	150	3	0.203	0.13	E
DP-1164	DJ-6213	DJ-4246	CI	100	150	44	0.201	0.13	E
P-2803	J-1069	DJ-3703	CI	100	150	78	0.201	0.13	E
DP-5178	DJ-3879	DJ-3878	CI	100	150	185	0.197	0.13	E
DP-4220	DJ-9415	DJ-7198	DI	140	150	102	0.194	0.13	E
DP-3234	DJ-6976	DJ-2978	CI	100	200	10	0.345	0.13	E
DP-7165	DJ-4216	DJ-3763	CI	100	200	129	0.336	0.12	E
P-2717	DJ-4441	J-1025	CI	100	100	29	0.084	0.12	E
DP-4404	DJ-5618	DJ-5617	CI	100	150	146	0.186	0.12	E
P-2807	J-1071	J-1072	HDPE	145	99.3	136	0.079	0.12	
DP-9801	DJ-1241	DJ-776	CI	100	150	4	0.179	0.12	E
DP-8818	DJ-9385	DJ-1314	CI	100	150	253	0.178	0.12	E
DP-6932	DJ-2396	DJ-2239	CI	100	150	109	0.178	0.12	E
P-2746	J-1037	J-1026	CI	100	100	36	0.078	0.11	E
P-2719	J-1024	J-1025	HDPE	145	99.3	32	0.076	0.11	
DP-3639	DJ-5361	DJ-5360	CI	100	150	116	0.172	0.11	E
DP-9328	DJ-6701	DJ-6831	CI	100	150	53	0.171	0.11	E
DP-1690	DJ-7940	DJ-7939	CI	100	100	58	0.076	0.11	E
DP-7119	DJ-5857	DJ-4441	CI	100	100	85	0.075	0.11	E
DP-	DJ-3240	DJ-3239	CI	100	150	161	0.167	0.11	E

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P-2748	J-1038	DJ-4282	HDPE	145	99.3	104	0.072	0.11	
P-2722	J-1023	J-1026	HDPE	145	99.3	28	0.071	0.11	
P-2796	J-1065	J-1066	HDPE	145	99.3	47	0.07	0.11	
DP-2261	DJ-7080	DJ-7079	CI	100	150	73	0.159	0.1	E
DP-4425	DJ-3598	DJ-3597	CI	100	150	147	0.156	0.1	E
DP-2524	DJ-6686	DJ-6685	CI	100	150	80	0.155	0.1	E
DP-8357	DJ-2430	DJ-3879	CI	100	150	52	0.148	0.1	E
DP-10599	DJ-1603	DJ-10058	CI	100	300	4	0.589	0.1	E
DP-3570	DJ-5502	DJ-5501	CI	100	150	114	0.142	0.09	E
P-2729	DJ-5857	J-1030	CI	100	100	52	0.063	0.09	E
P-3362	DJ-1083	PRV-32	CI	100	150	372	0.139	0.09	E
P-3363	PRV-32	DJ-6459	CI	100	150	216	0.139	0.09	E
DP-207	DJ-913	DJ-5704	CI	100	150	292	0.133	0.09	E
P-2733	J-1031	J-1029	HDPE	145	99.3	22	0.058	0.09	
P-2724	J-1027	DJ-4440	CI	100	100	8	0.059	0.09	E
P-524	J-176	DJ-1201	CI	100	150	148	0.129	0.08	E
P-2827	J-1082	DJ-7794	DI	140	150	8	0.125	0.08	E
P-2831	J-1077	J-1083	HDPE	145	99.3	47	0.053	0.08	
DP-9979	DJ-3062	DJ-4753	CI	100	150	13	0.121	0.08	E
P-2844	J-1089	DJ-325	CI	100	200	175	0.212	0.08	E
P-2804	J-1069	J-1070	HDPE	145	99.3	23	0.05	0.08	
P-2834	J-1085	DJ-4577	CI	100	150	16	0.114	0.07	E
DP-1166	DJ-4246	DJ-6212	CI	100	150	52	0.113	0.07	E
DP-1977	DJ-7526	DJ-7525	CI	100	100	65	0.05	0.07	E
DP-2973	DJ-7099	DJ-7098	CI	100	150	93	0.112	0.07	E
DP-2859	DJ-5939	DJ-4215	CI	100	200	8	0.189	0.07	E
P-2832	DJ-4577	J-1084	HDPE	145	99.3	49	0.046	0.07	
P-2745	DJ-4441	J-1037	CI	100	100	4	0.046	0.07	E
P-2792	DJ-5613	J-1063	HDPE	145	99.3	16	0.045	0.07	
DP-4872	DJ-3025	DJ-3024	CI	100	150	168	0.102	0.07	E
DP-4278	DJ-4602	DJ-4601	CI	100	100	141	0.045	0.07	E
DP-67	DJ-10236	DJ-10235	CI	100	150	4	0.099	0.06	E
DP-2255	DJ-7084	DJ-7083	CI	100	100	73	0.044	0.06	E
DP-1161	DJ-8708	DJ-8707	CI	100	100	42	0.042	0.06	E
DP-2069	DJ-7406	DJ-7405	CI	100	150	68	0.094	0.06	E
DP-4158	DJ-2503	DJ-2794	CI	100	150	184	0.093	0.06	E

DP-2500	DJ-6976	DJ-6975	CI	100	150	79	0.089	0.06	E
P-2782	J-1057	J-1058	HDPE	145	99.3	29	0.039	0.06	
DP-5781	DJ-2430	DJ-2429	CI	100	150	225	0.085	0.06	E
P-518	DJ-834	J-174	CI	100	150	218	0.085	0.06	E
DP-3100	DJ-1460	DJ-6211	DI	140	150	164	0.085	0.06	E
P-2721	J-1026	DJ-4282	CI	100	100	38	0.037	0.05	E
DP-192	DJ-10266	DJ-10265	CI	100	150	7	0.082	0.05	E
DP-1681	DJ-7949	DJ-7948	CI	100	100	57	0.036	0.05	E
DP-10173	DJ-390	DJ-9248	CI	100	150	58	0.081	0.05	E
DP-1005	DJ-9504	DJ-5857	CI	100	100	40	0.036	0.05	E
DP-8229	DJ-6241	DJ-3202	CI	100	150	110	0.08	0.05	E
P-2836	J-1086	J-167	CI	100	150	32	0.079	0.05	E
DP-4704	DJ-3245	DJ-3244	CI	100	100	161	0.033	0.05	E
P-2726	J-1025	J-1028	CI	100	100	27	0.033	0.05	E
DP-1359	DJ-8456	DJ-8455	CI	100	150	49	0.074	0.05	E
DP-857	DJ-9108	DJ-9107	DI	140	100	35	0.032	0.05	E
DP-2159	DJ-7244	DJ-7243	CI	100	150	70	0.073	0.05	E
DP-2184	DJ-7198	DJ-7197	DI	140	200	71	0.128	0.05	E
DP-1837	DJ-7794	DJ-7793	DI	140	150	62	0.071	0.05	E
DP-6677	DJ-1234	DJ-1233	CI	100	150	340	0.07	0.05	E
DP-3327	DJ-5809	DJ-5808	CI	100	150	105	0.068	0.04	E
DP-5197	DJ-2930	DJ-10266	CI	100	150	66	0.067	0.04	E
DP-3813	DJ-5131	DJ-5130	CI	100	150	122	0.066	0.04	E
DP-3642	DJ-6297	DJ-4561	CI	100	150	102	0.065	0.04	E
DP-2553	DJ-6646	DJ-6645	CI	100	100	81	0.029	0.04	E
DP-2065	DJ-7417	DJ-7416	CI	100	150	67	0.064	0.04	E
DP-2251	DJ-7088	DJ-7087	CI	100	150	73	0.063	0.04	E
P-501	J-167	DJ-3264	CI	100	150	8	0.06	0.04	E
DP-1334	DJ-8444	DJ-8443	CI	100	100	48	0.026	0.04	E
DP-4659	DJ-3309	DJ-3308	CI	100	150	158	0.058	0.04	E
DP-3361	DJ-6701	DJ-5751	CI	100	150	106	0.054	0.04	E

DP-6246	DJ-6831	DJ-6296	CI	100	150	110	0.053	0.03	E
DP-7840	DJ-2847	DJ-7080	CI	100	150	43	0.053	0.03	E
DP-2779	DJ-8031	DJ-8030	DI	140	150	87	0.052	0.03	E
P-2734	J-1030	J-1032	CI	100	100	24	0.023	0.03	E
P-1497	J-505	DJ-2021	CI	100	450	14	0.426	0.03	E
P-2793	J-1063	J-1061	HDPE	145	99.3	40	0.02	0.03	
DP-4435	DJ-3195	DJ-5704	CI	100	150	43	0.046	0.03	E
P-2818	J-1075	J-1076	HDPE	145	99.3	45	0.019	0.03	
P-2825	J-1079	J-1081	HDPE	145	99.3	19	0.019	0.03	
DP-2564	DJ-6623	DJ-6622	CI	100	150	81	0.042	0.03	E
DP-820	DJ-9169	DJ-9168	CI	100	150	34	0.041	0.03	E
P-2853	DJ-6017	DJ-6192	HDPE	145	99.3	31	0.018	0.03	
DP-5661	DJ-4762	DJ-10058	CI	100	200	4	0.067	0.02	E
DP-5263	DJ-3222	DJ-5490	CI	100	150	15	0.037	0.02	E
DP-5443	DJ-4999	DJ-4998	CI	100	150	202	0.037	0.02	E
DP-1678	DJ-7953	DJ-7952	CI	100	150	57	0.036	0.02	E
DP-5660	DJ-10059	DJ-4762	CI	100	200	3	0.059	0.02	E
P-2747	J-1037	J-1038	HDPE	145	99.3	73	0.013	0.02	
DP-1481	DJ-8250	DJ-8249	DI	140	150	52	0.029	0.02	E
DP-543	DJ-8793	DJ-581	CI	100	150	125	0.029	0.02	E
DP-4488	DJ-7794	DJ-2020	DI	140	150	160	0.026	0.02	E
DP-6463	DJ-9410	DJ-912	CI	100	150	22	0.025	0.02	E
DP-8356	DJ-3127	DJ-2430	CI	100	150	74	0.023	0.02	E
DP-6900	DJ-1044	DJ-1931	CI	100	200	29	0.042	0.02	E
P-1474	DJ-4246	J-499	CI	100	200	262	0.038	0.01	E
DP-7969	DJ-9963	DJ-3126	CI	100	150	13	0.014	0.01	E
DP-9648	DJ-2989	DJ-320	CI	100	300	36	0.055	0.01	E
P-2810	DJ-1918	J-1073	CI	100	350	7	0.052	0.01	E
P-1477	J-500	DJ-5290	CI	100	350	58	0.019	0	E
P-2716	J-1023	J-1024	HDPE	145	99.3	10	0.001	0	
P-3173	PRV-16	DJ-1918	CI	100	450	23	0	0	E
P-3172	DJ-2021	PRV-16	CI	100	450	34	0	0	E

Table B5(b): Junction results

Label	Elevation (m)	Demand (ML/day)	Hydraulic Grade (m)	Pressure (kg/cm ²)
DJ-1083	560.7	0.139	572.8	1.213
J-1038	566.1	0.085	580	1.38
J-499	565.2	0.038	579.2	1.394
DJ-9504	565.9	0.036	579.9	1.401
DJ-5857	565.9	0.103	579.9	1.401
DJ-6423	561.5	0.665	575.7	1.415
J-1030	565.7	0.035	580	1.419
J-1032	565.7	0.033	580	1.425
DJ-5856	565.6	0.113	579.9	1.431
DJ-9168	568.3	0.024	582.6	1.433
DJ-6212	564.8	0.113	579.2	1.439
DJ-3407	561.4	0.634	575.9	1.445
DJ-4441	565.3	0.054	580	1.459
J-1029	565.3	0.033	580	1.46
J-1037	565.3	0.018	580	1.46
DJ-2989	567.7	0.055	582.4	1.461
DJ-8008	564.7	0.038	579.4	1.466
J-1026	565.3	0.03	580	1.468
J-1031	565.2	0.036	580	1.472
DJ-4282	565.2	0.028	580	1.475
DJ-912	564.5	0.025	579.3	1.476
DJ-9410	564.5	0.035	579.3	1.476
J-1025	565.1	0.025	580	1.487
J-1046	567.7	0.072	582.6	1.487
DJ-9169	567.7	0.041	582.6	1.493
J-1023	565	0.032	580	1.494
J-1024	565	0.02	580	1.494
J-344	567.7	0.046	582.8	1.501
J-1087	562.9	0.095	578.1	1.509
DJ-6023	562.9	0.148	578	1.51
J-1028	564.8	0.023	580	1.511
DJ-4246	564	0.051	579.2	1.513
DJ-3195	564	0.048	579.2	1.515
DJ-5704	564	0.024	579.2	1.515
DJ-6213	564	0.009	579.2	1.515
DJ-8249	564.7	0.029	579.9	1.519
DJ-8250	564.7	0.024	579.9	1.519
DJ-7405	564.2	0.094	579.4	1.521
DJ-8443	564.7	0.026	579.9	1.524
DJ-8444	564.7	0.032	579.9	1.525
J-1033	564.7	0.016	580	1.531
J-1022	564.6	0.031	580	1.532
DJ-7525	563.8	0.05	579.1	1.534
J-1027	564.6	0.014	580	1.534

DJ-6024	563	0.16	578.4	1.538
DJ-4440	564.6	0.059	580	1.541
DJ-3810	561.5	0.046	577	1.546
DJ-9411	563.8	0.032	579.3	1.551
DJ-3408	562.2	0.118	577.8	1.555
DJ-3263	564.2	0.06	579.8	1.558
DJ-7526	563.5	0.069	579.2	1.56
DJ-949	562.2	0.162	577.8	1.564
DJ-3709	566.5	0.139	582.4	1.581
DJ-3440	562	0.099	577.8	1.582
DJ-3202	564.5	0.08	580.4	1.585
DJ-320	566.5	0.278	582.4	1.589
DJ-2888	564.2	0.069	580.1	1.592
DJ-8031	564.5	0.052	580.5	1.596
DJ-8030	564.5	0.04	580.5	1.596
DJ-7948	562.7	0.036	578.7	1.597
DJ-7952	562.7	0.036	578.7	1.598
DJ-5705	563.3	0.145	579.3	1.601
J-1034	564.4	0.25	580.4	1.602
DJ-8707	564.5	0.042	580.6	1.603
DJ-8708	564.5	0.049	580.6	1.603
J-500	568.3	0.019	584.4	1.603
J-174	566.3	0.134	582.4	1.604
DJ-3809	560.4	0.841	576.5	1.604
DJ-337	560.1	1.59	576.2	1.609
DJ-6622	562.7	0.042	578.9	1.613
DJ-6645	562.7	0.029	578.9	1.614
DJ-7949	562.5	0.041	578.7	1.615
DJ-7953	562.5	0.032	578.7	1.615
DJ-10058	565.7	0.522	581.9	1.617
DJ-1603	565.7	0.196	581.9	1.617
J-1039	564.2	0.077	580.5	1.625
J-341	565.6	0.347	581.9	1.625
DJ-10059	565.6	0.059	581.9	1.626
DJ-4762	565.6	0.008	581.9	1.626
DJ-4215	566.1	0.025	582.4	1.627
J-1055	566.2	0.093	582.5	1.627
DJ-5939	566.1	0.032	582.4	1.628
DJ-6623	562.5	0.017	578.9	1.631
DJ-1234	565.7	0.276	582	1.631
DJ-6646	562.5	0.034	578.9	1.632
DJ-3203	563.9	0.052	580.4	1.646
DJ-5290	567.8	0.025	584.4	1.65
J-1264	564.7	0	581.2	1.652
DJ-3479	561.1	0.187	577.7	1.655
J-176	561.8	0.084	578.4	1.659
J-175	561.7	0.037	578.4	1.66
DJ-4754	562.9	0.125	579.5	1.662
J-177	561.8	0.004	578.5	1.664
J-1071	567.7	0.018	584.4	1.666
DJ-4216	565.5	0.336	582.2	1.666
J-1072	567.6	0.324	584.4	1.669
DJ-7099	563.9	0.326	580.7	1.67
DJ-6210	561.3	0.546	578.1	1.671

J-1091	561.8	0.03	578.5	1.672
DJ-389	560.5	0.582	577.3	1.672
J-1054	565.8	0.034	582.6	1.672
DJ-7083	561.8	0.044	578.6	1.674
DJ-3763	565.5	0.325	582.3	1.674
DJ-7087	561.8	0.063	578.6	1.675
DJ-4020	562.6	0.15	579.4	1.678
DJ-1201	561.5	0.129	578.4	1.68
DJ-2432	561.6	0.101	578.4	1.681
DJ-834	565.5	0.085	582.4	1.682
DJ-5490	563.6	0.037	580.5	1.683
DJ-3222	563.6	0.021	580.5	1.683
DJ-9388	565	0.125	582	1.692
DJ-1313	560	1.173	577	1.692
J-1088	561	0.121	578	1.693
J-1058	565.8	0.039	582.8	1.693
DJ-6211	561.2	0.221	578.2	1.697
DJ-9389	565	0.214	582	1.699
DJ-3308	563	0.058	580	1.7
DJ-1459	561.2	0.303	578.3	1.704
DJ-5613	565.6	0.052	582.7	1.704
J-1057	565.6	0.021	582.8	1.716
DJ-5289	566.5	0.051	583.7	1.716
J-1263	566.5	0	583.7	1.717
DJ-6241	563.2	0.127	580.4	1.717
DJ-7084	561.4	0.05	578.6	1.717
DJ-3239	563	0.167	580.2	1.717
DJ-7088	561.4	0.05	578.6	1.718
DJ-6157	563.2	0.045	580.4	1.719
DJ-2503	566.5	0.006	583.7	1.72
DJ-2929	563.2	0.037	580.4	1.72
DJ-2795	566.5	0.03	583.7	1.722
DJ-5906	566.5	0.091	583.8	1.725
J-1060	565.4	0.034	582.7	1.728
DJ-5360	562.6	0.172	580	1.733
J-1056	565.4	0.047	582.8	1.733
DJ-1132	566.5	0.057	583.8	1.733
J-1063	565.3	0.024	582.7	1.737
DJ-3597	564.2	0.156	581.6	1.738
DJ-3221	560.8	0.234	578.3	1.744
DJ-3138	562.1	0.092	579.6	1.745
DJ-6240	562.8	0.12	580.3	1.747
DJ-1602	562.7	0.225	580.2	1.747
DJ-4753	560.8	0.061	578.4	1.747
DJ-3062	560.8	0.11	578.4	1.747
J-165	565.2	0.097	582.8	1.749
DJ-7406	561.9	0.067	579.4	1.75
DJ-3762	564.4	0.588	582	1.753
J-1092	561.4	0.128	579	1.753
DJ-799	560.9	0.117	578.5	1.76
DJ-2951	560.9	0.054	578.5	1.763
DJ-3025	560.9	0.071	578.5	1.763
DJ-5861	561.8	0.03	579.5	1.767
J-1061	564.9	0.054	582.7	1.77

DJ-3139	561.8	0.089	579.6	1.776
DJ-776	565.7	0.033	583.5	1.777
DJ-1241	565.7	0.06	583.5	1.777
DJ-1918	564.8	0.052	582.6	1.777
DJ-8793	565.7	0.02	583.5	1.779
DJ-5614	563.9	0.509	581.8	1.78
DJ-8794	565.7	0.017	583.5	1.782
J-1059	565	0.039	582.8	1.782
DJ-4021	561.8	0.05	579.7	1.788
J-1073	564.7	0.031	582.6	1.791
DJ-3061	560.2	0.417	578.2	1.791
DJ-3245	560.8	0.125	578.7	1.791
DJ-1460	560.2	0.085	578.2	1.791
DJ-3194	561	0.076	579	1.794
DJ-5809	561	0.06	579	1.794
DJ-5866	561.1	0.051	579.1	1.798
DJ-5949	561.6	0.049	579.6	1.802
DJ-2431	560.2	0.164	578.3	1.803
DJ-2950	560	0.221	578.1	1.805
DJ-4836	564.2	0.248	582.4	1.808
DJ-3127	563.8	0.014	581.9	1.811
DJ-4362	560.2	0.574	578.4	1.813
DJ-326	563.8	0.027	581.9	1.813
DJ-5414	561	0.061	579.3	1.817
J-167	565.8	0.019	584	1.817
DJ-3264	565.8	0.022	584	1.817
J-1086	565.8	0.072	584	1.817
J-1062	564.4	0.066	582.6	1.819
DJ-800	563.8	0.014	582	1.82
DJ-3878	563.6	0.197	581.9	1.821
DJ-390	560.8	0.095	579.1	1.83
DJ-5938	564.8	0.062	583.1	1.833
DJ-1314	562.5	0.751	580.9	1.833
DJ-2429	563.5	0.085	581.9	1.835
DJ-4561	564.2	0.065	582.6	1.837
DJ-5361	561.6	0.055	580	1.838
DJ-1202	561	0.099	579.5	1.839
DJ-2913	560.4	1.101	578.9	1.844
DJ-3309	561.6	0.02	580	1.844
J-1005	562.5	0.064	581	1.845
DJ-6368	560.8	0.1	579.3	1.845
DJ-3024	560	0.102	578.5	1.847
J-1044	562.4	0.07	581	1.848
DJ-5413	560.4	1.05	578.9	1.848
DJ-950	561.6	0.028	580.1	1.848
DJ-5491	562.5	0.032	581.1	1.853
DJ-6017	560.5	0.051	579.1	1.855
DJ-3704	564.8	0.071	583.3	1.855
DJ-451	562.6	0.085	581.2	1.855
DJ-6297	564	0.104	582.6	1.857
DJ-6192	560.5	0.078	579.1	1.858
DJ-10265	561.7	0.082	580.4	1.863
DJ-10266	561.7	0.06	580.4	1.863
DJ-5948	560.8	0.176	579.5	1.864

DJ-8921	560	0.559	578.7	1.864
DJ-10236	564	0.099	582.7	1.865
DJ-10235	564	0.016	582.7	1.865
DJ-3244	560	0.033	578.7	1.865
J-1093	560.4	0.111	579.1	1.865
DJ-5905	564.7	0.224	583.4	1.866
DJ-3240	561.5	0.092	580.2	1.87
J-1042	562.2	0.127	580.9	1.873
DJ-9453	560.3	0.508	579.1	1.874
DJ-5860	560.6	0.164	579.4	1.879
DJ-3585	561.1	0.229	580	1.881
J-1095	560.2	0.215	579.1	1.882
DJ-2930	561.5	0.067	580.4	1.883
DJ-9454	560.3	0.652	579.1	1.884
DJ-6193	560.4	0.063	579.3	1.884
DJ-5808	560.1	0.17	579	1.886
DJ-7343	560.1	0.29	579	1.886
J-170	565.8	0.077	584.7	1.888
J-1094	560.3	0.228	579.3	1.889
DJ-1317	560	0.243	579	1.891
J-1070	564.3	0.05	583.3	1.893
DJ-7098	561.7	0.112	580.7	1.893
DJ-7349	561	0.206	579.9	1.894
DJ-4562	564	0.11	583	1.894
J-1066	564.2	0.07	583.2	1.895
DJ-344	561.8	0.068	580.8	1.895
DJ-3598	562.6	0.052	581.7	1.9
DJ-2239	562.8	0.178	581.8	1.901
DJ-1917	561.5	0.128	580.6	1.903
DJ-2396	562.8	0.259	581.8	1.904
J-1067	564.2	0.025	583.3	1.904
J-1068	564.2	0.021	583.3	1.905
DJ-9248	560	0.075	579.1	1.907
DJ-7350	561	0.023	580.1	1.909
J-1069	564.1	0.024	583.3	1.909
DJ-913	560	0.133	579.2	1.91
DJ-4577	565.7	0.068	584.9	1.911
DJ-4837	563.2	0.135	582.4	1.914
J-1085	565.7	0.014	584.9	1.914
DJ-9247	560	0.073	579.2	1.915
J-1065	564	0.078	583.2	1.915
J-1045	560.9	0.458	580.1	1.916
DJ-5751	563.2	0.054	582.4	1.918
DJ-9107	560	0.032	579.3	1.919
DJ-9108	560	0.017	579.3	1.919
DJ-6296	563.2	0.479	582.4	1.919
DJ-325	561.7	0.212	580.9	1.921
DJ-6018	560	0.025	579.3	1.921
DJ-2887	560	0.05	579.3	1.922
DJ-5867	560	0.02	579.3	1.922
DJ-8922	560	0.002	579.3	1.923
DJ-6369	560	0.061	579.3	1.923
DJ-2430	562.6	0.086	581.9	1.925
J-1080	565.7	0.033	585	1.929

J-1084	565.5	0.046	584.9	1.94
DJ-1287	561.6	0.691	581.1	1.946
DJ-2502	563.6	0.344	583.2	1.947
DJ-2021	565.7	0.045	585.2	1.949
J-505	565.7	0.008	585.2	1.949
DJ-7417	565	0.061	584.5	1.95
DJ-2794	564.1	0.093	583.7	1.952
DJ-8534	560	0.275	579.6	1.956
J-1074	565.6	0.045	585.2	1.957
DJ-2914	561.3	0.141	580.9	1.959
DJ-6701	562.8	0.062	582.4	1.96
DJ-6831	562.8	0.097	582.4	1.961
J-1079	565.4	0.014	585.1	1.961
J-1075	565.5	0.013	585.2	1.963
DJ-6422	561.1	0.485	580.8	1.966
DJ-4876	563.8	0.076	583.5	1.966
J-1077	565.5	0.012	585.2	1.967
DJ-343	560.3	0.463	580	1.969
J-1078	565.4	0.015	585.2	1.969
J-1043	561	0.247	580.7	1.969
DJ-581	563.8	0.029	583.5	1.97
DJ-7344	560	0.031	579.8	1.972
J-1081	565.3	0.019	585.1	1.973
J-1076	565.4	0.034	585.2	1.973
DJ-2766	565	0.111	584.8	1.974
DJ-3584	560.1	0.255	579.9	1.974
DJ-4578	565.7	0.019	585.5	1.977
DJ-5502	564.3	0.078	584.1	1.98
DJ-2847	562	0.051	581.8	1.981
DJ-3703	563.4	0.067	583.2	1.981
DJ-7080	562	0.099	581.8	1.981
J-342	561.9	0.129	581.8	1.983
DJ-3441	562.6	0.025	582.5	1.983
DJ-8456	562.6	0.037	582.5	1.986
J-1089	561	0.141	580.9	1.988
DJ-7244	564.3	0.05	584.2	1.989
J-1083	565.2	0.02	585.2	1.993
J-1082	565.2	0.009	585.2	1.995
DJ-1950	565.8	0.174	585.8	1.995
DJ-7793	565.2	0.071	585.2	1.996
DJ-7794	565.2	0.028	585.2	1.996
DJ-1233	562	0.07	582	1.999
DJ-3803	564.1	0.206	584.2	2.002
DJ-6975	563.4	0.089	583.5	2.005
DJ-4602	564.1	0.173	584.2	2.006
DJ-7079	561.7	0.159	581.8	2.007
DJ-3879	561.8	0.081	581.9	2.011
DJ-4245	565.8	0.126	585.9	2.013
DJ-3126	561.8	0.014	582	2.014
DJ-9963	561.8	0.049	582	2.014
DJ-338	561.8	0.003	582	2.015
DJ-8524	560.8	0.218	581	2.017
DJ-9962	561.8	0.022	582	2.019
J-501	565.9	0.219	586.2	2.025

J-1090	560.5	0.185	580.8	2.028
DJ-1082	565.8	0.011	586.2	2.028
DJ-8455	562.2	0.074	582.5	2.031
DJ-7416	564.1	0.064	584.5	2.034
DJ-6702	561.9	0.132	582.3	2.035
DJ-5880	560.2	0.864	580.6	2.038
J-1041	561.3	0.081	581.8	2.042
DJ-7182	561.8	0.075	582.3	2.045
J-171	566.1	0.18	586.6	2.048
DJ-4999	563.2	0.03	583.7	2.05
J-166	566	0.093	586.5	2.05
DJ-2978	563	0.38	583.5	2.05
DJ-7181	561.5	0.195	582.1	2.05
DJ-6976	563	0.145	583.5	2.05
J-172	565.9	0.057	586.5	2.053
DJ-4589	563.2	0.065	583.8	2.054
DJ-5501	563.5	0.142	584.1	2.054
DJ-1949	565.8	0.075	586.4	2.055
DJ-9385	560.2	0.178	580.9	2.059
DJ-1288	560.4	0.098	581	2.063
DJ-7243	563.5	0.073	584.2	2.065
DJ-7453	560.7	0.077	581.4	2.07
DJ-6832	561.7	0.075	582.4	2.07
DJ-6247	562.8	0.05	583.6	2.079
DJ-2395	561.7	0.1	582.5	2.079
DJ-8019	560.1	0.192	581	2.083
DJ-8535	560.3	0.078	581.3	2.091
DJ-8020	560.1	0.089	581.1	2.096
DJ-8525	560.1	0.048	581.1	2.099
DJ-5618	562.6	0.294	583.6	2.099
DJ-6685	560.6	0.155	581.8	2.108
DJ-2020	564	0.026	585.2	2.11
DJ-7939	560.5	0.076	581.7	2.115
DJ-9704	560.5	0.026	581.7	2.116
DJ-7940	560.5	0.012	581.7	2.117
DJ-9705	560.5	0.043	581.7	2.117
DJ-2848	560.7	0.115	581.9	2.119
J-1009	560.4	0.071	581.6	2.12
DJ-775	560.9	0.581	582.1	2.12
DJ-5600	560.2	0.213	581.4	2.12
J-1011	560.4	0.022	581.6	2.123
DJ-7452	560	0.431	581.3	2.124
DJ-1044	561.9	0.029	583.2	2.127
DJ-9271	561.4	0.228	582.7	2.129
DJ-6246	561.9	0.037	583.2	2.13
DJ-9272	561.4	0.125	582.8	2.13
DJ-9414	562.8	0.106	584.2	2.132
DJ-9415	562.8	0.07	584.2	2.133
DJ-9544	560.2	0.198	581.7	2.145
DJ-1129	560.1	0.178	581.6	2.148
DJ-5130	560.2	0.066	581.7	2.15
DJ-6686	560.2	0.056	581.8	2.153
DJ-5881	560.2	0.043	581.8	2.157
DJ-5601	560	0.075	581.7	2.159

DJ-5131	560	0.081	581.7	2.163
DJ-6459	564.1	0.38	585.8	2.168
DJ-4998	562	0.037	583.7	2.169
DJ-4588	561.8	0.15	583.5	2.17
DJ-1931	561.4	0.071	583.2	2.176
DJ-4601	561.9	0.045	584.2	2.229
J-502	561.7	0.041	584.1	2.23
DJ-2977	560.9	0.297	583.4	2.25

4. Zone C2-C3

Table C2-3(a): Pipe results

Label	Start Node	Stop Node	Material	Hazen-Williams C	Diameter (mm)	Length (m)	Flow (ML/day)	Velocity (m/s)	Pipe type (new/existing)
P-2008	J-680	DJ-7748	HDPE	145	99.3	303	1.226	1.83	New
P-433	J-142	DJ-8981	CI	100	150	110	2.76	1.81	E
P-2009	J-521	J-683	HDPE	145	99.3	20	1.202	1.8	New
P-2022	DJ-6282	J-688	HDPE	145	284.5	162	9.844	1.79	New
DP-6274	DJ-5454	DJ-5520	CI	100	80	17	0.772	1.78	E
P-2013	J-684	DJ-8305	CI	100	100	6	1.172	1.73	E
P-3367	DJ-6281	DJ-9480	di	140	300	89	10.51	1.72	New
DP-6024	DJ-6282	DJ-1637	CI	100	300	37	10.46	1.71	E
P-1565	412	DJ-6281	DI	140	400	108	18.56	1.71	New
DP-2353	DJ-2297	DJ-7252	CI	100	100	137	1.141	1.68	E
P-2004	DJ-9591	J-681	HDPE	145	252.9	16	7.237	1.67	New
DP-1118	DJ-8304	DJ-1614	CI	100	100	24	1.097	1.62	E
P-2036	DJ-671	J-693	CI	100	150	6	2.454	1.61	E
P-1544	DJ-8981	J-520	CI	100	150	178	2.437	1.6	E
P-2023	J-688	J-527	HDPE	145	284.5	293	8.688	1.58	New
P-2054	J-686	J-699	HDPE	145	203.1	187	4.253	1.52	New
P-2002	DJ-5285	J-681	CI	100	250	11	6.261	1.48	E
P-2044	J-694	J-695	HDPE	145	252.9	7	6.321	1.46	New
P-2025	J-527	J-689	HDPE	145	284.5	34	7.862	1.43	New
P-2385	J-520	J-820	CI	100	150	12	2.15	1.41	E
P-2057	J-699	DJ-4895	HDPE	145	99.3	131	0.907	1.36	New
P-1564	J-526	DJ-2337	HDPE	145	144.4	163	1.915	1.35	New
P-2021	J-687	DJ-443	HDPE	145	99.3	166	0.869	1.3	New
P-257	J-83	DJ-2689	CI	100	100	205	0.871	1.28	E
DP-7884	DJ-7252	DJ-9373	CI	100	100	48	0.854	1.26	E
P-2010	J-683	DJ-879	HDPE	145	99.3	69	0.835	1.25	New
P-1563	J-526	DJ-4828	HDPE	145	99.3	70	0.832	1.24	New
P-3181	J-678	DJ-2127	DI	140	200	464	3.329	1.23	
P-1538	J-518	DJ-5286	CI	100	150	22	1.87	1.22	E
DP-5287	DJ-2765	J-83	CI	100	100	197	0.83	1.22	E
P-1537	DJ-2449	J-518	CI	100	150	7	1.864	1.22	E
DP-1188	DJ-9480	DJ-6281	CI	100	300	97	7.19	1.18	E
P-2055	J-699	J-687	HDPE	145	203.1	131	3.208	1.15	New
DP-1440	DJ-8305	DJ-8304	CI	100	100	51	0.744	1.1	E
P-1551	J-522	DJ-624	CI	100	250	30	4.588	1.08	E
P-2386	J-820	DJ-573	CI	100	150	181	1.638	1.07	E
P-2005	J-679	J-680	HDPE	145	203.1	135	2.966	1.06	New
DP-7885	DJ-9373	DJ-2296	CI	100	100	48	0.694	1.02	E

DP-9751	DJ-3734	DJ-5285	CI	100	250	144	4.32	1.02	E
P-1553	J-522	J-523	HDPE	145	225.8	202	3.5	1.01	New
P-2053	J-698	DJ-407	HDPE	145	99.3	528	0.673	1.01	New
P-2006	DJ-7748	J-682	CI	100	50	7	0.167	0.99	E
P-3178	DJ-624	J-1265	CI	100	250	389	4.112	0.97	E
P-3179	J-1265	J-701	CI	100	250	5	4.112	0.97	E
DP-6303	DJ-2056	DJ-1638	CI	100	100	92	0.628	0.93	E
DP-5455	DJ-4265	DJ-4264	CI	100	100	203	0.617	0.91	E
DP-6301	DJ-443	DJ-2056	CI	100	100	165	0.613	0.9	E
DP-3475	DJ-4896	DJ-9481	CI	100	100	146	0.61	0.9	E
P-2045	J-523	J-696	HDPE	145	225.8	27	3.104	0.9	New
DP-6288	DJ-1320	DJ-3734	CI	100	250	48	3.794	0.89	E
P-2034	J-689	J-692	HDPE	145	284.5	203	4.904	0.89	New
DP-10492	DJ-4265	DJ-5454	CI	100	80	66	0.379	0.87	E
DP-3291	DJ-2462	DJ-2921	CI	100	150	51	1.322	0.87	E
P-2370	J-810	DJ-574	CI	100	200	17	2.33	0.86	E
P-432	DJ-574	J-142	CI	100	150	42	1.307	0.86	E
P-2046	J-696	DJ-4829	HDPE	145	225.8	4	2.915	0.84	New
P-2000	J-680	DJ-7748	CI	100	50	307	0.138	0.82	E
P-1562	DJ-4829	J-526	HDPE	145	225.8	83	2.815	0.81	New
P-2020	J-687	DJ-2056	HDPE	145	203.1	3	2.275	0.81	New
P-2369	DJ-2127	J-810	CI	100	200	62	2.115	0.78	E
DP-5194	DJ-1615	DJ-671	CI	100	150	207	1.189	0.78	E
DP-3984	DJ-4896	DJ-4895	CI	100	100	128	0.524	0.77	E
P-2007	J-682	DJ-879	CI	100	50	52	0.129	0.76	E
DP-9085	DJ-2181	DJ-2449	CI	100	150	159	1.151	0.75	E
P-1548	J-521	DJ-7748	HDPE	145	144.4	23	1.045	0.74	New
P-2024	DJ-442	J-688	HDPE	145	99.3	35	0.488	0.73	New
DP-9646	DJ-1902	DJ-3560	CI	100	100	93	0.492	0.72	E
P-2062	J-701	J-697	CI	100	250	311	3.057	0.72	E
P-3182	DJ-3734	DJ-2297	HDPE	140	99.3	46	0.479	0.72	New
DP-6382	DJ-1638	DJ-1637	CI	100	150	292	1.084	0.71	E
DP-3685	DJ-5286	DJ-5285	CI	100	200	113	1.918	0.71	E
DP-7345	DJ-9591	DJ-407	CI	100	100	535	0.477	0.7	E
P-2017	DJ-9480	J-686	HDPE	145	300	4	4.27	0.7	New
P-430	J-133	755	HDPE	145	144.4	5	0.989	0.7	New
DP-5493	DJ-4211	DJ-4210	CI	100	100	206	0.472	0.7	E
P-2396	DJ-1601	J-825	CI	100	80	72	0.3	0.69	E
DP-9084	DJ-4111	DJ-2181	CI	100	150	202	1.022	0.67	E
P-2033	J-691	J-83	HDPE	145	203.1	35	1.861	0.66	New
P-2387	J-819	J-820	HDPE	145	99.3	135	0.435	0.65	
P-2028	DJ-2690	J-690	CI	100	100	3	0.441	0.65	E
P-2389	J-821	DJ-2448	CI	100	200	115	1.763	0.65	E
DP-9231	DJ-8256	DJ-4111	CI	100	150	3	0.989	0.65	E
DP-9230	DJ-3561	DJ-8256	CI	100	150	325	0.959	0.63	E
DP-4870	DJ-8305	DJ-768	CI	100	100	40	0.423	0.62	E
P-2391	J-821	J-823	HDPE	145	99.3	13	0.415	0.62	
P-2031	J-689	J-691	HDPE	145	252.9	218	2.685	0.62	New
P-2384	DJ-7747	J-819	HDPE	145	99.3	37	0.413	0.62	
P-2399	DJ-671	J-827	CI	100	150	320	0.912	0.6	E
DP-8968	DJ-6282	DJ-442	CI	100	80	167	0.255	0.59	E
P-2381	J-816	J-817	HDPE	145	99.3	49	0.388	0.58	
P-2403	J-827	J-828	HDPE	145	99.3	78	0.387	0.58	

DP-9154	DJ-196	DJ-588	CI	100	150	13	0.882	0.58	E
DP-5967	DJ-2219	DJ-2218	CI	100	150	236	0.875	0.57	E
P-1998	J-679	DJ-1320	CI	100	250	690	2.409	0.57	E
P-2401	J-697	J-828	CI	100	250	132	2.406	0.57	E
DP-1116	DJ-1615	DJ-8304	CI	100	100	373	0.385	0.57	E
P-405	DJ-7039	J-133	CI	100	150	358	0.843	0.55	E
P-2038	J-692	J-693	HDPE	145	252.9	684	2.396	0.55	New
P-2042	DJ-137	J-695	CI	100	250	26	2.309	0.54	E
P-3180	J-680	J-142	HDPE	140	203.1	95	1.514	0.54	
DP-9983	DJ-442	DJ-1601	CI	100	80	335	0.235	0.54	E
P-2011	J-683	DJ-7747	HDPE	145	99.3	47	0.36	0.54	New
P-427	350	DJ-137	HDPE	145	252.9	7	2.312	0.53	New
P-2040	705	J-694	DI	140	600	46	12.93	0.53	E
DP-1829	DJ-7748	DJ-7747	CI	100	50	61	0.089	0.52	E
689-A	704	TCV-52	DI	140	600	7	12.73	0.52	E
689-B	TCV-52	705	DI	140	600	7	12.73	0.52	E
DP-3289	DJ-2922	DJ-2462	CI	100	150	120	0.773	0.51	E
DP-7817	DJ-2297	DJ-7039	CI	100	150	45	0.768	0.5	E
P-2382	J-817	DJ-5778	HDPE	145	99.3	134	0.335	0.5	
DP-6754	DJ-1381	DJ-8255	CI	100	100	3	0.338	0.5	E
DP-8324	DJ-2448	DJ-1320	CI	100	200	108	1.317	0.49	E
DP-3031	DJ-6281	412	CI	100	80	106	0.209	0.48	E
P-2388	DJ-2180	J-821	CI	100	200	70	1.303	0.48	E
DP-1353	DJ-9481	DJ-9480	CI	100	150	49	0.731	0.48	E
P-1569	J-527	DJ-4210	HDPE	145	99.3	224	0.312	0.47	New
P-2029	J-690	DJ-4210	CI	100	100	10	0.316	0.47	E
DP-6756	DJ-8255	DJ-1035	CI	100	100	61	0.311	0.46	E
DP-9155	DJ-588	DJ-3561	CI	100	150	91	0.697	0.46	E
P-2035	J-692	DJ-5454	HDPE	145	284.5	5	2.494	0.45	New
DP-4069	DJ-8257	DJ-5778	CI	100	100	3	0.308	0.45	E
DP-2795	DJ-2449	DJ-9442	CI	100	150	110	0.692	0.45	E
520	751	754	DI	140	450	209	5.962	0.43	E
518	754	755	DI	140	450	57	5.905	0.43	E
DP-3567	DJ-5454	DJ-5453	CI	100	200	114	1.163	0.43	E
P-2368	J-808	J-809	HDPE	145	99.3	54	0.285	0.43	
DP-522	DJ-1034	DJ-1901	CI	100	100	411	0.288	0.42	E
P-2395	DJ-2921	J-824	HDPE	145	99.3	13	0.282	0.42	
P-2367	J-808	DJ-2127	CI	100	150	70	0.634	0.42	E
DP-5854	DJ-2338	DJ-2337	CI	100	50	230	0.069	0.41	E
DP-4752	DJ-2921	DJ-2180	CI	100	200	28	1.063	0.39	E
DP-3608	DJ-2128	DJ-2922	CI	100	150	58	0.594	0.39	E
DP-8156	DJ-588	DJ-6396	CI	100	100	15	0.264	0.39	E
DP-4939	DJ-4829	DJ-4828	CI	100	50	171	0.065	0.38	E
DP-8053	DJ-3560	DJ-1034	CI	100	100	92	0.252	0.37	E
DP-8110	DJ-574	DJ-1049	CI	100	200	150	1.005	0.37	E
P-2402	J-828	J-685	CI	100	250	800	1.534	0.36	E
DP-2797	DJ-9442	DJ-2448	CI	100	150	101	0.551	0.36	E
P-431	755	DJ-8941	di	140	450	3	4.91	0.36	New
DP-7154	DJ-2128	DJ-4110	CI	100	150	2	0.535	0.35	E
DP-2151	DJ-7252	DJ-7251	CI	100	100	70	0.232	0.34	E
P-2371	J-809	J-810	HDPE	145	99.3	48	0.226	0.34	
P-1557	J-523	J-524	HDPE	145	99.3	93	0.223	0.33	New
DP-3946	DJ-2462	DJ-5407	CI	100	150	64	0.509	0.33	E
P-428	347	DJ-557	DI	140	600	12	8.092	0.33	New

P-3370	DJ-557	PRV-35	CI	100	600	486	7.98	0.33	E
P-3177	J-1357	DJ-556	CI	100	600	17	7.98	0.33	E
P-3371	PRV-35	J-1357	CI	100	600	203	7.98	0.33	E
P-1993	DJ-1901	DJ-1049	HDPE	145	203.1	23	0.913	0.33	New
P-1994	DJ-556	J-678	CI	100	600	211	7.909	0.32	E
P-2394	J-824	J-823	HDPE	145	99.3	99	0.216	0.32	
DP-538	DJ-9591	DJ-9590	CI	100	600	15	7.719	0.32	E
DP-1095	DJ-1601	DJ-2690	CI	100	100	175	0.213	0.31	E
DP-2919	DJ-6396	DJ-6395	CI	100	100	91	0.212	0.31	E
DP-6880	DJ-8258	DJ-1901	CI	100	150	101	0.474	0.31	E
P-2397	J-825	DJ-4265	CI	100	80	45	0.134	0.31	E
P-2039	J-685	J-684	HDPE	145	252.9	11	1.314	0.3	New
DP-6879	DJ-5158	DJ-8258	CI	100	150	103	0.46	0.3	E
DP-3825	DJ-1902	DJ-5158	CI	100	150	60	0.453	0.3	E
DP-1891	DJ-5520	DJ-670	CI	100	80	448	0.126	0.29	E
P-2060	DJ-4265	J-700	HDPE	145	99.3	19	0.193	0.29	New
DP-6797	DJ-4829	DJ-2338	CI	100	50	34	0.049	0.29	E
P-3174	J-694	J-1356	DI	140	600	10	6.606	0.27	E
P-3368	J-1356	PRV-34	DI	140	600	401	6.606	0.27	E
P-3369	PRV-34	727	DI	140	600	228	6.606	0.27	E
P-2047	J-696	DJ-623	HDPE	145	99.3	270	0.18	0.27	New
P-1555	DJ-2338	J-524	CI	100	50	32	0.046	0.27	E
DP-1097	DJ-2690	DJ-1600	CI	100	100	113	0.179	0.26	E
P-2050	DJ-670	J-697	HDPE	145	99.3	42	0.171	0.26	New
514	727	728	DI	140	600	505	6.242	0.26	E
DP-4216	DJ-1381	DJ-4110	CI	100	150	159	0.389	0.25	E
P-2037	J-693	DJ-5453	CI	100	150	567	0.388	0.25	E
513	728	730	DI	140	600	52	6.212	0.25	E
519	730	751	DI	140	600	390	6.206	0.25	E
DP-4067	DJ-5779	DJ-8257	CI	100	100	102	0.17	0.25	E
DP-3948	DJ-5407	DJ-2461	CI	100	150	156	0.38	0.25	E
P-2051	J-681	J-698	CI	100	250	6	0.972	0.23	E
DP-2923	DJ-1035	DJ-5157	CI	100	100	125	0.154	0.23	E
DP-446	DJ-624	DJ-4829	CI	100	50	236	0.038	0.22	E
DP-5563	DJ-6395	DJ-3560	CI	100	100	142	0.149	0.22	E
P-2374	J-812	J-808	CI	100	150	39	0.314	0.21	E
P-256	DJ-4210	J-83	CI	100	100	24	0.14	0.21	E
DP-957	DJ-8981	DJ-8980	CI	100	100	38	0.137	0.2	E
P-2012	J-85	J-684	CI	100	100	80	0.136	0.2	E
DP-694	DJ-9373	DJ-9372	CI	100	100	29	0.136	0.2	E
DP-3482	DJ-2461	DJ-2127	CI	100	200	127	0.541	0.2	E
DP-1611	DJ-8942	DJ-8941	CI	100	600	72	4.844	0.2	E
P-1997	DJ-2461	J-679	CI	100	250	7	0.798	0.19	E
P-2377	J-814	J-812	CI	100	150	29	0.285	0.19	E
P-1999	DJ-880	J-680	CI	100	50	72	0.031	0.18	E
DP-5176	DJ-9590	DJ-8942	CI	100	600	497	4.505	0.18	E
P-1995	J-678	DJ-2218	CI	100	600	276	4.294	0.18	E
P-2032	J-691	J-690	HDPE	145	252.9	4	0.76	0.18	New
DP-9645	DJ-5157	DJ-1902	CI	100	100	106	0.109	0.16	E
P-2380	J-816	J-814	CI	100	150	47	0.242	0.16	E
P-1991	J-677	DJ-1034	CI	100	100	139	0.105	0.16	E
P-2398	J-825	J-826	HDPE	145	99.3	230	0.103	0.15	
DP-1477	DJ-8258	DJ-8257	CI	100	100	52	0.1	0.15	E
DP-5562	DJ-3561	DJ-6395	CI	100	100	6	0.1	0.15	E

P-1547	J-520	J-521	HDPE	145	144.4	84	0.204	0.14	New
DP-5779	DJ-2218	DJ-8022	CI	100	600	15	3.352	0.14	E
P-2393	J-823	J-824	HDPE	145	99.3	490	0.091	0.14	
DP-1636	DJ-8022	DJ-8021	CI	100	600	56	3.321	0.14	E
DP-5173	DJ-8021	DJ-9590	CI	100	600	121	3.25	0.13	E
P-1556	J-524	DJ-623	CI	100	50	201	0.022	0.13	E
DP-499	DJ-9652	DJ-9651	CI	100	100	21	0.087	0.13	E
DP-2658	DJ-9652	DJ-2180	CI	100	150	190	0.186	0.12	E
DP-1963	DJ-1638	DJ-442	CI	100	100	624	0.082	0.12	E
DP-643	DJ-9442	DJ-9441	CI	100	100	27	0.08	0.12	E
P-2379	DJ-2922	J-816	CI	100	150	4	0.16	0.1	E
DP-2812	DJ-1035	DJ-1380	CI	100	100	251	0.069	0.1	E
312	707	705	DI	140	450	11	1.233	0.09	E
DP-2287	DJ-7039	DJ-7038	CI	100	100	74	0.06	0.09	E
P-1990	DJ-6396	J-677	CI	100	100	4	0.057	0.08	E
DP-5556	DJ-5158	DJ-5779	CI	100	100	53	0.057	0.08	E
DP-5557	DJ-5779	DJ-5157	CI	100	100	112	0.05	0.07	E
DP-4421	DJ-4110	DJ-5754	CI	100	150	99	0.103	0.07	E
P-2052	J-698	DJ-286	CI	100	250	75	0.283	0.07	E
P-2058	DJ-5520	J-700	CI	100	300	66	0.368	0.06	E
P-2372	J-809	J-811	HDPE	145	99.3	64	0.039	0.06	
686-A	350	TCV-55	DI	140	600	4	1.237	0.05	E
686-B	TCV-55	352	DI	140	600	4	1.237	0.05	E
311	352	707	DI	140	600	13	1.236	0.05	E
P-2015	J-685	J-87	CI	100	250	79	0.188	0.04	E
P-2378	J-814	J-815	HDPE	145	99.3	108	0.03	0.04	
DP-4172	DJ-269	DJ-2297	CI	100	150	54	0.063	0.04	E
P-2400	J-827	DJ-670	CI	100	150	140	0.055	0.04	E
DP-7153	DJ-5755	DJ-2128	CI	100	150	6	0.055	0.04	E
DP-3473	DJ-2056	DJ-4896	CI	100	100	130	0.024	0.03	E
DP-3603	DJ-5408	DJ-5407	CI	100	100	115	0.021	0.03	E
P-2383	J-817	J-818	HDPE	145	99.3	28	0.017	0.03	
P-2375	J-812	J-813	HDPE	145	99.3	103	0.016	0.02	
DP-2656	DJ-2181	DJ-9652	CI	100	150	53	0.03	0.02	E
DP-4215	DJ-4111	DJ-1381	CI	100	150	51	0.021	0.01	E
P-2059	J-700	DJ-5519	CI	100	300	47	0.08	0.01	E
DP-4308	DJ-3735	DJ-3734	CI	100	150	142	0.019	0.01	E
P-434	DJ-880	J-142	HDPE	145	144.4	22	0.006	0	New
DP-1478	DJ-8256	DJ-8255	CI	100	150	52	0	0	E

Table C2-3(b): Junction results

Label	Elevation (m)	Demand (ML/day)	Hydraulic Grade (m)	Pressure (kg/cm ²)
DJ-2337	602.9	1.984	606.6	0.371
DJ-2296	610	0.694	614	0.403
DJ-879	605.9	0.964	610.2	0.431
DJ-623	603.6	0.202	608.5	0.49
DJ-9372	610	0.136	615	0.496
DJ-9373	610	0.024	615	0.499
DJ-573	604	1.638	609	0.503
J-819	605.7	0.848	611	0.525
DJ-4828	601.7	0.897	607.4	0.568

J-683	605.6	0.007	611.3	0.571
J-682	605.9	0.038	611.6	0.572
DJ-7251	610.4	0.232	616.3	0.593
DJ-7748	605.9	0.063	612	0.603
DJ-7747	604.8	0.036	611.1	0.637
J-526	602.1	0.068	608.5	0.641
DJ-7252	610	0.055	616.5	0.644
J-524	602.2	0.156	608.7	0.647
J-521	605.3	0.047	611.9	0.655
DJ-2338	602	0.026	608.5	0.657
J-820	604.3	0.077	611.6	0.729
DJ-4829	601.3	0.025	608.7	0.742
J-696	601.2	0.009	608.7	0.752
J-520	604.2	0.084	611.9	0.766
DJ-2689	593.9	0.871	601.7	0.787
J-523	600.5	0.173	608.8	0.83
DJ-4264	594.8	0.617	603.4	0.863
DJ-5519	595.6	0.08	606.8	1.115
J-825	595.6	0.064	606.9	1.132
DJ-1601	596.5	0.147	607.8	1.135
J-700	595.2	0.096	606.8	1.156
J-689	597	0.273	608.6	1.158
J-527	597	0.514	608.8	1.175
DJ-4265	595	0.088	606.8	1.176
J-826	594.8	0.103	606.8	1.203
DJ-5520	594.7	0.278	606.8	1.207
DJ-2765	590.2	0.83	602.5	1.227
DJ-670	593	0.352	605.6	1.261
J-697	593	0.479	605.7	1.263
J-83	595.4	0.3	608.2	1.28
DJ-4210	595.3	0.016	608.2	1.287
J-701	593.9	1.055	606.8	1.287
DJ-2690	595.3	0.049	608.2	1.289
J-691	595.4	0.064	608.3	1.289
J-1265	593.9	0	606.9	1.289
DJ-8980	604.1	0.137	617.1	1.29
J-690	595.3	0.003	608.3	1.292
DJ-5453	594.9	0.774	607.9	1.293
DJ-8942	612.2	0.338	625.2	1.302
DJ-1615	592.4	0.804	605.6	1.309
J-827	592.4	0.47	605.6	1.326
754	611.9	0.057	625.3	1.329
J-692	594.7	0.014	608.1	1.334
DJ-5454	594.7	0.181	608.1	1.336
DJ-1600	594.6	0.179	608.1	1.342
DJ-3735	610.4	0.019	623.9	1.347
DJ-1320	610	0.068	623.6	1.352
DJ-2297	610	0.043	623.6	1.352
DJ-269	610	0.063	623.6	1.359
DJ-7038	610.1	0.06	623.7	1.362
J-688	597.1	0.668	610.8	1.362
DJ-7039	610	0.016	623.7	1.367
DJ-9441	609.8	0.08	623.5	1.371
DJ-9442	609.8	0.061	623.5	1.372

DJ-442	596.8	0.59	610.6	1.375
J-828	591.6	1.259	605.4	1.377
DJ-3734	610	0.029	623.9	1.378
DJ-443	595.9	1.482	609.7	1.378
DJ-4896	598.5	0.109	612.4	1.385
DJ-1638	596.7	1.63	610.8	1.409
DJ-8981	602.8	0.186	617.1	1.425
J-522	595.3	0.154	609.6	1.427
DJ-624	594.9	0.438	609.4	1.438
J-699	598.5	0.138	613.2	1.463
J-133	610.4	0.145	625.2	1.476
755	610.4	0.006	625.2	1.48
DJ-5285	610	0.022	624.9	1.488
DJ-8941	610.3	0.067	625.2	1.489
751	610.3	0.245	625.3	1.498
DJ-2448	608.3	0.105	623.3	1.5
DJ-2449	608.8	0.021	623.8	1.5
J-681	610	0.005	625	1.504
DJ-2127	606.9	0.039	622	1.505
DJ-6282	597.1	0.36	612.2	1.508
J-698	609.9	0.016	625	1.51
J-518	608.8	0.006	624	1.513
J-680	606	0.056	621.3	1.526
J-679	606.5	0.241	621.9	1.54
DJ-4895	595.4	1.431	610.8	1.543
DJ-407	604.2	1.15	619.7	1.543
DJ-5286	608.8	0.048	624.3	1.547
DJ-9591	609.7	0.005	625.2	1.547
DJ-2461	606.4	0.122	621.9	1.548
DJ-9590	609.6	0.036	625.2	1.55
J-810	606.1	0.011	621.7	1.553
DJ-1637	597.1	0.133	612.7	1.561
DJ-574	605.9	0.018	621.5	1.565
DJ-286	609.2	0.283	625	1.58
DJ-4211	590.2	0.472	606.2	1.589
J-808	605.8	0.035	621.8	1.598
DJ-671	591.1	0.353	607.2	1.608
J-693	591.1	0.331	607.3	1.621
J-687	595.9	0.064	612.4	1.646
DJ-8021	608.7	0.071	625.2	1.648
DJ-2056	595.9	1.011	612.4	1.652
J-809	605.1	0.02	621.7	1.655
J-812	605.2	0.013	621.8	1.658
DJ-9481	598.1	0.121	614.8	1.661
DJ-880	604.5	0.025	621.2	1.662
730	608.4	0.006	625.4	1.691
J-823	605.9	0.108	622.8	1.693
DJ-5408	605	0.021	622.1	1.704
J-686	597.7	0.017	614.9	1.714
DJ-9480	597.7	1.026	614.9	1.722
J-821	605.6	0.045	622.9	1.724
J-142	603.8	0.068	621.2	1.735
J-814	604.4	0.014	621.8	1.735
DJ-6281	598.1	1.066	615.6	1.748

DJ-2219	605.9	0.875	624.1	1.825
J-811	603.4	0.039	621.7	1.828
DJ-2180	604	0.054	622.7	1.873
J-818	602.8	0.017	621.6	1.88
J-813	602.9	0.016	621.8	1.883
J-816	602.9	0.013	621.8	1.884
DJ-9652	603.8	0.069	622.7	1.884
DJ-2922	602.8	0.02	621.8	1.896
DJ-2181	603.6	0.159	622.7	1.9
DJ-5407	603.1	0.108	622.1	1.9
DJ-2462	603.1	0.04	622.2	1.91
DJ-1614	582.7	1.097	601.8	1.912
J-824	603.4	0.025	622.7	1.929
DJ-557	609.2	0.112	628.5	1.929
DJ-2921	603.1	0.022	622.7	1.958
DJ-8022	605.5	0.031	625.2	1.96
728	605.7	0.03	625.4	1.962
J-817	601.9	0.036	621.6	1.967
DJ-2218	605.5	0.066	625.2	1.967
J-815	602	0.03	621.8	1.973
DJ-8304	582.7	0.031	603	2.027
DJ-5754	601	0.103	621.6	2.058
DJ-768	583.2	0.423	603.8	2.059
707	608.9	0.003	629.5	2.06
705	608.8	1.03	629.5	2.067
352	608.5	0.001	629.5	2.098
DJ-137	608.4	0.003	629.5	2.106
J-694	607.7	0.005	629.5	2.175
J-695	607.6	0.519	629.4	2.179
DJ-4110	599.8	0.044	621.6	2.181
DJ-5755	599.8	0.055	621.7	2.181
DJ-2128	599.8	0.003	621.7	2.181
DJ-9651	600.8	0.087	622.7	2.182
J-1356	607.5	0	629.5	2.193
DJ-1901	599.2	0.151	621.3	2.206
DJ-1049	599.2	0.092	621.3	2.207
DJ-8257	599.1	0.037	621.2	2.207
DJ-5778	599.1	0.027	621.2	2.209
DJ-196	596.2	0.751	619.5	2.318
DJ-588	596.2	0.079	619.5	2.324
DJ-8255	598	0.026	621.5	2.342
DJ-1381	598	0.072	621.5	2.344
DJ-6396	596.1	0.006	619.6	2.345
J-677	596	0.048	619.6	2.35
DJ-8305	580.5	0.005	604.2	2.36
J-684	580.5	0.006	604.5	2.395
J-685	580.4	0.033	604.5	2.405
DJ-8256	597.3	0.03	621.5	2.41
DJ-4111	597.3	0.012	621.5	2.411
J-85	580.2	0.136	604.4	2.423
DJ-3561	595.4	0.162	619.8	2.429
DJ-6395	595.4	0.036	619.8	2.431
DJ-1035	596.3	0.088	621.2	2.487
J-87	579.6	0.188	604.5	2.491

DJ-5157	595.9	0.095	621	2.511
DJ-5779	595.9	0.063	621.1	2.513
DJ-8258	595.9	0.114	621.2	2.518
DJ-1034	594.3	0.435	619.7	2.526
DJ-3560	594.5	0.092	619.9	2.544

5. Zone C5

Table C5(a): Pipe results

Label	Start Node	Stop Node	Material	Hazen-Williams C	Diameter (mm)	Length (m)	Flow (ML/day)	Velocity (m/s)	Pipe type (new/existing)
DP-4342	DJ-176	DJ-215	MS	140	100	109	1.114	1.64	E
P-236	J-77	DJ-1628	CI	100	200	237	4.084	1.5	E
P-237	J-76	J-77	HDPE	145	203.1	11	4.109	1.47	New
P-239	PNJ-102	DJ-772	HDPE	145	144.4	9	1.404	0.99	New
P-121	DJ-1628	J-47	CI	100	200	140	2.657	0.98	E
DP-4313	DJ-935	DJ-1628	CI	100	150	66	1.373	0.9	E
DP-9644	DJ-998	DJ-935	CI	100	150	62	1.329	0.87	E
DP-9643	DJ-1046	DJ-998	CI	100	150	59	1.28	0.84	E
DP-8751	DJ-3238	DJ-2513	CI	100	100	19	0.544	0.8	E
DP-7970	DJ-1629	DJ-1046	CI	100	150	98	1.223	0.8	E
DP-3075	DJ-225	DJ-616	CI	100	250	131	3.054	0.72	E
P-123	J-47	J-48	CI	100	200	63	1.875	0.69	E
P-125	J-48	J-49	CI	100	200	56	1.661	0.61	E
DP-7103	DJ-4858	DJ-176	MS	140	100	61	0.414	0.61	E
DP-4720	DJ-2601	DJ-2900	CI	100	100	96	0.401	0.59	E
DP-9905	DJ-176	DJ-2360	CI	100	150	55	0.875	0.57	E
DP-2338	DJ-3622	J-35	CI	100	100	71	0.384	0.57	E
PNP-970	DJ-215	PNJ-306	HDPE	145	144.4	18	0.793	0.56	New
DP-7012	DJ-616	DJ-791	CI	100	200	132	1.518	0.56	E
DP-10444	DJ-2360	DJ-295	CI	100	150	82	0.84	0.55	E
P-126	J-49	DJ-1702	CI	100	200	128	1.494	0.55	E
DP-5160	DJ-1702	DJ-295	CI	100	200	70	1.474	0.54	E
P-96	J-35	DJ-4971	HDPE	145	144.4	13	0.763	0.54	New
DP-9019	DJ-4988	DJ-4858	MS	140	100	263	0.366	0.54	E
DP-3903	DJ-4988	J-47	CI	100	150	133	0.781	0.51	E
DP-8460	DJ-8741	DJ-7052	CI	100	100	88	0.339	0.5	E
DP-8122	DJ-5977	DJ-4073	CI	100	150	68	0.749	0.49	E
DP-9125	DJ-4214	DJ-395	CI	100	200	83	1.302	0.48	E
P-240	DJ-772	PNJ-101	HDPE	145	144.4	1	0.67	0.47	New
P-241	PNJ-101	DJ-770	HDPE	145	144.4	9	0.67	0.47	New
DP-3562	DJ-4162	DJ-8741	CI	100	100	53	0.314	0.46	E
P-238	PNJ-151	PNJ-102	HDPE	145	144.4	9	0.65	0.46	New
P-225	DJ-4971	DJ-2512	HDPE	145	144.4	54	0.642	0.45	New
P-231	J-51	DJ-3017	HDPE	145	144.4	11	0.632	0.45	New
DP-9124	DJ-806	DJ-4214	CI	100	200	95	1.199	0.44	E
DP-	DJ-3460	DJ-5416	CI	100	150	168	0.656	0.43	E

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DP-5282	DJ-927	DJ-615	CI	100	150	180	0.649	0.43	E
DP-3080	DJ-4073	DJ-2512	CI	100	150	48	0.635	0.42	E
DP-7013	DJ-791	DJ-805	CI	100	200	222	1.103	0.41	E
DP-6943	J-33	DJ-803	CI	100	150	409	0.608	0.4	E
DP-9693	DJ-1571	DJ-806	CI	100	200	94	1.08	0.4	E
DP-6907	DJ-790	DJ-2039	CI	100	200	75	1.079	0.4	E
DP-10842	DJ-295	DJ-2361	CI	100	150	146	0.607	0.4	E
DP-9692	DJ-2039	DJ-1571	CI	100	200	58	1.071	0.39	E
P-1580	J-528	J-530	HDPE	145	99.3	111	0.26	0.39	New
DP-6905	DJ-396	DJ-790	CI	100	200	129	1.021	0.38	E
DP-10109	DJ-5416	DJ-5216	CI	100	150	178	0.566	0.37	E
DP-7934	DJ-4198	DJ-3622	CI	100	100	66	0.251	0.37	E
DP-8121	DJ-2513	DJ-5977	CI	100	150	106	0.561	0.37	E
DP-4681	DJ-1036	DJ-3238	CI	100	150	67	0.56	0.37	E
DP-10843	DJ-2361	DJ-5588	CI	100	150	55	0.535	0.35	E
P-107	DJ-395	PNJ-216	HDPE	145	144.4	8	0.488	0.34	New
DP-3763	DJ-4199	DJ-3623	CI	100	100	70	0.233	0.34	E
DP-8350	DJ-616	DJ-396	CI	100	250	409	1.446	0.34	E
DP-7771	DJ-1629	DJ-803	CI	100	200	61	0.886	0.33	E
DP-2025	DJ-7471	DJ-7470	CI	100	100	66	0.219	0.32	E
DP-8461	DJ-7052	J-48	CI	100	100	135	0.214	0.32	E
DP-7933	DJ-2428	DJ-4198	CI	100	100	86	0.213	0.31	E
DP-2867	DJ-805	DJ-615	CI	100	200	96	0.804	0.3	E
DP-9798	DJ-277	DJ-3460	CI	100	150	61	0.435	0.28	E
P-109	PNJ-306	DJ-5113	CI	100	200	189	0.747	0.28	E
P-139	DJ-3806	J-35	HDPE	145	144.4	95	0.38	0.27	New
DP-7316	DJ-1572	DJ-2040	CI	100	100	71	0.18	0.27	E
DP-4680	DJ-3641	DJ-1036	CI	100	150	94	0.397	0.26	E
DP-3992	DJ-5977	DJ-4143	CI	100	100	58	0.172	0.25	E
PNP-972	DJ-5368	PNJ-311	HDPE	145	144.4	6	0.355	0.25	New
DP-2386	DJ-791	DJ-1572	CI	100	150	152	0.378	0.25	E
DP-2280	DJ-7052	J-49	CI	100	100	80	0.167	0.25	E
DP-5648	DJ-3705	DJ-6542	CI	100	100	120	0.163	0.24	E
DP-5529	DJ-4144	DJ-4143	CI	100	100	209	0.162	0.24	E
P-1573	J-529	DJ-4988	MS	140	100	291	0.157	0.23	E
DP-6831	DJ-1036	DJ-1898	CI	100	100	182	0.155	0.23	E
DP-5333	DJ-3623	DJ-3622	CI	100	100	194	0.15	0.22	E
DP-4496	DJ-6930	DJ-4144	CI	100	100	60	0.145	0.21	E
P-91	J-33	DJ-2899	CI	100	150	66	0.326	0.21	E
DP-5491	DJ-6185	DJ-4214	CI	100	100	206	0.144	0.21	E
DP-4878	DJ-2786	DJ-5206	CI	100	100	151	0.143	0.21	E
DP-10210	DJ-927	DJ-3110	CI	100	150	77	0.321	0.21	E
DP-4769	DJ-1976	DJ-5449	CI	100	200	68	0.568	0.21	E
DP-4721	DJ-2900	DJ-2600	CI	100	100	117	0.142	0.21	E
DP-9252	DJ-1838	DJ-927	CI	100	150	1	0.31	0.2	E
PNP-628	PNJ-161	PNJ-154	DI	140	300	135	1.226	0.2	
PNP-627	PNJ-104	PNJ-164	MS	140	300	39	1.208	0.2	E
PNP-965	DJ-1976	PNJ-297	HDPE	145	144.4	5	0.28	0.2	New
DP-2376	DJ-4162	DJ-4858	CI	100	150	58	0.301	0.2	E

DP-5448	DJ-2900	DJ-2899	CI	100	150	203	0.29	0.19	E
DP-4345	DJ-6184	DJ-805	CI	100	150	200	0.286	0.19	E
P-90	DJ-2600	J-33	CI	100	150	62	0.282	0.18	E
P-116	DJ-5449	PNJ-311	CI	100	200	92	0.5	0.18	E
P-3184	PRV-19	DJ-6058	MS	140	500	37	3.07	0.18	E
P-92	DJ-225	J-34	MS	140	500	88	3.07	0.18	E
P-3183	J-34	PRV-19	MS	140	500	97	3.07	0.18	E
DP-4821	DJ-4073	DJ-5790	CI	100	100	71	0.122	0.18	E
DP-3337	DJ-5790	DJ-5789	CI	100	100	105	0.122	0.18	E
DP-5059	DJ-4971	DJ-5789	CI	100	100	64	0.122	0.18	E
DP-8681	DJ-5216	DJ-4199	CI	100	150	107	0.267	0.17	E
DP-10211	DJ-3110	DJ-3492	CI	100	150	97	0.265	0.17	E
DP-5384	DJ-3460	DJ-3459	CI	100	150	198	0.265	0.17	E
DP-10030	DJ-4787	DJ-6930	CI	100	100	573	0.117	0.17	E
DP-3743	DJ-5216	DJ-5215	CI	100	150	120	0.261	0.17	E
P-233	665	J-76	DI	140	600	21	4.113	0.17	New
DP-7317	DJ-2040	DJ-8743	CI	100	100	62	0.112	0.16	E
P-1574	DJ-2786	J-530	CI	100	150	77	0.247	0.16	E
DP-5549	DJ-7917	DJ-4799	CI	100	200	64	0.422	0.16	E
DP-2385	PNJ-152	DJ-1838	CI	100	150	78	0.235	0.15	E
DP-9797	DJ-5588	DJ-277	CI	100	150	81	0.23	0.15	E
DP-5548	DJ-4800	DJ-7917	CI	100	200	67	0.407	0.15	E
DP-1881	DJ-7682	DJ-7681	CI	100	200	63	0.394	0.15	E
DP-4377	DJ-4848	DJ-3641	CI	100	200	145	0.384	0.14	E
DP-4015	DJ-4849	DJ-4848	CI	100	150	129	0.203	0.13	E
P-88	664	DJ-6057	DI	140	600	17	3.191	0.13	New
DP-3142	DJ-6058	DJ-6057	MS	140	600	98	3.165	0.13	E
DP-2263	PNJ-154	DJ-395	MS	140	300	205	0.755	0.12	E
PNP-625	PNJ-102	PNJ-214	DI	140	300	561	0.754	0.12	E
DP-4343	DJ-806	DJ-6184	CI	100	150	201	0.183	0.12	E
DP-7895	DJ-296	DJ-1629	CI	100	200	105	0.315	0.12	E
DP-6832	DJ-1898	DJ-4792	CI	100	100	204	0.079	0.12	E
DP-6182	DJ-7338	DJ-1898	CI	100	100	264	0.077	0.11	E
DP-8359	DJ-5113	DJ-5626	CI	100	200	568	0.301	0.11	E
DP-4562	DJ-5588	DJ-3459	CI	100	200	55	0.295	0.11	E
PNP-871	PNJ-160	PNJ-152	MS	140	300	37	0.654	0.11	E
DP-5321	DJ-4848	DJ-3705	CI	100	150	193	0.163	0.11	E
PNP-865	PNJ-151	PNJ-160	MS	140	300	366	0.65	0.11	E
DP-755	DJ-5205	DJ-1976	CI	100	200	65	0.288	0.11	E
P-1571	J-528	DJ-296	CI	100	200	97	0.282	0.1	E
P-100	PNJ-297	DJ-7967	CI	100	200	150	0.28	0.1	E
PNP-669	PNJ-214	PNJ-104	DI	140	300	21	0.624	0.1	
DP-1247	DJ-8743	DJ-1571	CI	100	100	257	0.069	0.1	E
PNP-670	PNJ-164	PNJ-161	DI	140	300	55	0.616	0.1	
P-140	DJ-3492	J-52	CI	100	150	137	0.154	0.1	E
DP-5668	DJ-5450	DJ-8178	CI	100	100	47	0.068	0.1	E
DP-5669	DJ-8178	DJ-5449	CI	100	100	110	0.068	0.1	E
DP-5536	DJ-7681	DJ-5450	CI	100	250	43	0.423	0.1	E
DP-6631	DJ-2507	DJ-4787	CI	100	100	125	0.067	0.1	E
DP-3902	DJ-2477	DJ-422	CI	100	100	55	0.066	0.1	E
PNP-635	PNJ-164	PNJ-161	MS	140	300	55	0.596	0.1	E
PNP-879	PNJ-104	PNJ-155	DI	140	300	5	0.586	0.1	

PNP-636	PNJ-212	PNJ-155	MS	140	300	20	0.581	0.1	E
DP-3749	DJ-5207	DJ-5206	CI	100	100	120	0.063	0.09	E
DP-8801	DJ-5215	DJ-2428	CI	100	150	94	0.143	0.09	E
P-142	DJ-1838	J-53	CI	100	100	246	0.063	0.09	E
PNP-887	PNJ-212	PNJ-214	HDPE	145	144.4	4	0.13	0.09	New
P-232	J-52	J-51	HDPE	145	144.4	13	0.128	0.09	New
DP-2783	DJ-422	DJ-2507	CI	100	100	298	0.061	0.09	E
DP-8347	DJ-5324	DJ-6542	CI	100	250	57	0.374	0.09	E
DP-8287	DJ-422	DJ-1641	CI	100	100	228	0.059	0.09	E
DP-3765	DJ-3623	DJ-4198	CI	100	100	137	0.057	0.08	E
DP-5537	DJ-5450	DJ-5368	CI	100	250	70	0.355	0.08	E
DP-5283	DJ-615	DJ-6185	CI	100	150	193	0.127	0.08	E
DP-7772	DJ-803	DJ-277	CI	100	200	356	0.223	0.08	E
PNP-631	PNJ-106	PNJ-216	DI	140	300	202	0.488	0.08	
PNP-880	PNJ-106	PNJ-154	DI	140	300	5	0.475	0.08	
DP-8346	DJ-1642	DJ-5324	CI	100	250	93	0.329	0.08	E
DP-4879	DJ-5206	DJ-2785	CI	100	100	39	0.052	0.08	E
DP-2387	DJ-1572	DJ-790	CI	100	150	251	0.116	0.08	E
DP-3512	DJ-6542	DJ-7338	CI	100	200	112	0.205	0.08	E
DP-4055	DJ-8376	DJ-4787	CI	100	100	131	0.05	0.07	E
DP-5698	DJ-2615	DJ-4830	CI	100	100	66	0.049	0.07	E
DP-5697	DJ-4831	DJ-2615	CI	100	100	64	0.048	0.07	E
DP-8906	DJ-2428	DJ-2600	CI	100	150	85	0.107	0.07	E
PNP-872	PNJ-152	PNJ-212	MS	140	300	149	0.425	0.07	E
DP-5268	DJ-4849	DJ-7470	CI	100	200	532	0.188	0.07	E
DP-7312	DJ-5324	DJ-4304	CI	100	100	62	0.045	0.07	E
DP-3040	DJ-4792	DJ-8377	CI	100	100	120	0.045	0.07	E
DP-5433	DJ-7966	DJ-1642	CI	100	250	107	0.27	0.06	E
DP-3277	DJ-3806	DJ-2601	MS	140	300	16	0.385	0.06	E
DP-5709	DJ-4800	DJ-5626	CI	100	250	221	0.262	0.06	E
P-244	DJ-16	J-78	HDPE	145	144.4	7	0.084	0.06	New
DP-6079	DJ-2040	DJ-2039	CI	100	100	254	0.04	0.06	E
DP-1390	DJ-8377	DJ-8376	CI	100	150	50	0.083	0.05	E
DP-3827	DJ-5113	DJ-5205	CI	100	100	122	0.037	0.05	E
P-117	PNJ-311	DJ-9085	CI	100	200	101	0.145	0.05	E
DP-4890	DJ-3017	DJ-3016	MS	140	600	169	1.29	0.05	E
DP-4971	DJ-3016	DJ-10138	MS	140	600	426	1.278	0.05	E
DP-2778	DJ-3492	DJ-3360	CI	100	150	74	0.079	0.05	E
DP-3941	DJ-5220	DJ-7966	CI	100	300	54	0.312	0.05	E
P-1583	DJ-2785	J-533	HDPE	145	99.3	111	0.034	0.05	New
DP-4950	DJ-4792	DJ-8376	CI	100	100	172	0.033	0.05	E
DP-8351	DJ-396	DJ-224	CI	100	250	203	0.204	0.05	E
DP-3739	DJ-5220	DJ-5219	CI	100	100	120	0.032	0.05	E
DP-8800	DJ-322	DJ-5215	CI	100	150	400	0.073	0.05	E
DP-4972	DJ-10138	DJ-689	MS	140	600	85	1.161	0.05	E
DP-2110	DJ-7338	DJ-8377	CI	100	200	69	0.129	0.05	E
DP-3938	DJ-7967	DJ-5220	CI	100	300	4	0.28	0.05	E
DP-2167	DJ-1735	DJ-2786	CI	100	150	169	0.068	0.04	E
DP-3839	DJ-689	DJ-216	MS	140	600	71	1.083	0.04	E
P-242	J-42	J-78	DI	140	500	9	0.734	0.04	E
P-111	DJ-772	J-42	DI	140	500	105	0.734	0.04	E
DP-6244	DJ-4830	DJ-2477	CI	100	150	271	0.066	0.04	E

DP-8417	DJ-7681	DJ-4460	CI	100	100	168	0.029	0.04	E
DP-6935	DJ-5625	DJ-4830	CI	100	200	399	0.115	0.04	E
DP-5540	DJ-5205	DJ-3574	CI	100	300	68	0.251	0.04	E
DP-5542	DJ-3574	DJ-7471	CI	100	300	52	0.251	0.04	E
DP-2257	DJ-1642	DJ-693	CI	100	150	63	0.059	0.04	E
DP-7097	DJ-1874	DJ-1641	CI	100	150	165	0.059	0.04	E
P-243	J-78	DJ-1837	DI	140	500	83	0.647	0.04	E
DP-10031	DJ-6930	DJ-3238	CI	100	100	82	0.025	0.04	E
DP-3062	DJ-6185	DJ-6184	CI	100	150	96	0.055	0.04	E
DP-8298	DJ-1837	DJ-321	DI	140	500	150	0.597	0.04	E
DP-7095	DJ-693	DJ-1874	CI	100	150	56	0.053	0.04	E
DP-1586	DJ-4831	DJ-422	CI	100	150	215	0.053	0.03	E
DP-1132	DJ-8743	DJ-8742	CI	100	100	42	0.022	0.03	E
DP-3841	DJ-216	DJ-688	MS	140	600	366	0.803	0.03	E
DP-6963	DJ-321	J-51	DI	140	500	94	0.555	0.03	E
DP-6628	DJ-2361	DJ-2360	CI	100	150	333	0.048	0.03	E
DP-7057	DJ-770	DJ-3017	MS	140	600	434	0.67	0.03	E
DP-7313	DJ-4304	DJ-4220	CI	100	100	52	0.017	0.02	E
DP-5765	DJ-9085	DJ-4800	CI	100	300	222	0.145	0.02	E
DP-4855	DJ-4460	DJ-7918	CI	100	100	53	0.015	0.02	E
DP-4609	DJ-3360	DJ-3359	CI	100	150	156	0.033	0.02	E
PNP-771	PNJ-212	PNJ-156	CI	100	100	252	0.014	0.02	E
PNP-717	PNJ-160	PNJ-156	CI	100	100	59	0.014	0.02	E
DP-5665	DJ-5219	DJ-7471	CI	100	150	218	0.032	0.02	E
DP-5413	DJ-4304	DJ-7818	CI	100	150	200	0.029	0.02	E
DP-6755	DJ-1046	DJ-1045	CI	100	150	357	0.027	0.02	E
DP-4498	DJ-4144	DJ-6929	CI	100	100	16	0.012	0.02	E
P-108	DJ-7470	PNJ-306	CI	100	200	100	0.046	0.02	E
DP-1788	DJ-7818	DJ-7966	CI	100	200	60	0.042	0.02	E
DP-1134	DJ-8741	DJ-8740	CI	100	100	42	0.011	0.02	E
DP-6783	DJ-998	DJ-997	CI	100	150	364	0.023	0.02	E
DP-2781	DJ-3360	DJ-3491	CI	100	150	77	0.022	0.01	E
DP-3445	DJ-5626	DJ-5625	CI	100	300	109	0.083	0.01	E
DP-6828	DJ-935	DJ-934	CI	100	150	372	0.02	0.01	E
DP-4809	DJ-3110	DJ-3109	CI	100	150	165	0.019	0.01	E
P-1582	J-533	J-531	CI	100	150	76	0.017	0.01	E
DP-1704	DJ-7918	DJ-7917	CI	100	150	58	0.015	0.01	E
DP-6097	DJ-4220	DJ-7818	CI	100	150	256	0.014	0.01	E
DP-6298	DJ-1702	DJ-1701	CI	100	150	280	0.013	0.01	E
DP-6205	DJ-1874	DJ-1873	CI	100	100	267	0.005	0.01	E
DP-5534	DJ-1873	DJ-693	CI	100	100	316	0.005	0.01	E
DP-3595	DJ-5416	DJ-5415	CI	100	150	115	0.012	0.01	E
DP-1782	DJ-4199	DJ-175	CI	100	150	96	0.011	0.01	E
DP-3995	DJ-4143	DJ-5976	CI	100	100	43	0.004	0.01	E
DP-4563	DJ-3459	DJ-5587	CI	100	200	55	0.016	0.01	E

Table C5(b): Junction results

Label	Elevation (m)	Demand (ML/day)	Hydraulic Grade (m)	Pressure (kg/cm ²)
DJ-4800	609.9	0	613.4	0.345
DJ-4831	609.9	0	613.4	0.351
DJ-9085	609.8	0	613.4	0.354

DJ-4459	609.8	0	613.3	0.358
DJ-5368	609.7	0	613.4	0.365
PNJ-309	609.7	0	613.4	0.365
PNJ-311	609.7	0	613.4	0.365
DJ-2442	609.8	0	613.4	0.367
DJ-694	609.8	0	613.5	0.368
DJ-8178	609.7	0	613.4	0.368
DJ-8177	609.7	0	613.4	0.368
DJ-2615	609.7	0	613.4	0.371
DJ-6745	609.6	0	613.3	0.372
DJ-1976	609.6	0	613.4	0.38
PNJ-297	609.6	0	613.4	0.38
J-45	609.6	0	613.4	0.382
DJ-7917	609.5	0	613.3	0.383
DJ-5449	609.6	0	613.4	0.384
DJ-4799	609.4	0.422	613.3	0.394
DJ-9086	609.4	0	613.4	0.397
677	609.4	0	613.4	0.398
DJ-1873	609.4	0	613.5	0.402
DJ-8357	609.3	0	613.4	0.412
DJ-4830	609.1	0	613.4	0.431
DJ-7918	609	0	613.3	0.437
DJ-5205	609	0	613.4	0.439
DJ-1653	608.8	0	613.3	0.458
DJ-7967	608.8	0	613.4	0.462
DJ-5220	608.8	0	613.4	0.462
DJ-4460	608.7	0.014	613.3	0.466
DJ-8356	608.7	0	613.4	0.467
DJ-688	607.9	0.803	612.7	0.473
DJ-7681	608.6	0	613.3	0.474
DJ-5450	608.6	0	613.4	0.474
DJ-5626	608.6	0.122	613.4	0.476
DJ-422	608.5	0	613.4	0.489
DJ-3574	608.3	0	613.4	0.509
DJ-3575	608	0	613.4	0.544
DJ-5113	607.9	0.409	613.4	0.555
DJ-7818	607.7	0	613.4	0.571
DJ-216	606.8	0.28	612.7	0.583
DJ-7471	607.3	0	613.4	0.608
DJ-7682	607.1	0.394	613.3	0.626
DJ-7966	607	0	613.4	0.647
DJ-7470	607.1	0.015	613.6	0.65
DJ-10138	606	0.095	612.7	0.669
DJ-10137	606	0.023	612.7	0.669
DJ-2477	606.5	0	613.4	0.682
DJ-1642	606.4	0	613.5	0.707
DJ-689	605.6	0.078	612.7	0.708
DJ-693	606.2	0	613.5	0.72
PNJ-306	606.4	0	613.6	0.72
DJ-215	606.4	0.321	613.6	0.724
DJ-5219	606	0	613.4	0.746
DJ-5324	605.8	0	613.5	0.769
DJ-5625	605.6	0.032	613.4	0.774
DJ-423	605.6	0.005	613.4	0.777

DJ-4304	605.4	0	613.5	0.801
DJ-4162	608.8	0.008	616.8	0.802
DJ-176	608.4	0.175	616.5	0.813
DJ-7052	609.3	0.042	617.6	0.824
DJ-8741	608.8	0.014	617.1	0.827
DJ-4988	609.4	0.259	617.7	0.831
J-47	609.8	0	618.2	0.837
DJ-4858	608.4	0.252	616.8	0.839
DJ-8740	608.6	0.011	617.1	0.842
DJ-8961	604.9	0.003	613.5	0.849
DJ-8960	604.9	0	613.5	0.849
DJ-4220	604.9	0	613.5	0.849
DJ-5429	604.8	0	613.5	0.865
DJ-1874	604.8	0	613.5	0.866
DJ-3705	604.9	0	613.6	0.867
J-49	608.7	0	617.7	0.894
DJ-6542	604.4	0	613.5	0.902
DJ-2360	607.7	0.014	616.8	0.907
DJ-4859	607.7	0.005	616.8	0.909
J-48	608.7	0	617.9	0.914
DJ-1641	604	0	613.4	0.941
DJ-295	607.6	0.027	617.1	0.946
DJ-1702	607.7	0.007	617.3	0.957
DJ-224	603.8	0.204	613.8	0.992
DJ-6541	603.4	0	613.5	1.009
DJ-998	607.8	0.026	618.1	1.023
DJ-1046	607.3	0.03	617.6	1.026
J-529	607.1	0.157	617.5	1.04
DJ-935	608.2	0.023	618.7	1.048
DJ-1628	608.6	0.054	619.3	1.075
DJ-8742	602.7	0.022	613.4	1.076
DJ-1572	602.8	0.081	613.6	1.077
DJ-8377	602.7	0	613.5	1.078
DJ-2040	602.7	0.029	613.5	1.08
DJ-1629	605.7	0.022	616.8	1.101
DJ-803	605.5	0.055	616.7	1.114
DJ-7338	602.1	0	613.5	1.131
DJ-322	604.3	0.073	615.7	1.136
DJ-790	602	0.059	613.6	1.152
DJ-396	602.1	0.22	613.8	1.165
DJ-8743	601.7	0.021	613.4	1.167
DJ-934	607	0.02	618.7	1.169
DJ-8376	601.8	0	613.5	1.169
DJ-3491	600.9	0.022	612.7	1.181
DJ-3109	600.8	0.019	612.8	1.196
DJ-2361	604.8	0.024	616.8	1.2
DJ-2039	601.3	0.047	613.4	1.208
DJ-2507	601.3	0	613.5	1.214
DJ-277	604.4	0.018	616.7	1.22
DJ-5588	604.4	0.01	616.7	1.227
DJ-4849	601.3	0.015	613.6	1.23
DJ-5587	604.3	0.016	616.7	1.234
DJ-3459	604.3	0.014	616.7	1.234
DJ-1045	605	0.027	617.6	1.256

DJ-296	604.1	0.033	616.7	1.256
DJ-805	600.8	0.013	613.4	1.256
PNJ-108	600	0	612.7	1.267
PNJ-105	600	0	612.7	1.267
DJ-997	605.3	0.023	618.1	1.273
PNJ-109	600	0	612.8	1.28
J-34	601.8	0	614.6	1.284
DJ-3016	599.8	0.012	612.7	1.284
DJ-3677	599.8	0.019	612.7	1.286
J-36	599.8	0	612.7	1.286
DJ-615	600.4	0.028	613.3	1.286
DJ-791	600.7	0.037	613.7	1.297
DJ-2786	603.2	0.036	616.5	1.322
DJ-6184	600	0.048	613.3	1.322
DJ-1701	603.9	0.013	617.3	1.34
DJ-1571	599.8	0.06	613.4	1.357
DJ-616	600.5	0.091	614.1	1.361
DJ-1735	602.7	0.068	616.5	1.374
DJ-225	600.8	0.016	614.6	1.379
DJ-4848	599.8	0.018	613.7	1.382
DJ-4787	599.6	0	613.5	1.391
DJ-3360	598.8	0.024	612.7	1.393
DJ-3359	598.7	0.033	612.7	1.4
PNJ-103	598.5	0	612.7	1.419
DJ-321	598.4	0.042	612.7	1.426
PNJ-214	598.5	0	612.8	1.428
PNJ-212	598.5	0.011	612.8	1.428
PNJ-104	598.5	0	612.8	1.428
PNJ-155	598.5	0.003	612.8	1.428
PNJ-164	598.5	0.004	612.8	1.429
J-528	602.4	0.022	616.7	1.433
DJ-3460	602.2	0.044	616.6	1.435
DJ-3110	598.4	0.037	612.8	1.439
DJ-4214	598.5	0.041	613	1.45
DJ-3017	598.1	0.012	612.7	1.451
J-50	598.1	0.022	612.7	1.452
J-51	598.1	0.01	612.7	1.452
J-52	598.1	0.025	612.7	1.452
J-113	598	0.074	612.7	1.466
J-111	597.9	0.002	612.7	1.472
PNJ-161	598	0.014	612.8	1.474
PNJ-236	598	0.001	612.8	1.476
PNJ-234	598	0	612.8	1.479
DJ-5415	601.3	0.012	616.1	1.481
PNJ-216	597.9	0	612.8	1.489
DJ-395	597.9	0.059	612.8	1.49
DJ-3492	597.7	0.032	612.7	1.495
DJ-806	597.8	0.064	613.2	1.536
DJ-5206	600.9	0.028	616.3	1.536
PNJ-152	597.3	0.006	612.8	1.544
DJ-1838	597.3	0.012	612.8	1.547
DJ-927	597.3	0.018	612.8	1.547
J-530	600.9	0.013	616.5	1.559
DJ-4792	597.9	0	613.5	1.559

DJ-5416	600.5	0.078	616.1	1.561
DJ-6185	597.6	0.037	613.3	1.564
DJ-5207	600.6	0.063	616.3	1.57
PNJ-163	596.7	0	612.8	1.602
DJ-1837	596.6	0.05	612.7	1.607
DJ-233	597.2	0	613.4	1.614
PNJ-106	596.6	0	612.8	1.614
PNJ-154	596.6	0.017	612.8	1.614
J-53	596.6	0.063	612.8	1.616
DJ-2899	599.5	0.036	615.7	1.622
PNJ-160	596.5	0.019	612.8	1.628
PNJ-159	596.3	0	612.8	1.642
PNJ-156	596.3	0	612.8	1.642
DJ-2785	599.7	0.019	616.3	1.66
J-33	598.8	0	615.8	1.694
J-533	599.3	0.017	616.3	1.695
J-77	606.5	0.026	623.8	1.726
J-78	595.2	0.003	612.7	1.742
J-76	606.4	0.003	623.9	1.749
DJ-16	595.1	0.008	612.7	1.757
J-42	595.1	0	612.7	1.757
J-531	598.6	0.017	616.3	1.763
DJ-770	595	0	612.7	1.767
DJ-6057	606.2	0.026	623.9	1.767
PNJ-101	595	0	612.7	1.769
DJ-772	595	0	612.7	1.769
PNJ-102	595	0	612.8	1.775
PNJ-151	595	0	612.8	1.776
PNJ-162	595	0	612.8	1.783
DJ-5215	597.7	0.045	615.7	1.804
DJ-6058	605.7	0.032	623.9	1.819
DJ-1451	605.7	0.063	623.9	1.819
J-74	594.2	0	612.7	1.848
DJ-2600	596.9	0.033	615.7	1.876
DJ-1898	594.8	0	613.6	1.877
DJ-5216	597	0.039	615.8	1.877
DJ-3641	594.7	0.013	613.7	1.897
DJ-3623	596.3	0.026	615.6	1.916
DJ-1036	594.5	0.008	613.8	1.922
DJ-4143	595	0.005	614.3	1.922
DJ-5977	595.1	0.016	614.4	1.929
DJ-2428	596.3	0.036	615.7	1.937
DJ-3238	594.5	0.009	613.9	1.942
DJ-4073	595.1	0.007	614.6	1.951
DJ-2900	596	0.031	615.6	1.958
DJ-5976	594.7	0.004	614.3	1.958
DJ-4199	596	0.022	615.7	1.966
DJ-2513	594.5	0.017	614.2	1.967
J-532	595	0.009	614.9	1.983
DJ-4198	595.6	0.02	615.5	1.988
DJ-5790	594.7	0	614.7	1.989
DJ-3622	595.2	0.017	615.3	2.003
DJ-4072	594.4	0	614.7	2.018
DJ-2512	594.3	0.007	614.7	2.037

DJ-4971	594.3	0	614.8	2.045
DJ-3806	594.3	0.005	614.9	2.055
DJ-2601	594.3	0.007	614.9	2.055
J-35	594.2	0	614.8	2.061
DJ-6930	593.2	0.003	613.9	2.067
J-534	594	0	614.8	2.076
DJ-4970	593.9	0	614.8	2.078
DJ-6929	593.1	0.012	614	2.09
DJ-4144	593.1	0.005	614	2.09
DJ-175	594.5	0.011	615.7	2.116
DJ-5789	593.4	0	614.8	2.134
DJ-2155	590	0	612.7	2.267
PNJ-215	590	0	612.7	2.268
PNJ-100	590	0	612.8	2.274
PNJ-153	590	0	612.8	2.276

6. Zone C10

Table C10(a): Pipe results

Label	Start Node	Stop Node	Material	Hazen-Williams C	Diameter (mm)	Length (m)	Flow (ML/day)	Velocity (m/s)	Pipe type (new/existing)
DP-1813	DJ-9099	DJ-9614	CI	100	80	20	0.804	1.85	E
P-392	DJ-9614	J-128	CI	100	80	3	0.804	1.85	E
DP-3275	DJ-5997	DJ-5996	CI	100	50	103	0.275	1.62	E
P-2095	804	J-711	DI	140	400	5	17.41	1.6	New
P-2096	J-711	DJ-5785	DI	140	400	4	17.38	1.6	New
DP-9246	DJ-3041	DJ-6576	CI	100	100	5	0.927	1.37	E
P-400	J-131	DJ-4524	CI	100	80	36	0.572	1.32	E
P-2087	J-707	J-708	HDPE	145	284.5	11	7.074	1.29	New
DP-2687	DJ-5785	DJ-10099	MS	140	300	7	7.468	1.22	E
P-3374	DJ-10100	DJ-2464	di	140	300	89	7.454	1.22	New
P-3372	DJ-10099	DJ-10100	di	140	350	11	10.13	1.22	New
DP-5893	DJ-9549	J-128	CI	100	100	125	0.804	1.18	E
DP-8639	DJ-3476	DJ-419	CI	100	250	122	4.711	1.11	E
P-2093	J-709	J-710	HDPE	145	284.5	3	6.094	1.11	New
P-2102	DJ-10100	J-713	CI	100	175	10	2.189	1.05	E
P-3373	DJ-5785	DJ-10099	di	140	300	9	6.425	1.05	New
P-2103	J-713	DJ-7897	CI	100	175	78	2.15	1.03	E
DP-10405	DJ-2706	DJ-7900	DI	140	200	126	2.748	1.01	E
P-2091	J-708	J-710	MS	140	300	401	6.096	1	E

DP-10525	DJ-419	DJ-349	CI	100	250	2	4.121	0.97	E
DP-10406	DJ-7900	DJ-9102	DI	140	200	76	2.624	0.97	E
DP-10687	DJ-7897	DJ-6056	CI	100	175	22	1.946	0.94	E
DP-2347	DJ-6948	DJ-6947	GI	100	50	75	0.155	0.91	E
DP-5213	DJ-2880	DJ-2879	CI	100	100	186	0.577	0.85	E
P-399	DJ-9940	J-131	CI	100	80	79	0.365	0.84	E
DP-808	DJ-3042	DJ-6120	CI	100	150	72	1.271	0.83	E
DP-10685	DJ-6056	DJ-7775	CI	100	175	55	1.728	0.83	E
DP-9247	DJ-6576	DJ-7768	CI	100	100	51	0.558	0.82	E
DP-6635	DJ-5004	DJ-3820	DI	140	200	132	2.2	0.81	E
P-2100	DJ-9083	DJ-10342	HDPE	145	284.5	17	4.398	0.8	New
P-2084	J-707	DJ-3476	CI	100	300	35	4.863	0.8	E
P-2090	J-709	DJ-8497	CI	100	300	4	4.568	0.75	E
DP-6997	DJ-8497	DJ-9083	CI	100	300	4	4.484	0.73	E
DP-10526	DJ-349	DJ-438	CI	100	250	7	3.106	0.73	E
DP-9022	DJ-9466	DJ-1897	DI	140	200	23	1.976	0.73	E
DP-9225	DJ-419	DJ-3204	CI	100	100	61	0.479	0.71	E
DP-10853	DJ-7775	DJ-8403	CI	100	175	28	1.457	0.7	E
P-2463	DJ-3011	J-865	CI	100	200	53	1.84	0.68	E
P-2082	DJ-2648	DJ-10342	HDPE	145	284.5	6	3.685	0.67	New
P-401	DJ-141	J-131	HDPE	145	144.4	8	0.946	0.67	New
DP-810	DJ-6120	DJ-3041	CI	100	150	138	1.014	0.66	E
DP-8183	DJ-349	DJ-3358	CI	100	150	59	1.005	0.66	E
P-380	DJ-725	J-123	CI	100	100	235	0.435	0.64	E
P-396	DJ-1507	J-130	CI	100	100	106	0.431	0.64	E
P-2081	DJ-5785	DJ-2797	HDPE	145	284.5	5	3.481	0.63	New
DP-8766	DJ-2936	DJ-3011	CI	100	200	45	1.713	0.63	E
P-2415	DJ-4470	J-833	CI	100	100	22	0.427	0.63	E
DP-8748	DJ-2464	DJ-10100	CI	100	175	89	1.29	0.62	E
P-2464	J-865	DJ-4502	CI	100	200	40	1.641	0.6	E
DP-10425	DJ-194	DJ-2648	CI	100	300	15	3.658	0.6	E
DP-9545	DJ-5564	DJ-4915	CI	100	100	91	0.404	0.6	E
P-2405	J-829	DJ-5564	CI	100	100	66	0.404	0.6	E
DP-10340	DJ-3447	DJ-194	CI	100	300	37	3.553	0.58	E

P-3189	DJ-2797	J-1358	CI	100	300	146	3.473	0.57	E
P-3190	J-1358	DJ-8149	CI	100	300	18	3.473	0.57	E
DP-178	DJ-10100	DJ-10099	CI	100	150	9	0.863	0.57	E
P-382	J-123	J-124	CI	100	100	31	0.373	0.55	E
DP-10854	DJ-8403	DJ-9626	CI	100	175	206	1.14	0.55	E
DP-3673	DJ-8149	DJ-2464	CI	100	300	68	3.35	0.55	E
DP-9637	DJ-9102	DJ-9466	DI	140	200	36	1.471	0.54	E
P-1142	DJ-1323	J-364	CI	100	200	226	1.463	0.54	E
DP-293	DJ-9941	DJ-9940	CI	100	100	12	0.363	0.53	E
P-2416	J-833	DJ-4469	CI	100	100	64	0.362	0.53	E
DP-6636	DJ-3820	DJ-3746	DI	140	200	32	1.43	0.53	E
DP-4523	DJ-2880	DJ-3746	CI	100	150	54	0.794	0.52	E
P-1143	J-364	J-363	CI	100	200	9	1.405	0.52	E
P-1141	J-363	DJ-1144	CI	100	200	166	1.388	0.51	E
DP-8765	DJ-3004	DJ-2936	CI	100	200	123	1.361	0.5	E
DP-8404	DJ-438	DJ-1507	DI	140	200	410	1.336	0.49	E
DP-5899	DJ-8985	DJ-1897	CI	100	150	228	0.742	0.49	E
P-384	J-124	J-125	CI	100	100	24	0.327	0.48	E
DP-93	DJ-10198	DJ-10197	CI	100	150	4	0.731	0.48	E
DP-9682	DJ-10099	DJ-1323	MS	140	300	58	2.865	0.47	E
DP-8363	DJ-9514	DJ-9507	CI	100	250	4	1.977	0.47	E
DP-9226	DJ-3204	DJ-4029	CI	100	100	162	0.312	0.46	E
DP-7913	DJ-10342	DJ-725	CI	100	150	40	0.696	0.46	E
DP-6865	DJ-5900	DJ-3004	CI	100	200	9	1.232	0.45	E
DP-9023	DJ-1897	DJ-5004	DI	140	200	8	1.23	0.45	E
DP-2647	DJ-6576	DJ-6575	CI	100	100	83	0.305	0.45	E
DP-4339	DJ-9363	DJ-4469	CI	100	100	57	0.304	0.45	E
P-2412	DJ-4119	J-832	CI	100	100	190	0.303	0.45	E
DP-9546	DJ-4915	DJ-1315	CI	100	100	2	0.302	0.45	E
DP-5350	DJ-9515	DJ-2706	CI	100	300	195	2.69	0.44	E
P-386	J-125	J-126	CI	100	100	13	0.297	0.44	E
DP-7845	DJ-4502	DJ-854	CI	100	200	121	1.162	0.43	E
DP-7685	DJ-7768	DJ-10287	CI	100	100	50	0.288	0.43	E

P-3375	DJ-8123	DJ-1302	HDPE	145	99.3	7	0.283	0.42	New
DP-4787	DJ-9102	DJ-1093	CI	100	200	24	1.136	0.42	E
DP-9840	DJ-438	DJ-2028	CI	100	250	4	1.76	0.42	E
DP-2679	DJ-6536	DJ-6535	CI	100	100	84	0.275	0.41	E
DP-1660	DJ-8393	DJ-9099	CI	100	150	57	0.615	0.4	E
DP-7914	DJ-725	DJ-4815	CI	100	150	334	0.61	0.4	E
DP-4409	DJ-3358	DJ-4903	DI	140	150	57	0.604	0.4	E
DP-5897	DJ-8984	DJ-8985	CI	100	150	38	0.601	0.39	E
P-2467	J-865	J-866	HDPE	145	99.3	119	0.263	0.39	
DP-1565	DJ-7240	DJ-418	CI	100	100	214	0.263	0.39	E
DP-1747	J-126	DJ-7892	GI	100	50	54	0.065	0.38	E
DP-5976	DJ-2028	DJ-2463	CI	100	250	8	1.605	0.38	E
DP-4286	DJ-6654	DJ-3820	CI	100	150	141	0.568	0.37	E
DP-3721	DJ-8896	DJ-9549	CI	100	150	15	0.565	0.37	E
P-2407	DJ-5284	J-830	CI	100	100	66	0.25	0.37	E
DP-2510	DJ-3446	DJ-1253	CI	100	200	47	0.998	0.37	E
DP-4772	DJ-5997	DJ-3746	CI	100	150	100	0.557	0.37	E
DP-9621	DJ-5004	DJ-5899	CI	100	200	23	0.977	0.36	E
DP-9136	DJ-9625	DJ-4404	CI	100	175	47	0.747	0.36	E
DP-8362	DJ-2463	DJ-9514	CI	100	250	97	1.519	0.36	E
DP-6229	DJ-1144	DJ-7538	CI	100	200	26	0.93	0.34	E
DP-2721	DJ-4502	DJ-3446	CI	100	150	87	0.506	0.33	E
DP-6230	DJ-7538	DJ-7813	CI	100	200	80	0.877	0.32	E
DP-7718	DJ-3447	DJ-8680	CI	100	300	23	1.97	0.32	E
P-388	J-126	J-127	CI	100	100	36	0.217	0.32	E
DP-603	DJ-9515	DJ-9507	CI	100	300	22	1.948	0.32	E
DP-702	DJ-9363	DJ-9362	CI	100	100	29	0.216	0.32	E
P-2408	J-830	J-829	CI	100	100	28	0.215	0.32	E
DP-8767	DJ-8680	DJ-8728	CI	100	300	1	1.93	0.32	E
DP-4789	DJ-1093	DJ-9466	CI	100	200	12	0.851	0.31	E
DP-5913	DJ-8123	DJ-1302	CI	100	100	6	0.209	0.31	E

DP-8768	DJ-8728	DJ-6332	CI	100	300	21	1.869	0.31	E
DP-953	DJ-8985	DJ-8984	CI	100	100	38	0.207	0.31	E
DP-5891	DJ-5166	DJ-9549	CI	100	100	14	0.203	0.3	E
DP-3360	DJ-4488	DJ-5900	CI	100	200	90	0.806	0.3	E
DP-8961	DJ-10198	DJ-418	CI	100	150	47	0.45	0.3	E
DP-338	DJ-9872	DJ-9871	CI	100	100	15	0.2	0.29	E
DP-423	DJ-9762	DJ-9761	CI	100	80	19	0.127	0.29	E
DP-1930	DJ-7813	DJ-9720	CI	100	200	60	0.791	0.29	E
DP-598	DJ-9515	DJ-9514	CI	100	200	24	0.788	0.29	E
P-2478	DJ-1144	J-875	CI	100	150	171	0.442	0.29	E
DP-6701	DJ-1253	DJ-8270	CI	100	150	62	0.44	0.29	E
DP-8405	DJ-1507	DJ-10197	DI	140	200	99	0.781	0.29	E
P-376	DJ-6332	J-121	CI	100	300	95	1.735	0.28	E
P-2406	J-829	DJ-2665	HDPE	145	99.3	65	0.189	0.28	
DP-5826	DJ-9507	DJ-7790	CI	100	100	56	0.192	0.28	E
DP-5794	DJ-5166	DJ-8895	CI	100	150	40	0.43	0.28	E
DP-8430	DJ-9099	DJ-6649	CI	100	100	11	0.189	0.28	E
DP-872	DJ-9084	DJ-9083	CI	100	100	36	0.184	0.27	E
DP-7864	DJ-2758	DJ-4488	CI	100	200	5	0.731	0.27	E
P-2414	J-831	J-832	HDPE	145	99.3	60	0.18	0.27	
P-2468	DJ-4815	J-867	CI	100	150	28	0.398	0.26	E
DP-8773	DJ-4029	DJ-2151	CI	100	100	2	0.177	0.26	E
DP-5824	DJ-7791	DJ-9507	CI	100	100	5	0.176	0.26	E
P-377	J-121	DJ-3446	CI	100	300	13	1.568	0.26	E
DP-1818	DJ-7768	DJ-7767	CI	100	100	61	0.173	0.26	E
DP-3429	DJ-6351	DJ-6350	CI	100	100	109	0.169	0.25	E
P-2089	DJ-7791	J-709	CI	100	300	111	1.52	0.25	E
DP-5340	DJ-5900	DJ-2738	CI	100	150	93	0.377	0.25	E
DP-9622	DJ-5899	DJ-2758	CI	100	200	8	0.669	0.25	E
DP-8413	DJ-4903	DJ-7585	DI	140	150	33	0.371	0.24	E
P-2480	J-874	J-875	HDPE	145	99.3	26	0.162	0.24	
P-397	J-130	DJ-5114	CI	100	100	45	0.163	0.24	E
DP-4042	DJ-4815	DJ-4814	CI	100	100	130	0.162	0.24	E
P-2424	J-831	J-839	CI	100	100	3	0.161	0.24	E
P-2088	DJ-9514	DJ-7791	HDPE	145	284.5	5	1.303	0.24	New
DP-43	DJ-	DJ-	CI	100	100	3	0.16	0.24	E

	10287	10286							
DP-1932	DJ-9720	DJ-8393	CI	100	200	8	0.639	0.24	E
DP-8089	DJ-9362	DJ-8514	CI	100	100	59	0.158	0.23	E
DP-10250	DJ-8270	DJ-7887	CI	100	150	28	0.35	0.23	E
DP-9671	DJ-9891	DJ-9084	CI	100	100	32	0.155	0.23	E
DP-8112	DJ-6079	DJ-2665	CI	100	100	92	0.154	0.23	E
DP-3144	DJ-6056	DJ-6055	CI	100	100	99	0.153	0.23	E
DP-2160	DJ-7240	DJ-7239	CI	100	100	70	0.152	0.22	E
DP-454	DJ-9720	DJ-9719	CI	100	100	20	0.151	0.22	E
DP-3571	DJ-9719	DJ-8538	CI	100	100	46	0.151	0.22	E
DP-1814	DJ-7775	DJ-7774	CI	100	100	61	0.149	0.22	E
DP-9683	DJ-1323	DJ-3042	MS	140	300	7	1.341	0.22	E
DP-5792	DJ-8896	DJ-5166	CI	100	150	2	0.33	0.22	E
DP-8184	DJ-3358	DJ-4119	CI	100	150	389	0.328	0.21	E
DP-5341	DJ-2738	DJ-5899	CI	100	150	9	0.323	0.21	E
DP-3098	J-127	DJ-6128	DI	140	100	91	0.143	0.21	E
DP-9331	DJ-2549	DJ-9156	CI	100	100	12	0.142	0.21	E
DP-10372	DJ-6643	DJ-4524	CI	100	150	17	0.312	0.2	E
DP-2941	DJ-1316	DJ-5284	CI	100	100	70	0.137	0.2	E
DP-142	DJ-3133	DJ-1315	CI	100	150	68	0.302	0.2	E
DP-10339	DJ-854	DJ-3447	CI	100	300	13	1.209	0.2	E
DP-6099	DJ-4404	DJ-6351	CI	100	175	14	0.41	0.2	E
DP-5630	DJ-8180	DJ-8538	CI	100	100	19	0.133	0.2	E
DP-8431	DJ-6649	DJ-8180	CI	100	100	16	0.133	0.2	E
DP-10251	DJ-7887	DJ-7916	CI	100	150	27	0.299	0.2	E
DP-6653	DJ-10286	DJ-9270	CI	100	150	16	0.291	0.19	E
DP-5914	DJ-1302	DJ-8122	CI	100	100	56	0.129	0.19	E
DP-6544	DJ-1438	DJ-1437	CI	100	80	318	0.082	0.19	E
DP-3990	DJ-4903	DJ-4902	CI	100	100	128	0.127	0.19	E

DP-5743	DJ-7790	DJ-2706	CI	100	100	162	0.127	0.19	E
P-2465	DJ-1253	J-866	CI	100	200	3	0.503	0.19	E
DP-629	DJ-9466	DJ-9465	CI	100	100	27	0.125	0.18	E
DP-7869	DJ-1665	DJ-3133	CI	100	150	16	0.28	0.18	E
P-2479	J-875	DJ-1665	CI	100	150	105	0.28	0.18	E
DP-116	DJ-1229	DJ-3646	CI	100	80	74	0.08	0.18	E
P-2469	J-867	DJ-6536	CI	100	150	136	0.278	0.18	E
DP-1980	DJ-7522	DJ-8544	DI	140	100	65	0.122	0.18	E
P-2425	J-839	J-837	CI	100	100	21	0.122	0.18	E
DP-7197	DJ-1093	DJ-9872	CI	100	150	488	0.27	0.18	E
DP-8322	DJ-5536	DJ-4470	DI	140	200	119	0.475	0.17	E
P-394	DJ-10287	J-129	CI	100	100	58	0.118	0.17	E
DP-2052	DJ-7455	DJ-7454	CI	100	100	67	0.113	0.17	E
DP-566	DJ-5284	DJ-7454	CI	100	100	34	0.113	0.17	E
DP-8193	DJ-6617	DJ-6643	CI	100	150	12	0.251	0.16	E
DP-9670	DJ-9769	DJ-9891	CI	100	100	23	0.111	0.16	E
DP-2727	J-123	DJ-4493	GI	100	50	78	0.028	0.16	E
DP-1936	DJ-7585	DJ-7584	DI	140	100	64	0.111	0.16	E
DP-425	DJ-9871	DJ-9760	CI	100	100	19	0.108	0.16	E
P-2085	DJ-141	J-708	MS	140	300	167	0.947	0.16	E
DP-10373	DJ-4524	DJ-6265	CI	100	150	23	0.236	0.15	E
DP-8728	DJ-7916	DJ-2549	CI	100	150	14	0.23	0.15	E
P-2458	J-130	J-862	CI	100	100	62	0.102	0.15	E
DP-5598	DJ-4915	DJ-6600	CI	100	100	105	0.102	0.15	E
P-2486	DJ-6600	J-877	CI	100	100	16	0.102	0.15	E
P-2489	J-877	J-879	CI	100	100	10	0.102	0.15	E
DP-10227	DJ-2628	DJ-10198	CI	100	150	13	0.229	0.15	E
DP-8111	DJ-2317	DJ-6079	CI	100	100	153	0.102	0.15	E
DP-3719	DJ-9550	DJ-8896	CI	100	150	9	0.225	0.15	E
DP-8866	DJ-9270	DJ-9460	CI	100	150	99	0.224	0.15	E
P-2474	J-871	DJ-4914	HDPE	145	99.3	31	0.097	0.15	
P-2477	J-873	J-874	HDPE	145	99.3	14	0.097	0.14	
DP-5925	DJ-4451	DJ-2317	CI	100	100	134	0.098	0.14	E
P-2490	J-879	DJ-4914	CI	100	100	5	0.097	0.14	E
DP-1723	DJ-7897	DJ-7896	CI	100	100	58	0.097	0.14	E

DP-114	DJ-9894	DJ-1229	CI	100	80	99	0.061	0.14	E
DP-5624	DJ-8067	DJ-7767	CI	100	100	35	0.093	0.14	E
DP-2597	DJ-6654	DJ-8985	CI	100	150	82	0.21	0.14	E
DP-8071	DJ-3747	DJ-5997	CI	100	150	43	0.207	0.14	E
DP-2961	DJ-6332	DJ-6331	CI	100	100	93	0.092	0.13	E
DP-1022	J-124	DJ-8887	GI	100	50	31	0.023	0.13	E
DP-1029	J-125	DJ-8875	GI	100	50	34	0.023	0.13	E
DP-8321	DJ-1302	DJ-5536	DI	140	200	48	0.361	0.13	E
DP-9684	DJ-7585	DJ-7522	DI	140	150	33	0.199	0.13	E
DP-7394	DJ-8434	DJ-6617	CI	100	150	31	0.199	0.13	E
DP-354	DJ-6078	DJ-2666	CI	100	80	126	0.056	0.13	E
P-2422	J-837	J-835	CI	100	100	4	0.084	0.12	E
DP-7960	DJ-9762	DJ-2880	CI	100	150	6	0.189	0.12	E
DP-1304	DJ-8498	DJ-8497	DI	140	100	47	0.084	0.12	E
DP-3120	DJ-6120	DJ-6119	CI	100	100	98	0.084	0.12	E
DP-5040	DJ-6079	DJ-6078	CI	100	80	176	0.053	0.12	E
DP-1369	DJ-8403	DJ-8402	CI	100	80	49	0.053	0.12	E
DP-516	DJ-9626	DJ-9625	CI	100	300	22	0.722	0.12	E
DP-5923	DJ-2666	DJ-4451	CI	100	100	5	0.08	0.12	E
DP-5052	DJ-8395	DJ-3134	CI	100	100	43	0.078	0.11	E
DP-3099	J-121	DJ-6385	CI	100	100	97	0.077	0.11	E
DP-826	DJ-9156	DJ-9155	CI	100	100	34	0.075	0.11	E
DP-8070	DJ-3993	DJ-3747	CI	100	150	36	0.164	0.11	E
DP-551	DJ-9871	DJ-9573	CI	100	100	24	0.072	0.11	E
DP-1290	DJ-8514	DJ-8513	CI	100	100	46	0.071	0.11	E
DP-3000	DJ-6273	DJ-6272	DI	140	100	94	0.071	0.1	E
DP-10184	DJ-8148	DJ-9941	CI	100	300	13	0.64	0.1	E
DP-3771	DJ-9339	DJ-8148	CI	100	300	13	0.63	0.1	E
DP-1263	DJ-8544	DJ-8543	CI	100	80	46	0.045	0.1	E
DP-4897	DJ-3004	DJ-3003	CI	100	100	169	0.069	0.1	E
DP-	DJ-7149	DJ-9769	CI	100	100	90	0.069	0.1	E

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DP-5600	DJ-2628	DJ-2627	CI	100	100	213	0.068	0.1	E
DP-7673	DJ-9339	DJ-9895	CI	100	300	13	0.595	0.1	E
P-2482	J-871	J-874	HDPE	145	99.3	51	0.065	0.1	
P-2456	J-860	DJ-9363	CI	100	100	71	0.065	0.1	E
P-2470	J-867	J-868	HDPE	145	99.3	194	0.064	0.1	
DP-9691	DJ-6265	DJ-6273	CI	100	150	25	0.145	0.09	E
P-2492	J-880	DJ-8572	CI	100	100	40	0.064	0.09	E
DP-1410	DJ-2028	DJ-10286	CI	100	150	233	0.144	0.09	E
DP-7309	DJ-418	DJ-348	CI	100	150	59	0.139	0.09	E
P-2491	DJ-8395	J-880	CI	100	100	27	0.06	0.09	E
DP-9332	DJ-9156	DJ-9474	CI	100	100	12	0.059	0.09	E
P-2476	J-872	J-873	HDPE	145	99.3	10	0.058	0.09	
DP-3007	DJ-6265	DJ-6264	DI	140	100	95	0.058	0.09	E
DP-7327	DJ-9466	DJ-1452	CI	100	150	533	0.129	0.08	E
DP-9135	DJ-9626	DJ-9625	CI	100	175	22	0.175	0.08	E
DP-4994	DJ-4827	DJ-4826	CI	100	100	173	0.057	0.08	E
DP-7393	DJ-5536	DJ-8434	CI	100	150	8	0.128	0.08	E
DP-7674	DJ-9895	DJ-8123	CI	100	300	22	0.507	0.08	E
DP-2551	DJ-6649	DJ-8394	CI	100	100	81	0.056	0.08	E
DP-5054	DJ-3134	DJ-8394	CI	100	100	6	0.056	0.08	E
P-2466	J-866	DJ-6948	CI	100	200	198	0.22	0.08	E
DP-5009	DJ-6535	DJ-4487	CI	100	150	4	0.124	0.08	E
P-2457	J-860	J-861	HDPE	145	99.3	34	0.054	0.08	
DP-8867	DJ-9460	DJ-2027	CI	100	150	26	0.123	0.08	E
DP-632	DJ-9460	DJ-9459	CI	100	100	27	0.054	0.08	E
DP-1339	DJ-8434	DJ-8433	CI	100	100	49	0.054	0.08	E
DP-1705	DJ-7916	DJ-7915	CI	100	100	58	0.053	0.08	E
DP-3516	DJ-5528	DJ-5527	CI	100	100	112	0.049	0.07	E
DP-4864	DJ-7960	DJ-5114	CI	100	100	35	0.049	0.07	E
DP-8774	DJ-2151	DJ-7240	CI	100	100	111	0.048	0.07	E
P-398	DJ-194	DJ-2433	HDPE	145	144.4	11	0.098	0.07	New
P-2420	J-835	J-836	HDPE	145	99.3	68	0.045	0.07	
P-2080	DJ-3447	DJ-725	HDPE	145	284.5	6	0.366	0.07	New

DP-1469	DJ-8270	DJ-8269	CI	100	100	51	0.045	0.07	E
P-2459	J-862	DJ-6182	CI	100	100	38	0.043	0.06	E
DP-5273	DJ-2936	DJ-8874	CI	100	250	122	0.268	0.06	E
DP-5702	DJ-6535	DJ-4487	CI	100	100	4	0.043	0.06	E
DP-3907	DJ-4404	DJ-4403	CI	100	250	126	0.262	0.06	E
DP-4144	DJ-5528	DJ-3204	CI	100	100	153	0.042	0.06	E
DP-2567	DJ-6643	DJ-6642	CI	100	100	81	0.041	0.06	E
DP-10537	DJ-1438	DJ-1840	CI	100	300	56	0.365	0.06	E
DP-10777	DJ-1840	DJ-1566	CI	100	300	83	0.365	0.06	E
DP-10882	DJ-1566	DJ-5637	CI	100	300	14	0.365	0.06	E
DP-1031	DJ-8874	DJ-8873	CI	100	150	40	0.091	0.06	E
DP-9388	DJ-5074	DJ-2433	CI	100	150	86	0.09	0.06	E
DP-5625	DJ-7767	DJ-8066	CI	100	100	30	0.04	0.06	E
P-2481	J-870	J-873	HDPE	145	99.3	49	0.039	0.06	
DP-758	DJ-9270	DJ-9269	CI	100	100	31	0.04	0.06	E
DP-8055	DJ-4827	DJ-6535	CI	100	150	12	0.088	0.06	E
DP-10883	DJ-5637	DJ-7455	CI	100	300	43	0.351	0.06	E
DP-7809	DJ-9474	DJ-9088	CI	100	100	13	0.038	0.06	E
DP-1673	DJ-7960	DJ-7959	CI	100	100	57	0.038	0.06	E
P-2462	J-863	DJ-7239	HDPE	145	99.3	34	0.037	0.06	
DP-10226	DJ-4119	DJ-2628	CI	100	150	44	0.084	0.05	E
P-2417	J-833	J-834	HDPE	145	99.3	31	0.036	0.05	
DP-8090	DJ-8514	DJ-7960	CI	100	100	30	0.036	0.05	E
P-2471	DJ-7101	J-869	HDPE	145	99.3	8	0.036	0.05	
DP-9934	DJ-4403	DJ-5596	CI	100	175	14	0.109	0.05	E
P-2409	J-830	DJ-2665	HDPE	145	99.3	95	0.035	0.05	
DP-1267	J-129	DJ-8899	CI	100	100	45	0.036	0.05	E
DP-1862	DJ-8572	DJ-7101	CI	100	100	15	0.036	0.05	E
DP-1181	DJ-8681	DJ-8680	CI	100	100	43	0.034	0.05	E
P-2473	J-870	J-871	HDPE	145	99.3	12	0.032	0.05	
P-395	J-129	DJ-2406	CI	100	100	82	0.033	0.05	E
DP-10185	DJ-9941	DJ-1438	CI	100	300	96	0.283	0.05	E

DP-4143	DJ-3646	DJ-5528	CI	100	100	9	0.03	0.04	E
P-2475	J-869	J-872	HDPE	145	99.3	49	0.029	0.04	
P-2483	DJ-8571	J-872	HDPE	145	99.3	17	0.029	0.04	
DP-8054	DJ-4488	DJ-4827	CI	100	150	69	0.065	0.04	E
DP-1245	DJ-8572	DJ-8571	CI	100	100	45	0.029	0.04	E
DP-290	DJ-8895	DJ-9885	CI	100	100	101	0.028	0.04	E
DP-8305	DJ-2549	DJ-6091	CI	100	150	104	0.062	0.04	E
P-2426	J-839	J-840	HDPE	145	99.3	46	0.027	0.04	
DP-1734	DJ-7887	DJ-7886	CI	100	100	59	0.027	0.04	E
DP-5489	DJ-2758	DJ-2757	DI	140	150	206	0.06	0.04	E
P-3376	DJ-6464	PRV-36	DI	140	100	60	0.026	0.04	E
DP-10556	DJ-7455	DJ-1316	CI	100	300	34	0.238	0.04	E
P-3377	PRV-36	DJ-2659	DI	140	100	76	0.026	0.04	E
DP-6981	DJ-6731	DJ-8438	DI	140	100	76	0.026	0.04	E
DP-7695	DJ-2659	DJ-6731	DI	140	100	72	0.026	0.04	E
DP-9933	DJ-6351	DJ-4403	CI	100	175	91	0.081	0.04	E
DP-2570	DJ-6617	DJ-6616	DI	140	100	81	0.026	0.04	E
P-2461	J-863	J-864	HDPE	145	99.3	24	0.024	0.04	
P-2423	J-837	J-838	HDPE	145	99.3	52	0.024	0.04	
DP-5658	DJ-2738	DJ-2757	CI	100	150	205	0.052	0.03	E
DP-7959	DJ-3747	DJ-9762	CI	100	150	82	0.052	0.03	E
DP-868	DJ-9088	DJ-9087	CI	100	100	36	0.022	0.03	E
DP-2193	DJ-3134	DJ-4530	CI	100	100	8	0.022	0.03	E
DP-2194	DJ-4530	DJ-3133	CI	100	100	180	0.022	0.03	E
DP-3474	DJ-5597	DJ-5596	CI	100	150	110	0.05	0.03	E
DP-5662	DJ-8618	DJ-8729	CI	100	150	10	0.047	0.03	E
P-2460	J-862	J-863	HDPE	145	99.3	32	0.02	0.03	
P-2455	DJ-2151	J-860	CI	100	100	117	0.02	0.03	E
P-2413	J-832	DJ-4118	CI	100	100	20	0.02	0.03	E
DP-1383	DJ-8438	DJ-8437	DI	140	100	50	0.019	0.03	E
DP-418	DJ-9769	DJ-9768	CI	100	100	18	0.019	0.03	E
DP-325	DJ-9891	DJ-9890	CI	100	100	14	0.019	0.03	E
P-389	J-127	DJ-724	CI	100	100	88	0.018	0.03	E
DP-3572	DJ-8538	DJ-8395	CI	100	100	72	0.018	0.03	E
DP-2763	DJ-4451	DJ-4450	CI	100	100	86	0.018	0.03	E

DP-10062	DJ-5596	DJ-5597	CI	100	175	138	0.056	0.03	E
DP-292	DJ-9885	DJ-4371	CI	100	100	12	0.018	0.03	E
DP-5664	DJ-8729	DJ-8728	CI	100	150	42	0.039	0.03	E
DP-5704	DJ-4487	DJ-5116	CI	100	100	137	0.017	0.03	E
DP-9516	DJ-10116	DJ-2666	CI	100	300	5	0.136	0.02	E
DP-5060	DJ-4029	DJ-4028	CI	100	150	177	0.033	0.02	E
DP-5274	DJ-8874	DJ-8882	CI	100	250	50	0.084	0.02	E
DP-3439	DJ-5637	DJ-6403	CI	100	100	109	0.013	0.02	E
DP-2998	DJ-6403	DJ-4324	DI	140	100	55	0.013	0.02	E
DP-1142	DJ-8729	DJ-8728	CI	100	100	42	0.013	0.02	E
DP-9220	DJ-9083	DJ-2027	CI	100	300	107	0.111	0.02	E
DP-8385	DJ-9084	DJ-7148	CI	100	100	6	0.012	0.02	E
P-2410	DJ-5114	J-831	CI	100	100	67	0.012	0.02	E
DP-5087	DJ-4786	DJ-6464	DI	140	150	13	0.026	0.02	E
DP-9515	DJ-3866	DJ-10116	CI	100	300	7	0.101	0.02	E
DP-10557	DJ-1316	DJ-3866	CI	100	300	133	0.101	0.02	E
DP-5375	DJ-9658	DJ-8393	CI	100	150	13	0.024	0.02	E
DP-622	DJ-9474	DJ-9473	CI	100	100	27	0.01	0.01	E
DP-9685	DJ-7522	DJ-3357	DI	140	150	33	0.021	0.01	E
DP-163	DJ-10117	DJ-10116	CI	100	200	6	0.035	0.01	E
DP-328	DJ-9886	DJ-9885	CI	100	80	13	0.005	0.01	E
DP-5086	DJ-4450	DJ-4786	DI	140	150	76	0.018	0.01	E
DP-10063	DJ-5597	DJ-2463	CI	100	175	95	0.025	0.01	E
DP-1046	DJ-8882	DJ-8881	CI	100	150	40	0.018	0.01	E
DP-2999	DJ-4324	DJ-6402	DI	140	100	36	0.007	0.01	E
DP-1402	DJ-6402	DJ-4785	CI	100	150	83	0.016	0.01	E
DP-6982	DJ-8438	DJ-1433	DI	140	100	25	0.007	0.01	E
DP-5659	DJ-2757	DJ-2737	CI	100	150	4	0.015	0.01	E
P-2472	J-869	J-870	HDPE	145	99.3	9	0.007	0.01	
DP-2011	DJ-10197	DJ-437	DI	140	200	29	0.025	0.01	E

DP-2856	DJ-4325	DJ-4324	CI	100	100	89	0.006	0.01	E
DP-8192	DJ-6295	DJ-6078	CI	100	80	32	0.004	0.01	E
P-2495	DJ-1151	J-882	CI	100	80	13	0.004	0.01	E
P-2496	J-882	DJ-6295	CI	100	80	190	0.004	0.01	E
DP-5745	DJ-2706	DJ-897	CI	100	100	218	0.006	0.01	E
DP-4881	DJ-3012	DJ-3011	CI	100	100	168	0.005	0.01	E
P-2493	J-879	J-880	HDPE	145	99.3	104	0.005	0.01	
DP-324	DJ-9895	DJ-9894	CI	100	450	14	0.079	0.01	E
DP-1400	DJ-4786	DJ-6402	CI	100	150	48	0.008	0.01	E
DP-4095	DJ-1217	DJ-1151	CI	100	100	266	0.004	0.01	E
DP-8373	DJ-4979	DJ-2317	CI	100	100	127	0.004	0.01	E
DP-8372	DJ-1217	DJ-4979	CI	100	100	93	0.004	0.01	E

Table C10(b): Junction results

Label	Elevation (m)	Demand (ML/day)	Hydraulic Grade (m)	Pressure (kg/cm ²)
DJ-5996	580.3	0.275	588.2	0.785
J-126	588.3	0.015	598.8	1.047
J-125	588.4	0.007	598.9	1.051
J-124	588.3	0.024	599	1.065
J-123	588.5	0.034	599.2	1.071
DJ-8875	587.8	0.023	598.9	1.102
J-851	576.9	0	588	1.108
J-847	576.9	0	588	1.113
DJ-8887	587.8	0.023	599	1.114
DJ-2660	576.8	0	588	1.118
J-853	576.8	0	588	1.118
DJ-6385	589.9	0.077	601.1	1.119
DJ-4493	587.8	0.028	599.1	1.126
DJ-9768	590	0.019	601.3	1.126
J-842	576.7	0	588	1.126
DJ-9890	590	0.019	601.3	1.128
J-846	576.7	0	588	1.129
DJ-6350	590	0.169	601.3	1.129
J-844	576.7	0	588	1.13
J-127	587.4	0.056	598.7	1.131
J-850	576.6	0	588	1.137
J-848	576.6	0	588	1.138
DJ-8899	590	0.036	601.4	1.139
J-129	590	0.05	601.4	1.139
DJ-8437	576.6	0.019	588	1.142
DJ-6351	590	0.316	601.5	1.146
J-852	576.5	0	588	1.146

DJ-7892	586.9	0.065	598.4	1.146
DJ-4404	590	0.075	601.5	1.146
J-854	576.5	0	588	1.147
DJ-9459	589.9	0.054	601.4	1.149
DJ-2406	589.9	0.017	601.4	1.149
DJ-2027	589.9	0.027	601.4	1.149
DJ-9460	589.9	0.048	601.4	1.149
DJ-9625	590	0.15	601.6	1.153
DJ-9626	590	0.243	601.6	1.154
J-856	576.4	0	588	1.156
J-843	576.4	0	588	1.162
J-858	576.4	0	588	1.164
DJ-9269	589.8	0.04	601.4	1.165
DJ-9270	589.8	0.027	601.4	1.165
DJ-10286	589.8	0.013	601.5	1.166
DJ-10287	589.8	0.01	601.5	1.166
DJ-5596	589.8	0.004	601.5	1.169
DJ-4403	589.8	0.072	601.5	1.169
DJ-195	589.7	0.001	601.4	1.172
DJ-5074	589.6	0.09	601.3	1.173
J-849	576.3	0	588	1.175
J-845	576.2	0	588	1.177
DJ-6331	589.3	0.092	601.2	1.184
DJ-7768	589.8	0.096	601.7	1.186
DJ-9886	585.1	0.005	597	1.186
DJ-9885	585.1	0.005	597	1.186
DJ-8681	589.3	0.034	601.2	1.189
DJ-8618	589.3	0.047	601.2	1.19
DJ-8729	589.3	0.005	601.2	1.19
J-855	576.1	0	588	1.193
DJ-6575	590	0.305	602	1.194
DJ-8895	585	0.402	597	1.196
DJ-1433	576	0.007	588	1.196
DJ-4371	585	0.018	597	1.199
DJ-9550	585	0.225	597	1.2
DJ-5166	585	0.103	597	1.2
DJ-8896	585	0.009	597	1.2
J-857	576	0	588	1.201
DJ-8881	588.5	0.018	600.5	1.201
DJ-9549	585	0.036	597.1	1.203
J-859	575.9	0	588	1.21
DJ-6947	586.1	0.155	598.3	1.214
DJ-3012	588.5	0.005	600.7	1.219
DJ-6731	575.8	0	588	1.22
DJ-2659	575.8	0	588	1.221
DJ-7886	588.8	0.027	601	1.222
DJ-7887	588.8	0.024	601	1.222
DJ-8438	575.8	0	588	1.223
DJ-6730	575.8	0	588	1.223
DJ-6128	586.4	0.143	598.7	1.224
DJ-8269	588.8	0.045	601	1.224
DJ-8270	588.8	0.044	601	1.224
DJ-1253	588.8	0.056	601.1	1.225
J-866	588.8	0.02	601.1	1.229

DJ-8873	587.9	0.091	600.5	1.256
DJ-4814	587.6	0.162	600.3	1.27
DJ-8067	588.8	0.093	601.5	1.271
DJ-8394	589.6	0	602.4	1.272
DJ-3134	589.6	0	602.4	1.272
DJ-4530	589.6	0	602.4	1.272
DJ-7767	588.8	0.04	601.6	1.273
DJ-6576	589.6	0.063	602.3	1.273
DJ-1151	588.6	0	601.4	1.275
DJ-724	585.9	0.018	598.7	1.279
DJ-8874	587.6	0.092	600.5	1.287
DJ-8882	587.6	0.067	600.5	1.289
DJ-3041	589.6	0.088	602.5	1.291
DJ-8402	589.3	0.053	602.2	1.291
DJ-194	588.4	0.007	601.3	1.296
J-882	588.4	0	601.4	1.297
DJ-2648	588.3	0.027	601.4	1.3
DJ-10342	588.3	0.017	601.4	1.305
DJ-9613	587.6	0	600.7	1.305
DJ-4186	588.2	0.002	601.3	1.306
DJ-2433	588.2	0.001	601.3	1.306
DJ-193	588.2	0.005	601.3	1.306
DJ-9083	588.2	0.013	601.4	1.314
DJ-2549	587.8	0.026	601	1.314
DJ-8497	588.2	0.001	601.4	1.315
DJ-7916	587.8	0.016	601	1.315
J-710	588.2	0.001	601.4	1.321
DJ-6055	589.4	0.153	602.7	1.322
J-709	588.1	0.006	601.4	1.328
DJ-1666	589.1	0	602.4	1.331
DJ-3003	586.8	0.069	600.1	1.331
DJ-9087	587.5	0.022	601	1.342
DJ-9088	587.5	0.016	601	1.342
DJ-9473	587.5	0.01	601	1.342
DJ-9474	587.5	0.011	601	1.342
DJ-9156	587.5	0.008	601	1.343
DJ-7915	587.5	0.053	601	1.343
DJ-6091	587.5	0.062	601	1.344
DJ-6056	589.3	0.065	602.8	1.348
DJ-725	587.7	0.017	601.3	1.35
DJ-3446	587.6	0.063	601.2	1.351
DJ-6332	587.7	0.043	601.2	1.352
DJ-8728	587.7	0.008	601.2	1.353
DJ-8680	587.7	0.006	601.2	1.353
DJ-854	587.7	0.047	601.3	1.354
DJ-3447	587.7	0.008	601.3	1.354
DJ-7896	589.3	0.097	603	1.364
DJ-2936	586.8	0.085	600.5	1.367
DJ-9769	587.6	0.024	601.3	1.367
DJ-7897	589.3	0.107	603	1.367
DJ-8403	588.5	0.264	602.2	1.367
DJ-9891	587.6	0.024	601.3	1.369
DJ-1216	587.6	0	601.4	1.373
DJ-7148	587.6	0.012	601.3	1.373

DJ-9084	587.6	0.017	601.3	1.373
J-868	586.6	0.064	600.5	1.377
J-121	587.4	0.09	601.2	1.379
DJ-8498	587.6	0.084	601.4	1.379
DJ-7775	588.5	0.121	602.4	1.382
DJ-9155	587.1	0.075	601	1.384
DJ-3011	586.8	0.122	600.7	1.384
DJ-5900	586.2	0.049	600.2	1.393
DJ-3004	586.2	0.06	600.2	1.394
DJ-4826	585.9	0.057	600.1	1.411
DJ-2757	585.9	0.098	600.1	1.414
DJ-2737	585.9	0.015	600.1	1.414
DJ-5116	585.9	0.017	600.1	1.414
DJ-4827	585.9	0.096	600.1	1.417
DJ-4487	585.9	0.149	600.1	1.417
DJ-6535	585.9	0.021	600.1	1.417
DJ-7900	586.2	0.071	600.5	1.426
DJ-5899	585.8	0.016	600.1	1.427
DJ-2758	585.8	0.003	600.1	1.427
DJ-2738	585.8	0.002	600.1	1.427
DJ-4488	585.8	0.01	600.1	1.427
J-867	586	0.057	600.5	1.446
DJ-5004	585.5	0.008	600.1	1.448
DJ-1897	585.5	0.005	600.1	1.449
DJ-9466	585.5	0.092	600.1	1.455
J-865	586.3	0.064	600.9	1.456
DJ-1093	585.5	0.015	600.1	1.456
DJ-6536	585.8	0.002	600.4	1.459
DJ-9102	585.5	0.017	600.2	1.461
DJ-4915	587.7	0	602.3	1.464
DJ-1315	587.7	0	602.3	1.464
DJ-4815	585.8	0.05	600.5	1.469
DJ-7899	585.8	0.053	600.5	1.47
J-883	586.6	0	601.4	1.47
DJ-6079	586.7	0	601.4	1.472
DJ-347	585.5	0.001	600.4	1.483
DJ-7149	586.4	0.069	601.3	1.485
DJ-9005	587.5	0	602.4	1.486
DJ-9004	587.5	0	602.4	1.486
DJ-6599	587.5	0	602.4	1.486
DJ-9465	585.1	0.125	600.1	1.498
DJ-5597	586.4	0.081	601.5	1.508
DJ-4502	585.9	0.028	601	1.513
DJ-6948	585.9	0.063	601.1	1.513
DJ-1891	585.9	0.002	601.1	1.513
DJ-8066	586.4	0.04	601.6	1.514
DJ-7240	585	0.158	600.2	1.515
DJ-8179	587.1	0	602.4	1.528
DJ-8395	587.1	0	602.4	1.53
DJ-2706	585.8	0.063	601.1	1.531
DJ-7790	585.9	0.065	601.3	1.536
J-128	585	0	600.4	1.544
DJ-9098	585	0	600.4	1.545
DJ-9515	585.9	0.046	601.4	1.545

DJ-9507	585.9	0.013	601.4	1.546
DJ-7791	585.9	0.039	601.4	1.548
DJ-9514	585.9	0.057	601.4	1.548
DJ-7774	586.7	0.149	602.3	1.554
DJ-897	585.5	0.006	601.1	1.555
J-881	586.8	0	602.4	1.555
DJ-9614	585	0	600.7	1.571
DJ-5563	586.1	0	601.9	1.577
DJ-3820	583.8	0.202	599.6	1.58
DJ-1565	585.3	0	601.3	1.601
DJ-4978	585.2	0	601.4	1.609
J-878	586.2	0	602.4	1.613
DJ-2879	580.5	0.577	596.6	1.614
DJ-6120	587.1	0.173	603.3	1.617
DJ-2463	585.2	0.116	601.5	1.625
DJ-2028	585.2	0.012	601.5	1.627
DJ-438	585.2	0.01	601.5	1.627
DJ-3133	586.1	0	602.4	1.627
DJ-1665	586.1	0	602.4	1.628
DJ-6600	586.1	0	602.4	1.628
DJ-349	585.2	0.01	601.5	1.63
DJ-419	585.2	0.111	601.5	1.631
J-880	585.8	0	602.4	1.654
DJ-8985	582.7	0.143	599.3	1.661
J-877	585.7	0	602.4	1.67
DJ-5170	584.5	0	601.3	1.674
DJ-3042	587.1	0.07	603.9	1.679
DJ-1323	587.1	0.061	603.9	1.679
DJ-4223	584.4	0	601.3	1.683
DJ-6119	586.4	0.084	603.3	1.686
DJ-2317	584.4	0	601.4	1.688
DJ-2151	583.3	0.108	600.2	1.688
DJ-4029	583.3	0.102	600.2	1.689
DJ-3204	584	0.126	601	1.693
J-879	585.4	0	602.4	1.697
DJ-638	584.3	0	601.3	1.702
DJ-3746	582.5	0.079	599.6	1.704
DJ-4914	585.3	0	602.4	1.709
DJ-2628	583.8	0.076	600.9	1.71
DJ-10198	583.8	0.052	600.9	1.71
DJ-10197	583.8	0.025	600.9	1.712
DJ-5564	584.7	0	601.9	1.712
DJ-3358	584	0.073	601.2	1.712
DJ-6078	584.2	0	601.4	1.715
DJ-9761	582.1	0.127	599.3	1.721
DJ-8909	584	0	601.3	1.725
DJ-9762	582.1	0.01	599.4	1.726
DJ-2880	582.1	0.027	599.4	1.726
DJ-7538	585.3	0.051	602.6	1.726
DJ-1437	585.3	0.082	602.6	1.729
DJ-1144	585.3	0.016	602.6	1.729
DJ-8910	584	0	601.3	1.732
DJ-4407	584	0	601.3	1.732
DJ-6480	584	0	601.3	1.732

DJ-7000	584	0	601.3	1.732
DJ-6295	584	0	601.4	1.732
DJ-9099	585	0	602.3	1.732
DJ-4979	584	0	601.4	1.734
DJ-6649	585	0	602.4	1.735
DJ-5169	583.9	0	601.3	1.739
DJ-4272	583.9	0	601.3	1.739
DJ-8180	584.9	0	602.4	1.743
DJ-2318	583.9	0	601.4	1.745
DJ-1217	583.9	0	601.4	1.745
DJ-9658	585	0.024	602.4	1.745
DJ-9657	585	0	602.4	1.745
DJ-8393	585	0.001	602.4	1.745
DJ-8538	584.9	0	602.4	1.745
DJ-7813	585	0.087	602.5	1.746
J-871	584.9	0	602.4	1.746
DJ-6654	581.8	0.358	599.3	1.747
DJ-9719	584.9	0	602.4	1.75
DJ-3865	583.8	0	601.3	1.751
DJ-9720	584.9	0	602.5	1.752
J-870	584.8	0	602.4	1.756
J-869	584.7	0	602.4	1.763
DJ-7537	584.9	0.001	602.6	1.765
DJ-4902	583.3	0.127	601	1.766
DJ-2665	583.8	0	601.5	1.767
DJ-4119	583.2	0.108	600.9	1.767
DJ-8564	583.6	0	601.3	1.768
DJ-6054	583.6	0	601.3	1.768
DJ-3603	583.6	0	601.3	1.768
DJ-1839	583.6	0	601.3	1.768
DJ-8572	584.7	0	602.4	1.772
DJ-7101	584.7	0	602.4	1.772
DJ-8571	584.7	0	602.4	1.772
DJ-1507	583.2	0.124	601	1.774
DJ-8984	581.4	0.809	599.2	1.782
J-713	585.8	0.038	603.8	1.797
J-872	584.4	0	602.4	1.797
J-711	585.9	0.031	604	1.806
DJ-10117	583.2	0	601.3	1.808
DJ-10116	583.2	0	601.3	1.808
DJ-7001	583.2	0	601.3	1.808
DJ-3866	583.2	0	601.3	1.808
DJ-2666	583.2	0	601.3	1.808
DJ-637	583.2	0	601.3	1.808
J-132	583.2	0	601.3	1.808
DJ-4451	583.2	0	601.3	1.809
DJ-10099	585.9	0.032	604	1.809
DJ-2797	585.9	0.008	604	1.812
DJ-5785	585.9	0.001	604	1.812
J-873	584.2	0	602.4	1.813
DJ-10100	585.7	0.062	603.9	1.817
DJ-5283	583.1	0	601.3	1.819
J-829	583.3	0	601.5	1.823
DJ-3604	583	0	601.3	1.823

DJ-7239	581.8	0.115	600.1	1.826
DJ-8563	583	0	601.3	1.827
DJ-6479	583	0	601.3	1.827
DJ-7584	582.8	0.111	601.1	1.828
DJ-4408	583	0	601.3	1.832
DJ-348	582.5	0.139	600.9	1.832
DJ-418	582.5	0.049	600.9	1.833
J-874	584	0	602.4	1.834
DJ-437	582.5	0.025	600.9	1.84
DJ-6126	582.8	0	601.3	1.842
DJ-7585	582.5	0.062	601.1	1.858
J-830	582.9	0	601.5	1.858
DJ-4903	582.5	0.105	601.1	1.859
DJ-6294	582.7	0	601.4	1.863
J-875	583.7	0	602.4	1.874
DJ-3476	583.4	0.151	602.5	1.907
DJ-3747	580.3	0.095	599.4	1.908
DJ-5997	580.3	0.075	599.4	1.909
J-707	583.4	0.019	602.7	1.92
DJ-6127	582.1	0	601.3	1.92
DJ-6053	582.1	0	601.3	1.92
J-863	580.8	0.033	600.1	1.93
DJ-5784	583.4	0.009	602.8	1.932
J-130	580.8	0.166	600.1	1.934
DJ-5528	581.6	0.023	601	1.939
DJ-3646	581.6	0.049	601	1.939
J-708	583.1	0.031	602.6	1.942
DJ-3357	581.6	0.021	601.1	1.948
DJ-7522	581.6	0.055	601.1	1.948
DJ-7454	581.8	0	601.3	1.949
DJ-5284	581.8	0	601.4	1.95
J-712	583.3	0.024	602.9	1.953
J-864	580.5	0.024	600.1	1.958
DJ-8544	581.3	0.078	601.1	1.975
J-861	580.4	0.054	600.2	1.981
DJ-4271	581.4	0	601.3	1.982
J-860	580.3	0.031	600.2	1.985
DJ-4786	581.2	0	601.3	2.006
DJ-4450	581.2	0	601.3	2.006
J-862	580	0.039	600.1	2.008
DJ-5527	580.7	0.049	601	2.021
DJ-8543	580.7	0.045	601.1	2.028
DJ-8514	579.5	0.051	600.1	2.057
DJ-3993	578.8	0.164	599.4	2.058
DJ-6182	579.5	0.043	600.1	2.059
DJ-1229	580.5	0.023	601.2	2.069
J-364	582.4	0.058	603.2	2.075
DJ-6273	580.5	0.074	601.3	2.076
DJ-6265	580.5	0.033	601.3	2.077
J-363	582.1	0.017	603.1	2.103
DJ-2464	582.5	0.107	603.6	2.106
DJ-7960	579	0.047	600.1	2.106
DJ-5114	579	0.102	600.1	2.107
DJ-7455	580	0	601.3	2.131

DJ-1316	580	0	601.3	2.131
DJ-4325	580	0	601.3	2.132
DJ-4785	580	0	601.3	2.132
DJ-4324	579.9	0	601.3	2.136
DJ-6402	579.9	0	601.3	2.136
DJ-4118	578.7	0.02	600.1	2.142
DJ-9362	578.7	0.058	600.2	2.143
J-832	578.6	0.103	600.1	2.147
DJ-4028	578.7	0.033	600.2	2.148
J-838	578.5	0.024	600.1	2.149
DJ-9363	578.7	0.022	600.3	2.151
DJ-6464	579.8	0	601.3	2.151
J-831	578.2	0.03	600.1	2.184
J-839	578.1	0.013	600.1	2.189
DJ-6643	579.3	0.02	601.3	2.193
DJ-4524	579.3	0.024	601.3	2.194
DJ-9894	579.3	0.018	601.3	2.195
DJ-9895	579.3	0.009	601.3	2.195
DJ-9339	579.3	0.036	601.3	2.195
DJ-9573	577.9	0.072	599.9	2.196
DJ-9871	577.9	0.02	599.9	2.197
DJ-9872	577.9	0.07	599.9	2.2
DJ-160	579.3	0.003	601.4	2.204
DJ-2627	578.8	0.068	600.9	2.205
DJ-8513	577.9	0.071	600.1	2.208
DJ-7959	577.9	0.038	600.1	2.208
DJ-1566	579.1	0	601.3	2.212
DJ-5637	579.1	0	601.3	2.212
DJ-1452	577.9	0.129	600.1	2.216
J-837	577.8	0.014	600.1	2.223
J-835	577.7	0.037	600.1	2.229
J-840	577.7	0.027	600.1	2.233
DJ-6272	578.7	0.071	601.3	2.25
DJ-6264	578.7	0.058	601.3	2.251
DJ-1301	578.7	0.01	601.2	2.253
DJ-8434	578.4	0.017	601.3	2.28
DJ-8433	578.4	0.054	601.3	2.282
DJ-6617	578.4	0.027	601.3	2.283
DJ-4469	577.7	0.059	600.6	2.286
J-836	577.1	0.045	600.1	2.29
DJ-1506	576.8	0.003	600.1	2.319
DJ-9760	576.6	0.108	599.8	2.323
DJ-141	579.3	0.001	602.6	2.325
J-841	576.6	0	600.1	2.337
J-131	579	0.008	602.6	2.348
DJ-6642	577.7	0.041	601.3	2.355
DJ-6616	577.7	0.026	601.3	2.356
DJ-1302	577.6	0.002	601.3	2.361
DJ-9338	577.6	0.014	601.3	2.363
DJ-8123	577.6	0.001	601.3	2.363
DJ-8148	577.6	0.009	601.3	2.364
DJ-9941	577.6	0.006	601.3	2.364
DJ-8654	577.6	0.012	601.3	2.365
DJ-6467	577.6	0.001	601.3	2.365

J-1358	580	0	603.7	2.365
DJ-9940	577.6	0.002	601.4	2.37
DJ-1840	577.4	0	601.3	2.385
DJ-8122	577.3	0.024	601.2	2.388
DJ-6403	577.3	0	601.3	2.394
DJ-5536	577.3	0.014	601.3	2.397
DJ-8509	577.1	0.043	601.2	2.403
DJ-7398	577.1	0	601.2	2.404
J-834	576.9	0.036	601	2.409
J-833	576.7	0.029	601	2.424
J-366	576.9	0	601.2	2.426
J-365	577	0	601.3	2.431
DJ-1230	576.8	0	601.2	2.432
DJ-8149	579.3	0.114	603.7	2.434
DJ-2547	576.4	0.019	601.2	2.474
DJ-4470	576.4	0.037	601.2	2.478
DJ-8510	576.2	0	601.2	2.498
DJ-1438	576.1	0	601.3	2.514
DJ-8655	576.1	0	601.3	2.514
DJ-2796	577.6	0.009	603.7	2.602

7. Zone C11

Table C11(a): Pipe results

Label	Start Node	Stop Node	Material	Hazen-Williams C	Diameter (mm)	Length (m)	Flow (ML/day)	Velocity (m/s)	Pipe type (new/existing)
P-1621	DJ-2648	J-550	HDPE	145	284.5	27	9.51	1.731	New
P-317	Sant Tukaram	DJ-161	di	140	400	16	17.21	1.585	New
DP-154	DJ-10127	DJ-10126	CI	100	150	4	2.327	1.524	E
P-1629	DJ-2648	J-553	CI	100	300	22	9.007	1.475	E
P-1630	J-553	DJ-5204	CI	100	300	93	8.955	1.466	E
DP-10748	DJ-5204	DJ-5101	CI	100	300	20	8.48	1.388	E
DP-10496	DJ-5101	DJ-5330	CI	100	300	29	8.081	1.323	E
DP-10497	DJ-5330	DJ-10127	CI	100	300	29	8.023	1.314	E
P-1622	DJ-161	DJ-9911	HDPE	145	284.5	21	7.068	1.287	New
DP-9238	DJ-2616	DJ-2107	CI	100	100	5	0.841	1.24	E
DP-316	DJ-9911	DJ-9910	CI	100	300	13	7.057	1.156	E
DP-7615	DJ-4864	DJ-894	CI	100	100	31	0.782	1.152	E
DP-8802	DJ-9910	DJ-802	CI	100	300	23	6.639	1.087	E
DP-10267	DJ-802	DJ-4791	CI	100	300	13	6.63	1.086	E
DP-10707	DJ-4791	DJ-7716	CI	100	300	26	6.509	1.066	E
DP-2664	DJ-3169	DJ-6713	CI	100	100	35	0.709	1.046	E
DP-2291	DJ-2107	DJ-8811	CI	100	100	162	0.687	1.013	E

DP-10708	DJ-7716	DJ-10242	CI	100	300	21	6.154	1.008	E
DP-64	DJ-10242	DJ-10241	CI	100	250	3	4.252	1.003	E
DP-278	DJ-4172	DJ-6355	CI	100	100	15	0.645	0.95	E
DP-9959	DJ-10127	DJ-5154	CI	100	300	50	5.665	0.928	E
DP-10626	DJ-5154	DJ-4638	CI	100	300	51	5.588	0.915	E
DP-1071	DJ-10328	DJ-8161	CI	100	80	86	0.388	0.893	E
DP-10895	DJ-6439	DJ-10126	CI	100	150	29	1.266	0.829	E
DP-10922	DJ-4638	DJ-1252	CI	100	300	101	5.048	0.827	E
DP-9297	DJ-8161	DJ-8228	CI	100	80	9	0.337	0.775	E
P-2859	J-1096	DJ-4174	CI	100	100	148	0.515	0.758	E
DP-10947	DJ-4707	DJ-6439	CI	100	150	47	1.135	0.743	E
P-1625	DJ-161	J-552	MS	140	450	445	10.13	0.737	E
DP-10923	DJ-1252	DJ-4163	CI	100	300	66	4.479	0.733	E
P-2910	J-552	J-1123	MS	140	450	222	10.04	0.731	E
DP-9668	DJ-4865	DJ-754	CI	100	100	43	0.484	0.713	E
P-2911	J-1123	J-550	MS	140	450	449	9.557	0.695	E
DP-10757	DJ-10126	DJ-7725	CI	100	150	8	1.048	0.686	E
DP-1159	DJ-4612	DJ-6153	CI	100	100	54	0.463	0.682	E
DP-2292	DJ-8811	DJ-2106	CI	100	100	91	0.461	0.68	E
DP-10835	DJ-4163	DJ-6151	CI	100	300	32	4.062	0.665	E
DP-4243	DJ-2597	DJ-3006	CI	100	100	41	0.447	0.659	E
P-2912	J-1122	J-1123	HDPE	145	99.3	80	0.437	0.652	
DP-10256	DJ-6151	DJ-10190	CI	100	300	171	3.976	0.651	E
P-2865	J-1099	DJ-4613	CI	100	150	34	0.96	0.629	E
DP-3754	DJ-5204	DJ-5203	CI	100	100	121	0.424	0.624	E
DP-10034	DJ-10241	DJ-4173	CI	100	250	7	2.648	0.624	E
DP-10912	DJ-7725	DJ-10331	CI	100	150	31	0.951	0.623	E
DP-8888	DJ-6713	DJ-6810	CI	100	100	24	0.418	0.616	E
P-2858	DJ-6424	J-1096	CI	100	100	62	0.411	0.605	E
DP-10946	DJ-2548	DJ-4707	CI	100	150	119	0.923	0.604	E
DP-101	DJ-10190	DJ-10189	CI	100	150	4	0.887	0.581	E
P-2873	J-1103	J-1101	CI	100	100	29	0.387	0.57	E
DP-9298	DJ-8228	DJ-8552	CI	100	80	74	0.245	0.565	E
P-2864	J-1097	J-1099	CI	100	150	52	0.862	0.565	E
DP-3164	DJ-4206	DJ-3975	CI	100	150	81	0.859	0.563	E
DP-8544	DJ-4613	DJ-755	CI	100	150	3	0.846	0.554	E
DP-201	DJ-5101	DJ-9929	CI	100	100	98	0.372	0.549	E
DP-8451	DJ-4130	DJ-1559	CI	100	100	13	0.351	0.517	E
DP-11	DJ-	DJ-	CI	100	100	1	0.346	0.51	E

	10331	10330							
DP-279	DJ-6355	DJ-1914	CI	100	100	259	0.34	0.502	E
DP-10257	DJ-10190	DJ-3507	CI	100	300	79	3.035	0.497	E
DP-5606	DJ-2617	DJ-2616	CI	100	150	213	0.758	0.496	E
P-2878	J-1105	DJ-9229	CI	100	100	181	0.334	0.493	E
DP-3904	DJ-4986	DJ-4985	CI	100	100	125	0.333	0.491	E
DP-6464	DJ-755	DJ-9038	CI	100	150	57	0.745	0.488	E
DP-5694	DJ-7643	DJ-7716	CI	100	100	55	0.318	0.469	E
DP-1993	DJ-7500	DJ-7789	CI	100	100	67	0.318	0.468	E
DP-12	DJ-10329	DJ-10328	CI	100	100	1	0.317	0.467	E
DP-5207	DJ-2859	DJ-3975	CI	100	150	186	0.708	0.464	E
DP-6510	DJ-6532	DJ-755	CI	100	300	29	2.793	0.457	E
DP-9926	DJ-4173	DJ-4201	CI	100	250	17	1.937	0.457	E
P-2874	DJ-9038	J-1104	CI	100	150	28	0.695	0.455	E
DP-10749	DJ-6220	DJ-2548	CI	100	150	60	0.694	0.455	E
P-2905	DJ-4637	J-1121	CI	100	150	86	0.69	0.452	E
DP-5538	DJ-4173	DJ-4172	CI	100	150	210	0.683	0.447	E
DP-6509	DJ-3507	DJ-6532	CI	100	300	47	2.73	0.447	E
DP-8999	DJ-4615	DJ-10330	CI	100	100	116	0.3	0.442	E
DP-10896	DJ-4201	DJ-2967	CI	100	250	22	1.872	0.441	E
DP-8545	DJ-755	DJ-9131	CI	100	150	76	0.671	0.44	E
P-2872	J-95	J-1103	CI	100	100	83	0.29	0.427	E
DP-8813	DJ-4612	DJ-6228	CI	100	150	118	0.649	0.425	E
DP-4118	DJ-9198	DJ-5999	CI	100	100	2	0.287	0.423	E
DP-203	DJ-9929	DJ-5100	CI	100	100	50	0.286	0.422	E
DP-7344	DJ-9131	DJ-9171	CI	100	150	30	0.643	0.421	E
DP-7346	DJ-9171	DJ-4612	CI	100	150	30	0.623	0.408	E
P-2894	J-1112	J-1114	HDPE	145	99.3	3	0.272	0.406	
DP-4006	DJ-4865	DJ-4864	CI	100	150	129	0.618	0.405	E
DP-5621	DJ-4131	DJ-4130	CI	100	150	214	0.618	0.404	E
DP-10476	DJ-7546	DJ-6220	CI	100	150	75	0.617	0.404	E
DP-6036	DJ-2105	DJ-2104	CI	100	100	249	0.274	0.403	E
DP-10944	DJ-10329	DJ-10189	CI	100	150	77	0.61	0.4	E
DP-7547	DJ-5100	DJ-4637	CI	100	150	123	0.606	0.397	E
DP-2506	DJ-6714	DJ-6713	CI	100	100	80	0.268	0.395	E
DP-10913	DJ-10331	DJ-5074	CI	100	150	77	0.601	0.394	E
DP-8814	DJ-6228	DJ-6413	CI	100	150	22	0.597	0.391	E
DP-4469	DJ-3557	DJ-3675	CI	100	100	149	0.265	0.39	E
P-2908	DJ-2509	J-1122	CI	100	100	165	0.263	0.387	E
DP-7737	DJ-4986	DJ-6355	CI	100	100	36	0.263	0.387	E
DP-10897	DJ-2967	DJ-2617	CI	100	250	13	1.607	0.379	E
DP-10564	DJ-4131	DJ-10241	CI	100	250	5	1.591	0.375	E
P-2861	DJ-10224	J-1097	CI	100	150	58	0.564	0.369	E

DP-8747	DJ-3169	DJ-10208	CI	100	150	393	0.559	0.366	E
DP-4117	DJ-2557	DJ-9198	CI	100	100	214	0.246	0.362	E
DP-10734	DJ-7429	DJ-7546	CI	100	150	2	0.551	0.361	E
DP-7071	DJ-6413	DJ-754	CI	100	150	141	0.54	0.353	E
DP-5995	DJ-6153	DJ-4865	CI	100	100	183	0.24	0.353	E
DP-1905	DJ-7644	DJ-7643	CI	100	100	63	0.236	0.347	E
DP-10093	DJ-6810	DJ-7008	CI	100	100	26	0.235	0.346	E
P-2863	J-1097	J-1098	HDPE	145	99.3	137	0.23	0.343	
DP-8179	DJ-195	DJ-10326	CI	100	100	27	0.232	0.342	E
DP-8450	DJ-6789	DJ-4130	CI	100	100	112	0.231	0.34	E
DP-618	DJ-9483	DJ-9482	CI	100	100	27	0.23	0.34	E
P-2889	J-1110	DJ-1252	CI	100	150	39	0.518	0.339	E
P-2875	J-1104	DJ-9076	CI	100	150	33	0.514	0.337	E
P-2885	J-1108	J-1105	CI	100	100	8	0.227	0.334	E
DP-4238	DJ-5074	DJ-5073	CI	100	150	139	0.51	0.334	E
DP-9175	DJ-5073	DJ-1307	CI	100	150	25	0.509	0.333	E
DP-9276	DJ-9076	DJ-4612	CI	100	150	17	0.501	0.328	E
P-2906	J-1121	DJ-4206	CI	100	150	50	0.491	0.321	E
DP-1177	DJ-6153	DJ-8133	CI	100	100	38	0.212	0.313	E
DP-5400	DJ-2649	DJ-2648	CI	100	150	196	0.476	0.312	E
DP-9896	DJ-10242	DJ-7500	CI	100	300	8	1.892	0.31	E
DP-8674	DJ-8552	DJ-9681	CI	100	80	15	0.133	0.307	E
P-2882	DJ-363	J-1107	CI	100	100	541	0.206	0.303	E
DP-4165	DJ-4638	DJ-3534	CI	100	150	30	0.461	0.302	E
DP-1741	DJ-794	DJ-1306	CI	100	150	18	0.452	0.296	E
P-2917	J-1125	J-1126	HDPE	145	99.3	89	0.197	0.294	
DP-3260	DJ-4707	DJ-2883	CI	100	100	34	0.2	0.294	E
P-321	DJ-464	J-96	CI	100	100	240	0.199	0.294	E
DP-4999	DJ-2883	DJ-2882	CI	100	50	173	0.049	0.29	E
DP-7310	DJ-10328	DJ-4615	CI	100	100	470	0.197	0.29	E
P-2915	DJ-3506	J-1125	HDPE	145	99.3	125	0.193	0.288	
DP-9687	DJ-2105	DJ-10224	CI	100	150	53	0.427	0.28	E
DP-7613	DJ-9229	DJ-4864	CI	100	100	17	0.189	0.278	E
P-2907	J-1120	J-1121	HDPE	145	99.3	42	0.186	0.278	
DP-3150	DJ-6425	DJ-6424	CI	100	150	104	0.423	0.277	E
DP-8143	DJ-2413	DJ-7785	CI	100	150	38	0.423	0.277	E
P-322	J-96	DJ-2522	CI	100	100	143	0.188	0.277	E
P-2892	J-1112	J-1110	CI	100	150	86	0.419	0.274	E
DP-8368	DJ-3534	DJ-9413	CI	100	150	27	0.417	0.273	E
P-2884	J-1101	J-1108	CI	100	100	78	0.184	0.271	E
P-2896	J-1114	J-1115	HDPE	145	99.3	38	0.178	0.266	
P-2876	J-1103	J-1104	HDPE	145	99.3	89	0.177	0.264	
DP-8041	DJ-387	DJ-4163	CI	100	150	154	0.402	0.263	E
P-2879	J-1102	J-1106	CI	100	100	79	0.178	0.262	E
DP-3833	DJ-3541	DJ-1395	CI	100	100	67	0.176	0.259	E
DP-9897	DJ-7500	DJ-5024	CI	100	300	56	1.56	0.255	E
DP-6816	DJ-8683	DJ-2548	CI	100	100	155	0.172	0.254	E

DP-3695	DJ-1306	DJ-4206	CI	100	150	5	0.38	0.249	E
DP-4246	DJ-3006	DJ-9199	CI	100	100	172	0.167	0.246	E
P-324	DJ-3895	J-97	CI	100	100	159	0.167	0.246	E
P-2898	J-1116	DJ-7430	CI	100	100	42	0.164	0.242	E
DP-7545	DJ-5203	DJ-5100	CI	100	150	47	0.362	0.237	E
DP-8789	DJ-5024	DJ-5086	CI	100	300	25	1.448	0.237	E
DP-6690	DJ-5086	DJ-304	CI	100	300	56	1.429	0.234	E
DP-4356	DJ-3676	DJ-3675	CI	100	150	144	0.357	0.234	E
DP-14	DJ-10327	DJ-10326	CI	100	100	1	0.158	0.232	E
DP-10566	DJ-3557	DJ-2566	CI	100	250	3	0.98	0.231	E
DP-3377	DJ-7785	DJ-8677	CI	100	100	87	0.154	0.227	E
DP-8390	DJ-1928	DJ-3540	CI	100	150	149	0.342	0.224	E
DP-5760	DJ-4725	DJ-8854	CI	100	80	224	0.097	0.224	E
DP-10814	DJ-2566	DJ-2597	CI	100	250	28	0.944	0.223	E
DP-9607	DJ-9413	DJ-6914	CI	100	150	24	0.336	0.22	E
DP-10563	DJ-4886	DJ-4131	CI	100	250	77	0.93	0.219	E
DP-1179	DJ-8133	DJ-6152	CI	100	100	88	0.148	0.219	E
DP-7379	DJ-387	DJ-386	CI	100	100	552	0.148	0.218	E
DP-2441	DJ-6811	DJ-6810	CI	100	100	78	0.148	0.218	E
DP-5802	DJ-181	DJ-9483	CI	100	150	185	0.326	0.214	E
DP-8397	DJ-6425	DJ-304	CI	100	300	48	1.269	0.208	E
P-2904	J-1120	DJ-794	CI	100	150	13	0.316	0.207	E
DP-8675	DJ-9681	DJ-4314	CI	100	80	77	0.09	0.206	E
DP-1760	DJ-9199	DJ-5805	CI	100	100	14	0.137	0.201	E
DP-3181	DJ-10208	DJ-2386	CI	100	150	109	0.303	0.198	E
P-2860	DJ-1559	J-1096	HDPE	145	99.3	161	0.132	0.197	
DP-6911	DJ-3975	DJ-363	CI	100	150	86	0.298	0.195	E
DP-3502	DJ-2649	DJ-9475	CI	100	150	5	0.297	0.195	E
DP-10737	DJ-2617	DJ-1655	CI	100	250	28	0.815	0.192	E
DP-1078	DJ-8811	DJ-8810	CI	100	100	41	0.129	0.189	E
DP-10901	DJ-10327	DJ-10329	CI	100	150	48	0.286	0.187	E
DP-3379	DJ-8677	DJ-5574	CI	100	100	24	0.125	0.185	E
P-2881	J-1105	J-1106	HDPE	145	99.3	33	0.123	0.184	
DP-9239	DJ-2107	DJ-4986	CI	100	100	29	0.123	0.182	E
DP-9407	DJ-7730	DJ-7789	CI	100	150	26	0.277	0.182	E
DP-8194	DJ-10227	DJ-795	CI	100	100	69	0.122	0.18	E
DP-10094	DJ-7008	DJ-7320	CI	100	100	28	0.122	0.18	E
DP-5800	DJ-2386	DJ-181	CI	100	150	44	0.274	0.18	E
DP-5014	DJ-6531	DJ-5574	CI	100	100	168	0.122	0.179	E
DP-10389	DJ-4833	DJ-5999	CI	100	100	3	0.12	0.177	E
DP-5157	DJ-4791	DJ-7829	CI	100	100	4	0.119	0.176	E
DP-2365	DJ-6914	DJ-6913	CI	100	100	76	0.118	0.173	E
P-2871	J-1101	J-1102	HDPE	145	99.3	36	0.115	0.173	
DP-	DJ-1655	DJ-3557	CI	100	250	24	0.725	0.171	E

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DP-8391	DJ-3540	DJ-3895	CI	100	150	36	0.259	0.17	E
P-1613	DJ-1560	J-547	CI	100	100	137	0.114	0.168	E
DP-8786	DJ-2957	DJ-4886	CI	100	250	10	0.713	0.168	E
DP-3263	DJ-2883	DJ-4706	CI	100	100	100	0.112	0.165	E
P-2109	DJ-4726	DJ-10208	HDPE	145	284.5	4	0.887	0.162	New
DP-9123	DJ-10228	DJ-9475	CI	100	150	17	0.245	0.16	E
DP-2099	DJ-6789	DJ-2616	CI	100	100	21	0.107	0.158	E
DP-3829	DJ-3507	DJ-2413	CI	100	150	53	0.241	0.158	E
P-2105	DJ-9637	DJ-4726	HDPE	145	284.5	10	0.868	0.158	New
DP-8144	DJ-7785	DJ-3506	CI	100	150	59	0.24	0.157	E
DP-4037	DJ-4833	DJ-4832	CI	100	100	130	0.106	0.156	E
P-2913	DJ-5574	J-1124	HDPE	145	99.3	44	0.104	0.155	
DP-6257	DJ-7430	DJ-1789	CI	100	150	273	0.234	0.153	E
DP-2060	DJ-7430	DJ-7429	CI	100	250	67	0.634	0.149	E
DP-4917	DJ-2967	DJ-2966	CI	100	150	170	0.228	0.149	E
DP-6693	DJ-1150	J-98	CI	100	100	341	0.101	0.149	E
DP-1180	DJ-8683	DJ-8682	CI	100	100	43	0.101	0.149	E
P-2900	DJ-1307	J-1118	CI	100	150	285	0.225	0.147	E
DP-5016	DJ-5574	DJ-1787	CI	100	100	128	0.1	0.147	E
DP-4208	DJ-4726	DJ-4725	CI	100	100	138	0.099	0.146	E
DP-8338	DJ-2522	DJ-2386	CI	100	100	125	0.098	0.145	E
DP-9406	DJ-6740	DJ-7730	CI	100	150	70	0.214	0.14	E
DP-8339	DJ-2386	DJ-181	CI	100	100	44	0.095	0.139	E
DP-5790	DJ-7430	DJ-2413	CI	100	150	226	0.212	0.139	E
DP-9176	DJ-1307	DJ-4294	CI	100	150	350	0.208	0.136	E
DP-8180	DJ-10326	DJ-10328	CI	100	100	48	0.091	0.135	E
P-2887	DJ-6152	J-1109	HDPE	145	99.3	64	0.088	0.132	
P-2107	J-714	DJ-6425	CI	100	300	33	0.803	0.132	E
DP-2457	DJ-6784	DJ-6783	CI	100	100	78	0.089	0.131	E
P-2899	J-1116	J-1117	HDPE	145	99.3	38	0.087	0.13	
DP-789	DJ-9229	DJ-9228	CI	100	100	32	0.087	0.128	E
DP-2884	DJ-6439	DJ-6438	CI	100	100	90	0.086	0.126	E
DP-1259	DJ-8552	DJ-8551	CI	100	80	46	0.054	0.124	E
DP-3991	DJ-4886	DJ-4885	CI	100	150	128	0.188	0.123	E
DP-10945	DJ-10189	DJ-7429	CI	100	150	139	0.187	0.123	E
P-2869	J-97	J-1102	CI	100	100	477	0.082	0.121	E
DP-1708	DJ-6471	DJ-4207	CI	100	80	132	0.053	0.121	E
DP-2456	DJ-6789	DJ-6788	CI	100	100	78	0.082	0.121	E
DP-4207	DJ-4615	DJ-4614	CI	100	80	137	0.052	0.12	E
DP-3392	DJ-9638	DJ-2957	CI	100	250	118	0.508	0.12	E
DP-1849	DJ-7725	DJ-7724	CI	100	100	62	0.081	0.119	E
DP-3184	DJ-5999	DJ-5998	CI	100	100	100	0.081	0.119	E
DP-4303	DJ-7503	DJ-764	CI	100	150	27	0.181	0.118	E
DP-4126	DJ-4706	DJ-1989	CI	100	100	118	0.08	0.118	E
DP-8040	DJ-3975	DJ-387	CI	100	150	43	0.179	0.117	E
DP-10390	DJ-5999	DJ-5245	CI	100	100	55	0.079	0.116	E
P-2916	J-1125	J-1124	HDPE	145	99.3	21	0.077	0.115	
DP-4065	DJ-4865	DJ-4781	CI	100	100	132	0.077	0.113	E

DP-3501	DJ-9806	DJ-2649	CI	100	150	22	0.172	0.113	E
P-2886	J-1107	J-1108	HDPE	145	99.3	43	0.073	0.109	
DP-9608	DJ-6914	DJ-4637	CI	100	150	56	0.165	0.108	E
DP-10815	DJ-2597	DJ-2557	CI	100	250	30	0.459	0.108	E
DP-2305	DJ-7009	DJ-7008	CI	100	100	74	0.073	0.108	E
DP-5102	DJ-3006	DJ-3005	CI	100	100	180	0.073	0.107	E
DP-9051	DJ-6714	DJ-4851	CI	100	150	40	0.164	0.107	E
DP-2487	DJ-6740	DJ-6739	CI	100	100	79	0.072	0.106	E
DP-1494	DJ-8228	DJ-8227	CI	100	80	52	0.045	0.104	E
DP-1762	DJ-5805	DJ-9198	CI	100	100	19	0.07	0.103	E
P-2909	J-1122	DJ-2508	CI	100	100	114	0.069	0.102	E
DP-4928	DJ-2957	DJ-2956	CI	100	150	170	0.154	0.101	E
P-2895	J-1114	J-1113	HDPE	145	99.3	52	0.067	0.1	
DP-9145	DJ-6235	DJ-6811	CI	100	150	24	0.152	0.1	E
DP-3605	DJ-8854	DJ-1485	CI	100	100	16	0.067	0.099	E
DP-8746	DJ-464	DJ-3169	CI	100	150	6	0.15	0.098	E
DP-8399	DJ-7828	DJ-4790	CI	100	100	68	0.066	0.097	E
DP-3730	DJ-6091	DJ-6090	CI	100	100	119	0.065	0.096	E
DP-1465	DJ-8161	DJ-9491	CI	100	80	53	0.041	0.094	E
DP-7328	DJ-4294	DJ-794	CI	100	150	27	0.144	0.094	E
P-1628	J-548	DJ-4832	HDPE	145	99.3	6	0.062	0.093	New
P-2903	J-1118	J-1120	CI	100	150	16	0.14	0.092	E
P-1083	DJ-4726	DJ-2522	HDPE	145	144.4	14	0.127	0.09	New
DP-3018	DJ-6235	DJ-6234	CI	100	100	95	0.061	0.089	E
DP-1961	DJ-7546	DJ-7545	CI	100	80	65	0.039	0.089	E
DP-661	DJ-9413	DJ-9412	CI	100	100	28	0.06	0.089	E
DP-3880	DJ-5024	DJ-5023	CI	100	100	125	0.06	0.089	E
P-2866	J-1099	J-1100	HDPE	145	99.3	137	0.058	0.087	
P-2883	J-1107	DJ-362	CI	100	100	19	0.058	0.086	E
DP-10780	DJ-2859	DJ-3541	CI	100	300	2	0.522	0.086	E
DP-3714	DJ-5245	DJ-5244	CI	100	100	119	0.058	0.085	E
P-319	DJ-755	J-95	CI	100	300	75	0.52	0.085	E
P-2891	DJ-6091	J-1112	CI	100	150	87	0.127	0.083	E
DP-72	DJ-10228	DJ-10227	CI	100	150	4	0.126	0.082	E
DP-8671	DJ-801	DJ-10327	CI	100	150	26	0.126	0.082	E
DP-8442	DJ-6784	DJ-7009	CI	100	150	21	0.125	0.082	E
DP-6425	DJ-1655	DJ-1654	CI	100	100	298	0.055	0.081	E
DP-4371	DJ-4613	DJ-801	CI	100	150	6	0.124	0.081	E
DP-5552	DJ-1789	DJ-6531	CI	100	150	34	0.122	0.08	E
DP-1806	DJ-7789	DJ-7788	CI	100	100	60	0.053	0.078	E
DP-1779	DJ-7829	DJ-7828	CI	100	100	60	0.053	0.078	E
DP-8398	DJ-7829	DJ-7828	CI	100	100	60	0.053	0.078	E
DP-7785	DJ-7644	DJ-1394	CI	100	150	91	0.116	0.076	E
P-2108	J-714	DJ-2522	HDPE	145	284.5	4	0.413	0.075	New
DP-3036	DJ-6220	DJ-6219	CI	100	100	96	0.051	0.075	E
DP-34	DJ-10299	DJ-10298	CI	100	100	2	0.05	0.074	E
P-2890	J-1110	J-1111	HDPE	145	99.3	48	0.049	0.073	
DP-3794	DJ-5154	DJ-5153	CI	100	100	121	0.048	0.07	E
DP-8421	DJ-9806	DJ-7503	CI	100	200	49	0.189	0.069	E

DP-8823	DJ-9019	DJ-9910	CI	100	300	11	0.413	0.068	E
DP-2903	DJ-6413	DJ-6412	CI	100	100	91	0.045	0.067	E
DP-8514	DJ-4207	DJ-1989	CI	100	150	186	0.1	0.065	E
P-2106	DJ-9637	J-714	CI	100	300	6	0.389	0.064	E
DP-10774	DJ-3676	DJ-9019	CI	100	300	19	0.389	0.064	E
DP-6248	J-99	DJ-464	CI	100	100	350	0.043	0.064	E
DP-1846	DJ-7730	DJ-7729	CI	100	100	62	0.043	0.063	E
DP-919	DJ-9038	DJ-9037	CI	100	100	37	0.042	0.062	E
P-323	DJ-1394	J-96	HDPE	145	144.4	6	0.087	0.062	New
DP-4709	DJ-9491	DJ-9724	CI	100	80	16	0.027	0.061	E
DP-3607	DJ-1485	DJ-8853	CI	100	100	39	0.041	0.061	E
DP-9666	DJ-9637	DJ-9638	CI	100	300	22	0.367	0.06	E
DP-3026	DJ-6228	DJ-6227	CI	100	100	95	0.04	0.059	E
DP-5550	DJ-6532	DJ-1789	CI	100	150	52	0.09	0.059	E
P-2880	J-1106	DJ-357	CI	100	100	26	0.04	0.058	E
P-1604	J-542	DJ-6470	CI	100	100	79	0.039	0.057	E
DP-10433	DJ-3541	DJ-1928	CI	100	300	1	0.346	0.057	E
DP-450	DJ-9724	DJ-9723	CI	100	80	20	0.024	0.056	E
P-2902	J-1118	J-1119	HDPE	145	99.3	35	0.037	0.055	
DP-9669	DJ-754	DJ-1689	CI	100	100	1	0.037	0.054	E
DP-1573	DJ-8133	DJ-8132	CI	100	100	54	0.034	0.051	E
DP-3834	DJ-1395	DJ-3540	CI	100	100	82	0.033	0.049	E
DP-5095	DJ-9592	DJ-10227	CI	100	100	81	0.032	0.047	E
DP-5682	DJ-9530	DJ-6710	CI	100	150	53	0.072	0.047	E
DP-2388	J-100	DJ-6887	CI	100	150	76	0.071	0.047	E
DP-506	DJ-9638	DJ-9637	CI	100	200	22	0.126	0.046	E
DP-8515	DJ-1989	DJ-1306	CI	100	150	37	0.07	0.046	E
DP-9144	DJ-7009	DJ-6235	CI	100	150	2	0.069	0.045	E
P-2897	DJ-2413	J-1116	CI	100	100	183	0.03	0.044	E
DP-10095	DJ-2557	DJ-874	CI	100	250	37	0.188	0.044	E
DP-3351	DJ-5805	DJ-5804	CI	100	100	106	0.028	0.041	E
DP-9122	DJ-6470	DJ-10228	CI	100	150	73	0.062	0.041	E
DP-9993	DJ-10330	DJ-5363	CI	100	100	22	0.027	0.04	E
P-1612	J-546	DJ-6740	CI	100	150	90	0.06	0.039	E
DP-2116	DJ-7321	DJ-7320	CI	100	100	69	0.026	0.038	E
DP-76	DJ-10224	DJ-10223	CI	100	150	4	0.058	0.038	E
DP-5693	DJ-5744	DJ-7643	CI	100	100	52	0.026	0.038	E
DP-9737	DJ-195	DJ-10310	MS	140	300	53	0.231	0.038	E
DP-7047	DJ-7320	DJ-3168	CI	100	100	47	0.025	0.037	E
DP-5649	DJ-2567	DJ-2566	CI	100	100	214	0.025	0.037	E
DP-9738	DJ-10310	DJ-10298	MS	140	300	170	0.223	0.037	E
DP-844	DJ-9131	DJ-9130	CI	100	100	35	0.024	0.035	E
DP-481	DJ-9681	DJ-9680	CI	100	80	21	0.015	0.035	E
DP-3659	DJ-5330	DJ-5329	CI	100	100	118	0.023	0.033	E
DP-9050	DJ-6811	DJ-6714	CI	100	150	24	0.049	0.032	E

DP-584	DJ-9531	DJ-9530	CI	100	150	29	0.049	0.032	E
DP-5681	DJ-9531	DJ-9530	CI	100	150	29	0.049	0.032	E
DP-1183	DJ-8677	DJ-8676	CI	100	100	43	0.022	0.032	E
DP-7784	DJ-7789	DJ-7644	CI	100	150	28	0.048	0.032	E
DP-1856	DJ-7717	DJ-7716	CI	100	100	61	0.021	0.03	E
DP-4494	DJ-3534	DJ-3533	CI	100	100	149	0.02	0.03	E
P-326	J-95	J-98	CI	100	300	64	0.181	0.03	E
DP-10779	DJ-1560	DJ-2859	CI	100	300	183	0.174	0.028	E
DP-5686	DJ-10298	DJ-143	MS	140	300	230	0.173	0.028	E
P-1627	J-551	J-552	HDPE	145	203.1	7	0.079	0.028	New
DP-3078	DJ-6151	DJ-6150	CI	100	150	97	0.04	0.026	E
DP-9678	DJ-4852	DJ-7321	CI	100	150	12	0.04	0.026	E
DP-3846	DJ-5086	DJ-5085	CI	100	100	123	0.018	0.026	E
P-325	J-97	DJ-3894	CI	100	100	24	0.018	0.026	E
DP-7457	DJ-9475	DJ-4185	CI	100	150	3	0.039	0.026	E
DP-1435	DJ-9019	DJ-9018	CI	100	100	51	0.017	0.026	E
DP-5592	DJ-6471	DJ-9884	CI	100	100	2	0.017	0.025	E
DP-10360	DJ-795	DJ-10342	CI	100	100	110	0.017	0.025	E
DP-5495	DJ-3895	DJ-1927	CI	100	150	77	0.037	0.024	E
DP-8972	DJ-2509	DJ-9592	CI	100	300	63	0.145	0.024	E
DP-6814	DJ-9088	DJ-8683	CI	100	100	110	0.016	0.023	E
DP-819	DJ-9171	DJ-9170	CI	100	100	34	0.016	0.023	E
DP-1466	DJ-9491	DJ-8160	CI	100	80	10	0.01	0.023	E
DP-329	DJ-9884	DJ-9883	CI	100	80	14	0.01	0.023	E
DP-2479	DJ-7785	DJ-7784	CI	100	100	79	0.015	0.022	E
DP-4125	DJ-1990	DJ-4706	CI	100	100	140	0.014	0.021	E
DP-8092	DJ-4614	DJ-1291	CI	100	80	148	0.009	0.02	E
DP-609	DJ-9499	DJ-9498	CI	100	100	27	0.013	0.019	E
DP-10582	DJ-9531	DJ-4851	CI	100	300	132	0.116	0.019	E
DP-5501	DJ-4201	DJ-4200	CI	100	150	206	0.027	0.018	E
P-1623	DJ-4295	J-551	CI	100	200	15	0.043	0.016	E
P-1618	J-549	DJ-10299	CI	100	200	276	0.041	0.015	E
P-1601	DJ-795	J-541	CI	100	150	74	0.023	0.015	E
DP-8091	DJ-4207	DJ-4614	CI	100	80	67	0.006	0.014	E
DP-9679	DJ-7321	DJ-6784	CI	100	150	5	0.021	0.014	E
P-1624	J-551	J-539	CI	100	200	155	0.036	0.013	E
DP-880	DJ-9076	DJ-9075	CI	100	100	36	0.009	0.013	E
P-1615	DJ-222	J-548	CI	100	200	468	0.034	0.013	E
P-328	DJ-304	J-100	CI	100	300	222	0.071	0.012	E
DP-302	DJ-9929	DJ-9928	CI	100	100	13	0.008	0.012	E
DP-9994	DJ-5363	DJ-194	CI	100	100	129	0.007	0.011	E
DP-25	DJ-10311	DJ-10310	CI	100	100	2	0.007	0.011	E
DP-7684	DJ-5245	DJ-6789	CI	100	100	39	0.007	0.011	E
P-1600	J-540	DJ-4294	CI	100	200	24	0.029	0.011	E
DP-537	DJ-9592	DJ-9807	CI	100	250	30	0.041	0.01	E
DP-1070	DJ-8822	DJ-8821	CI	100	150	43	0.014	0.009	E
DP-5539	DJ-9592	DJ-9807	CI	100	200	30	0.023	0.008	E
DP-8971	DJ-4871	DJ-2509	CI	100	300	8	0.049	0.008	E

DP-6612	DJ-6597	DJ-9592	CI	100	300	174	0.037	0.006	E
DP-3183	DJ-4726	DJ-4170	CI	100	150	183	0.009	0.006	E
DP-379	DJ-9807	DJ-9806	CI	100	200	12	0.016	0.006	E
DP-8420	DJ-9807	DJ-9806	CI	100	200	12	0.016	0.006	E
DP-4945	DJ-10208	DJ-9499	CI	100	250	10	0.024	0.006	E
P-1610	J-545	DJ-2105	CI	100	150	181	0.008	0.005	E
DP-3637	DJ-5363	DJ-5362	CI	100	100	116	0.003	0.005	E
P-327	J-98	DJ-1560	CI	100	300	60	0.029	0.005	E
DP-10049	DJ-4851	DJ-276	CI	100	300	58	0.026	0.004	E
DP-10721	DJ-4295	DJ-8821	CI	100	300	5	0.023	0.004	E
DP-10096	DJ-4167	DJ-4871	CI	100	300	156	0.019	0.003	E
P-1620	J-550	DJ-7791	MS	140	450	108	0.039	0.003	E
DP-4947	DJ-9499	DJ-10207	CI	100	250	2	0.011	0.003	E
DP-9733	DJ-232	DJ-9637	CI	100	300	9	0.014	0.002	E
P-1607	DJ-802	J-544	CI	100	150	126	0.003	0.002	E
P-1606	J-543	DJ-3676	CI	100	300	70	0.01	0.002	E

Table C11(b): Junction results

Label	Elevation (m)	Demand (ML/day)	Hydraulic Grade (m)	Pressure (kg/cm ²)
J-545	593.3	0.008	601.8	0.843
DJ-4174	595.5	0.515	604.4	0.887
DJ-2105	592.7	0.146	601.8	0.902
DJ-1928	593.3	0.003	602.3	0.905
DJ-3541	593.3	0.001	602.3	0.905
DJ-2859	593.3	0.012	602.3	0.905
DJ-4851	595.4	0.022	604.9	0.952
DJ-1560	592.7	0.089	602.3	0.96
J-1096	596.4	0.028	606.1	0.966
DJ-9637	597	0	606.7	0.967
DJ-9638	597	0.011	606.7	0.967
J-714	597	0	606.7	0.968
DJ-9498	597	0.013	606.7	0.97
DJ-10208	597	0.001	606.7	0.97
DJ-9499	597	0	606.7	0.97
DJ-4726	597	0	606.7	0.97
DJ-2522	597	0	606.7	0.971
DJ-232	597	0.014	606.7	0.973
DJ-10207	597	0.011	606.7	0.974
DJ-6425	597	0.043	606.7	0.974
DJ-10223	591.8	0.058	601.8	1.003
DJ-10224	591.8	0.078	601.8	1.003
DJ-222	595.8	0.034	605.9	1.007
J-547	592.1	0.114	602.2	1.014
DJ-181	596.5	0.043	606.6	1.016
DJ-4725	596.5	0.002	606.6	1.017

DJ-2386	596.5	0.032	606.7	1.018
DJ-276	594.7	0.026	604.9	1.018
DJ-6424	596.4	0.012	606.6	1.02
DJ-2956	596.4	0.154	606.7	1.03
DJ-8853	595.9	0.041	606.3	1.036
DJ-1485	595.9	0.026	606.3	1.036
DJ-8854	595.9	0.03	606.3	1.037
J-98	591.7	0.051	602.3	1.061
DJ-1395	591.5	0.142	602.2	1.072
DJ-6811	594.1	0.045	604.9	1.078
DJ-6714	594.1	0.055	604.9	1.078
DJ-4170	595.8	0.009	606.7	1.087
DJ-4207	592.3	0.053	603.2	1.088
DJ-4167	595	0.019	605.9	1.09
DJ-1990	592.3	0.014	603.3	1.101
DJ-9483	595.4	0.096	606.5	1.106
DJ-1307	592.3	0.076	603.4	1.11
DJ-2957	595.6	0.05	606.7	1.113
DJ-304	595.6	0.088	606.7	1.113
DJ-6597	594.7	0.037	605.9	1.114
J-1097	590.8	0.069	601.9	1.114
DJ-9482	595.1	0.23	606.4	1.127
DJ-9531	593.6	0.018	604.9	1.134
DJ-9530	593.5	0.027	604.9	1.144
DJ-4885	595.2	0.188	606.7	1.147
DJ-5100	592.3	0.043	603.8	1.148
DJ-5362	592.3	0.003	603.8	1.153
DJ-5203	592.3	0.061	603.9	1.16
DJ-5744	595	0.026	606.6	1.161
DJ-7643	595	0.057	606.6	1.162
DJ-8132	589.7	0.034	601.4	1.165
DJ-2967	595	0.037	606.7	1.169
DJ-5086	595	0.001	606.8	1.17
DJ-4886	595	0.029	606.7	1.171
DJ-4201	595	0.039	606.7	1.172
DJ-5024	595	0.052	606.8	1.174
DJ-6783	593.1	0.089	604.9	1.175
DJ-4173	595	0.028	606.8	1.175
DJ-9928	592.3	0.008	604	1.176
DJ-9929	592.3	0.078	604	1.176
DJ-9883	591.4	0.01	603.2	1.176
DJ-9884	591.4	0.007	603.2	1.176
DJ-6471	591.4	0.036	603.2	1.176
DJ-4131	595	0.043	606.8	1.177
DJ-6234	593.1	0.061	604.9	1.177
DJ-10241	595	0.013	606.8	1.177
J-1103	590.2	0.079	602	1.177
J-95	590.5	0.05	602.3	1.178
DJ-7500	595	0.014	606.8	1.179
DJ-10242	595	0.011	606.8	1.179
J-96	594.6	0.076	606.5	1.183
DJ-1394	594.5	0.029	606.5	1.191
DJ-464	594	0.006	606	1.192
DJ-1927	590.3	0.037	602.2	1.192

DJ-7716	595	0.016	606.9	1.193
DJ-3169	594	0	606	1.196
DJ-7008	592.9	0.04	604.9	1.2
J-1098	589.7	0.23	601.7	1.202
DJ-5073	591.4	0.001	603.4	1.202
J-1099	590.1	0.039	602.2	1.204
DJ-6438	591.7	0.086	603.7	1.204
DJ-5329	592.3	0.023	604.4	1.205
J-1102	589.7	0.02	601.8	1.205
DJ-6810	592.9	0.035	605	1.207
DJ-7829	595	0.014	607.1	1.207
DJ-4791	595	0.001	607.1	1.207
DJ-4871	593.8	0.03	605.9	1.21
DJ-2617	594.5	0.034	606.7	1.211
DJ-1655	594.5	0.035	606.7	1.212
DJ-9130	590	0.024	602.1	1.212
DJ-9131	590	0.005	602.1	1.212
DJ-4986	593.6	0.053	605.8	1.212
DJ-9037	590	0.042	602.2	1.213
DJ-9038	590	0.007	602.2	1.213
DJ-802	595	0.006	607.2	1.215
J-1104	589.9	0.004	602.1	1.216
DJ-2509	593.7	0.069	605.9	1.218
DJ-4614	591	0.037	603.2	1.218
J-540	591	0.029	603.3	1.222
DJ-3006	594	0.207	606.3	1.223
DJ-4706	591	0.018	603.3	1.224
DJ-10311	590	0.007	602.3	1.224
DJ-10310	590	0	602.3	1.224
DJ-6355	593.6	0.042	605.9	1.224
DJ-6713	592.9	0.023	605.2	1.226
DJ-4612	589.7	0.011	602	1.227
J-1101	589.5	0.088	601.8	1.228
DJ-9075	589.7	0.009	602	1.229
DJ-9076	589.7	0.004	602	1.229
DJ-9170	589.7	0.016	602.1	1.233
DJ-9171	589.7	0.005	602.1	1.233
DJ-9681	587.4	0.029	599.7	1.234
DJ-7730	594.1	0.021	606.5	1.236
DJ-4852	592.5	0.04	604.9	1.237
DJ-7321	592.5	0.008	604.9	1.237
DJ-6784	592.5	0.014	604.9	1.237
DJ-7009	592.5	0.018	604.9	1.237
DJ-6235	592.5	0.022	604.9	1.237
DJ-8552	587.4	0.058	599.8	1.239
DJ-9680	587.2	0.015	599.7	1.246
DJ-8551	587.2	0.054	599.7	1.248
DJ-4637	591	0.082	603.6	1.251
DJ-4172	593.6	0.038	606.2	1.251
DJ-6914	591	0.053	603.6	1.252
DJ-195	589.7	0.001	602.3	1.254
DJ-6710	592.3	0.072	604.9	1.257
DJ-6740	593.8	0.082	606.4	1.26
J-1118	590.7	0.047	603.3	1.26

DJ-2104	588.2	0.274	600.8	1.26
DJ-4613	589.7	0.01	602.3	1.261
DJ-801	589.7	0.002	602.3	1.261
DJ-10326	589.7	0.017	602.3	1.261
DJ-10327	589.7	0.003	602.3	1.262
DJ-755	589.7	0.01	602.4	1.262
DJ-6532	589.7	0.027	602.4	1.264
DJ-4615	590.6	0.051	603.3	1.265
DJ-1789	589.7	0.022	602.4	1.266
PNJ-6	594	0	606.7	1.269
J-1123	594.1	0.049	606.8	1.269
DJ-7789	593.7	0.036	606.5	1.271
DJ-7644	593.7	0.071	606.5	1.271
DJ-3895	589.5	0.055	602.2	1.271
DJ-3540	589.5	0.117	602.2	1.273
DJ-3557	593.9	0.01	606.7	1.277
DJ-4707	590.6	0.012	603.4	1.278
J-1120	590.5	0.01	603.3	1.28
DJ-7717	594.1	0.021	606.9	1.282
DJ-2566	593.8	0.012	606.7	1.282
DJ-5153	591	0.048	603.9	1.283
DJ-8821	594.2	0.009	607	1.283
DJ-9592	593	0.013	605.9	1.287
DJ-4295	594.1	0.02	607	1.287
DJ-1291	590.3	0.009	603.2	1.293
DJ-8227	587.4	0.045	600.4	1.295
DJ-4206	590.3	0.011	603.2	1.295
DJ-1306	590.3	0.002	603.2	1.295
DJ-2883	590.4	0.039	603.4	1.295
DJ-764	592.9	0.181	605.9	1.296
DJ-9806	592.9	0.015	605.9	1.297
DJ-8228	587.4	0.046	600.4	1.297
DJ-7828	594.1	0.039	607.1	1.297
J-99	592.9	0.042	605.9	1.297
DJ-794	590.3	0.008	603.3	1.298
DJ-4294	590.3	0.036	603.3	1.298
DJ-4200	593.6	0.027	606.7	1.307
DJ-9724	587.4	0.002	600.6	1.308
DJ-9490	587.4	0	600.6	1.308
DJ-9723	587.4	0.024	600.6	1.308
DJ-8160	587.4	0.01	600.6	1.309
DJ-9491	587.4	0.004	600.6	1.309
DJ-9807	592.8	0.032	605.9	1.31
DJ-8161	587.4	0.01	600.6	1.31
DJ-5363	590.7	0.017	603.8	1.311
DJ-6090	589.9	0.065	603.1	1.311
DJ-10330	590.7	0.019	603.8	1.311
DJ-10331	590.7	0.004	603.8	1.312
DJ-6439	590.6	0.045	603.8	1.312
DJ-3507	589.3	0.063	602.4	1.312
DJ-5085	593.6	0.018	606.8	1.312
DJ-2107	592.6	0.031	605.8	1.314
DJ-9412	590.4	0.06	603.6	1.318
DJ-9413	590.4	0.02	603.6	1.318

DJ-3513	593.5	0.005	606.7	1.321
DJ-3534	590.4	0.024	603.6	1.321
J-100	593.5	0	606.7	1.322
DJ-5154	590.6	0.03	603.9	1.324
DJ-4638	590.4	0.078	603.7	1.325
DJ-10328	589.1	0.034	602.4	1.326
DJ-3168	591.6	0.025	604.9	1.326
DJ-7320	591.6	0.071	604.9	1.326
DJ-10329	589.1	0.007	602.4	1.327
J-551	593.7	0	607	1.327
DJ-7725	590.7	0.016	604	1.327
DJ-2616	592.6	0.024	606	1.33
DJ-6789	592.6	0.049	606	1.331
DJ-2413	589.1	0.06	602.4	1.332
DJ-10126	590.7	0.014	604	1.332
DJ-2557	593.3	0.026	606.6	1.332
DJ-2597	593.3	0.038	606.7	1.333
J-1100	588.7	0.058	602.1	1.338
DJ-3975	589.5	0.032	602.9	1.339
DJ-387	589.5	0.074	602.9	1.34
J-552	593.6	0.005	607	1.343
DJ-7503	592.4	0.008	605.9	1.344
DJ-4185	592.4	0.039	605.9	1.345
DJ-9475	592.4	0.013	605.9	1.345
J-1119	589.8	0.037	603.3	1.345
DJ-2649	592.4	0.007	605.9	1.345
DJ-5204	591.4	0.052	604.9	1.345
DJ-9018	593.8	0.017	607.3	1.347
DJ-3676	593.8	0.023	607.3	1.347
DJ-9019	593.8	0.007	607.3	1.347
DJ-9910	593.8	0.005	607.3	1.347
DJ-10127	590.6	0.03	604.1	1.347
J-1122	592.9	0.104	606.4	1.354
DJ-9911	593.8	0.011	607.4	1.356
DJ-7788	592.8	0.053	606.5	1.363
DJ-161	593.8	0.016	607.5	1.366
DJ-5330	590.7	0.035	604.4	1.37
DJ-894	586.1	0.782	599.8	1.371
DJ-874	592.9	0.188	606.6	1.373
DJ-5245	592.2	0.014	606	1.375
DJ-4833	592.2	0.014	606	1.376
DJ-5999	592.2	0.008	606	1.377
DJ-9198	592.2	0.028	606	1.378
DJ-5805	592.2	0.039	606	1.378
DJ-9199	592.2	0.03	606	1.38
J-544	593.3	0.003	607.2	1.383
DJ-2508	592.5	0.069	606.4	1.386
DJ-5023	592.8	0.06	606.7	1.392
DJ-1559	592.2	0.22	606.2	1.393
J-1121	589.4	0.013	603.3	1.393
DJ-2966	592.6	0.228	606.6	1.397
DJ-5101	590.7	0.027	604.7	1.397
DJ-7724	589.9	0.081	604	1.399
DJ-3005	592.2	0.073	606.2	1.4

DJ-4130	592.2	0.036	606.3	1.4
DJ-386	588.2	0.148	602.3	1.401
DJ-8133	587.3	0.029	601.4	1.403
J-543	593.2	0.01	607.3	1.403
DJ-5074	589.6	0.09	603.6	1.405
DJ-4314	585.5	0.09	599.6	1.405
DJ-6153	587.4	0.011	601.5	1.406
DJ-8822	592.9	0.014	607	1.408
DJ-1989	589.1	0.051	603.2	1.409
J-1108	587.5	0.03	601.7	1.409
DJ-357	587.3	0.04	601.7	1.43
J-549	587.9	0.041	602.3	1.431
DJ-7729	592.1	0.043	606.4	1.432
J-1106	587.2	0.015	601.7	1.438
DJ-6739	592	0.072	606.4	1.438
DJ-6887	592.3	0.071	606.7	1.44
DJ-1150	587.7	0.101	602.1	1.44
J-1107	587.2	0.075	601.7	1.441
DJ-4864	586.2	0.026	600.6	1.442
DJ-2567	592.2	0.025	606.7	1.443
J-1105	587.2	0.016	601.6	1.443
DJ-9228	586.2	0.087	600.7	1.444
DJ-9229	586.2	0.059	600.7	1.445
J-541	591.3	0.023	605.8	1.452
J-542	591.2	0.039	605.9	1.46
DJ-4781	586.2	0.077	600.9	1.467
DJ-6913	588.8	0.118	603.5	1.47
J-546	591.7	0.06	606.4	1.471
DJ-10189	587.7	0.09	602.5	1.48
DJ-10190	587.7	0.054	602.6	1.482
DJ-10299	587.4	0.009	602.3	1.485
DJ-10298	587.4	0	602.3	1.485
DJ-5574	587.4	0.044	602.2	1.486
DJ-362	586.8	0.058	601.7	1.487
DJ-8677	587.4	0.007	602.3	1.488
DJ-3506	587.4	0.047	602.4	1.489
DJ-7784	587.4	0.015	602.4	1.49
DJ-7785	587.4	0.014	602.4	1.491
DJ-6531	587.4	0	602.4	1.491
DJ-4790	592.1	0.066	607	1.492
DJ-8676	587.2	0.022	602.3	1.499
DJ-9088	587.5	0.016	602.6	1.506
J-1125	587.1	0.073	602.2	1.509
DJ-3675	592	0.092	607.2	1.516
DJ-2548	587.6	0.056	602.9	1.52
DJ-8810	587.3	0.129	602.5	1.52
DJ-6788	590.7	0.082	605.9	1.522
J-1124	587	0.027	602.2	1.524
DJ-4865	585.7	0.028	600.9	1.524
DJ-363	587.6	0.092	602.8	1.525
J-1126	586.8	0.197	602.1	1.527
J-539	591.6	0.036	607	1.538
DJ-10227	590.5	0.036	605.9	1.539
DJ-10228	590.5	0.056	605.9	1.539

DJ-194	588.4	0.007	603.8	1.543
J-1109	585.8	0.088	601.3	1.547
DJ-2106	586.1	0.461	601.6	1.553
DJ-6091	587.5	0.062	603.1	1.555
DJ-8811	586.9	0.097	602.5	1.559
DJ-1252	587.6	0.051	603.3	1.562
DJ-1689	585.7	0.037	601.4	1.566
DJ-754	585.7	0.019	601.4	1.566
DJ-6413	585.9	0.011	601.7	1.576
DJ-6152	585.5	0.06	601.3	1.576
DJ-6228	585.9	0.013	601.7	1.581
J-97	586.1	0.067	602	1.585
DJ-3894	586.1	0.018	602	1.587
DJ-1654	590.7	0.055	606.6	1.589
DJ-795	589.9	0.083	605.8	1.589
DJ-8682	586.6	0.101	602.6	1.592
DJ-8683	586.6	0.056	602.6	1.594
DJ-6470	589.9	0.022	605.9	1.595
DJ-4985	589.1	0.333	605.1	1.595
J-1110	587.1	0.051	603.2	1.611
DJ-6412	585.5	0.045	601.6	1.612
DJ-6227	585.5	0.04	601.7	1.617
J-1117	586.2	0.087	602.4	1.621
DJ-143	585.8	0.173	602.3	1.641
DJ-2882	586.1	0.049	602.6	1.647
DJ-7429	585.9	0.104	602.5	1.655
DJ-7546	585.9	0.028	602.5	1.656
J-1116	585.8	0.047	602.4	1.657
DJ-6220	586.1	0.026	602.7	1.657
DJ-6219	585.8	0.051	602.7	1.684
J-1112	586.2	0.02	603.1	1.684
J-1114	586.2	0.027	603.1	1.686
DJ-1787	585.3	0.1	602.2	1.687
DJ-6151	586.1	0.045	603	1.687
J-1115	586.1	0.178	603.1	1.693
DJ-4163	586.1	0.016	603.1	1.695
J-1111	586.2	0.049	603.2	1.701
DJ-7545	585.4	0.039	602.5	1.706
DJ-7430	585.4	0.024	602.5	1.706
J-553	588.6	0.052	605.9	1.724
J-1113	585.7	0.067	603.1	1.731
DJ-10342	588.3	0.017	605.8	1.748
DJ-3533	586.1	0.02	603.6	1.75
DJ-4186	588.2	0.002	605.9	1.76
DJ-5244	588.3	0.058	606	1.763
DJ-2433	588.2	0.001	605.9	1.765
DJ-2648	588.3	0.027	606.2	1.78
DJ-6150	585.1	0.04	603	1.78
J-548	587.9	0.028	605.9	1.797
DJ-4832	587.9	0.044	605.9	1.8
DJ-5998	587.9	0.081	606	1.805
DJ-5804	587.9	0.028	606	1.809
J-550	588.1	0.008	606.4	1.826
DJ-1914	585.2	0.34	604.5	1.918

DJ-7791	585.9	0.039	606.4	2.047
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8. Zone C12

Table C12(a): Pipe results

Label	Start Node	Stop Node	Material	Hazen-Williams C	Diameter (mm)	Length (m)	Flow (ML/day)	Velocity (m/s)	Pipe type (new/existing)
P-1639	DJ-596	J-557	CI	100	250	7	8.043	1.896	E
P-3193	771	DJ-1060	DI	140	500	10	30.52	1.799	New
P-2123	DJ-5863	J-720	HDPE	145	144.4	7	2.114	1.494	New
P-2127	J-720	J-721	HDPE	145	144.4	87	2.097	1.482	New
P-3048	J-1206	J-1207	HDPE	145	99.3	55	0.93	1.391	
P-1641	DJ-493	J-557	HDPE	145	284.5	5	7.472	1.36	New
DP-9047	DJ-3071	DJ-5001	CI	100	150	93	1.988	1.302	E
P-3027	J-1190	J-1196	HDPE	145	99.3	71	0.861	1.286	
DP-9563	DJ-2314	DJ-492	CI	100	300	43	7.844	1.284	E
P-1644	J-557	DJ-3445	HDPE	145	144.4	393	1.809	1.278	New
DP-8021	DJ-7710	DJ-4043	CI	100	100	35	0.863	1.271	E
DP-6892	DJ-4695	DJ-2349	CI	100	150	26	1.921	1.258	E
DP-1633	DJ-4695	DJ-1475	CI	100	200	248	3.413	1.258	E
P-2128	J-721	DJ-5862	HDPE	145	144.4	12	1.753	1.239	New
DP-7238	DJ-493	DJ-492	MS	140	300	537	7.551	1.236	E
DP-7286	DJ-596	DJ-373	CI	100	200	84	3.339	1.23	E
P-1635	DJ-1454	J-556	CI	100	300	91	7.439	1.218	E
P-1636	J-556	DJ-1338	CI	100	300	11	7.428	1.216	E
P-2135	J-724	DJ-9876	CI	100	100	4	0.801	1.181	E
DP-3249	DJ-2314	DJ-397	CI	100	300	36	7.174	1.175	E
DP-8299	DJ-213	DJ-1454	CI	100	300	115	7.15	1.171	E
DP-9396	DJ-2171	DJ-213	CI	100	300	77	7.148	1.17	E
P-3045	J-1200	J-1206	HDPE	145	99.3	34	0.778	1.162	
P-3038	J-1203	DJ-596	CI	100	150	207	1.744	1.142	E
DP-115	DJ-10175	DJ-10174	CI	100	300	5	6.924	1.134	E
P-3196	DJ-10174	J-1362	CI	100	300	17	6.892	1.129	E
P-3197	J-1362	DJ-2171	CI	100	300	11	6.892	1.129	E

DP-6894	DJ-2349	DJ-4268	CI	100	150	43	1.71	1.12	E
DP-235	DJ-9221	DJ-2726	CI	100	100	14	0.75	1.105	E
P-3080	DJ-5001	J-1223	CI	100	150	4	1.676	1.098	E
P-3054	J-1211	J-1204	CI	100	150	41	1.658	1.086	E
P-3015	J-1188	J-722	HDPE	145	99.3	197	0.72	1.076	New
DP-7285	DJ-5863	DJ-596	CI	100	200	32	2.873	1.058	E
DP-9229	DJ-7694	DJ-7710	CI	100	100	34	0.714	1.052	E
P-3017	J-1189	J-1190	HDPE	145	99.3	53	0.691	1.032	
DP-10879	DJ-4278	DJ-1475	CI	100	150	45	1.569	1.028	E
P-3073	J-1217	J-1219	CI	100	100	4	0.684	1.009	E
DP-10887	DJ-3918	DJ-4278	CI	100	150	35	1.534	1.005	E
P-3032	J-1199	J-1200	HDPE	145	99.3	7	0.671	1.003	
DP-4108	DJ-5863	DJ-991	CI	100	100	62	0.678	0.999	E
P-3061	J-1214	J-1211	CI	100	150	33	1.524	0.998	E
P-3082	J-1223	J-1224	HDPE	145	99.3	53	0.667	0.996	
DP-7682	DJ-373	DJ-375	CI	100	200	39	2.689	0.991	E
P-3077	J-1221	DJ-7341	CI	100	100	128	0.66	0.973	E
DP-4735	DJ-3262	DJ-3261	CI	100	100	162	0.654	0.964	E
P-3047	J-1207	J-724	HDPE	145	99.3	123	0.644	0.963	New
P-3128	J-1257	DJ-397	CI	100	250	258	4.042	0.953	E
DP-7565	DJ-4268	DJ-3858	CI	100	150	56	1.45	0.95	E
P-3123	J-1253	J-1254	HDPE	145	99.3	288	0.632	0.945	
DP-4555	DJ-3445	DJ-3444	CI	100	100	175	0.639	0.942	E
P-3066	J-1216	J-1214	CI	100	150	34	1.411	0.924	E
P-3083	J-1224	J-1225	HDPE	145	99.3	37	0.616	0.92	
P-3003	J-1181	DJ-7787	CI	100	200	30	2.495	0.919	E
DP-10886	DJ-4046	DJ-3918	CI	100	150	47	1.39	0.91	E
P-2130	J-722	DJ-3187	CI	100	200	22	2.442	0.9	E
P-3040	J-1204	J-1203	CI	100	150	35	1.334	0.874	E
DP-10799	DJ-7787	DJ-7147	CI	100	200	31	2.348	0.865	E
P-3120	J-1253	DJ-3233	CI	100	200	60	2.339	0.862	E
DP-10180	DJ-7540	DJ-7694	CI	100	100	34	0.581	0.856	E
DP-10118	DJ-2682	DJ-4253	CI	100	200	33	2.317	0.854	E
P-3025	DJ-2682	J-1196	CI	100	100	123	0.574	0.846	E
DP-9026	DJ-6823	DJ-7012	CI	100	100	33	0.574	0.845	E
DP-2428	DJ-6824	DJ-6823	CI	100	50	78	0.143	0.844	E
P-2997	J-1176	J-1177	HDPE	145	99.3	23	0.563	0.842	
DP-	DJ-	DJ-	CI	100	150	22	1.277	0.836	E

10502	6197	4046							
P-3065	DJ-9933	J-1216	CI	100	150	17	1.273	0.834	E
DP-10574	DJ-7147	DJ-6522	CI	100	200	29	2.262	0.833	E
DP-7566	DJ-3858	DJ-4694	CI	100	150	9	1.259	0.825	E
DP-7087	DJ-902	DJ-901	CI	100	100	444	0.557	0.82	E
DP-9976	DJ-3187	DJ-3610	CI	100	200	38	2.225	0.82	E
DP-5179	DJ-5657	DJ-3087	CI	100	100	53	0.555	0.817	E
P-3068	J-1215	J-1217	CI	100	100	47	0.549	0.809	E
DP-5419	DJ-4694	DJ-4038	CI	100	150	200	1.228	0.805	E
DP-10575	DJ-6522	DJ-6251	CI	100	200	29	2.182	0.804	E
P-3076	DJ-375	J-1221	CI	100	100	336	0.545	0.803	E
DP-2250	DJ-7090	DJ-7089	CI	100	50	73	0.135	0.798	E
P-3127	J-1254	J-1257	CI	100	250	95	3.381	0.797	E
P-3384	DJ-1060	DJ-10175	ms	140	300	7	4.726	0.774	E
DP-10519	DJ-4253	DJ-4975	CI	100	200	11	2.093	0.771	E
P-3016	J-1188	J-1189	HDPE	145	99.3	105	0.516	0.771	
DP-7683	DJ-375	DJ-3071	CI	100	200	18	2.091	0.771	E
P-3055	DJ-373	J-1212	CI	100	100	257	0.522	0.769	E
P-3036	J-1201	J-1202	HDPE	145	99.3	31	0.51	0.762	
DP-9827	DJ-3610	DJ-2312	CI	100	200	20	2.063	0.76	E
P-3022	DJ-2312	J-1194	CI	100	100	149	0.512	0.754	E
P-3071	J-1218	DJ-9933	CI	100	150	60	1.151	0.754	E
P-3388	DJ-1060	DJ-10175	di	140	300	8	4.493	0.736	New
P-3063	J-1213	J-1215	CI	100	100	34	0.499	0.735	E
DP-9852	DJ-6251	DJ-5133	CI	100	200	59	1.991	0.734	E
DP-6140	DJ-1948	DJ-1947	CI	100	100	259	0.489	0.72	E
P-3058	J-1212	J-1213	CI	100	100	37	0.486	0.717	E
DP-8997	DJ-7012	DJ-7089	CI	100	100	33	0.486	0.716	E
P-3119	DJ-5862	J-1253	CI	100	200	64	1.917	0.706	E
DP-10473	DJ-3233	DJ-3182	CI	100	200	35	1.915	0.706	E
P-3199	DJ-9220	PRV-26	CI	100	150	113	1.066	0.698	E
P-3200	PRV-26	DJ-2170	CI	100	150	63	1.066	0.698	E
DP-9025	DJ-7341	DJ-6823	CI	100	100	34	0.473	0.697	E
P-3084	J-1225	J-1226	HDPE	145	99.3	39	0.463	0.691	
P-2973	DJ-1475	J-1165	CI	100	150	90	1.034	0.677	E
P-2129	DJ-	J-722	CI	100	200	65	1.824	0.672	E

	4975								
DP-10117	DJ-5133	DJ-2682	CI	100	200	5	1.779	0.655	E
P-3081	J-1223	DJ-4711	CI	100	150	22	0.994	0.651	E
DP-6341	DJ-4038	DJ-8114	CI	100	150	15	0.992	0.65	E
DP-5258	DJ-2726	DJ-5015	CI	100	100	221	0.437	0.643	E
DP-10179	DJ-7395	DJ-7540	CI	100	100	26	0.427	0.63	E
P-3070	DJ-9931	J-1218	CI	100	150	5	0.956	0.626	E
DP-1583	DJ-8114	DJ-8113	CI	100	150	55	0.955	0.625	E
P-3044	J-1199	J-1205	HDPE	145	99.3	32	0.412	0.616	
P-3008	DJ-3182	J-1184	CI	100	200	31	1.662	0.612	E
DP-9399	DJ-3445	DJ-9167	CI	100	150	19	0.934	0.611	E
DP-10501	DJ-8749	DJ-6197	CI	100	150	14	0.93	0.609	E
DP-623	DJ-8113	DJ-8415	CI	100	150	61	0.91	0.596	E
DP-185	DJ-9876	DJ-990	CI	100	100	117	0.404	0.595	E
DP-7504	DJ-4043	DJ-9931	CI	100	150	26	0.906	0.593	E
P-3198	DJ-3261	DJ-3444	HDPE	145	99.3	29	0.39	0.582	New
DP-8965	DJ-8883	DJ-1338	CI	100	200	58	1.559	0.574	E
P-3075	J-1219	J-1220	HDPE	145	99.3	34	0.384	0.574	
DP-9990	DJ-4711	DJ-3569	CI	100	150	40	0.871	0.57	E
P-3100	DJ-3087	J-1239	CI	100	100	4	0.383	0.565	E
P-3121	J-557	J-1254	CI	100	250	190	2.382	0.562	E
P-3052	J-1210	J-1201	HDPE	145	99.3	92	0.375	0.561	
P-3009	J-1184	J-1182	CI	100	200	3	1.496	0.551	E
DP-9828	DJ-2312	DJ-2447	CI	100	200	7	1.496	0.551	E
P-2996	J-1175	J-1176	HDPE	145	99.3	8	0.366	0.548	
P-3041	J-1203	J-1204	HDPE	145	99.3	108	0.359	0.536	
P-3085	J-1226	J-1227	HDPE	145	99.3	43	0.357	0.533	
DP-795	DJ-9221	DJ-9220	CI	100	150	33	0.805	0.527	E
P-2976	J-1165	J-1166	CI	100	150	4	0.803	0.526	E
DP-2107	DJ-7342	DJ-7341	CI	100	50	69	0.089	0.525	E
DP-1859	DJ-7710	DJ-7709	CI	100	50	62	0.087	0.512	E
DP-8690	DJ-5885	DJ-8749	CI	100	150	13	0.782	0.512	E
P-2958	DJ-1365	J-1156	CI	100	150	355	0.768	0.503	E
DP-422	DJ-9876	DJ-9875	CI	100	100	18	0.335	0.494	E
P-310	DJ-397	J-92	CI	100	300	15	2.99	0.49	E
P-3129	J-1257	J-1258	HDPE	145	99.3	226	0.324	0.484	
P-3023	J-1194	DJ-	CI	100	100	66	0.327	0.483	E

		2311							
P-3102	J-1239	J-1240	HDPE	145	99.3	58	0.318	0.476	
DP-10880	DJ-1475	DJ-2383	CI	100	150	44	0.723	0.474	E
P-2998	J-1177	J-1178	HDPE	145	99.3	30	0.315	0.471	
DP-8998	DJ-7089	DJ-374	CI	100	100	13	0.318	0.469	E
P-3011	J-1182	J-1186	CI	100	200	27	1.269	0.467	E
P-2977	J-1166	J-94	CI	100	150	188	0.709	0.464	E
DP-4713	DJ-3233	DJ-3232	CI	100	100	161	0.314	0.462	E
DP-1025	DJ-8884	DJ-8883	CI	100	100	39	0.313	0.461	E
DP-3054	DJ-6197	DJ-6196	CI	100	100	97	0.313	0.461	E
DP-2072	DJ-7395	DJ-7394	CI	100	50	68	0.078	0.459	E
P-3020	J-1174	J-1192	HDPE	145	99.3	90	0.304	0.454	
DP-6145	DJ-8415	DJ-2451	CI	100	150	44	0.688	0.451	E
DP-4110	DJ-991	DJ-5862	CI	100	100	37	0.304	0.449	E
P-311	J-92	DJ-901	CI	100	300	21	2.719	0.445	E
P-3012	J-1186	J-1181	CI	100	200	3	1.206	0.444	E
P-3105	J-1242	DJ-902	HDPE	145	99.3	8	0.297	0.444	
P-2981	J-1167	J-1168	CI	100	100	4	0.294	0.433	E
DP-8964	DJ-1365	DJ-8883	CI	100	200	146	1.172	0.432	E
P-2960	J-1155	J-1156	HDPE	145	99.3	33	0.288	0.431	
P-3106	J-1241	J-1243	HDPE	145	99.3	67	0.284	0.424	
DP-9094	DJ-2447	DJ-5979	CI	100	200	40	1.149	0.423	E
P-3051	J-1209	J-1210	HDPE	145	99.3	34	0.28	0.419	
P-3031	J-1198	J-1199	HDPE	145	99.3	69	0.277	0.414	
DP-6980	DJ-9167	DJ-5657	CI	100	150	36	0.63	0.413	E
DP-822	DJ-9167	DJ-9166	CI	100	100	34	0.278	0.409	E
P-2978	DJ-2383	J-1167	CI	100	100	115	0.274	0.404	E
P-3126	J-1255	J-1256	HDPE	145	99.3	119	0.27	0.403	
DP-10295	DJ-5928	DJ-5885	CI	100	150	50	0.613	0.401	E
P-3086	J-1227	J-1228	HDPE	145	99.3	26	0.266	0.398	
P-3087	J-1228	J-1229	HDPE	145	99.3	14	0.255	0.381	
P-3014	J-721	J-1188	HDPE	145	99.3	332	0.253	0.379	New
P-2943	DJ-1474	J-1147	HDPE	145	99.3	131	0.247	0.37	
P-1642	DJ-3569	J-558	CI	100	150	60	0.558	0.366	E
P-3074	J-1219	DJ-6824	CI	100	100	122	0.248	0.365	E
P-3104	J-1241	J-1242	HDPE	145	99.3	106	0.243	0.363	
DP-5744	DJ-2447	DJ-2446	CI	100	100	223	0.246	0.363	E
P-2986	DJ-1328	J-1170	CI	100	100	140	0.242	0.357	E
P-2984	J-1169	DJ-1327	CI	100	100	190	0.237	0.35	E
P-2134	DJ-991	J-724	CI	100	100	311	0.237	0.349	E

DP-9571	DJ-2451	DJ-4681	CI	100	150	44	0.532	0.348	E
P-3050	J-1208	J-1209	HDPE	145	99.3	33	0.232	0.347	
P-2111	J-715	DJ-2170	HDPE	145	284.5	31	1.899	0.346	New
P-2110	774	J-715	DI	140	300	79	2.108	0.345	New
DP-6207	DJ-2171	DJ-2170	DI	140	150	267	0.522	0.342	E
DP-8838	DJ-5979	DJ-1948	CI	100	200	15	0.923	0.34	E
P-3130	DJ-901	J-1259	CI	100	300	67	1.988	0.326	E
P-2991	DJ-1648	J-1172	CI	100	100	169	0.219	0.322	E
DP-4149	DJ-4681	DJ-4680	CI	100	100	135	0.219	0.322	E
P-1643	J-558	DJ-3262	CI	100	150	6	0.49	0.321	E
DP-3897	DJ-5001	DJ-5000	CI	100	100	125	0.211	0.31	E
P-2975	J-1164	J-1165	HDPE	145	99.3	37	0.204	0.305	
DP-3648	DJ-4044	DJ-7395	CI	100	100	47	0.205	0.302	E
P-3007	J-1182	J-1183	HDPE	145	99.3	157	0.201	0.3	
P-3049	J-1206	J-1208	HDPE	145	99.3	26	0.197	0.295	
DP-10664	DJ-7580	DJ-5928	CI	100	150	90	0.449	0.294	E
DP-4457	DJ-3569	DJ-3568	CI	100	100	148	0.199	0.293	E
P-2995	J-1174	J-1175	HDPE	145	99.3	36	0.19	0.284	
P-3078	J-1220	J-1221	HDPE	145	99.3	27	0.189	0.282	
P-3194	DJ-150	PRV-24	MS	140	300	129	1.672	0.274	E
P-3195	PRV-24	DJ-8814	MS	140	300	12	1.671	0.274	E
P-3026	J-1196	DJ-2681	CI	100	100	73	0.182	0.267	E
P-3132	J-1259	J-1260	HDPE	145	99.3	268	0.178	0.266	
P-3021	J-1176	J-1193	HDPE	145	99.3	199	0.177	0.264	
DP-2302	DJ-7013	DJ-7012	CI	100	50	74	0.045	0.263	E
DP-5460	DJ-4253	DJ-4252	CI	100	100	204	0.178	0.263	E
DP-3918	DJ-4975	DJ-4974	CI	100	100	126	0.176	0.259	E
P-2959	J-1156	DJ-7491	CI	100	150	108	0.394	0.258	E
DP-1873	DJ-7694	DJ-7693	CI	100	50	62	0.043	0.253	E
DP-1354	DJ-8416	DJ-8415	CI	100	100	49	0.172	0.253	E
P-3088	J-1229	J-1230	HDPE	145	99.3	18	0.169	0.253	
DP-10781	DJ-2383	DJ-1328	CI	100	150	41	0.385	0.252	E
P-3131	J-1259	DJ-2313	CI	100	300	185	1.535	0.251	E
P-3387	DJ-1453	J-1177	di	140	400	91	2.674	0.246	New
P-3118	J-1251	J-1252	HDPE	145	99.3	62	0.164	0.245	
P-3079	J-1220	J-1222	HDPE	145	99.3	268	0.162	0.243	
P-3072	J-1217	J-1218	HDPE	145	99.3	116	0.161	0.24	
P-2931	J-1137	DJ-2304	HDPE	145	99.3	61	0.157	0.235	

P-316	J-94	DJ-1474	CI	100	150	125	0.355	0.232	E
P-3019	J-1175	J-1191	HDPE	145	99.3	36	0.153	0.229	
P-2987	J-1170	J-1169	CI	100	100	4	0.151	0.223	E
P-3024	J-1194	J-1195	HDPE	145	99.3	69	0.148	0.222	
P-3001	J-1180	J-1174	HDPE	145	99.3	16	0.148	0.221	
DP-3806	DJ-5133	DJ-5132	CI	100	100	122	0.149	0.22	E
P-3112	J-1247	J-1248	HDPE	145	99.3	58	0.147	0.22	
DP-1962	DJ-7540	DJ-7539	CI	100	50	65	0.037	0.22	E
P-3010	J-1184	J-1185	HDPE	145	99.3	76	0.143	0.214	
P-2982	J-1168	DJ-2382	CI	100	100	108	0.144	0.213	E
P-2924	DJ-1327	J-1131	HDPE	145	99.3	35	0.141	0.211	
P-3382	J-1198	PRV-38	MS	140	300	21	1.285	0.21	E
P-3383	PRV-38	DJ-150	MS	140	300	1,022	1.285	0.21	E
DP-4876	DJ-7580	DJ-8554	CI	100	100	30	0.141	0.207	E
P-2918	J-94	J-1127	CI	100	150	3	0.315	0.206	E
P-3103	DJ-5000	J-1241	HDPE	145	99.3	37	0.134	0.2	
P-2970	J-1162	J-1163	HDPE	145	99.3	49	0.129	0.193	
DP-9110	DJ-7491	DJ-9648	CI	100	150	37	0.293	0.192	E
P-3109	DJ-902	J-1246	HDPE	145	99.3	86	0.127	0.189	
DP-10663	DJ-7655	DJ-7580	CI	100	150	24	0.288	0.189	E
DP-9572	DJ-4681	DJ-5254	CI	100	150	3	0.282	0.185	E
P-2945	J-1147	J-1149	HDPE	145	99.3	123	0.124	0.185	
DP-5259	DJ-5015	DJ-2725	CI	100	100	40	0.125	0.184	E
DP-5140	DJ-8268	DJ-7548	CI	100	100	9	0.124	0.183	E
DP-5884	DJ-2452	DJ-2451	CI	100	100	232	0.124	0.183	E
DP-8257	DJ-8814	DJ-10175	MS	140	300	45	1.116	0.183	E
DP-237	DJ-2726	DJ-3723	CI	100	100	128	0.124	0.183	E
P-3108	J-1243	J-1245	HDPE	145	99.3	50	0.122	0.182	
DP-1124	DJ-8749	DJ-8748	CI	100	100	42	0.124	0.182	E
P-2985	J-1168	J-1169	HDPE	145	99.3	39	0.118	0.176	
DP-3264	DJ-5885	DJ-5884	CI	100	100	103	0.118	0.174	E
P-3096	J-1230	J-1236	HDPE	145	99.3	188	0.116	0.174	
P-3033	J-1200	J-1201	HDPE	145	99.3	23	0.115	0.171	
DP-3008	DJ-6251	DJ-6250	CI	100	100	96	0.116	0.171	E
DP-4753	DJ-3182	DJ-3181	CI	100	100	162	0.112	0.165	E
P-2999	J-1178	J-1179	HDPE	145	99.3	161	0.11	0.164	
DP-4837	DJ-3087	DJ-3086	CI	100	100	166	0.111	0.164	E
P-2957	DJ-7490	J-1155	HDPE	145	99.3	114	0.109	0.164	
P-2946	DJ-7655	J-1150	CI	100	100	11	0.11	0.163	E

DP-5445	DJ-4268	DJ-4267	CI	100	100	202	0.11	0.162	E
P-3107	J-1243	J-1244	HDPE	145	99.3	28	0.108	0.162	
DP-5129	DJ-3918	DJ-3917	CI	100	100	181	0.108	0.159	E
P-2989	J-1171	DJ-1647	CI	100	100	112	0.107	0.158	E
DP-4751	DJ-3187	DJ-3186	CI	100	100	162	0.107	0.157	E
P-3067	J-1215	J-1216	HDPE	145	99.3	105	0.105	0.157	
DP-5171	DJ-3858	DJ-3857	CI	100	100	184	0.106	0.157	E
P-2920	J-1127	J-1128	HDPE	145	99.3	30	0.105	0.157	
P-3043	J-1205	J-1198	MS	140	300	49	0.945	0.155	E
DP-5845	DJ-2349	DJ-2348	CI	100	100	229	0.105	0.155	E
P-2972	J-1164	DJ-4277	CI	100	100	135	0.102	0.151	E
P-3046	J-723	J-1207	HDPE	145	99.3	56	0.1	0.15	New
P-3093	J-1225	J-1235	HDPE	145	99.3	62	0.099	0.148	
P-2964	J-1158	J-1159	HDPE	145	99.3	18	0.099	0.148	
DP-3195	DJ-5979	DJ-5978	CI	100	100	100	0.1	0.148	E
DP-5880	DJ-2304	DJ-5254	CI	100	150	232	0.221	0.145	E
P-2992	J-1172	J-1171	CI	100	100	4	0.094	0.139	E
P-2993	J-1172	J-1173	HDPE	145	99.3	41	0.091	0.136	
DP-9398	DJ-3262	DJ-3445	CI	100	150	26	0.207	0.136	E
P-2956	J-1153	J-1154	HDPE	145	99.3	119	0.09	0.134	
P-2950	J-1152	DJ-9321	CI	100	100	50	0.09	0.133	E
P-3057	J-1211	J-1212	HDPE	145	99.3	96	0.087	0.129	
DP-1442	DJ-8814	DJ-10175	CI	100	300	46	0.791	0.129	E
P-2925	J-1131	J-1132	HDPE	145	99.3	5	0.086	0.129	
P-3098	J-1237	J-1236	CI	100	100	3	0.087	0.128	E
P-2929	J-1135	J-1136	HDPE	145	99.3	7	0.08	0.12	
P-2949	DJ-7548	J-1152	CI	100	100	22	0.081	0.119	E
DP-624	DJ-3182	DJ-9471	CI	100	100	32	0.078	0.115	E
P-3099	J-1237	J-1238	HDPE	145	99.3	56	0.077	0.114	
DP-298	DJ-9933	DJ-9932	CI	100	100	13	0.078	0.114	E
P-2941	J-1145	DJ-6472	HDPE	145	99.3	17	0.075	0.113	
P-2955	J-1154	DJ-7490	CI	100	100	17	0.075	0.111	E
DP-1258	DJ-8554	DJ-8553	CI	100	100	47	0.075	0.11	E
DP-6644	DJ-2478	DJ-9220	CI	100	150	48	0.167	0.11	E
DP-6339	DJ-1648	DJ-4038	CI	100	150	40	0.166	0.109	E
DP-9004	DJ-5279	DJ-7655	CI	100	150	91	0.165	0.108	E
DP-9111	DJ-9648	DJ-7686	CI	100	150	85	0.163	0.107	E
P-3090	J-1229	J-1232	HDPE	145	99.3	67	0.071	0.106	
P-2919	J-1127	DJ-	CI	100	150	87	0.162	0.106	E

		6472							
DP-1807	DJ-7787	DJ-7786	CI	100	100	100	0.072	0.106	E
P-2923	J-1130	DJ-1327	HDPE	145	99.3	5	0.069	0.104	
DP-3888	DJ-5015	DJ-5014	CI	100	100	125	0.07	0.102	E
P-3028	J-1189	J-1197	HDPE	145	99.3	56	0.068	0.101	
DP-560	DJ-8268	DJ-5279	CI	100	150	5	0.154	0.101	E
P-3062	J-1213	J-1214	HDPE	145	99.3	101	0.067	0.1	
DP-3233	DJ-5928	DJ-5927	CI	100	100	102	0.066	0.098	E
DP-4164	DJ-4711	DJ-4710	CI	100	100	136	0.066	0.097	E
DP-4921	DJ-8416	DJ-2961	CI	100	100	170	0.062	0.092	E
DP-5717	DJ-2479	DJ-2478	CI	100	100	222	0.061	0.089	E
P-2947	J-1150	DJ-7654	CI	100	100	59	0.061	0.089	E
DP-4629	DJ-6824	DJ-372	CI	100	100	63	0.06	0.088	E
DP-5046	DJ-4046	DJ-4045	CI	100	100	176	0.058	0.086	E
P-3042	J-1202	J-1205	MS	140	300	24	0.522	0.086	E
DP-10020	DJ-1948	DJ-5696	CI	100	200	94	0.226	0.083	E
P-2980	J-1166	J-1167	HDPE	145	99.3	38	0.054	0.081	
P-3091	J-1227	J-1233	HDPE	145	99.3	62	0.054	0.081	
P-2932	DJ-2452	J-1136	HDPE	145	99.3	55	0.054	0.08	
P-2930	J-1136	J-1137	HDPE	145	99.3	39	0.053	0.079	
P-2961	J-1155	J-1157	HDPE	145	99.3	90	0.051	0.077	
DP-2640	DJ-6522	DJ-6521	CI	100	100	166	0.048	0.071	E
P-2933	J-1137	J-1138	HDPE	145	99.3	81	0.048	0.071	
P-2990	J-1170	J-1171	HDPE	145	99.3	38	0.045	0.068	
P-2954	DJ-7491	J-1154	CI	100	100	51	0.046	0.068	E
DP-4522	DJ-3610	DJ-3609	CI	100	100	151	0.045	0.066	E
P-2942	J-1145	J-1146	HDPE	145	99.3	75	0.044	0.066	
P-2926	J-1132	J-1133	HDPE	145	99.3	36	0.043	0.064	
P-2939	J-1130	J-1144	HDPE	145	99.3	78	0.043	0.064	
P-2940	J-1128	J-1145	HDPE	145	99.3	166	0.043	0.064	
P-3092	J-1226	J-1234	HDPE	145	99.3	48	0.042	0.063	
DP-3349	DJ-5691	DJ-10175	MS	140	300	356	0.372	0.061	E
P-312	DJ-159	J-93	CI	100	250	95	0.246	0.058	E
P-2928	J-1134	J-1135	HDPE	145	99.3	31	0.039	0.058	
P-3013	J-1186	J-1187	HDPE	145	99.3	80	0.038	0.057	
DP-4877	DJ-8554	DJ-7579	CI	100	100	34	0.039	0.057	E
P-1638	J-555	DJ-1338	HDPE	145	284.5	5	0.313	0.057	New
DP-10782	DJ-1328	DJ-1648	CI	100	150	42	0.087	0.057	E
DP-5685	DJ-8884	DJ-2693	CI	100	100	220	0.038	0.057	E
P-2938	J-1131	J-1143	HDPE	145	99.3	65	0.038	0.057	

DP-504	DJ-9648	DJ-9647	CI	100	100	22	0.038	0.055	E
DP-725	DJ-9321	DJ-9320	CI	100	100	30	0.037	0.055	E
P-2921	J-1128	J-1129	HDPE	145	99.3	11	0.034	0.051	
P-2969	J-1162	J-555	MS	140	300	283	0.307	0.05	E
P-2948	J-1150	J-1151	HDPE	145	99.3	36	0.033	0.049	
DP-9564	DJ-492	DJ-2293	CI	100	300	195	0.276	0.045	E
P-2951	J-1152	DJ-8553	HDPE	145	99.3	45	0.03	0.045	
P-2952	DJ-7686	J-1153	CI	100	100	31	0.03	0.045	E
P-3390	J-1363	DJ-213	di	140	300	4	0.272	0.045	New
DP-300	DJ-9931	DJ-9930	CI	100	100	13	0.03	0.044	E
P-2944	J-1147	J-1148	HDPE	145	99.3	52	0.029	0.044	
P-314	J-92	J-93	HDPE	145	300	4	0.265	0.043	New
DP-3037	DJ-7686	DJ-370	CI	100	150	46	0.064	0.042	E
P-2937	J-1132	J-1142	HDPE	145	99.3	32	0.028	0.042	
P-2953	J-1153	DJ-7685	CI	100	100	44	0.027	0.04	E
P-3089	J-1230	J-1231	HDPE	145	99.3	17	0.025	0.037	
DP-5141	DJ-7548	DJ-8267	CI	100	100	57	0.025	0.036	E
DP-6643	DJ-1769	DJ-2478	CI	100	150	52	0.054	0.036	E
DP-5335	DJ-9321	DJ-7547	CI	100	100	12	0.024	0.035	E
DP-10021	DJ-5696	DJ-197	CI	100	200	59	0.088	0.033	E
P-2936	J-1134	J-1141	HDPE	145	99.3	41	0.021	0.032	
P-2935	J-1133	J-1140	HDPE	145	99.3	90	0.021	0.032	
DP-2212	DJ-7147	DJ-7146	CI	100	100	150	0.02	0.03	E
P-3101	J-1239	J-1237	CI	100	100	33	0.02	0.029	E
P-2934	J-1135	J-1139	HDPE	145	99.3	95	0.019	0.028	
P-2968	J-1158	J-1162	MS	140	300	207	0.163	0.027	E
P-2967	J-1160	J-1161	HDPE	145	99.3	15	0.018	0.026	
P-3115	J-1249	J-1250	HDPE	145	99.3	59	0.015	0.022	
P-2971	DJ-4278	J-1164	CI	100	100	67	0.014	0.021	E
DP-3425	DJ-5696	DJ-5695	CI	100	100	109	0.012	0.018	E
DP-4786	DJ-5691	DJ-5690	CI	100	300	164	0.102	0.017	E
P-3095	J-1236	DJ-5656	CI	100	100	20	0.005	0.008	E
P-2966	J-1160	J-1158	MS	140	300	23	0.042	0.007	E
P-2927	J-1133	J-1134	HDPE	145	99.3	6	0.003	0.004	
P-1632	J-554	DJ-213	MS	140	300	205	0.018	0.003	E
P-2922	J-1129	J-1130	HDPE	145	99.3	37	0.001	0.002	
DP-558	DJ-5280	DJ-8268	CI	100	150	127	0.002	0.002	E
P-2965	DJ-214	J-1160	MS	140	300	136	0.007	0.001	E

Table C12(b): Junction results

Label	Elevation (m)	Demand (ML/day)	Hydraulic Grade (m)	Pressure (kg/cm ²)
DJ-3568	599.3	0.199	602.4	0.313
DJ-4710	599.1	0.066	602.9	0.376
DJ-3087	597.4	0.06	601.7	0.424
DJ-9166	598	0.278	602.3	0.428
DJ-5000	599.1	0.077	603.4	0.43
J-1239	597.3	0.045	601.6	0.431
J-1222	595.5	0.162	599.9	0.437
DJ-9167	598	0.026	602.4	0.441
J-1195	594.4	0.148	598.8	0.441
DJ-2293	603.8	0.276	608.2	0.443
J-1241	599	0.093	603.5	0.449
DJ-3262	598	0.043	602.5	0.45
DJ-3569	598.2	0.114	602.7	0.45
DJ-3445	598	0.029	602.5	0.45
J-558	598	0.069	602.5	0.45
J-1240	597	0.318	601.5	0.45
DJ-2311	593.8	0.327	598.5	0.471
J-1194	593.8	0.036	598.9	0.504
J-1238	596.6	0.077	601.6	0.505
DJ-5657	597.2	0.075	602.3	0.513
DJ-4711	597.8	0.057	602.9	0.513
J-1237	596.4	0.03	601.6	0.52
J-1224	597.3	0.051	602.5	0.521
J-1225	597	0.054	602.2	0.521
J-1236	596.3	0.024	601.6	0.528
J-1223	597.8	0.016	603.1	0.528
DJ-5001	597.8	0.102	603.1	0.535
DJ-3086	596.2	0.111	601.5	0.536
J-1226	596.6	0.064	602	0.537
J-1259	602.9	0.276	608.3	0.539
J-1246	599.6	0.127	605	0.54
DJ-492	602.8	0.017	608.2	0.54
J-1245	597.9	0.122	603.3	0.542
J-1260	599.7	0.178	605.1	0.545
J-1243	597.9	0.054	603.4	0.549
DJ-397	602.8	0.143	608.4	0.553
J-1227	596.2	0.037	601.8	0.562
J-93	602.7	0.019	608.4	0.564
J-92	602.7	0.006	608.4	0.565
DJ-2314	602.8	0.14	608.6	0.576
DJ-5656	595.8	0.005	601.6	0.58
DJ-1947	591.9	0.489	597.7	0.583
J-1242	598.7	0.054	604.6	0.587
J-1228	595.9	0.011	601.8	0.588
DJ-902	598.7	0.133	604.7	0.595
J-1244	597.4	0.108	603.4	0.596
DJ-5014	604.6	0.07	610.5	0.597
DJ-901	602.4	0.174	608.4	0.598
DJ-4252	595.1	0.178	601.1	0.604
DJ-2725	604.3	0.125	610.5	0.62
J-1235	595.9	0.099	602.2	0.627
J-1229	595.4	0.015	601.7	0.63
J-1234	595.6	0.042	602	0.631
DJ-5015	604.2	0.243	610.6	0.635
DJ-3187	594.5	0.11	601	0.641
DJ-4975	595	0.093	601.4	0.641
J-722	594.6	0.103	601.1	0.647
DJ-4253	595	0.046	601.5	0.648
DJ-5695	593.8	0.012	600.5	0.667

DJ-2682	595	0.036	601.7	0.669
DJ-5133	595	0.063	601.7	0.671
DJ-2447	593.8	0.1	600.6	0.678
DJ-2312	593.8	0.056	600.6	0.68
DJ-2313	601.5	0.402	608.3	0.685
DJ-3232	595.5	0.314	602.4	0.686
J-1233	594.9	0.054	601.8	0.687
DJ-3609	593.8	0.045	600.7	0.688
J-1183	595.8	0.201	602.7	0.688
DJ-3610	593.8	0.117	600.7	0.691
DJ-3181	596	0.112	602.9	0.691
DJ-3186	593.8	0.107	600.8	0.702
J-1230	594.6	0.028	601.7	0.713
DJ-5979	593.4	0.126	600.5	0.714
DJ-5978	593.2	0.1	600.5	0.72
DJ-1948	593.3	0.208	600.5	0.72
DJ-7147	595	0.066	602.4	0.73
DJ-3071	597.1	0.103	604.5	0.74
J-1232	594.3	0.071	601.7	0.741
DJ-375	597.1	0.052	604.6	0.748
DJ-7787	595	0.075	602.6	0.751
DJ-5696	592.9	0.126	600.5	0.757
DJ-197	592.9	0.088	600.5	0.762
DJ-159	600.7	0.246	608.4	0.766
J-1181	595.1	0.037	602.8	0.769
J-1186	595.1	0.024	602.8	0.77
DJ-6251	594.2	0.075	602	0.773
J-1182	595.1	0.027	602.9	0.775
J-1184	595.1	0.022	602.9	0.776
DJ-3182	595.2	0.064	603	0.778
J-1231	593.8	0.025	601.7	0.79
DJ-6522	594.2	0.032	602.2	0.79
DJ-3233	595.2	0.11	603.2	0.792
DJ-3723	604.5	0.124	612.4	0.792
DJ-2446	591.9	0.246	599.9	0.804
DJ-2479	604.8	0.061	612.9	0.811
J-1257	598.6	0.337	606.8	0.817
J-1221	591.9	0.074	600.1	0.819
DJ-4974	593	0.176	601.2	0.819
DJ-9471	594.8	0.078	603	0.821
DJ-2726	604.3	0.189	612.5	0.823
DJ-373	596.6	0.129	604.9	0.828
DJ-6250	593.6	0.116	601.9	0.829
J-1253	595.2	0.211	603.6	0.833
J-1258	597.9	0.324	606.2	0.835
DJ-2681	594.8	0.182	603.2	0.841
J-1196	594.9	0.105	603.4	0.846
DJ-7090	585.8	0.135	594.3	0.849
DJ-5132	593	0.149	601.5	0.855
J-723	594.2	0.1	602.8	0.855
DJ-7342	588.1	0.089	596.7	0.858
DJ-7786	593.9	0.072	602.5	0.86
J-1185	594.2	0.143	602.8	0.861
DJ-5862	595.2	0.14	603.9	0.864
DJ-1769	604.3	0.054	613	0.867
J-1189	595.2	0.107	603.9	0.868
J-1187	594.1	0.038	602.8	0.868
J-721	595.3	0.091	604	0.869
DJ-991	595.3	0.137	604	0.872
J-1207	594	0.186	602.8	0.876

J-1254	597.6	0.367	606.4	0.881
DJ-9221	604	0.055	612.9	0.884
J-1212	592.8	0.122	601.7	0.884
J-1220	591.2	0.033	600.1	0.888
J-1213	592.3	0.054	601.3	0.891
J-1197	595	0.068	603.9	0.893
DJ-2478	604	0.052	613	0.894
DJ-9220	604	0.094	613	0.896
DJ-9875	592.9	0.335	601.9	0.898
J-1188	594.3	0.049	603.4	0.899
DJ-9876	592.9	0.062	602	0.908
J-724	592.9	0.08	602.1	0.914
J-1215	591.7	0.055	600.9	0.921
J-1190	595.2	0.204	604.4	0.922
DJ-7146	593	0.02	602.3	0.93
DJ-6521	592.7	0.048	602.1	0.94
J-720	595.8	0.017	605.3	0.952
DJ-5863	595.8	0.081	605.5	0.959
J-1203	592.9	0.051	602.6	0.97
DJ-6823	587.5	0.043	597.3	0.975
DJ-596	596	0.087	605.8	0.983
J-1217	590.4	0.025	600.3	0.986
J-1219	590.3	0.053	600.2	0.988
DJ-493	596	0.079	606	1
J-557	596	0.003	606	1
DJ-7341	587.5	0.098	597.6	1.009
J-1204	592.2	0.035	602.3	1.009
J-1198	593.9	0.063	604.1	1.019
J-1255	601.7	0.41	611.9	1.019
J-1211	591.3	0.048	601.7	1.036
DJ-374	586	0.318	596.4	1.037
DJ-7089	586	0.032	596.5	1.043
J-1214	590.6	0.046	601.3	1.064
J-1206	592.9	0.044	603.6	1.067
DJ-7013	585.8	0.045	596.6	1.07
DJ-7012	586	0.043	596.8	1.079
J-1216	589.9	0.033	600.9	1.098
DJ-9930	589.3	0.03	600.3	1.1
DJ-9931	589.3	0.02	600.3	1.1
J-1218	589.3	0.035	600.3	1.101
DJ-7693	587.1	0.043	598.2	1.102
J-1199	593	0.018	604	1.104
J-1200	592.8	0.008	604	1.113
DJ-9932	589.6	0.078	600.8	1.117
DJ-7709	587.1	0.087	598.3	1.117
DJ-9933	589.6	0.045	600.8	1.117
J-1205	592.9	0.01	604.1	1.12
J-1208	592.4	0.035	603.6	1.121
DJ-990	589.8	0.404	601.1	1.123
DJ-7394	585.3	0.078	597	1.161
J-1201	592.3	0.02	604	1.161
DJ-6824	588.1	0.045	599.8	1.168
J-1202	592.4	0.013	604.1	1.17
J-1209	591.7	0.048	603.7	1.192
J-1256	599.6	0.27	611.7	1.198
DJ-7710	587	0.062	599.1	1.208
DJ-150	603.5	0.388	615.8	1.231
DJ-7539	585.3	0.037	597.7	1.236
DJ-4044	585.1	0.205	597.6	1.243
DJ-7395	585.1	0.145	597.7	1.259

J-1210	591	0.095	603.7	1.266
DJ-7540	585.1	0.116	597.9	1.281
DJ-4043	587	0.043	600.2	1.316
DJ-7694	585.1	0.09	598.4	1.33
DJ-372	585.8	0.06	599.8	1.395
DJ-2451	603.6	0.033	618.6	1.498
DJ-8416	603.6	0.11	618.6	1.502
DJ-8113	603.9	0.045	619	1.508
DJ-8415	603.6	0.05	618.7	1.51
DJ-5254	603.2	0.061	618.5	1.53
DJ-4681	603.2	0.03	618.5	1.53
J-1193	602.4	0.177	617.8	1.531
J-1247	600.6	0.184	616.1	1.548
DJ-8114	603.7	0.037	619.3	1.558
J-1249	600.5	0.023	616.5	1.597
DJ-1648	603.2	0.034	619.4	1.613
DJ-4038	603.2	0.071	619.4	1.614
J-1192	601.3	0.304	617.7	1.637
J-1251	600.4	0.033	616.8	1.642
J-1248	599.5	0.147	616	1.646
DJ-4680	601.6	0.219	618.2	1.656
DJ-3858	604.4	0.085	621.1	1.663
DJ-4694	604.3	0.03	621	1.669
J-1179	601.2	0.11	618	1.671
J-1250	599.5	0.015	616.5	1.699
J-1173	601.7	0.091	618.9	1.715
DJ-4268	604.4	0.15	621.7	1.726
J-1252	599.3	0.164	616.8	1.746
J-1180	600.2	0.015	617.9	1.766
J-1172	601.2	0.033	618.9	1.767
J-1171	601.2	0.033	618.9	1.77
DJ-3857	603.2	0.106	621	1.775
DJ-2349	604.5	0.105	622.4	1.782
DJ-1453	600.3	0.041	618.1	1.784
J-1174	599.9	0.034	617.9	1.794
DJ-2452	600.3	0.071	618.4	1.803
DJ-2304	600.3	0.064	618.4	1.807
DJ-1328	601.2	0.056	619.4	1.813
DJ-2383	601.2	0.064	619.4	1.817
J-1137	600.1	0.056	618.4	1.826
DJ-4695	604.5	0.132	622.9	1.831
J-1175	599.4	0.023	617.9	1.85
J-1170	600.3	0.046	618.9	1.86
J-1169	600.3	0.032	618.9	1.864
J-1176	599.3	0.02	617.9	1.865
J-1139	599.7	0.019	618.4	1.867
J-1136	599.6	0.026	618.4	1.878
J-1135	599.4	0.023	618.4	1.891
DJ-2961	599.5	0.062	618.6	1.901
J-1138	599.3	0.048	618.4	1.902
J-1140	599.3	0.021	618.4	1.903
J-1141	599.3	0.021	618.4	1.905
J-1191	598.8	0.153	617.9	1.907
J-1177	598.9	0.041	618.1	1.916
J-1134	598.9	0.02	618.4	1.947
J-1178	598.5	0.206	618	1.948
J-1133	598.8	0.019	618.4	1.957
J-1167	599.2	0.035	619	1.969
J-1168	599.2	0.031	619	1.973
DJ-4278	599.2	0.049	618.9	1.974

DJ-4267	601.7	0.11	621.6	1.985
J-1143	598.4	0.038	618.4	1.989
J-1142	598.3	0.028	618.4	2.003
J-1132	598.1	0.015	618.4	2.021
J-1165	598.7	0.027	619	2.025
J-1166	598.7	0.04	619	2.026
J-1131	598	0.017	618.4	2.031
DJ-1475	599.2	0.087	619.5	2.033
DJ-6197	597.3	0.034	617.8	2.046
J-1144	597.8	0.043	618.4	2.054
DJ-3918	597.8	0.037	618.5	2.066
DJ-4046	597.3	0.055	618	2.066
DJ-6196	596.7	0.313	617.4	2.068
DJ-1338	604.3	0.09	625.1	2.078
J-556	604.4	0.01	625.2	2.078
DJ-2382	598	0.144	618.8	2.08
J-555	604.3	0.006	625.1	2.081
DJ-1647	598	0.107	618.9	2.084
DJ-1327	597.4	0.027	618.4	2.095
DJ-8748	596.7	0.124	617.7	2.099
DJ-2348	601.2	0.105	622.2	2.101
J-1130	597.3	0.028	618.4	2.104
J-1164	597.9	0.087	618.9	2.105
DJ-1454	604.5	0.13	625.9	2.14
DJ-5928	596.1	0.097	617.6	2.144
DJ-5885	596.1	0.051	617.7	2.155
DJ-8749	596.1	0.024	617.8	2.16
J-1129	596.6	0.032	618.4	2.173
J-1128	596.4	0.028	618.4	2.193
J-1145	596.4	0.074	618.4	2.199
DJ-6472	596.3	0.086	618.4	2.2
DJ-8884	602.5	0.274	624.7	2.216
DJ-4277	596.6	0.102	618.9	2.226
DJ-3917	596	0.108	618.4	2.23
DJ-213	604.3	0.253	626.7	2.232
J-554	604.3	0.018	626.7	2.234
J-1363	604.3	0	626.7	2.234
DJ-8883	602.5	0.075	624.9	2.235
DJ-5884	595.2	0.118	617.6	2.243
J-1127	595.9	0.049	618.4	2.247
J-94	595.9	0.04	618.4	2.247
J-1146	595.9	0.044	618.4	2.248
J-1149	595.4	0.124	618	2.264
DJ-4045	595	0.058	618	2.298
DJ-7655	594.3	0.012	617.5	2.311
DJ-7580	594.3	0.02	617.5	2.312
DJ-2171	604.1	0.266	627.2	2.314
J-1150	594.3	0.017	617.5	2.315
J-1151	594.2	0.033	617.5	2.321
DJ-5927	594.3	0.066	617.6	2.321
J-1362	604	0	627.3	2.325
DJ-1474	595	0.107	618.3	2.329
DJ-10174	603.9	0.031	627.4	2.343
DJ-10175	603.9	0.016	627.4	2.349
DJ-8554	593.9	0.027	617.5	2.354
DJ-8814	603.9	0.236	627.4	2.354
DJ-1060	603.9	0.001	627.5	2.355
DJ-8553	593.7	0.045	617.4	2.365
DJ-7579	593.7	0.039	617.5	2.368
J-1148	594.3	0.029	618.1	2.372

DJ-7548	593.5	0.019	617.5	2.39
DJ-7654	593.5	0.061	617.5	2.39
DJ-8268	593.5	0.027	617.5	2.39
DJ-5279	593.5	0.011	617.5	2.391
DJ-2170	603.5	0.31	627.5	2.391
J-1152	593.5	0.021	617.4	2.393
J-1147	594.1	0.094	618.1	2.394

9. Zone 13

Table C13(b): Pipe results

Label	Start Node	Stop Node	Material	Hazen-Williams C	Diameter (mm)	Length (m)	Flow (ML/day)	Velocity (m/s)	Pipe type (new/existing)
P-2512	J-892	DJ-1411	CI	100	80	4	0.423	0.974	E
DP-7260	Annasah eb_Magar	DJ-1449	CI	100	400	19	9.073	0.836	E
DP-3972	DJ-5389	DJ-4910	CI	100	150	127	1.239	0.812	E
P-1649	DJ-4910	J-562	HDPE	145	144.4	29	0.991	0.7	New
DP-8162	DJ-2619	DJ-848	CI	100	80	16	0.298	0.687	E
P-1650	J-562	DJ-1955	HDPE	145	144.4	33	0.952	0.673	New
DP-9745	DJ-4806	DJ-8014	CI	100	200	49	1.806	0.665	E
P-2149	J-728	J-729	HDPE	145	144.4	94	0.917	0.648	New
P-2143	J-729	DJ-1411	HDPE	145	99.3	317	0.382	0.571	New
DP-9216	DJ-5033	DJ-882	MS	140	400	42	5.946	0.548	E
DP-3301	DJ-4806	DJ-10254	CI	100	150	61	0.776	0.508	E
DP-2438	DJ-4454	DJ-3129	CI	100	100	180	0.341	0.503	E
DP-9746	DJ-8014	DJ-10303	CI	100	200	47	1.354	0.499	E
DP-9481	DJ-1449	DJ-10218	CI	100	400	8	5.217	0.481	E
DP-7794	DJ-10303	DJ-5389	CI	100	200	21	1.283	0.473	E
DP-2751	DJ-4464	DJ-4463	CI	100	100	86	0.314	0.462	E
P-2513	J-891	J-892	HDPE	145	99.3	20	0.301	0.45	
DP-9482	DJ-10218	DJ-5098	CI	100	400	41	4.841	0.446	E
DP-4502	DJ-7637	DJ-9543	CI	100	100	3	0.302	0.445	E
P-2506	DJ-1412	J-889	CI	100	80	215	0.193	0.444	E
DP-5832	DJ-2619	DJ-2618	CI	100	80	229	0.189	0.436	E
DP-6668	DJ-4463	DJ-904	CI	100	100	130	0.289	0.425	E
DP-210	DJ-5078	DJ-5104	CI	100	150	63	0.576	0.377	E
DP-1344	DJ-5390	DJ-4806	CI	100	200	3	1.009	0.372	E
DP-954	DJ-1562	DJ-5390	CI	100	200	46	0.996	0.367	E
P-847	DJ-882	J-279	MS	140	400	6	3.803	0.35	E
DP-403	DJ-905	DJ-3130	CI	100	100	88	0.237	0.349	E
DP-4851	DJ-1411	DJ-1412	CI	100	80	312	0.15	0.346	E
DP-212	DJ-5104	DJ-5077	CI	100	150	60	0.52	0.341	E
P-848	J-279	DJ-5097	MS	140	400	5	3.651	0.336	E
P-2523	J-897	J-896	HDPE	145	99.3	29	0.215	0.321	
DP-575	DJ-9543	DJ-9542	CI	100	100	25	0.216	0.319	E
DP-967	DJ-9436	DJ-1449	CI	100	400	43	3.455	0.318	E
P-2150	J-729	DJ-1412	HDPE	145	144.4	5	0.448	0.316	New
DP-2982	DJ-5033	DJ-8009	MS	140	400	127	3.393	0.313	E
DP-6675	DJ-5032	DJ-9436	CI	100	400	60	3.307	0.305	E
DP-7490	DJ-5078	DJ-1562	CI	100	200	78	0.814	0.3	E
DP-5827	DJ-6222	DJ-848	DI	140	100	87	0.194	0.285	E
DP-2760	DJ-4455	DJ-4454	CI	100	150	86	0.427	0.28	E
DP-58	DJ-10254	DJ-10253	CI	100	150	3	0.411	0.269	E
DP-7045	DJ-5098	DJ-9986	MS	140	400	153	2.865	0.264	E

DP-5210	DJ-10253	DJ-10297	CI	100	150	51	0.383	0.251	E
DP-5829	DJ-848	DJ-6221	DI	140	100	11	0.164	0.241	E
P-2137	DJ-5097	J-725	MS	140	450	588	3.318	0.241	E
DP-9215	DJ-9986	DJ-5033	MS	140	400	43	2.621	0.241	E
P-2522	J-895	J-897	HDPE	145	99.3	105	0.155	0.231	
DP-2418	DJ-6221	DJ-10098	MS	140	100	360	0.154	0.227	E
DP-4503	DJ-9543	DJ-7636	CI	100	100	80	0.153	0.225	E
DP-4811	J-279	DJ-9927	MS	140	100	309	0.148	0.218	E
P-2528	J-898	J-899	HDPE	145	99.3	74	0.145	0.216	
P-2503	J-886	J-887	HDPE	145	99.3	20	0.143	0.214	
P-1130	DJ-6807	DJ-7769	HDPE	145	144.4	14	0.291	0.205	New
DP-3285	DJ-5097	DJ-3898	CI	100	150	83	0.309	0.202	E
P-846	DJ-3586	J-278	HDPE	145	144.4	3	0.284	0.201	New
DP-6665	DJ-3130	DJ-4463	CI	100	100	160	0.135	0.2	E
DP-3302	DJ-10254	DJ-7636	CI	100	150	70	0.3	0.196	E
P-844	DJ-882	J-278	CI	100	400	24	2.113	0.195	E
P-2516	J-894	J-891	HDPE	145	99.3	149	0.129	0.194	
DP-35	DJ-10297	DJ-10296	CI	100	150	2	0.295	0.193	E
P-2531	DJ-4910	J-901	HDPE	145	99.3	298	0.119	0.178	
P-2514	J-890	J-893	HDPE	145	99.3	152	0.119	0.177	
DP-8161	DJ-1412	DJ-2619	CI	100	80	70	0.077	0.176	E
P-2530	J-900	J-890	HDPE	145	99.3	3	0.115	0.172	
DP-1910	DJ-10296	DJ-9542	CI	100	150	64	0.261	0.171	E
P-2144	DJ-1955	J-727	CI	100	250	129	0.704	0.166	E
DP-2356	DJ-5098	DJ-8009	CI	100	400	21	1.783	0.164	E
P-845	J-278	DJ-3284	CI	100	400	359	1.783	0.164	E
DP-2649	DJ-6512	DJ-6511	CI	100	100	83	0.109	0.16	E
DP-2983	DJ-8009	DJ-5032	MS	140	400	9	1.673	0.154	E
DP-5688	DJ-3284	DJ-8014	CI	100	400	225	1.653	0.152	E
DP-816	DJ-1853	DJ-5032	CI	100	400	109	1.597	0.147	E
P-2500	J-885	J-886	HDPE	145	99.3	8	0.097	0.145	
P-2142	J-725	DJ-8014	DI	140	400	9	1.56	0.144	New
P-2529	J-885	J-900	HDPE	145	99.3	182	0.095	0.143	
P-2501	J-727	J-887	CI	100	250	142	0.591	0.139	E
P-2504	DJ-2618	J-888	HDPE	145	99.3	135	0.088	0.132	
DP-7145	DJ-6806	DJ-1853	CI	100	400	466	1.411	0.13	E
DP-4432	DJ-3587	DJ-3586	CI	100	150	147	0.195	0.128	E
DP-5151	DJ-3898	DJ-3897	CI	100	150	183	0.194	0.127	E
DP-2444	DJ-6807	DJ-6806	CI	100	400	78	1.335	0.123	E
P-842	DJ-8723	DJ-1956	HDPE	145	144.4	3	0.172	0.122	New
P-2146	DJ-2618	J-727	HDPE	145	99.3	37	0.079	0.118	New
P-2525	J-898	J-900	HDPE	145	99.3	58	0.071	0.106	
P-2526	J-887	J-899	CI	100	250	110	0.431	0.102	E
P-2510	J-890	J-891	HDPE	145	99.3	67	0.067	0.1	
DP-32	DJ-10303	DJ-10302	CI	100	80	2	0.042	0.097	E
DP-4239	DJ-4455	DJ-6807	CI	100	400	30	1.031	0.095	E
DP-3896	DJ-10196	DJ-6222	DI	140	100	125	0.064	0.094	E
DP-323	DJ-1449	DJ-6512	CI	100	200	129	0.242	0.089	E
DP-4813	DJ-9927	DJ-10196	MS	140	100	70	0.057	0.085	E
DP-801	DJ-10302	DJ-9210	CI	100	80	33	0.035	0.082	E
P-2147	J-725	J-728	MS	140	450	7	1.079	0.079	E
P-2508	J-888	J-889	HDPE	145	99.3	64	0.05	0.074	
DP-304	DJ-9927	DJ-9926	CI	100	150	13	0.103	0.067	E
DP-7893	DJ-1562	DJ-5264	CI	100	150	83	0.097	0.063	E
P-2140	J-725	DJ-848	DI	140	400	8	0.661	0.061	New
DP-7489	DJ-2860	DJ-5078	CI	100	200	67	0.163	0.06	E
DP-7326	DJ-905	DJ-4455	CI	100	400	4	0.594	0.055	E

P-2527	J-899	J-896	CI	100	250	294	0.218	0.051	E
DP-6133	DJ-1956	DJ-1955	CI	100	250	259	0.217	0.051	E
DP-5336	DJ-7769	DJ-4370	CI	100	300	194	0.269	0.044	E
DP-4538	DJ-4850	DJ-6594	CI	100	450	68	0.556	0.04	E
P-1133	DJ-1562	DJ-10166	HDPE	145	144.4	17	0.055	0.039	New
DP-5211	DJ-10297	DJ-5104	CI	100	150	73	0.059	0.038	E
P-2511	J-889	J-892	CI	100	80	183	0.016	0.037	E
P-2517	J-893	J-895	HDPE	145	99.3	88	0.024	0.036	
P-2518	J-895	J-894	HDPE	145	99.3	94	0.023	0.034	
DP-81	DJ-10218	DJ-10217	CI	100	400	4	0.37	0.034	E
DP-7325	DJ-5134	DJ-905	CI	100	400	97	0.334	0.031	E
DP-1282	DJ-7808	DJ-4850	CI	100	450	88	0.401	0.029	E
DP-4541	DJ-6594	DJ-5077	CI	100	450	62	0.392	0.029	E
DP-2819	DJ-4370	DJ-4369	CI	100	300	88	0.171	0.028	E
DP-7780	DJ-5134	DJ-4464	DI	140	450	280	0.334	0.024	E
DP-7525	DJ-10309	DJ-9986	CI	100	300	718	0.148	0.024	E
DP-1281	DJ-4780	DJ-7808	CI	100	450	102	0.29	0.021	E
DP-2586	DJ-6594	DJ-7637	CI	100	450	82	0.26	0.019	E
DP-3286	DJ-3898	DJ-5243	CI	100	150	200	0.028	0.019	E
DP-1794	DJ-7808	DJ-7807	CI	100	100	60	0.011	0.016	E
DP-2458	DJ-420	DJ-6724	CI	100	250	14	0.066	0.015	E
DP-1169	DJ-8723	DJ-8722	CI	100	300	42	0.086	0.014	E
DP-8293	DJ-8723	DJ-8722	CI	100	300	42	0.086	0.014	E
DP-7228	DJ-4780	DJ-7807	CI	100	450	267	0.18	0.013	E
P-2148	J-728	DJ-38	MS	140	450	362	0.148	0.011	E
DP-6676	DJ-9436	DJ-3521	CI	100	400	5	0.109	0.01	E
DP-4014	DJ-1853	DJ-420	CI	100	400	73	0.108	0.01	E
DP-122	DJ-10166	DJ-10165	CI	100	200	5	0.022	0.008	E
DP-4835	DJ-8722	DJ-3088	CI	100	300	166	0.042	0.007	E
DP-4600	DJ-8722	DJ-3088	CI	100	300	166	0.042	0.007	E
DP-2993	DJ-7807	DJ-5242	CI	100	450	80	0.063	0.005	E
DP-1819	DJ-9789	DJ-7769	CI	100	250	61	0.018	0.004	E
DP-1638	DJ-8014	DJ-8013	CI	100	400	52	0.042	0.004	E
P-2524	J-897	J-898	HDPE	145	99.3	224	0.002	0.003	
P-2505	J-888	J-885	HDPE	145	99.3	6	0.002	0.003	
P-2515	J-893	J-894	HDPE	145	99.3	63	0.001	0.002	
DP-7680	DJ-10097	DJ-10166	DI	140	450	409	0.011	0.001	E

Table C13(b): Junction results

Label	Elevation (m)	Demand (ML/day)	Hydraulic Grade (m)	Pressure (kg/cm ²)
DJ-398	593.9	0	599	0.514
DJ-7913	592.6	0	600.5	0.788
DJ-36	592.6	0	600.5	0.788
DJ-4731	592.6	0	600.5	0.789
DJ-7769	592.6	0.003	600.5	0.789
DJ-905	592.6	0.023	600.5	0.789
DJ-4455	592.6	0.009	600.5	0.789
DJ-6807	592.6	0.013	600.5	0.789
DJ-10067	592.5	0	600.5	0.802
DJ-10066	592.5	0	600.5	0.802
DJ-10035	592.5	0	600.5	0.802
DJ-9946	592.5	0	600.5	0.802
DJ-9790	592.5	0.002	600.5	0.802
DJ-9789	592.5	0.016	600.5	0.802

DJ-8696	592.5	0	600.5	0.802
DJ-5134	592.5	0	600.5	0.803
DJ-6806	591.5	0.076	600.5	0.899
DJ-2618	589.7	0.18	599	0.931
J-727	589.6	0.033	599	0.939
DJ-4910	589.4	0.129	599.2	0.977
J-889	589.2	0.258	599	0.977
J-562	589.3	0.039	599.1	0.982
DJ-1955	589.2	0.031	599	0.986
DJ-3130	590	0.102	600.3	1.027
DJ-3586	590.2	0.089	600.5	1.036
DJ-5097	590.2	0.025	600.5	1.036
J-279	590.2	0.004	600.5	1.036
DJ-882	590.2	0.03	600.5	1.037
DJ-5033	590.2	0.068	600.6	1.039
DJ-4369	590.1	0.171	600.5	1.041
DJ-4454	590	0.086	600.4	1.041
DJ-10097	589.8	0.011	600.2	1.041
J-278	590.1	0.046	600.5	1.043
DJ-1412	589.7	0.181	600.2	1.046
J-887	588.5	0.018	599	1.047
DJ-10309	590.1	0.148	600.6	1.049
DJ-9986	590.1	0.097	600.6	1.049
J-729	589.7	0.087	600.2	1.051
J-892	588.4	0.106	599	1.052
DJ-1411	588.5	0.11	599.1	1.059
J-888	588.3	0.041	599	1.061
DJ-8723	588.4	0	599	1.061
DJ-1956	588.4	0.045	599	1.061
J-885	588.3	0	599	1.062
DJ-3088	588.4	0.083	599	1.063
J-886	588.3	0.046	599	1.063
DJ-10098	589.5	0.154	600.2	1.065
DJ-38	589.8	0.148	600.5	1.068
DJ-4370	589.8	0.098	600.5	1.071
J-891	588.2	0.104	598.9	1.074
DJ-2619	589.5	0.032	600.3	1.075
DJ-9210	589.5	0.035	600.3	1.083
DJ-10302	589.5	0.007	600.3	1.084
DJ-10303	589.5	0.029	600.3	1.084
DJ-848	589.5	0.005	600.5	1.096
DJ-5389	589.3	0.044	600.3	1.097
J-901	588.1	0.119	599.1	1.098
DJ-6221	589.4	0.01	600.5	1.101
J-725	589.4	0.018	600.5	1.102
DJ-6222	589.3	0.13	600.4	1.103
J-728	589.3	0.014	600.5	1.112
DJ-8014	589.3	0.01	600.5	1.116
DJ-8722	587.8	0.089	599	1.12
DJ-1853	589.1	0.078	600.6	1.144
J-900	587.3	0.051	598.9	1.156
J-890	587.3	0.064	598.9	1.158
J-899	587.3	0.069	599	1.163
DJ-8009	588.8	0.064	600.6	1.176
DJ-5032	588.8	0.037	600.6	1.176
DJ-5098	588.8	0.192	600.6	1.176
DJ-3129	587.6	0.341	599.4	1.183
DJ-3587	588.4	0.195	600.5	1.209
DJ-4463	588	0.161	600.1	1.211
DJ-3898	588.2	0.087	600.5	1.223

J-898	586.5	0.072	598.9	1.236
DJ-5264	587.8	0.097	600.2	1.24
DJ-10217	587.8	0.37	600.6	1.286
DJ-10218	587.8	0.007	600.6	1.286
DJ-1449	587.8	0.16	600.7	1.287
DJ-9436	587.7	0.039	600.6	1.291
DJ-3521	587.7	0.109	600.6	1.295
DJ-1562	587.1	0.03	600.2	1.308
DJ-5390	587.1	0.012	600.3	1.314
DJ-4806	587.1	0.021	600.3	1.315
DJ-5078	586.9	0.075	600.1	1.315
DJ-2860	586.9	0.163	600.1	1.316
DJ-1480	586.9	0.001	600.2	1.322
J-894	585.5	0.154	598.8	1.333
DJ-5242	586.5	0.063	599.9	1.334
DJ-8013	587.1	0.041	600.5	1.335
J-893	585.5	0.141	598.8	1.335
DJ-6512	587.2	0.133	600.6	1.339
DJ-2838	586.9	0.001	600.5	1.349
DJ-420	587	0.042	600.6	1.352
DJ-6724	587	0.066	600.6	1.358
DJ-10166	586.4	0.021	600.2	1.373
DJ-10165	586.4	0.022	600.2	1.373
DJ-10253	586.1	0.028	600	1.396
DJ-10254	586.1	0.065	600	1.396
DJ-5104	586	0.114	600	1.4
DJ-6511	586.4	0.109	600.6	1.414
DJ-10196	586.1	0.007	600.4	1.427
DJ-7807	585.5	0.129	599.9	1.439
DJ-3284	586.1	0.13	600.5	1.44
DJ-10296	585.4	0.034	600	1.453
DJ-10297	585.4	0.03	600	1.454
DJ-5077	585.3	0.128	599.9	1.457
DJ-7808	585.3	0.1	599.9	1.457
DJ-3897	585.8	0.194	600.4	1.457
J-897	584.3	0.062	598.9	1.463
J-896	584.2	0.001	599	1.471
DJ-7637	585.1	0.042	599.9	1.475
J-895	584.1	0.108	598.9	1.476
DJ-9543	585.1	0.067	599.9	1.476
DJ-7636	585.2	0.147	600	1.477
DJ-9542	585.1	0.045	600	1.482
DJ-9926	585.5	0.103	600.3	1.484
DJ-9927	585.5	0.102	600.3	1.484
DJ-257	584.1	0.001	599	1.486
DJ-6594	584.9	0.095	599.9	1.497
DJ-4850	584.5	0.156	599.9	1.541
DJ-4780	584.3	0.109	599.9	1.558
DJ-4464	584.9	0.02	600.5	1.563
DJ-904	583.6	0.289	599.6	1.597
DJ-5243	584.4	0.028	600.5	1.606
DJ-7806	583.4	0	600.5	1.707
DJ-31	582.6	0	600.5	1.787
DJ-408	582.6	0	600.5	1.787

10. Zone 14

Table C14(b): Pipe results

Label	Start Node	Stop Node	Material	Hazen-Williams C	Diameter (mm)	Length (m)	Flow (ML/day)	Velocity (m/s)	Pipe type (new/existing)
P-2155	J-731	Ajmera-2	CI	100	400	9	20.29	1.869	E
P-2154	DJ-10054	J-731	CI	100	400	103	20.25	1.865	E
P-2163	DJ-10054	J-565	DI	140	400	484	20.25	1.865	New
P-2156	DJ-1076	DJ-5606	HDPE	145	284.5	2	9.17	1.67	New
DP-2878	DJ-6707	DJ-6706	CI	100	80	90	0.72	1.659	E
P-1662	J-565	J-564	HDPE	145	400	239	17.3	1.594	New
DP-8006	DJ-5748	DJ-3877	CI	100	150	107	2.42	1.585	E
DP-4241	DJ-8100	DJ-5606	DI	140	300	137	9.396	1.539	E
DP-3265	DJ-3877	DJ-6602	CI	100	150	90	2.223	1.456	E
P-3393	DJ-10151	DJ-10069	HDPE	145	144.4	19	1.852	1.309	New
P-1656	J-564	DJ-4482	CI	100	400	137	13.8	1.271	E
P-2533	J-902	DJ-10069	CI	100	150	38	1.921	1.258	E
DP-8005	DJ-3229	DJ-5748	CI	100	150	40	1.849	1.211	E
DP-7770	DJ-6343	DJ-10151	CI	100	150	332	1.758	1.152	E
DP-4641	DJ-1794	DJ-10152	CI	100	150	336	1.735	1.136	E
P-2550	DJ-4482	J-914	CI	100	400	178	12.33	1.136	E
DP-10933	DJ-3849	DJ-5172	CI	100	150	14	1.711	1.121	E
DP-4626	DJ-1076	DJ-1794	CI	100	300	88	6.686	1.095	E
DP-3718	DJ-5239	DJ-5238	CI	100	100	119	0.735	1.084	E
DP-133	DJ-10152	DJ-10151	CI	100	150	5	1.621	1.061	E
P-2164	J-565	J-566	HDPE	145	180.6	20	2.259	1.021	New
DP-10766	DJ-5172	DJ-9672	CI	100	150	8	1.547	1.013	E
DP-5864	DJ-1010	DJ-1081	CI	100	150	10	1.542	1.01	E
P-2532	DJ-2802	J-902	CI	100	150	40	1.518	0.994	E
DP-3920	DJ-10151	DJ-10069	CI	100	150	17	1.495	0.979	E
P-2567	J-926	DJ-1043	DI	140	150	380	1.471	0.963	E
DP-10486	DJ-254	DJ-4608	CI	100	300	57	5.797	0.949	E
P-2551	J-914	DJ-192	CI	100	400	14	10.08	0.928	E
DP-10487	DJ-4608	DJ-5716	CI	100	300	222	5.529	0.905	E
P-2153	J-730	Ajmera-1	CI	100	400	11	9.466	0.872	E
P-2152	DJ-8100	J-730	CI	100	400	74	9.428	0.868	E
DP-8703	DJ-3543	DJ-1639	CI	100	300	50	5.148	0.843	E
DP-8569	DJ-192	DJ-254	CI	100	400	111	9.062	0.835	E
DP-923	DJ-10069	DJ-2801	CI	100	150	172	1.258	0.824	E
DP-8900	DJ-1417	DJ-5802	CI	100	150	27	1.228	0.804	E
DP-5378	DJ-2771	DJ-2705	CI	100	80	16	0.348	0.801	E
DP-5326	DJ-4482	DJ-5747	CI	100	150	74	1.193	0.781	E

DP-1522	DJ-5706	DJ-5801	CI	100	150	53	1.172	0.768	E
DP-9980	DJ-5716	DJ-7515	CI	100	300	37	4.657	0.763	E
DP-10807	DJ-1010	DJ-3594	CI	100	150	80	1.156	0.757	E
DP-8155	DJ-2802	DJ-476	CI	100	300	142	4.598	0.753	E
DP-8901	DJ-5802	DJ-6475	CI	100	150	26	1.13	0.74	E
DP-6436	DJ-476	DJ-3543	CI	100	300	28	4.492	0.735	E
DP-10449	DJ-7515	DJ-4457	CI	100	300	42	4.468	0.732	E
DP-7297	DJ-10270	DJ-1417	CI	100	150	3	1.113	0.729	E
DP-10450	DJ-4457	DJ-6884	CI	100	300	207	4.262	0.698	E
P-1664	J-566	DJ-4534	CI	100	200	231	1.867	0.688	E
DP-3331	DJ-5807	DJ-5806	CI	100	80	105	0.295	0.679	E
DP-2756	DJ-6884	DJ-6883	CI	100	80	86	0.294	0.677	E
DP-8009	DJ-4533	DJ-3229	CI	100	200	187	1.761	0.649	E
DP-225	DJ-10037	DJ-10036	CI	100	200	8	1.755	0.647	E
DP-1524	DJ-5801	DJ-6883	CI	100	150	72	0.984	0.645	E
DP-8462	DJ-192	DJ-254	DI	140	150	111	0.962	0.63	E
DP-10507	DJ-6884	DJ-2033	CI	100	300	32	3.806	0.623	E
DP-10808	DJ-3594	DJ-3718	CI	100	150	51	0.944	0.619	E
P-2588	J-944	J-941	HDPE	145	99.3	64	0.411	0.614	
DP-5230	DJ-5045	DJ-5044	CI	100	150	187	0.914	0.598	E
DP-10613	DJ-1639	DJ-1791	CI	100	300	6	3.614	0.592	E
DP-2868	DJ-4534	DJ-4533	CI	100	200	90	1.553	0.572	E
DP-9237	DJ-4534	DJ-4533	CI	100	200	90	1.553	0.572	E
DP-10508	DJ-2033	DJ-3123	CI	100	300	50	3.443	0.564	E
DP-3747	DJ-1043	DJ-6707	DI	140	150	281	0.856	0.561	E
DP-4442	DJ-1639	DJ-6322	CI	100	200	190	1.489	0.549	E
DP-9468	DJ-3123	DJ-1042	CI	100	300	4	3.349	0.548	E
P-2574	J-931	J-932	HDPE	145	99.3	56	0.356	0.531	
DP-9012	DJ-2771	DJ-4248	CI	100	150	4	0.809	0.53	E
DP-489	DJ-9672	DJ-9671	CI	100	150	21	0.807	0.528	E
P-3204	PRV-28	DJ-2802	CI	100	300	11	3.216	0.527	E
P-3203	DJ-1794	PRV-28	CI	100	300	261	3.215	0.526	E
DP-10762	DJ-1791	DJ-1051	CI	100	300	51	3.184	0.521	E
P-2553	J-915	J-916	HDPE	145	180.6	126	1.141	0.515	
P-2534	J-902	J-903	HDPE	145	99.3	104	0.34	0.508	
DP-5436	DJ-9146	DJ-5747	CI	100	150	58	0.772	0.506	E
P-2552	J-914	J-915	HDPE	145	252.9	197	2.179	0.502	
DP-10932	DJ-3718	DJ-3849	CI	100	150	58	0.764	0.5	E
DP-2758	DJ-4458	DJ-10036	CI	100	150	86	0.76	0.497	E
P-2560	J-918	J-921	HDPE	145	180.6	34	1.096	0.495	
P-2544	DJ-1051	J-910	CI	100	150	222	0.749	0.491	E
P-2589	J-943	J-944	HDPE	145	99.3	92	0.327	0.489	
DP-10125	DJ-9672	DJ-9313	CI	100	150	103	0.733	0.48	E
DP-9469	DJ-1042	DJ-5706	CI	100	300	70	2.91	0.477	E
P-2571	J-924	J-929	HDPE	145	180.6	45	1.045	0.472	
DP-6947	DJ-6322	DJ-6326	CI	100	200	45	1.27	0.468	E
DP-4394	DJ-3543	DJ-2801	CI	100	150	86	0.714	0.467	E

DP-5379	DJ-2705	DJ-2770	CI	100	80	174	0.2	0.462	E
DP-7386	DJ-4533	DJ-1081	CI	100	200	351	1.238	0.456	E
DP-5435	DJ-5748	DJ-9146	CI	100	150	49	0.629	0.412	E
DP-3133	DJ-5236	DJ-1076	CI	100	300	49	2.478	0.406	E
P-2587	J-915	J-944	HDPE	145	180.6	37	0.849	0.384	
DP-10763	DJ-1051	DJ-3266	CI	100	300	44	2.336	0.383	E
DP-7101	DJ-5439	DJ-10270	CI	100	150	1	0.583	0.382	E
DP-3267	DJ-6602	DJ-3876	CI	100	150	97	0.582	0.381	E
DP-9447	DJ-1786	DJ-5236	CI	100	300	26	2.281	0.373	E
DP-2968	DJ-6326	DJ-6325	CI	100	100	93	0.253	0.373	E
DP-4228	DJ-5806	DJ-4581	CI	100	80	138	0.16	0.369	E
DP-5865	DJ-1081	DJ-4458	CI	100	150	355	0.558	0.365	E
P-2537	J-904	J-905	HDPE	145	99.3	70	0.241	0.36	
DP-4985	DJ-10237	DJ-3122	CI	100	80	37	0.152	0.35	E
DP-6948	DJ-6326	DJ-1975	CI	100	200	54	0.919	0.339	E
DP-2759	DJ-1975	DJ-1050	CI	100	150	284	0.501	0.328	E
P-1660	J-564	DJ-10037	HDPE	145	284.5	9	1.783	0.325	New
P-2572	J-929	J-930	HDPE	145	99.3	272	0.217	0.324	
DP-2014	DJ-7515	DJ-9919	CI	100	80	66	0.135	0.311	E
P-851	J-280	DJ-1668	HDPE	145	144.4	31	0.439	0.31	New
DP-10126	DJ-9313	DJ-2771	CI	100	150	25	0.467	0.306	E
P-2545	J-910	DJ-1050	CI	100	150	241	0.465	0.305	E
P-2582	J-938	J-939	HDPE	145	99.3	112	0.201	0.3	
P-2557	J-916	J-918	HDPE	145	252.9	62	1.294	0.298	
DP-7905	DJ-1050	DJ-4017	CI	100	150	15	0.451	0.296	E
DP-6302	DJ-2030	DJ-2029	CI	100	150	280	0.447	0.293	E
P-2161	DJ-1794	DJ-6343	HDPE	145	284.5	7	1.583	0.288	New
P-2581	J-937	J-938	HDPE	145	144.4	31	0.408	0.288	
DP-9881	DJ-3266	DJ-1488	CI	100	300	111	1.751	0.287	E
P-2573	J-929	J-931	HDPE	145	180.6	113	0.633	0.286	
P-2580	J-937	J-936	HDPE	145	144.4	152	0.404	0.285	
DP-9092	DJ-2030	DJ-5045	CI	100	150	171	0.435	0.285	E
P-2554	DJ-254	J-917	DI	140	400	7	3.089	0.285	E
DP-3115	DJ-5706	DJ-10271	CI	100	300	71	1.71	0.28	E
DP-8942	DJ-10188	DJ-1042	CI	100	150	23	0.423	0.277	E
P-2535	DJ-2801	J-904	CI	100	150	44	0.407	0.267	E
DP-5315	DJ-3266	DJ-3265	CI	100	150	192	0.402	0.263	E
P-2586	J-942	J-943	HDPE	145	99.3	61	0.173	0.258	
DP-3411	DJ-3850	DJ-4677	CI	100	250	154	1.073	0.253	E
DP-9811	DJ-3297	DJ-1010	CI	100	150	40	0.385	0.252	E
DP-7769	DJ-242	DJ-6343	CI	100	150	449	0.383	0.251	E
P-2568	J-925	J-926	HDPE	145	252.9	151	1.085	0.25	
P-2549	J-912	J-913	HDPE	145	99.3	73	0.164	0.246	
P-2538	DJ-1791	J-906	CI	100	150	98	0.372	0.243	E
P-2566	J-917	J-926	DI	140	400	228	2.64	0.243	E
P-2546	J-910	J-911	HDPE	145	99.3	89	0.161	0.24	
P-2575	J-932	J-933	HDPE	145	99.3	47	0.159	0.238	
DP-3223	DJ-1043	DJ-4759	CI	100	150	34	0.361	0.237	E
DP-7882	DJ-1488	DJ-5044	CI	100	300	51	1.43	0.234	E
DP-3412	DJ-4677	DJ-3849	CI	100	250	31	0.987	0.233	E
P-1658	J-564	DJ-4534	HDPE	145	284.5	10	1.267	0.231	New
DP-8941	DJ-	DJ-	CI	100	150	105	0.344	0.225	E

	10238	10188							
P-2579	J-936	J-937	HDPE	145	99.3	157	0.148	0.221	
DP-5465	DJ-1786	DJ-5238	CI	100	250	185	0.914	0.215	E
DP-9446	DJ-10055	DJ-1786	CI	100	300	32	1.313	0.215	E
DP-3498	DJ-5172	DJ-9848	CI	100	100	107	0.146	0.214	E
P-2565	J-924	J-925	HDPE	145	252.9	41	0.912	0.21	
P-2583	J-938	J-940	HDPE	145	99.3	36	0.138	0.206	
DP-4370	DJ-3682	DJ-3681	CI	100	80	145	0.089	0.204	E
P-2166	DJ-254	DJ-3850	HDPE	145	284.5	13	1.106	0.201	New
P-2577	J-931	J-935	HDPE	145	99.3	56	0.134	0.2	
DP-5328	DJ-5747	DJ-9554	CI	100	150	14	0.302	0.198	E
DP-7583	DJ-2573	DJ-10055	CI	100	300	241	1.166	0.191	E
DP-4572	DJ-5122	DJ-5121	CI	100	100	154	0.129	0.191	E
P-2576	J-932	J-934	HDPE	145	99.3	67	0.127	0.19	
DP-3338	DJ-5802	DJ-5801	CI	100	80	105	0.08	0.184	E
DP-2031	DJ-7463	DJ-7462	CI	100	80	67	0.08	0.183	E
DP-4534	DJ-5236	DJ-5235	CI	100	100	152	0.122	0.18	E
P-2558	J-918	J-919	HDPE	145	99.3	133	0.119	0.178	
DP-3705	DJ-5264	DJ-5263	CI	100	100	118	0.119	0.176	E
DP-7906	DJ-4017	DJ-1974	CI	100	150	43	0.263	0.172	E
P-2585	J-941	J-942	HDPE	145	99.3	90	0.115	0.172	
DP-6688	DJ-1418	DJ-1417	CI	100	100	341	0.116	0.172	E
DP-9508	DJ-5239	DJ-5122	CI	100	150	221	0.261	0.171	E
DP-4983	DJ-3123	DJ-10237	CI	100	80	127	0.072	0.165	E
DP-2273	DJ-9312	DJ-8106	CI	100	100	73	0.112	0.165	E
DP-5657	DJ-4018	DJ-4017	CI	100	100	217	0.102	0.151	E
P-2578	J-921	J-936	HDPE	145	252.9	38	0.653	0.15	
P-2563	J-922	J-923	HDPE	145	180.6	28	0.319	0.144	
DP-9507	DJ-5264	DJ-5239	CI	100	150	51	0.216	0.141	E
DP-2971	DJ-6322	DJ-6321	CI	100	100	93	0.095	0.14	E
DP-7550	DJ-5045	DJ-1522	CI	100	150	71	0.196	0.128	E
DP-6437	DJ-2860	DJ-1492	MS	140	150	298	0.192	0.126	E
P-2541	J-906	J-908	CI	100	150	36	0.19	0.125	E
DP-51	DJ-10271	DJ-10270	CI	100	450	3	1.696	0.123	E
P-2162	DJ-2573	DJ-242	HDPE	145	284.5	7	0.649	0.118	New
DP-4297	DJ-4608	DJ-7483	CI	100	150	142	0.176	0.115	E
P-2540	J-906	J-907	HDPE	145	99.3	82	0.077	0.115	
DP-663	DJ-6602	DJ-7524	CI	100	450	47	1.532	0.111	E
DP-6973	DJ-1488	DJ-1487	CI	100	150	407	0.169	0.111	E
DP-66	DJ-10238	DJ-10237	CI	100	150	4	0.165	0.108	E
DP-732	DJ-9313	DJ-9312	CI	100	150	30	0.163	0.107	E
DP-2175	DJ-7215	DJ-7214	CI	100	80	71	0.045	0.104	E
P-2559	J-919	J-920	HDPE	145	99.3	60	0.067	0.1	
DP-8705	DJ-3797	DJ-10238	CI	100	150	6	0.152	0.1	E
DP-4082	DJ-4759	DJ-4758	CI	100	150	133	0.152	0.099	E
P-2561	J-921	J-922	HDPE	145	252.9	44	0.406	0.094	
P-2570	J-925	J-928	HDPE	145	99.3	36	0.062	0.093	
DP-8010	DJ-3229	DJ-1081	CI	100	200	164	0.244	0.09	E
DP-348	DJ-9848	DJ-9847	CI	100	100	15	0.061	0.089	E
P-2556	J-916	J-917	HDPE	145	252.9	179	0.378	0.087	
P-2569	J-923	J-927	HDPE	145	99.3	49	0.057	0.084	
P-2543	J-908	J-909	HDPE	145	99.3	78	0.054	0.081	
P-2536	J-904	DJ-3542	CI	100	150	18	0.116	0.076	E

DP-3499	DJ-9848	DJ-5171	CI	100	100	25	0.051	0.075	E
P-2562	J-922	J-919	HDPE	145	99.3	87	0.048	0.072	
DP-1978	DJ-7524	DJ-7523	CI	100	450	65	0.867	0.063	E
DP-8686	DJ-7215	DJ-3297	CI	100	150	71	0.096	0.063	E
DP-3393	DJ-5716	DJ-5715	CI	100	450	107	0.829	0.06	E
DP-4500	DJ-3877	DJ-3228	CI	100	150	82	0.09	0.059	E
P-2158	DJ-5044	J-732	CI	100	300	157	0.34	0.056	E
DP-3211	DJ-4248	DJ-7463	CI	100	450	11	0.751	0.055	E
DP-10041	DJ-4018	DJ-2030	CI	100	150	166	0.082	0.054	E
P-849	DJ-7463	J-280	CI	100	450	51	0.661	0.048	E
P-2564	J-923	J-924	HDPE	145	252.9	81	0.2	0.046	
DP-665	DJ-7524	DJ-6601	CI	100	450	35	0.602	0.044	E
DP-2949	DJ-6343	DJ-6342	CI	100	150	93	0.067	0.044	E
P-2547	J-732	J-912	CI	100	300	36	0.257	0.042	E
DP-1051	DJ-2705	DJ-9671	CI	100	450	127	0.566	0.041	E
DP-7132	DJ-5439	DJ-5807	CI	100	450	58	0.553	0.04	E
DP-7471	DJ-4248	DJ-591	CI	100	150	5	0.057	0.037	E
DP-8704	DJ-4759	DJ-3797	CI	100	150	253	0.056	0.037	E
P-2542	J-908	DJ-1790	CI	100	150	144	0.055	0.036	E
DP-5467	DJ-5238	DJ-1785	CI	100	250	92	0.141	0.033	E
P-1653	DJ-2573	J-563	CI	100	400	9	0.361	0.033	E
P-1654	J-563	DJ-1480	CI	100	400	9	0.357	0.033	E
DP-8221	DJ-1480	DJ-2838	CI	100	400	3	0.356	0.033	E
DP-8548	DJ-2838	DJ-2860	CI	100	400	6	0.355	0.033	E
DP-199	DJ-10069	DJ-10068	CI	100	250	7	0.132	0.031	E
DP-6325	DJ-1668	DJ-1667	CI	100	250	283	0.128	0.03	E
P-1659	DJ-1785	DJ-2573	HDPE	145	284.5	4	0.147	0.027	New
P-3209	DJ-5606	PRV-31	DI	140	300	490	0.163	0.027	E
P-3210	PRV-31	DJ-648	DI	140	300	12	0.163	0.027	E
DP-1227	DJ-5122	DJ-1561	CI	100	150	34	0.036	0.024	E
DP-103	DJ-10188	DJ-10187	CI	100	150	4	0.035	0.023	E
DP-1422	DJ-1418	DJ-2033	CI	100	450	188	0.277	0.02	E
DP-7100	DJ-6476	DJ-5439	CI	100	150	32	0.03	0.02	E
DP-563	DJ-9554	DJ-9553	CI	100	450	25	0.238	0.017	E
DP-9264	DJ-5807	DJ-6861	CI	100	450	5	0.215	0.016	E
DP-7218	DJ-648	DJ-647	CI	100	300	496	0.088	0.014	E
DP-4269	DJ-3797	DJ-3796	CI	100	450	140	0.197	0.014	E
DP-1053	DJ-9671	DJ-2704	CI	100	450	168	0.181	0.013	E
DP-4519	DJ-3297	DJ-7673	DI	140	450	42	0.181	0.013	E
P-850	J-280	DJ-4247	CI	100	450	153	0.168	0.012	E
DP-9265	DJ-6861	DJ-3682	CI	100	450	50	0.132	0.01	E
DP-4324	DJ-3718	DJ-8798	CI	100	450	100	0.131	0.01	E
DP-2165	DJ-285	DJ-242	CI	100	200	20	0.023	0.009	E
DP-4521	DJ-7673	DJ-3296	DI	140	450	121	0.095	0.007	E
DP-2766	DJ-4457	DJ-4456	DI	140	450	86	0.094	0.007	E
DP-6347	DJ-592	DJ-7215	CI	100	150	8	0.01	0.006	E
DP-4453	DJ-3594	DJ-3593	DI	140	450	148	0.088	0.006	E
DP-833	DJ-9146	DJ-9145	CI	100	450	34	0.084	0.006	E
DP-2012	DJ-7483	DJ-7482	DI	140	450	66	0.077	0.006	E
DP-310	DJ-9919	DJ-9918	CI	100	450	13	0.075	0.005	E
DP-2413	DJ-6861	DJ-6860	CI	100	450	77	0.073	0.005	E
DP-1503	DJ-8798	DJ-8797	CI	100	250	53	0.016	0.004	E
DP-1886	DJ-7673	DJ-7672	DI	140	450	63	0.042	0.003	E
DP-4644	DJ-10152	DJ-1793	CI	100	150	5	0.004	0.003	E
DP-4415	DJ-4677	DJ-4676	CI	100	450	146	0.035	0.003	E

P-1655	DJ-188	J-564	CI	100	400	439	0.022	0.002	E
DP-1420	DJ-2034	DJ-1418	CI	100	450	171	0.025	0.002	E
DP-2568	DJ-3682	DJ-5438	CI	100	450	3	0.017	0.001	E
DP-4326	DJ-8798	DJ-3717	CI	100	450	42	0.013	0.001	E

Table C14(b): Junction results

Label	Elevation (m)	Demand (ML/day)	Hydraulic Grade (m)	Pressure (kg/cm ²)
J-942	587.3	0.288	592.7	0.545
J-939	586.7	0.201	592.6	0.591
DJ-1561	589.9	0.036	596.3	0.645
DJ-5122	589.9	0.095	596.3	0.645
J-940	586.1	0.138	592.7	0.654
J-943	585.7	0.154	592.8	0.708
J-941	585.7	0.295	592.8	0.71
DJ-5121	588.9	0.129	596.2	0.727
J-938	585.4	0.069	592.7	0.732
J-937	584.7	0.144	592.7	0.803
DJ-5263	588.2	0.119	596.3	0.813
J-903	584.1	0.34	592.2	0.816
DJ-5264	587.8	0.097	596.4	0.865
DJ-5239	587.8	0.258	596.4	0.867
J-944	584	0.111	593	0.902
DJ-10055	589.9	0.147	599.2	0.935
DJ-10054	589.9	0.004	599.3	0.943
DJ-1786	589.7	0.054	599.3	0.949
DJ-5236	589.7	0.075	599.3	0.952
J-915	583.4	0.189	593.1	0.963
DJ-6342	588.9	0.067	598.8	0.988
DJ-648	580.1	0.075	590.3	1.021
DJ-5235	588.9	0.122	599.2	1.022
DJ-2802	581.8	0.136	592	1.023
DJ-8100	589.9	0.032	600.2	1.037
DJ-1076	588.9	0.006	599.3	1.042
DJ-6601	577.5	0.602	587.9	1.043
DJ-5606	588.9	0.063	599.3	1.045
DJ-4482	583.6	0.277	594.1	1.048
J-916	582.3	0.225	592.9	1.06
J-936	582.1	0.101	592.8	1.069
J-730	589.7	0.038	600.5	1.077
J-731	589.8	0.041	600.6	1.081
DJ-6322	579.9	0.124	590.7	1.085
J-566	585.1	0.392	596	1.091
DJ-5238	588.2	0.32	599.2	1.097
DJ-4458	583.6	0.202	594.7	1.099
DJ-1794	587.7	0.154	598.8	1.1
DJ-4533	583.6	0.106	594.7	1.103
DJ-6343	587.7	0.141	598.8	1.104
J-902	581.5	0.063	592.5	1.105
J-565	585	0.688	596.1	1.105
J-918	581.7	0.079	592.9	1.119
DJ-6326	579.4	0.098	590.6	1.123
J-933	581.2	0.159	592.5	1.127
J-934	581.2	0.127	592.5	1.131
DJ-10151	582.1	0.032	593.4	1.133
J-921	581.5	0.036	592.8	1.133
DJ-10152	582.1	0.11	593.5	1.14
DJ-1793	582.1	0.004	593.5	1.14
DJ-3543	580.1	0.058	591.5	1.14

J-908	579.7	0.081	591.2	1.145
J-906	579.7	0.105	591.2	1.146
DJ-476	580.1	0.106	591.6	1.148
DJ-242	587.4	0.242	599.2	1.178
J-935	580.8	0.134	592.7	1.19
J-563	587.2	0.004	599.2	1.196
DJ-2573	587.2	0.009	599.2	1.198
DJ-10036	582.9	0.996	594.9	1.2
DJ-4534	582.9	0.029	595	1.203
DJ-10068	581.2	0.132	593.2	1.206
DJ-10069	581.2	0.036	593.2	1.206
DJ-1051	579.1	0.099	591.2	1.206
DJ-6321	578.6	0.095	590.7	1.21
DJ-3542	579.6	0.116	591.7	1.212
J-904	579.5	0.051	591.7	1.214
DJ-1791	579.1	0.058	591.3	1.215
DJ-1639	579.1	0.044	591.3	1.216
DJ-2801	579.6	0.137	591.8	1.217
J-564	582.8	0.429	595	1.218
DJ-285	586.9	0.023	599.2	1.221
DJ-2838	586.9	0.001	599.2	1.222
DJ-1480	586.9	0.001	599.2	1.222
DJ-1785	586.9	0.006	599.2	1.222
DJ-2860	586.9	0.163	599.2	1.223
DJ-6706	571.7	0.72	584	1.224
DJ-10037	582.7	0.027	595	1.226
DJ-7524	575.6	0.063	587.9	1.227
J-932	580.2	0.07	592.5	1.228
J-907	578.8	0.077	591.2	1.231
J-922	580.5	0.04	592.8	1.232
J-909	578.7	0.054	591.2	1.241
J-931	580.2	0.143	592.7	1.249
DJ-6325	577.7	0.253	590.4	1.258
DJ-1975	578	0.418	590.6	1.258
DJ-7523	575.1	0.867	587.9	1.275
DJ-9553	580.6	0.238	593.6	1.289
DJ-9554	580.6	0.064	593.6	1.289
DJ-5747	580.6	0.118	593.6	1.29
DJ-6602	574.9	0.11	587.9	1.294
J-923	579.8	0.062	592.8	1.295
DJ-5748	580.1	0.058	593.2	1.309
DJ-3876	574.6	0.582	587.7	1.314
DJ-1790	578	0.055	591.2	1.318
DJ-9146	580.1	0.06	593.4	1.321
J-919	579.5	0.1	592.8	1.328
DJ-3877	576.5	0.106	590.2	1.365
J-929	579.1	0.196	592.8	1.367
J-924	579.1	0.067	592.8	1.371
J-927	579	0.057	592.8	1.375
DJ-3266	577.3	0.183	591.2	1.379
DJ-3229	580.1	0.157	594	1.38
J-905	577.8	0.241	591.6	1.382
DJ-3228	576.2	0.09	590.1	1.389
J-914	579.3	0.071	593.3	1.397
DJ-9145	579.3	0.084	593.4	1.402
J-925	578.7	0.111	592.8	1.412
J-928	578.7	0.062	592.8	1.413
J-920	578.5	0.067	592.8	1.428
DJ-192	578.9	0.057	593.2	1.432
DJ-254	578.5	0.033	592.9	1.436

DJ-3850	578.5	0.033	592.9	1.441
J-917	578.5	0.07	592.9	1.441
J-911	575.9	0.161	590.4	1.448
DJ-7463	577.5	0.01	592.1	1.453
DJ-591	577.5	0.057	592.1	1.453
DJ-4248	577.5	0.001	592.1	1.453
DJ-2771	577.5	0.006	592.1	1.454
DJ-9313	577.5	0.103	592.2	1.458
DJ-2705	577.5	0.018	592.4	1.482
DJ-7214	578.9	0.045	593.8	1.489
J-280	577.2	0.054	592.1	1.489
J-930	577.5	0.217	592.4	1.49
DJ-7215	578.9	0.041	593.8	1.492
DJ-592	578.9	0.01	593.8	1.492
DJ-7672	578.9	0.042	593.8	1.492
DJ-1668	577	0.311	592.1	1.508
DJ-9671	577.3	0.059	592.4	1.51
DJ-9672	577.3	0.007	592.5	1.518
DJ-7462	576.7	0.08	592	1.525
DJ-3297	578.5	0.108	593.8	1.526
DJ-5172	577.3	0.019	592.6	1.528
DJ-1010	578.5	0.001	593.8	1.53
DJ-1492	583.8	0.192	599.1	1.531
DJ-3718	577.6	0.05	593	1.536
DJ-9312	576.7	0.051	592.1	1.537
DJ-4759	575	0.154	590.5	1.542
DJ-1081	578.5	0.01	594	1.543
DJ-1043	575	0.253	590.5	1.545
DJ-3849	577.3	0.04	592.8	1.55
DJ-4677	577.3	0.05	592.8	1.552
J-926	577.3	0.085	592.9	1.553
DJ-8106	576.5	0.112	592.1	1.557
DJ-3594	577.6	0.123	593.3	1.562
DJ-4608	576.8	0.092	592.6	1.577
DJ-6883	573.6	1.278	589.7	1.61
DJ-7673	577.5	0.044	593.8	1.63
DJ-4581	572.2	0.16	588.6	1.638
DJ-2770	574.8	0.2	591.3	1.646
DJ-2034	574	0.025	590.7	1.667
DJ-9847	575.7	0.061	592.5	1.67
DJ-9848	575.7	0.034	592.5	1.671
J-910	573.4	0.123	590.5	1.707
DJ-4247	575	0.168	592.1	1.71
DJ-8798	575.9	0.102	593	1.711
DJ-3265	573.8	0.402	591	1.714
DJ-5801	572.8	0.268	590.1	1.727
DJ-5806	571.8	0.135	589.1	1.728
DJ-1042	573.2	0.015	590.6	1.739
DJ-3123	573.2	0.022	590.6	1.74
DJ-4456	573.9	0.094	591.3	1.741
DJ-1974	572.6	0.263	590.1	1.749
DJ-4017	572.6	0.086	590.1	1.751
DJ-3296	576.2	0.095	593.8	1.754
DJ-6884	573.2	0.162	590.8	1.757
DJ-5716	574	0.042	591.6	1.759
DJ-5171	574.8	0.051	592.5	1.76
DJ-3796	572.8	0.197	590.5	1.761
DJ-1488	573.4	0.152	591.1	1.762
DJ-5715	573.9	0.829	591.6	1.764
DJ-1418	573	0.135	590.7	1.768

DJ-10187	572.8	0.035	590.6	1.777
DJ-10188	572.8	0.044	590.6	1.777
DJ-9919	573.4	0.061	591.3	1.784
DJ-9918	573.4	0.075	591.3	1.784
DJ-2033	572.8	0.086	590.7	1.79
DJ-4457	573.4	0.112	591.3	1.793
DJ-4676	574.8	0.035	592.8	1.796
DJ-6860	572.4	0.073	590.4	1.8
DJ-5438	572.4	0.017	590.4	1.8
DJ-3682	572.4	0.026	590.4	1.8
DJ-5706	572.4	0.028	590.5	1.804
DJ-7515	573.4	0.054	591.5	1.806
DJ-6475	571.9	1.13	590	1.811
DJ-3681	572.1	0.089	590.3	1.813
DJ-5802	571.9	0.018	590.2	1.822
DJ-7483	574.3	0.1	592.6	1.823
DJ-4758	572.2	0.152	590.5	1.826
DJ-1417	571.9	0.002	590.4	1.845
DJ-6861	571.9	0.011	590.4	1.847
DJ-5807	571.9	0.042	590.4	1.847
DJ-5439	571.9	0	590.5	1.847
DJ-10270	571.9	0	590.5	1.847
DJ-10271	571.9	0.014	590.5	1.847
DJ-7482	574	0.077	592.6	1.857
DJ-6476	571.8	0.03	590.5	1.857
DJ-2704	573.8	0.181	592.4	1.858
DJ-8797	574.4	0.016	593	1.859
DJ-3717	574.4	0.013	593	1.859
DJ-1050	571.5	0.515	590.1	1.862
DJ-3122	571.6	0.152	590.3	1.869
DJ-188	576.2	0.022	595	1.873
DJ-3797	571.6	0.011	590.5	1.883
DJ-10237	571.6	0.084	590.5	1.883
DJ-10238	571.6	0.027	590.5	1.883
DJ-3593	574.4	0.088	593.3	1.884
DJ-5044	572.1	0.177	591.1	1.894
DJ-6707	570.6	0.136	589.9	1.921
DJ-2029	570	0.447	589.6	1.955
J-913	571.4	0.164	591	1.955
DJ-1522	570.6	0.196	590.2	1.955
DJ-5045	570.5	0.283	590.2	1.962
DJ-2030	570.1	0.07	590	1.984
DJ-647	570.2	0.088	590.3	2.009
DJ-4018	569.8	0.02	590	2.014
DJ-1667	571.5	0.128	592.1	2.052
J-912	570.2	0.093	591.1	2.086
J-732	570.1	0.083	591.1	2.093
DJ-1487	570	0.169	591	2.1

11. Zone D9

Table D9(a): Pipe results

Label	Start Node	Stop Node	Material	Hazen-Williams C	Diameter (mm)	Length (m)	Flow (ML/day)	Velocity (m/s)	Pipe type (new/existing)
DP-4908	DJ-9866	294	CI	100	400	54	19.88	1.831	E
DP-220	DJ-923	DJ-2114	CI	100	150	113	2.501	1.638	E
DP-421	DJ-9866	DJ-9865	DI	140	300	18	9.81	1.606	E
P-454	J-149	DJ-9865	HDPE	145	144.4	3	2.1	1.484	New
P-2266	J-761	J-762	HDPE	145	99.3	9	0.886	1.324	New
P-3394	DJ-9866	DJ-9865	HDPE	145	203.1	21	3.397	1.213	New
DP-7088	DJ-640	DJ-639	CI	100	100	446	0.669	0.986	E
DP-6503	DJ-2114	DJ-2113	CI	100	100	310	0.659	0.972	E
DP-7166	DJ-565	DJ-564	CI	100	100	473	0.653	0.963	E
DP-851	DJ-2271	DJ-4382	CI	100	100	228	0.622	0.917	E
P-2233	DJ-4126	J-752	HDPE	145	99.3	11	0.595	0.89	New
DP-3353	DJ-4373	DJ-4372	CI	100	100	105	0.568	0.837	E
DP-3458	DJ-5924	DJ-4372	CI	100	100	110	0.558	0.822	E
DP-6548	DJ-4372	DJ-1334	CI	100	100	319	0.536	0.79	E
DP-8895	DJ-2271	DJ-2226	CI	100	150	25	1.182	0.774	E
P-2243	DJ-6328	J-754	HDPE	145	99.3	4	0.518	0.774	New
P-1846	J-621	DJ-565	di	140	300	4	4.692	0.768	New
P-2253	J-758	DJ-7610	CI	100	150	30	1.138	0.745	E
P-1834	J-620	DJ-435	HDPE	145	284.5	210	4.053	0.738	New
DP-1129	DJ-5694	DJ-5532	CI	100	100	117	0.484	0.713	E
DP-5604	DJ-4127	DJ-4126	CI	100	100	213	0.472	0.696	E
DP-10346	DJ-640	DJ-565	DI	140	300	41	3.992	0.654	E
DP-2573	DJ-6625	DJ-6624	GI	100	50	81	0.108	0.638	E
P-1845	DJ-9866	J-622	DI	140	400	16	6.581	0.606	New
P-2232	J-752	DJ-2066	CI	100	300	172	3.699	0.606	E
DP-6867	DJ-887	DJ-886	CI	100	100	381	0.407	0.6	E
P-1838	DJ-	DJ-	HDPE	145	99.3	8	0.396	0.591	New

	887	4326							
P-2234	DJ-3072	DJ-2066	HDPE	145	99.3	9	0.39	0.583	New
P-2263	J-620	J-752	HDPE	145	203.1	670	1.585	0.566	New
DP-722	DJ-9327	DJ-9326	GI	100	50	30	0.094	0.556	E
DP-1797	DJ-7803	DJ-3072	CI	100	100	61	0.368	0.542	E
DP-4045	DJ-2226	DJ-5694	CI	100	150	32	0.803	0.526	E
DP-2853	DJ-4327	DJ-4326	CI	100	100	89	0.357	0.526	E
P-449	DJ-9865	J-148	MS	140	400	63	5.555	0.512	E
DP-8491	DJ-9955	DJ-9865	MS	140	400	15	5.537	0.51	E
DP-222	DJ-2114	DJ-922	CI	100	150	264	0.774	0.507	E
DP-2789	DJ-9330	DJ-9955	MS	140	400	39	5.498	0.506	E
DP-720	DJ-9331	DJ-9330	CI	100	400	30	5.469	0.504	E
P-2231	DJ-435	J-752	CI	100	300	434	3.064	0.502	E
P-2242	J-754	DJ-2066	CI	100	300	170	3.035	0.497	E
DP-583	DJ-883	DJ-7486	CI	100	150	67	0.753	0.493	E
DP-9784	DJ-5924	DJ-640	DI	140	300	38	2.999	0.491	E
P-451	DJ-7624	J-148	DI	140	400	7	5.315	0.49	New
P-2235	DJ-4292	DJ-7803	HDPE	145	99.3	29	0.326	0.488	New
DP-7753	DJ-7486	DJ-9327	CI	100	150	220	0.725	0.475	E
P-2248	J-756	DJ-9331	CI	100	400	474	5.062	0.466	E
DP-5961	DJ-2226	DJ-2225	CI	100	100	239	0.304	0.448	E
DP-2811	DJ-4382	DJ-4381	DI	140	100	88	0.304	0.448	E
DP-10033	DJ-2067	DJ-6453	CI	100	150	5	0.68	0.445	E
P-2255	J-757	J-759	HDPE	145	203.1	121	1.242	0.444	New
DP-9485	DJ-7267	DJ-6538	CI	100	200	36	1.2	0.442	E
P-2264	DJ-7624	J-762	CI	100	400	386	4.799	0.442	E
P-2236	DJ-4292	DJ-2696	HDPE	145	99.3	34	0.294	0.439	New
P-452	DJ-1176	J-149	CI	100	300	17	2.565	0.42	E
P-1836	DJ-5924	DJ-1924	HDPE	145	99.3	9	0.279	0.417	New
DP-9519	DJ-7605	DJ-8790	CI	100	300	26	2.517	0.412	E
P-2261	J-760	J-761	HDPE	145	203.1	402	1.151	0.411	New
DP-8626	DJ-1033	DJ-7610	CI	100	200	5	1.113	0.41	E
P-2251	J-757	J-754	CI	100	300	121	2.493	0.408	E

P-1839	DJ-639	DJ-564	HDPE	145	99.3	41	0.265	0.396	New
DP-1127	DJ-5533	DJ-5694	CI	100	100	13	0.269	0.396	E
P-2249	J-756	DJ-2271	HDPE	145	284.5	5	2.168	0.395	New
DP-9520	DJ-8790	DJ-7268	CI	100	300	81	2.364	0.387	E
DP-8625	DJ-883	DJ-1033	CI	100	200	35	1.038	0.382	E
DP-6189	DJ-1310	DJ-923	DI	140	300	5	2.325	0.381	E
P-1835	DJ-640	DJ-1053	HDPE	145	99.3	8	0.254	0.379	New
DP-9486	DJ-6538	DJ-7124	CI	100	200	10	1.026	0.378	E
DP-6633	DJ-1211	J-150	CI	100	150	331	0.572	0.375	E
DP-2117	DJ-7487	DJ-7486	CI	100	100	69	0.254	0.374	E
P-2256	J-759	J-758	HDPE	145	203.1	64	1.033	0.369	New
P-2237	DJ-2696	DJ-3996	HDPE	145	99.3	47	0.244	0.365	New
DP-10032	DJ-6327	DJ-2067	CI	100	150	5	0.543	0.356	E
DP-6091	DJ-7124	DJ-7971	CI	100	200	22	0.944	0.348	E
P-1837	DJ-4373	DJ-1607	HDPE	145	99.3	6	0.23	0.344	New
DP-9783	DJ-4373	DJ-5924	DI	140	300	41	2.093	0.343	E
P-2267	J-762	J-620	DI	140	500	10	5.656	0.333	New
P-1843	DJ-68	J-622	DI	140	500	32	5.337	0.315	E
P-1841	J-621	DJ-68	DI	140	500	582	5.312	0.313	E
DP-6163	DJ-5711	DJ-1924	CI	100	100	254	0.21	0.31	E
DP-8650	DJ-7036	DJ-4127	CI	100	150	24	0.467	0.306	E
DP-7754	DJ-9327	DJ-3453	CI	100	150	98	0.449	0.294	E
DP-5931	DJ-5022	DJ-2697	CI	100	150	13	0.439	0.287	E
DP-853	DJ-4382	DJ-2270	CI	100	100	11	0.192	0.283	E
DP-3536	DJ-5507	DJ-5506	CI	100	100	113	0.19	0.281	E
DP-8850	DJ-6453	DJ-4479	CI	100	150	45	0.424	0.278	E
DP-6483	DJ-1608	DJ-1607	CI	100	100	306	0.186	0.273	E
DP-1830	DJ-7746	DJ-7745	CI	100	100	61	0.181	0.267	E
DP-2399	DJ-7971	DJ-7970	CI	100	150	77	0.406	0.266	E
P-2247	J-755	J-756	CI	100	400	48	2.879	0.265	E
DP-6746	DJ-1054	DJ-1053	CI	100	100	351	0.179	0.264	E
DP-6441	DJ-8693	DJ-3453	CI	100	150	3	0.396	0.26	E
DP-6379	DJ-4479	DJ-4293	CI	100	150	33	0.377	0.247	E

P-2246	J-147	J-755	DI	140	400	14	2.659	0.245	New
P-2240	DJ-4478	J-753	HDPE	145	99.3	25	0.16	0.239	New
DP-6710	DJ-1176	DJ-1310	DI	140	400	343	2.551	0.235	E
DP-3812	DJ-5174	DJ-5173	CI	100	100	122	0.157	0.232	E
P-448	J-147	DJ-7605	CI	100	400	28	2.505	0.231	E
DP-6766	DJ-1033	DJ-1032	GI	100	50	359	0.039	0.227	E
DP-6606	DJ-1250	DJ-1249	CI	100	100	330	0.152	0.223	E
DP-10645	DJ-7700	DJ-8693	CI	100	150	24	0.341	0.223	E
DP-8894	DJ-5174	DJ-2271	CI	100	150	28	0.323	0.212	E
DP-6181	DJ-887	DJ-4373	DI	140	300	42	1.245	0.204	E
P-2250	DJ-2067	J-757	CI	100	300	3	1.226	0.201	E
DP-5932	DJ-2697	DJ-3997	CI	100	150	43	0.304	0.199	E
DP-9973	DJ-7971	DJ-4430	CI	100	200	3	0.512	0.189	E
DP-2266	DJ-4293	DJ-5022	CI	100	150	36	0.283	0.185	E
DP-2624	DJ-6538	DJ-6537	CI	100	100	83	0.124	0.183	E
DP-10644	DJ-7723	DJ-7700	CI	100	150	11	0.271	0.178	E
DP-5560	DJ-3881	DJ-3880	CI	100	100	211	0.119	0.175	E
DP-9251	DJ-7270	DJ-7036	CI	100	150	51	0.254	0.166	E
DP-6909	DJ-893	DJ-892	CI	100	100	395	0.109	0.161	E
DP-4976	DJ-6328	DJ-6327	CI	100	100	173	0.108	0.159	E
DP-9974	DJ-4430	DJ-4366	CI	100	200	22	0.425	0.156	E
DP-7172	DJ-7268	DJ-6625	CI	100	300	52	0.934	0.153	E
DP-6109	DJ-1986	DJ-1985	CI	100	100	258	0.104	0.153	E
DP-5861	DJ-7970	DJ-4281	CI	100	100	230	0.101	0.148	E
DP-5069	DJ-3997	DJ-3996	CI	100	100	178	0.101	0.148	E
DP-10647	DJ-7746	DJ-7723	CI	100	150	10	0.226	0.148	E
P-2238	DJ-6453	J-753	CI	100	150	86	0.225	0.147	E
DP-8940	DJ-4366	DJ-3881	CI	100	200	2	0.348	0.128	E
DP-9390	DJ-6625	DJ-5507	CI	100	300	39	0.722	0.118	E
DP-1091	DJ-8790	DJ-8789	CI	100	100	41	0.071	0.105	E
DP-5354	DJ-2697	DJ-2696	CI	100	100	196	0.069	0.102	E
DP-	DJ-	DJ-	CI	100	100	75	0.068	0.1	E

2317	6997	6996							
DP-6259	DJ-7487	DJ-883	CI	100	200	4	0.26	0.096	E
DP-2782	DJ-4430	DJ-4429	CI	100	100	87	0.062	0.092	E
DP-3596	DJ-5712	DJ-5711	CI	100	150	115	0.138	0.091	E
DP-9250	DJ-6997	DJ-7270	CI	100	150	27	0.138	0.09	E
P-2252	DJ-3997	J-758	CI	100	150	4	0.138	0.09	E
DP-5260	DJ-7970	DJ-3934	CI	100	100	189	0.061	0.09	E
DP-2821	DJ-4366	DJ-4365	CI	100	100	88	0.055	0.081	E
P-453	J-149	DJ-7624	CI	100	300	62	0.466	0.076	E
DP-10222	DJ-5507	DJ-1508	CI	100	300	42	0.461	0.075	E
DP-2289	DJ-7036	DJ-7035	CI	100	150	74	0.114	0.075	E
DP-8611	DJ-1986	DJ-1211	CI	100	250	23	0.313	0.074	E
DP-2227	DJ-7124	DJ-7123	CI	100	100	72	0.05	0.073	E
P-2258	J-622	J-760	DI	140	500	71	1.231	0.073	E
DP-2136	DJ-7270	DJ-7269	CI	100	100	70	0.048	0.071	E
P-2257	DJ-5022	J-759	HDPE	145	203.1	6	0.193	0.069	New
DP-1867	DJ-7700	DJ-7699	CI	100	100	62	0.038	0.055	E
DP-10223	DJ-1508	DJ-1489	CI	100	300	24	0.333	0.055	E
DP-5432	DJ-4293	DJ-4292	CI	100	100	201	0.037	0.054	E
DP-10477	DJ-1211	DJ-1250	CI	100	250	46	0.226	0.053	E
DP-6191	DJ-923	DJ-887	DI	140	300	111	0.318	0.052	E
DP-7700	DJ-7605	DJ-5174	CI	100	150	62	0.079	0.052	E
DP-1175	DJ-8693	DJ-8692	CI	100	100	42	0.032	0.048	E
DP-6136	DJ-3881	DJ-1235	CI	100	200	240	0.12	0.044	E
DP-6498	DJ-1508	DJ-4327	CI	100	100	309	0.029	0.043	E
DP-5972	DJ-893	DJ-1986	CI	100	250	39	0.179	0.042	E
DP-6511	DJ-1489	DJ-4327	CI	100	100	312	0.029	0.042	E
DP-5070	DJ-1608	DJ-6186	CI	100	150	3	0.059	0.039	E
DP-9041	DJ-1489	DJ-6187	CI	100	300	47	0.222	0.036	E
DP-1852	DJ-7723	DJ-7722	CI	100	100	62	0.025	0.036	E
P-1840	J-150	J-621	DI	140	500	47	0.61	0.036	E
DP-9841	DJ-6187	DJ-5712	CI	100	300	5	0.196	0.032	E

DP-2739	DJ-4479	DJ-4478	CI	100	100	85	0.021	0.032	E
P-2244	DJ-485	J-755	CI	100	400	354	0.195	0.018	E
DP-9791	DJ-1054	DJ-4965	CI	100	250	13	0.075	0.018	E
DP-10646	DJ-4127	DJ-7746	CI	100	150	10	0.025	0.016	E
P-2239	J-753	DJ-6452	CI	100	150	3	0.024	0.016	E
P-2228	J-750	DJ-6997	CI	100	150	28	0.023	0.015	E
DP-6772	DJ-7610	DJ-1020	CI	100	100	361	0.01	0.014	E
P-447	DJ-7492	J-147	CI	100	400	36	0.138	0.013	E
DP-5068	DJ-6187	DJ-1608	CI	100	150	93	0.014	0.009	E
DP-232	DJ-7611	DJ-893	CI	100	250	16	0.029	0.007	E
DP-1945	DJ-7606	DJ-7605	CI	100	300	63	0.036	0.006	E
DP-10478	DJ-1250	DJ-1054	CI	100	250	34	0.023	0.006	E
P-2226	J-749	DJ-7492	CI	100	400	130	0.057	0.005	E
P-2259	J-760	DJ-69	DI	140	500	293	0.079	0.005	E
P-450	J-148	DJ-2298	MS	140	400	249	0.045	0.004	E
P-2229	DJ-7611	J-751	CI	100	200	11	0.01	0.004	E
DP-280	DJ-9955	DJ-9954	CI	100	400	11	0.036	0.003	E
DP-9842	DJ-5712	DJ-4965	CI	100	300	42	0.011	0.002	E
DP-7441	DJ-485	DJ-1564	CI	100	400	603	0.011	0.001	E

Table D9(b): Junction results

Label	Elevation (m)	Demand (ML/day)	Hydraulic Grade (m)	Pressure (kg/cm ²)
DJ-4293	564.7	0.057	569.2	0.446
DJ-4479	564.7	0.068	569.2	0.449
DJ-6453	564.4	0.031	569.3	0.486
DJ-6327	564.4	0.65	569.3	0.486
DJ-2067	564.4	0.004	569.3	0.487
J-757	564.4	0.025	569.3	0.488
DJ-4478	564.1	0.138	569.2	0.509
J-753	563.9	0.041	569.2	0.533
DJ-6452	563.9	0.024	569.2	0.535
DJ-6328	563.9	0.41	569.4	0.55
J-754	563.9	0.024	569.4	0.552
J-759	563.2	0.016	569.2	0.594
DJ-3997	563.1	0.066	569.1	0.602
DJ-2697	563.1	0.065	569.1	0.604
DJ-5022	563.1	0.038	569.2	0.606
J-758	562.9	0.033	569.1	0.625
DJ-2113	555	0.659	562	0.701
DJ-7487	561.3	0.007	568.8	0.755
DJ-883	561.3	0.025	568.8	0.755

DJ-1033	561.3	0.037	568.9	0.76
DJ-7610	561.3	0.015	568.9	0.761
DJ-564	555	0.918	562.7	0.767
DJ-639	555	0.404	562.8	0.774
DJ-7486	560.7	0.282	568.6	0.789
DJ-3996	560.1	0.345	569	0.893
DJ-2696	559.9	0.118	569.1	0.913
DJ-4292	559.9	0.069	569.2	0.921
DJ-7803	559.9	0.042	569.2	0.928
DJ-3072	560	0.022	569.6	0.957
DJ-2066	560	0.274	569.7	0.96
DJ-7036	557.9	0.099	567.8	0.987
DJ-1564	561	0.011	570.9	0.989
DJ-6997	557.8	0.047	567.7	0.989
DJ-7270	557.8	0.068	567.7	0.989
DJ-4127	557.9	0.03	567.8	0.99
DJ-7745	557.8	0.181	567.7	0.99
DJ-7035	557.8	0.114	567.7	0.994
DJ-7746	557.8	0.019	567.8	0.995
DJ-7722	557.8	0.025	567.8	1.001
DJ-7699	557.8	0.038	567.8	1.001
DJ-8692	557.8	0.032	567.8	1.003
DJ-6537	555.8	0.124	565.9	1.011
DJ-6996	557.6	0.068	567.7	1.011
DJ-4365	555.8	0.055	565.9	1.012
DJ-4429	555.8	0.062	565.9	1.012
DJ-7269	557.6	0.048	567.7	1.013
J-750	557.6	0.023	567.7	1.013
DJ-7123	555.8	0.05	566	1.015
J-751	560.6	0.01	570.8	1.015
DJ-4281	555.3	0.101	565.7	1.036
DJ-7970	555.4	0.244	565.9	1.041
DJ-1032	557.4	0.039	567.9	1.047
DJ-7267	555.5	0.12	566.1	1.052
DJ-9326	556.9	0.094	567.5	1.057
DJ-3880	555.1	0.119	565.8	1.06
DJ-3934	555.1	0.061	565.8	1.065
DJ-1235	555.2	0.12	565.9	1.07
DJ-1334	555	0.536	565.7	1.071
DJ-7723	557	0.021	567.8	1.078
DJ-7700	557	0.032	567.8	1.079
DJ-8693	557	0.023	567.8	1.081
DJ-3453	557	0.053	567.8	1.081
DJ-3881	555.1	0.109	565.9	1.083
DJ-4366	555.1	0.022	565.9	1.083
DJ-4430	555.1	0.025	565.9	1.084
DJ-7971	555.1	0.026	565.9	1.084
DJ-7124	555.1	0.033	566	1.087
DJ-6538	555.1	0.049	566	1.088
DJ-7611	559.8	0.018	570.8	1.092
DJ-893	559.8	0.041	570.8	1.092
DJ-1986	559.8	0.031	570.8	1.092
DJ-9327	556.9	0.181	567.9	1.101
DJ-2270	555.9	0.192	567	1.111
DJ-4382	555.9	0.126	567.1	1.113
DJ-4126	558.7	0.123	569.9	1.117
J-752	558.8	0.354	570	1.118
DJ-1020	557.4	0.01	568.9	1.149
DJ-4381	555.1	0.304	566.9	1.169
DJ-4965	559	0.086	570.8	1.17

DJ-1250	559	0.098	570.8	1.17
DJ-1054	559	0.08	570.8	1.17
DJ-1211	559	0.033	570.8	1.178
DJ-922	555	0.774	566.9	1.189
DJ-485	558.5	0.184	570.9	1.24
DJ-5712	558.3	0.047	570.8	1.245
DJ-6187	558.3	0.04	570.8	1.245
DJ-5711	558.1	0.348	570.7	1.259
DJ-6186	558.1	0.059	570.8	1.261
DJ-1608	558.1	0.113	570.8	1.261
DJ-5532	556.7	0.484	569.4	1.267
DJ-2114	555.1	1.067	567.8	1.269
DJ-6624	556	0.108	569.2	1.321
DJ-1985	557.3	0.104	570.6	1.326
DJ-8789	557.5	0.071	570.8	1.334
DJ-5533	557.2	0.269	570.5	1.334
DJ-435	557.3	0.988	570.7	1.335
DJ-886	555	0.407	568.4	1.335
DJ-8790	557.5	0.082	570.9	1.336
DJ-7605	557.5	0.03	570.9	1.337
DJ-5694	557.2	0.051	570.6	1.34
DJ-1489	557.3	0.082	570.8	1.341
DJ-1508	557.3	0.099	570.8	1.341
DJ-5507	557.3	0.07	570.8	1.342
J-147	557.4	0.017	570.9	1.344
DJ-7606	557.4	0.036	570.9	1.345
DJ-7492	557.4	0.081	570.9	1.345
DJ-2226	557.2	0.074	570.7	1.352
J-755	557.3	0.025	570.9	1.356
DJ-2225	555.9	0.304	569.6	1.37
DJ-2271	557.2	0.04	570.9	1.371
J-756	557.1	0.015	570.9	1.376
J-749	556.9	0.057	570.9	1.392
DJ-5174	556.8	0.087	570.9	1.405
DJ-6625	556.6	0.104	570.8	1.418
J-620	556.8	0.019	571.1	1.424
J-762	556.8	0.028	571.1	1.427
DJ-4372	555.5	0.589	569.8	1.429
DJ-892	556	0.109	570.5	1.443
J-761	556.7	0.265	571.2	1.446
DJ-1249	555.6	0.152	570.4	1.47
DJ-7268	556	0.111	570.8	1.471
DJ-5506	555.8	0.19	570.6	1.473
DJ-5173	555.8	0.157	570.7	1.492
DJ-4327	555.5	0.414	570.7	1.523
DJ-1607	555.9	0.044	571.3	1.54
DJ-5924	555.9	0.069	571.3	1.542
DJ-1924	555.8	0.069	571.3	1.547
DJ-4373	555.7	0.05	571.3	1.557
DJ-9331	555.7	0.408	571.4	1.563
DJ-9330	555.7	0.029	571.4	1.567
DJ-1053	555.6	0.074	571.4	1.57
DJ-640	555.6	0.071	571.4	1.571
DJ-565	555.6	0.047	571.4	1.577
J-621	555.6	0.01	571.4	1.578
DJ-68	555.7	0.025	571.5	1.582
DJ-4326	555.4	0.039	571.3	1.586
DJ-887	555.4	0.123	571.3	1.589
J-150	555.4	0.037	571.4	1.599
DJ-1176	555.3	0.014	571.4	1.601

J-149	555.3	0.001	571.4	1.603
DJ-9954	555.3	0.036	571.4	1.606
DJ-9955	555.3	0.003	571.4	1.606
DJ-9865	555.3	0.015	571.4	1.607
DJ-923	555.2	0.143	571.3	1.608
DJ-1310	555.2	0.226	571.3	1.608
DJ-7624	555.3	0.051	571.4	1.61
J-148	555.2	0.194	571.4	1.612
J-622	555.3	0.013	571.5	1.619
DJ-9866	555.3	0.087	571.6	1.62
J-760	555.2	0.002	571.5	1.628
DJ-2298	555	0.045	571.4	1.635
DJ-69	555	0.079	571.5	1.651

12. Zone D10-11

Table D10-11(a): Pipe results

Label	Start Node	Stop Node	Material	Hazen-Williams C	Diameter (mm)	Length (m)	Flow (ML/day)	Velocity (m/s)	Pipe type (new/existing)
DP-9903	DJ-1878	DJ-1748	CI	100	150	36	2.615	1.712	E
P-2213	J-744	DJ-5965	CI	100	450	73	23.07	1.679	E
P-3395	DJ-7707	DJ-1878	HDPE	145	99.3	7	1.078	1.611	New
P-446	DJ-4208	DJ-6038	HDPE	145	144.4	18	2.216	1.566	New
DP-5953	DJ-1748	DJ-2864	CI	100	150	3	2.372	1.554	E
P-2216	J-744	J-745	DI	140	450	36	20.2	1.47	New
DP-5954	DJ-2864	DJ-4208	CI	100	150	6	2.234	1.463	E
DP-6132	DJ-6038	DJ-4081	CI	100	150	4	2.196	1.438	E
DP-4965	DJ-1878	DJ-7707	CI	100	100	6	0.861	1.269	E
DP-9491	DJ-4081	DJ-5129	CI	100	150	22	1.891	1.238	E
DP-7710	DJ-10269	DJ-1532	DI	140	300	1	7.465	1.222	E
DP-9492	DJ-5129	DJ-4580	CI	100	150	31	1.717	1.125	E
DP-10139	DJ-4209	DJ-1391	CI	100	150	20	1.664	1.09	E
DP-8727	DJ-4716	DJ-3352	DI	140	200	60	2.799	1.031	E
DP-10140	DJ-1391	DJ-2487	CI	100	150	5	1.514	0.992	E
P-1847	103	DJ-5965	DI	140	450	26	13.53	0.985	New
DP-10419	DJ-2487	DJ-3275	CI	100	150	22	1.374	0.9	E
DP-3783	DJ-10269	DJ-4857	CI	100	300	1	5.381	0.881	E
P-1086	J-351	DJ-5965	CI	100	100	18	0.587	0.865	E
DP-8560	DJ-5608	DJ-1938	CI	100	250	5	3.6	0.849	E
P-2215	J-745	J-625	CI	100	450	81	11.32	0.824	E
P-1854	J-625	DJ-937	CI	100	450	9	11.31	0.823	E
DP-9913	DJ-937	DJ-909	CI	100	450	7	11.22	0.816	E
DP-10420	DJ-3275	DJ-1325	CI	100	150	5	1.231	0.806	E
DP-70	DJ-10230	DJ-10229	CI	100	200	6	2.176	0.802	E
DP-3123	DJ-10229	DJ-6106	CI	100	200	97	2.174	0.801	E
DP-2191	DJ-7708	DJ-1400	CI	100	200	25	2.13	0.785	E
DP-1201	DJ-4722	DJ-6214	DI	140	150	4	1.189	0.779	E
P-1856	DJ-6106	DJ-7708	HDPE	145	203.1	4	2.164	0.773	New
DP-10553	DJ-6940	DJ-7572	DI	140	200	1	2.095	0.772	E
DP-7307	DJ-1400	DJ-1410	CI	100	200	4	2.088	0.769	E
P-1085	DJ-5966	J-351	CI	100	100	83	0.518	0.764	E
DP-4226	DJ-4580	DJ-4579	CI	100	100	138	0.516	0.76	E
DP-10552	DJ-1446	DJ-6940	DI	140	200	46	2.055	0.757	E
DP-7308	DJ-1410	DJ-7707	CI	100	200	34	2.032	0.749	E
DP-674	DJ-4580	DJ-6037	CI	100	150	42	1.141	0.748	E
P-2618	J-967	DJ-4654	CI	100	100	67	0.503	0.742	E
DP-1668	104	DJ-5965	CI	100	450	24	10.18	0.741	E
DP-8414	DJ-909	DJ-8188	DI	140	150	12	1.128	0.739	E
DP-9914	DJ-909	DJ-709	CI	100	450	67	10.07	0.733	E
DP-9902	DJ-7572	DJ-4716	DI	140	200	53	1.969	0.726	E

DP-10655	DJ-1325	DJ-3456	CI	100	150	34	1.106	0.724	E
DP-6152	DJ-495	DJ-1465	DI	140	200	2	1.964	0.724	E
DP-766	DJ-10181	DJ-9770	CI	100	100	31	0.472	0.695	E
DP-8745	DJ-709	DJ-692	CI	100	450	7	9.429	0.686	E
P-444	J-146	DJ-1446	DI	140	200	7	1.838	0.677	E
DP-3975	DJ-6904	DJ-8029	CI	100	100	13	0.459	0.677	E
DP-9575	DJ-692	DJ-4064	CI	100	450	10	9.286	0.676	E
DP-8902	DJ-4251	DJ-9374	DI	140	150	1	1.026	0.672	E
DP-10885	DJ-896	DJ-929	CI	100	300	6	4.087	0.669	E
DP-10805	DJ-929	DJ-7329	CI	100	300	29	4.017	0.658	E
DP-9576	DJ-4064	DJ-4856	CI	100	450	28	9.002	0.655	E
P-2214	DJ-10333	J-745	CI	100	450	41	8.807	0.641	E
DP-10890	DJ-7329	DJ-7354	CI	100	300	2	3.904	0.639	E
DP-10656	DJ-3456	DJ-3390	CI	100	150	7	0.975	0.639	E
DP-10891	DJ-7354	DJ-10230	CI	100	300	70	3.898	0.638	E
DP-10387	DJ-9974	DJ-10332	CI	100	450	3	8.753	0.637	E
DP-4317	DJ-2995	DJ-4352	DI	140	100	63	0.432	0.637	E
DP-8792	DJ-1465	DJ-1367	DI	140	200	55	1.667	0.614	E
DP-10055	DJ-9374	DJ-8246	DI	140	150	143	0.909	0.595	E
DP-987	DJ-5608	DJ-6485	CI	100	300	18	3.589	0.588	E
DP-9005	DJ-495	DJ-896	DI	140	400	7	6.301	0.58	E
DP-3319	DJ-5817	DJ-5816	CI	100	100	105	0.393	0.58	E
DP-5968	DJ-6485	DJ-2330	CI	100	300	5	3.46	0.567	E
P-2338	J-792	J-793	HDPE	145	99.3	15	0.379	0.566	
DP-10106	DJ-1367	DJ-1363	DI	140	200	7	1.529	0.563	E
DP-10182	DJ-4856	DJ-1870	CI	100	450	20	7.703	0.561	E
DP-6443	DJ-5922	DJ-889	DI	140	150	57	0.849	0.556	E
DP-4116	DJ-4722	DJ-4721	DI	140	150	134	0.826	0.541	E
DP-9309	DJ-4642	DJ-9660	DI	140	100	67	0.365	0.538	E
DP-8816	DJ-3390	DJ-1362	CI	100	150	1	0.801	0.525	E
DP-4914	DJ-2972	DJ-2971	CI	100	100	170	0.355	0.523	E
P-443	DJ-1363	J-146	DI	140	200	77	1.409	0.519	E
DP-8716	DJ-5644	DJ-1364	DI	140	400	81	5.631	0.519	E
DP-10183	DJ-1870	DJ-735	CI	100	450	22	7.109	0.517	E
DP-3977	DJ-8029	DJ-6903	CI	100	100	106	0.341	0.502	E
DP-10622	DJ-1362	DJ-9993	CI	100	150	67	0.766	0.502	E
DP-9939	DJ-1364	DJ-1366	DI	140	400	5	5.431	0.5	E
DP-9882	DJ-735	DJ-747	CI	100	450	50	6.819	0.496	E
DP-10236	DJ-2330	DJ-9407	CI	100	300	48	3.019	0.494	E
DP-7988	DJ-4352	DJ-4375	DI	140	100	36	0.328	0.484	E
DP-10699	DJ-1366	DJ-2514	DI	140	400	23	5.219	0.481	E
P-2619	J-966	J-967	HDPE	145	99.3	26	0.321	0.48	
DP-8580	DJ-6214	DJ-9974	CI	100	450	8	6.591	0.48	E
DP-10700	DJ-2514	DJ-1466	DI	140	400	35	5.179	0.477	E
DP-1533	DJ-8188	DJ-8187	CI	100	100	53	0.324	0.477	E

P-445	DJ-2008	DJ-2228	HDPE	145	144.4	8	0.674	0.476	New
DP-8636	PNJ-9	DJ-1532	MS	140	400	9	5.143	0.474	E
DP-8415	DJ-8188	DJ-8087	DI	140	150	202	0.72	0.472	E
DP-9883	DJ-747	DJ-742	CI	100	450	68	6.479	0.471	E
P-2357	J-802	J-803	HDPE	145	99.3	122	0.314	0.469	
DP-8635	DJ-6661	PNJ-9	MS	140	400	278	5.085	0.468	E
DP-3356	DJ-6661	DJ-4651	CI	100	400	6	5.084	0.468	E
DP-1120	DJ-8757	DJ-8756	CI	100	100	41	0.317	0.467	E
DP-10056	DJ-8246	DJ-8987	DI	140	150	4	0.711	0.465	E
DP-7907	DJ-9502	DJ-4251	DI	140	150	6	0.703	0.461	E
DP-1103	DJ-6442	DJ-5644	DI	140	400	44	4.98	0.459	E
DP-10623	DJ-9993	DJ-1878	CI	100	150	4	0.697	0.457	E
DP-6444	DJ-889	DJ-9502	DI	140	150	30	0.696	0.456	E
DP-10018	DJ-742	DJ-1552	CI	100	450	3	6.177	0.449	E
DP-10237	DJ-9407	DJ-2008	CI	100	300	99	2.687	0.44	E
P-2620	DJ-1121	J-968	CI	100	250	7	1.859	0.438	E
P-2622	J-966	J-968	HDPE	145	99.3	69	0.292	0.437	
DP-10046	DJ-1466	DJ-1473	DI	140	400	5	4.701	0.433	E
DP-6117	DJ-494	DJ-9710	CI	100	150	93	0.661	0.433	E
DP-9096	DJ-8987	DJ-8176	DI	140	150	23	0.658	0.431	E
DP-9310	DJ-9660	DJ-8482	DI	140	100	6	0.288	0.424	E
DP-5588	DJ-4081	DJ-2640	CI	100	100	212	0.286	0.421	E
DP-9454	DJ-6215	DJ-1141	DI	140	300	484	2.563	0.42	E
DP-1787	DJ-9252	DJ-5062	CI	100	100	20	0.284	0.418	E
DP-6392	DJ-1552	DJ-5031	DI	140	150	294	0.632	0.414	E
P-2358	J-800	J-804	HDPE	145	99.3	168	0.276	0.412	
DP-10047	DJ-1473	DJ-495	DI	140	400	300	4.395	0.405	E
DP-10652	DJ-1552	DJ-5817	CI	100	450	16	5.526	0.402	E
DP-1343	DJ-9009	302	CI	100	400	96	4.295	0.396	E
DP-8579	DJ-4857	DJ-6214	CI	100	450	5	5.401	0.393	E
P-2617	DJ-4655	J-967	CI	100	100	68	0.263	0.387	E
DP-1310	DJ-8482	DJ-8481	DI	140	100	47	0.262	0.386	E
DP-5472	DJ-9009	DJ-8994	MS	140	400	120	4.168	0.384	E
DP-5783	DJ-709	DJ-8086	DI	140	150	250	0.585	0.383	E
DP-5473	DJ-8994	DJ-6442	MS	140	400	2	4.122	0.38	E
P-2356	J-803	DJ-8194	HDPE	145	99.3	54	0.253	0.378	
DP-9453	DJ-1532	DJ-6215	DI	140	300	91	2.287	0.374	E
DP-10653	DJ-5817	DJ-2972	CI	100	450	17	5.11	0.372	E
DP-6350	DJ-1870	DJ-814	CI	100	150	23	0.566	0.371	E
DP-4722	DJ-7258	DJ-6682	CI	100	100	50	0.25	0.368	E
DP-10388	DJ-10332	DJ-10333	CI	100	450	3	5.051	0.368	E
P-2625	J-968	J-971	CI	100	250	29	1.557	0.367	E
DP-10884	DJ-931	DJ-896	CI	100	300	2	2.211	0.362	E
P-2363	DJ-9971	J-807	CI	100	150	33	0.55	0.36	E
DP-9097	DJ-8176	DJ-8751	DI	140	150	28	0.547	0.358	E
DP-1450	DJ-8194	DJ-8715	CI	100	100	4	0.241	0.355	E
P-2627	J-963	J-971	HDPE	145	99.3	67	0.237	0.354	
DP-331	DJ-9975	DJ-9974	CI	100	300	14	2.16	0.354	E
DP-8204	DJ-641	DJ-4655	DI	140	300	257	2.148	0.352	E

DP-10769	DJ-1194	DJ-931	CI	100	300	54	2.132	0.349	E
DP-7572	DJ-3674	DJ-845	CI	100	250	4	1.475	0.348	E
DP-4107	DJ-4734	DJ-4733	CI	100	100	134	0.236	0.347	E
P-2341	DJ-1141	J-796	CI	100	250	341	1.468	0.346	E
DP-461	DJ-9710	DJ-10181	CI	100	150	20	0.527	0.345	E
P-2337	J-792	DJ-9971	CI	100	150	27	0.523	0.343	E
DP-10462	DJ-2972	DJ-714	CI	100	450	31	4.701	0.342	E
DP-7709	DJ-9975	DJ-10269	DI	140	300	9	2.087	0.342	E
DP-10	DJ-10333	DJ-10332	CI	100	400	3	3.706	0.341	E
P-2364	J-807	DJ-9197	CI	100	150	8	0.52	0.34	E
P-2611	J-960	J-961	HDPE	145	99.3	73	0.226	0.338	
DP-7261	DJ-2008	DJ-6877	CI	100	200	137	0.916	0.338	E
DP-601	DJ-8083	DJ-1869	CI	100	150	5	0.514	0.337	E
DP-3191	DJ-1748	DJ-9921	CI	100	100	264	0.228	0.335	E
P-2342	J-796	DJ-3674	CI	100	250	21	1.409	0.332	E
P-2610	J-959	J-960	HDPE	145	99.3	67	0.221	0.33	
DP-5402	DJ-4651	DJ-207	DI	140	400	135	3.571	0.329	E
DP-10746	DJ-1207	DJ-1194	CI	100	300	7	1.999	0.327	E
DP-10463	DJ-714	DJ-720	CI	100	450	2	4.489	0.327	E
DP-1430	DJ-6258	DJ-3784	CI	100	100	48	0.217	0.32	E
DP-1462	DJ-8283	DJ-8282	CI	100	100	51	0.216	0.318	E
DP-397	DJ-1207	DJ-8761	DI	140	150	179	0.482	0.315	E
DP-9849	DJ-720	DJ-1938	CI	100	450	54	4.313	0.314	E
DP-1691	DJ-8556	DJ-8555	CI	100	100	58	0.212	0.312	E
P-2630	J-962	J-972	HDPE	145	99.3	68	0.208	0.311	
DP-8226	DJ-5230	DJ-8556	DI	140	150	48	0.475	0.311	E
P-2339	J-793	J-794	HDPE	145	99.3	37	0.207	0.309	
DP-5367	DJ-845	DJ-5921	CI	100	150	145	0.472	0.309	E
P-2628	J-971	J-972	CI	100	250	28	1.3	0.307	E
DP-8205	DJ-4655	DJ-1121	DI	140	300	20	1.867	0.306	E
DP-991	DJ-8751	DJ-2995	DI	140	150	4	0.466	0.305	E
P-2614	J-963	J-964	HDPE	145	99.3	7	0.203	0.303	
DP-9502	DJ-4721	DJ-494	DI	140	200	170	0.809	0.298	E
DP-8100	DJ-8087	DJ-8283	DI	140	150	90	0.453	0.297	E
DP-8044	DJ-207	DJ-3673	DI	140	300	770	1.761	0.288	E
DP-981	DJ-9177	DJ-9176	CI	100	100	38	0.191	0.282	E
DP-10727	DJ-10230	DJ-4209	CI	100	300	3	1.72	0.282	E
DP-7262	DJ-6877	DJ-7105	CI	100	200	34	0.757	0.279	E
DP-2503	DJ-6059	DJ-5230	DI	140	150	43	0.418	0.274	E
DP-6351	DJ-814	DJ-843	CI	100	150	50	0.417	0.273	E
DP-4358	DJ-3674	DJ-3673	CI	100	100	144	0.184	0.271	E
DP-2181	DJ-8703	DJ-1846	CI	100	100	225	0.18	0.266	E
P-2612	J-960	J-962	HDPE	145	99.3	29	0.176	0.263	
DP-2588	DJ-4650	DJ-641	DI	140	300	564	1.607	0.263	E
DP-6908	DJ-843	DJ-842	CI	100	100	393	0.176	0.26	E
DP-3470	J-146	DJ-8757	DI	140	150	108	0.396	0.259	E
DP-8045	DJ-3673	DJ-9196	DI	140	300	12	1.565	0.256	E
DP-7749	DJ-6259	DJ-6258	CI	100	100	119	0.174	0.256	E
DP-3768	DJ-2330	DJ-8186	CI	100	150	203	0.387	0.254	E
P-2629	J-972	J-959	CI	100	250	32	1.058	0.249	E
DP-3937	DJ-6259	DJ-6258	CI	100	100	126	0.168	0.248	E
DP-4122	DJ-3390	DJ-3201	CI	100	100	159	0.167	0.247	E
DP-1452	DJ-8715	DJ-8193	CI	100	100	49	0.165	0.243	E

DP-10745	DJ-1778	DJ-1207	CI	100	300	60	1.457	0.239	E
DP-7989	DJ-4375	DJ-2994	DI	140	100	125	0.162	0.238	E
DP-3193	DJ-9921	DJ-1747	CI	100	100	12	0.16	0.236	E
DP-6762	DJ-1869	DJ-1247	CI	100	150	323	0.357	0.234	E
DP-4781	DJ-8449	DJ-1246	CI	100	100	285	0.156	0.23	E
DP-8996	DJ-9176	DJ-6904	CI	100	150	114	0.349	0.229	E
DP-1199	DJ-6215	DJ-4722	DI	140	150	96	0.348	0.228	E
P-2344	J-793	J-797	HDPE	145	99.3	86	0.151	0.226	
DP-8538	DJ-9196	DJ-1213	DI	140	300	38	1.36	0.223	E
DP-9037	DJ-9197	DJ-1213	CI	100	150	5	0.34	0.223	E
DP-9472	DJ-845	DJ-5922	CI	100	250	95	0.936	0.221	E
DP-530	DJ-7572	DJ-5063	CI	100	100	47	0.148	0.218	E
DP-8642	DJ-1762	DJ-1778	CI	100	300	4	1.327	0.217	E
DP-7029	DJ-720	DJ-8872	CI	100	100	424	0.147	0.217	E
DP-7908	DJ-4251	DJ-5921	DI	140	150	46	0.326	0.214	E
DP-5149	DJ-1391	DJ-2486	CI	100	100	222	0.145	0.213	E
DP-6473	DJ-1466	DJ-1465	DI	140	150	305	0.325	0.213	E
DP-4780	DJ-1247	DJ-8449	CI	100	100	46	0.142	0.209	E
P-2615	J-964	J-965	HDPE	145	99.3	20	0.139	0.208	
P-2212	J-624	J-744	CI	100	450	93	2.841	0.207	E
DP-9953	DJ-3523	DJ-1762	CI	100	300	45	1.261	0.207	E
P-1851	DJ-3352	J-624	CI	100	450	5	2.822	0.205	E
DP-4431	DJ-5031	DJ-5030	CI	100	100	147	0.138	0.203	E
DP-3814	DJ-5129	DJ-5128	CI	100	100	122	0.137	0.202	E
DP-9266	DJ-7105	DJ-7764	CI	100	200	43	0.526	0.194	E
DP-2180	DJ-1847	DJ-8703	CI	100	100	42	0.129	0.191	E
DP-1023	DJ-2935	DJ-3784	DI	140	200	37	0.509	0.188	E
DP-7157	DJ-2228	DJ-1248	CI	100	100	471	0.127	0.187	E
DP-6934	DJ-814	DJ-813	CI	100	100	399	0.126	0.186	E
DP-8794	DJ-7108	DJ-4734	CI	100	200	12	0.502	0.185	E
DP-4687	DJ-3275	DJ-3274	CI	100	100	160	0.125	0.185	E
DP-2105	DJ-1846	DJ-4641	DI	140	100	34	0.125	0.184	E
DP-1252	DJ-8704	DJ-8703	CI	100	100	45	0.124	0.183	E
DP-2322	DJ-7105	DJ-7104	CI	100	100	75	0.124	0.183	E
DP-5798	DJ-2487	DJ-2486	CI	100	100	226	0.122	0.18	E
DP-9372	DJ-8186	DJ-8190	CI	100	150	39	0.267	0.175	E
DP-5205	DJ-2864	DJ-2863	CI	100	100	186	0.119	0.175	E
DP-9952	DJ-3527	DJ-3523	CI	100	300	6	1.035	0.169	E
DP-2528	DJ-6682	DJ-6681	CI	100	100	80	0.114	0.168	E
DP-6664	DJ-1175	DJ-1174	CI	100	100	339	0.114	0.168	E
DP-1476	DJ-8450	DJ-8449	CI	100	100	52	0.113	0.167	E
DP-8561	DJ-1938	DJ-8083	CI	100	250	16	0.704	0.166	E
DP-5403	DJ-207	DJ-4650	DI	140	400	4	1.803	0.166	E
DP-7007	DJ-742	DJ-741	CI	100	150	418	0.253	0.166	E
DP-2425	DJ-7329	DJ-938	CI	100	100	1	0.112	0.165	E
DP-8539	DJ-1213	DJ-1209	DI	140	300	13	1.001	0.164	E
P-2361	DJ-1209	J-806	CI	100	300	24	0.979	0.16	E
DP-8976	DJ-2008	DJ-7108	CI	100	300	171	0.967	0.158	E
DP-2671	DJ-6485	DJ-6484	CI	100	100	84	0.107	0.158	E
DP-2143	DJ-4064	DJ-9935	DI	140	150	269	0.239	0.156	E
DP-4550	DJ-3456	DJ-3455	CI	100	100	153	0.106	0.156	E
DP-1619	DJ-1325	DJ-3274	CI	100	100	160	0.105	0.155	E
DP-7096	DJ-630	DJ-3674	CI	100	100	448	0.105	0.155	E
DP-1319	DJ-9406	DJ-8467	DI	140	100	47	0.104	0.153	E
DP-6035	DJ-6999	DJ-9212	CI	100	100	26	0.101	0.148	E
DP-8227	DJ-8556	DJ-9177	DI	140	150	8	0.225	0.148	E
DP-2955	DJ-4350	DJ-4349	CI	100	100	93	0.1	0.147	E

P-2609	J-959	J-949	CI	100	250	337	0.624	0.147	E
P-2362	J-806	J-800	CI	100	300	65	0.896	0.147	E
DP-1604	DJ-8087	DJ-8086	CI	100	100	55	0.099	0.147	E
DP-1122	DJ-8761	DJ-8760	CI	100	100	41	0.098	0.145	E
DP-8995	DJ-843	DJ-9176	CI	100	150	36	0.216	0.142	E
DP-4102	DJ-6579	DJ-8469	CI	100	150	49	0.216	0.141	E
DP-2426	DJ-938	DJ-7328	CI	100	100	68	0.095	0.14	E
DP-2548	DJ-6671	DJ-6670	CI	100	100	81	0.095	0.14	E
DP-6409	DJ-3784	DJ-5966	DI	140	200	85	0.377	0.139	E
DP-3358	DJ-4651	DJ-9571	CI	100	400	114	1.502	0.138	E
DP-9267	DJ-7764	DJ-4642	CI	100	200	40	0.375	0.138	E
DP-4967	DJ-7707	DJ-1877	CI	100	100	261	0.093	0.137	E
DP-890	DJ-9068	DJ-9067	CI	100	100	36	0.093	0.137	E
DP-552	DJ-9572	DJ-9571	CI	100	400	24	1.48	0.136	E
DP-1464	DJ-8281	DJ-8280	CI	100	100	51	0.092	0.136	E
DP-10816	DJ-1247	DJ-9242	CI	100	150	16	0.205	0.134	E
DP-671	DJ-9399	DJ-9398	CI	100	400	28	1.457	0.134	E
P-2597	J-949	DJ-2494	CI	100	250	57	0.565	0.133	E
DP-7051	DJ-1141	DJ-641	DI	140	300	36	0.81	0.133	E
DP-1484	DJ-8246	DJ-8245	CI	100	100	52	0.089	0.132	E
DP-871	DJ-2494	DJ-3010	DI	140	250	31	0.555	0.131	E
P-2360	J-804	J-805	HDPE	145	99.3	68	0.086	0.129	
DP-738	DJ-9407	DJ-9406	CI	100	150	30	0.197	0.129	E
DP-5856	DJ-6059	DJ-3365	CI	100	300	230	0.783	0.128	E
DP-6095	DJ-3010	DJ-3283	DI	140	250	37	0.543	0.128	E
DP-6485	DJ-1447	DJ-1446	DI	140	150	306	0.19	0.125	E
DP-1117	DJ-9197	DJ-9196	CI	100	150	41	0.188	0.123	E
P-2623	J-965	J-969	HDPE	145	99.3	71	0.081	0.121	
DP-6532	DJ-1367	DJ-1366	DI	140	150	316	0.182	0.119	E
P-2353	DJ-2544	J-802	DI	140	250	20	0.502	0.118	E
DP-7034	DJ-714	DJ-713	CI	100	150	426	0.18	0.118	E
DP-10201	DJ-3283	DJ-5349	DI	140	250	55	0.485	0.114	E
DP-1887	DJ-7764	DJ-7763	CI	100	100	63	0.077	0.114	E
DP-5785	DJ-8086	DJ-708	DI	140	150	178	0.165	0.108	E
DP-7131	DJ-8450	DJ-7108	CI	100	250	29	0.453	0.107	E
DP-4723	DJ-6682	DJ-7257	CI	100	100	20	0.071	0.105	E
DP-1153	DJ-9583	DJ-8715	CI	100	100	42	0.071	0.105	E
DP-5150	DJ-2486	DJ-1390	CI	100	100	93	0.071	0.104	E
P-2347	J-794	J-798	HDPE	145	99.3	85	0.07	0.104	
DP-6537	DJ-1364	DJ-1363	DI	140	150	316	0.159	0.104	E
DP-692	DJ-9375	DJ-9374	CI	100	100	29	0.068	0.101	E
DP-10817	DJ-9242	DJ-8095	CI	100	150	39	0.152	0.1	E
DP-2497	DJ-6877	DJ-6876	CI	100	100	79	0.067	0.098	E
P-2340	J-794	J-795	HDPE	145	99.3	75	0.066	0.098	
DP-399	DJ-8761	DJ-1206	DI	140	150	156	0.149	0.098	E
DP-9373	DJ-8190	DJ-8096	CI	100	150	58	0.149	0.098	E
DP-1366	DJ-8469	DJ-8468	DI	140	100	49	0.066	0.098	E
DP-1620	DJ-3274	DJ-1324	CI	100	100	161	0.064	0.095	E
DP-6037	DJ-9212	DJ-9062	CI	100	100	24	0.064	0.095	E
DP-1544	DJ-8176	DJ-8175	CI	100	100	54	0.064	0.094	E
DP-371	DJ-6059	DJ-4856	CI	100	450	8	1.286	0.094	E
DP-8795	DJ-4734	DJ-1175	CI	100	200	4	0.253	0.093	E
DP-6008	DJ-6904	DJ-1869	CI	100	150	44	0.143	0.093	E
DP-10202	DJ-5349	DJ-5092	DI	140	250	35	0.391	0.092	E

DP-1927	DJ-7594	DJ-7593	DI	140	100	64	0.063	0.092	E
P-2350	J-800	DJ-2544	CI	100	300	390	0.543	0.089	E
DP-1632	DJ-8029	DJ-8028	CI	100	100	56	0.06	0.089	E
DP-6620	DJ-9399	DJ-6442	DI	140	400	79	0.958	0.088	E
DP-7046	DJ-692	DJ-691	DI	140	150	431	0.133	0.087	E
DP-7726	DJ-2985	DJ-6579	CI	100	200	5	0.233	0.086	E
DP-1130	DJ-8751	DJ-8750	CI	100	100	42	0.058	0.085	E
DP-7427	DJ-8096	DJ-6999	CI	100	150	6	0.128	0.084	E
DP-7692	DJ-3523	DJ-7594	CI	100	200	21	0.219	0.081	E
DP-8101	DJ-8283	DJ-908	DI	140	150	73	0.123	0.081	E
DP-4800	DJ-3201	DJ-3200	CI	100	100	165	0.053	0.079	E
DP-2818	DJ-4375	DJ-4374	DI	140	100	88	0.053	0.079	E
DP-7130	DJ-1847	DJ-8450	CI	100	250	34	0.324	0.076	E
DP-6597	DJ-1260	DJ-1259	CI	100	100	328	0.052	0.076	E
DP-7002	DJ-747	DJ-746	CI	100	200	418	0.205	0.076	E
P-2624	J-964	J-970	HDPE	145	99.3	70	0.051	0.076	
DP-2179	DJ-7205	DJ-7204	DI	140	100	71	0.051	0.075	E
DP-7019	DJ-735	DJ-734	CI	100	200	421	0.204	0.075	E
DP-257	DJ-9993	DJ-9992	CI	100	100	10	0.05	0.074	E
DP-5243	DJ-1285	DJ-7410	DI	140	150	299	0.112	0.073	E
DP-109	DJ-10181	DJ-10180	CI	100	100	5	0.049	0.073	E
DP-10511	DJ-8095	DJ-1260	CI	100	150	14	0.111	0.072	E
DP-7521	DJ-8469	DJ-8071	CI	100	150	30	0.111	0.072	E
DP-2088	DJ-7411	DJ-7410	DI	140	100	68	0.049	0.072	E
DP-9969	DJ-8281	DJ-889	CI	100	150	83	0.108	0.071	E
DP-1035	DJ-8872	DJ-8871	CI	100	150	40	0.107	0.07	E
DP-5368	DJ-5921	DJ-844	CI	100	150	250	0.104	0.068	E
P-2616	J-965	J-966	HDPE	145	99.3	7	0.045	0.067	
DP-10189	DJ-5092	DJ-5733	DI	140	250	59	0.284	0.067	E
P-2348	J-798	J-799	HDPE	145	99.3	17	0.043	0.064	
DP-6513	DJ-1410	DJ-1409	CI	100	100	312	0.043	0.063	E
DP-8182	DJ-1447	DJ-5644	DI	140	400	7	0.68	0.063	E
DP-2845	DJ-4352	DJ-4351	DI	140	100	89	0.042	0.061	E
DP-6826	DJ-937	DJ-936	DI	140	150	372	0.093	0.061	E
DP-496	DJ-9660	DJ-9659	DI	140	100	21	0.041	0.06	E
P-2365	J-806	J-807	HDPE	145	99.3	196	0.04	0.06	
DP-4046	DJ-4716	DJ-9068	CI	100	450	98	0.819	0.06	E
DP-10190	DJ-5733	DJ-5249	DI	140	250	5	0.248	0.058	E
DP-6629	DJ-1473	DJ-1472	DI	140	150	333	0.089	0.058	E
DP-821	DJ-3527	DJ-6671	CI	100	450	57	0.789	0.057	E
DP-6262	DJ-1778	DJ-1777	DI	140	150	274	0.087	0.057	E
DP-1710	DJ-8071	DJ-8070	DI	140	100	58	0.039	0.057	E
DP-780	DJ-9242	DJ-9241	CI	100	100	32	0.038	0.056	E
DP-6645	DJ-1194	DJ-1193	DI	140	150	336	0.084	0.055	E
DP-2094	DJ-7362	DJ-7361	CI	100	100	68	0.036	0.053	E
DP-6116	DJ-5230	DJ-494	CI	100	150	5	0.081	0.053	E
DP-6547	DJ-1337	DJ-1336	CI	100	100	319	0.036	0.053	E
DP-2601	DJ-6578	DJ-6577	DI	140	100	82	0.035	0.051	E
DP-383	DJ-9921	DJ-9920	CI	100	100	17	0.034	0.05	E
DP-8152	DJ-9068	DJ-9252	CI	100	450	33	0.688	0.05	E
P-2359	J-804	J-801	HDPE	145	99.3	36	0.033	0.05	
DP-7693	DJ-7594	DJ-6578	CI	100	200	37	0.135	0.05	E
DP-6112	DJ-6671	DJ-7362	CI	100	450	54	0.667	0.049	E
DP-2141	DJ-9375	DJ-7407	CI	100	100	70	0.033	0.048	E
DP-8058	DJ-1175	DJ-4350	CI	100	200	12	0.13	0.048	E

DP-5103	DJ-7411	DJ-8352	DI	140	100	59	0.032	0.048	E
DP-296	DJ-9935	DJ-9934	CI	100	150	13	0.072	0.047	E
DP-8181	DJ-2935	DJ-1447	DI	140	400	6	0.494	0.046	E
DP-544	DJ-9583	DJ-9582	CI	100	100	24	0.031	0.045	E
DP-6114	DJ-7362	DJ-3526	CI	100	450	43	0.601	0.044	E
DP-6619	DJ-9912	DJ-9399	DI	140	400	36	0.465	0.043	E
DP-952	DJ-8987	DJ-8986	CI	100	100	38	0.029	0.043	E
DP-6538	DJ-1362	DJ-1361	CI	100	100	317	0.029	0.043	E
DP-313	DJ-9913	DJ-9912	CI	100	400	13	0.462	0.043	E
DP-7212	DJ-8704	DJ-1847	CI	100	250	4	0.178	0.042	E
P-2336	DJ-8338	J-792	CI	100	150	278	0.064	0.042	E
DP-1536	DJ-8172	DJ-8193	CI	100	100	53	0.028	0.041	E
DP-8570	DJ-8083	DJ-6383	CI	100	250	79	0.171	0.04	E
DP-1595	DJ-8096	DJ-8095	CI	100	100	55	0.027	0.04	E
DP-5101	DJ-8353	DJ-7411	DI	140	100	16	0.027	0.039	E
DP-4124	DJ-3201	DJ-3389	CI	100	100	3	0.026	0.039	E
DP-10619	DJ-8311	DJ-3527	CI	100	300	75	0.233	0.038	E
DP-4351	DJ-5249	DJ-5248	DI	140	200	144	0.099	0.037	E
DP-2352	DJ-6940	DJ-6939	CI	100	100	75	0.025	0.037	E
P-2354	J-802	DJ-5582	DI	140	250	199	0.155	0.037	E
DP-6841	DJ-929	DJ-928	DI	140	150	374	0.055	0.036	E
DP-6267	DJ-1762	DJ-1761	DI	140	150	275	0.054	0.035	E
DP-10618	DJ-1285	DJ-8311	CI	100	300	25	0.21	0.034	E
DP-1789	DJ-5062	DJ-9251	CI	100	100	11	0.023	0.034	E
DP-6840	DJ-931	DJ-930	DI	140	150	374	0.051	0.033	E
P-2346	J-798	J-795	HDPE	145	99.3	157	0.022	0.033	
P-2633	J-973	J-974	HDPE	145	99.3	67	0.022	0.033	
DP-1415	DJ-8339	DJ-8338	CI	100	150	51	0.049	0.032	E
DP-3145	DJ-2228	DJ-7258	CI	100	450	107	0.438	0.032	E
P-2343	J-795	J-796	HDPE	145	99.3	19	0.021	0.032	
DP-6521	DJ-1400	DJ-1399	CI	100	100	313	0.021	0.031	E
DP-1535	DJ-8186	DJ-8185	CI	100	100	53	0.02	0.03	E
DP-7522	DJ-8071	DJ-8353	CI	100	150	14	0.046	0.03	E
DP-8153	DJ-9252	DJ-6259	CI	100	450	5	0.392	0.029	E
DP-1843	DJ-9699	DJ-9913	CI	100	400	33	0.308	0.028	E
P-2632	J-973	J-963	HDPE	145	99.3	25	0.019	0.028	
DP-492	DJ-9062	DJ-6998	CI	100	100	43	0.018	0.027	E
DP-10086	DJ-1260	DJ-1337	CI	100	150	23	0.041	0.027	E
DP-6411	DJ-5966	DJ-2934	DI	140	200	51	0.072	0.027	E
DP-6587	DJ-1270	DJ-1269	DI	140	150	327	0.04	0.026	E
DP-608	DJ-9502	DJ-9582	CI	100	100	26	0.018	0.026	E
DP-1532	DJ-8190	DJ-8189	CI	100	100	53	0.017	0.025	E
P-2631	J-962	J-973	HDPE	145	99.3	3	0.017	0.025	
DP-3955	DJ-2985	DJ-3526	CI	100	450	4	0.333	0.024	E
DP-9118	DJ-6578	DJ-7205	CI	100	200	47	0.065	0.024	E
P-2345	J-797	J-798	HDPE	145	99.3	37	0.016	0.023	
DP-4184	DJ-5582	DJ-5581	DI	140	200	136	0.062	0.023	E
DP-581	DJ-9710	DJ-5229	CI	100	150	22	0.035	0.023	E
DP-5244	DJ-7410	DJ-1284	DI	140	150	26	0.033	0.022	E
DP-8571	DJ-6383	DJ-5607	CI	100	250	24	0.084	0.02	E
DP-531	DJ-5063	DJ-7571	CI	100	100	18	0.013	0.019	E
DP-3957	DJ-3526	DJ-2984	CI	100	450	184	0.251	0.018	E
DP-4490	DJ-8310	DJ-5062	CI	100	450	93	0.248	0.018	E
DP-915	DJ-9212	DJ-9211	CI	100	100	37	0.012	0.018	E
DP-269	DJ-9971	DJ-9970	CI	100	150	11	0.025	0.017	E

DP-9119	DJ-7205	DJ-2985	CI	100	200	41	0.043	0.016	E
DP-2145	DJ-9935	DJ-4063	DI	140	150	58	0.023	0.015	E
DP-4489	DJ-5063	DJ-8310	CI	100	450	55	0.198	0.014	E
DP-411	DJ-9774	DJ-9773	CI	100	200	18	0.038	0.014	E
P-2218	J-746	DJ-8310	CI	100	100	37	0.009	0.014	E
DP-10101	DJ-1270	DJ-1285	CI	100	300	5	0.081	0.013	E
DP-7748	DJ-3785	DJ-6259	CI	100	100	2	0.008	0.012	E
P-2207	DJ-938	J-742	CI	100	100	371	0.008	0.012	E
DP-7210	DJ-7109	DJ-8704	CI	100	250	5	0.051	0.012	E
P-2355	J-801	J-803	HDPE	145	99.3	25	0.008	0.012	
DP-9473	DJ-5922	DJ-9774	CI	100	250	3	0.047	0.011	E
DP-7368	DJ-8482	DJ-1846	DI	140	100	28	0.007	0.011	E
DP-400	DJ-6382	DJ-8338	CI	100	150	3	0.014	0.009	E
DP-10728	DJ-4209	DJ-773	CI	100	300	3	0.055	0.009	E
DP-4943	DJ-4350	DJ-9393	CI	100	200	50	0.023	0.008	E
DP-922	DJ-9062	DJ-9061	CI	100	100	37	0.005	0.008	E
DP-677	DJ-9393	DJ-9392	CI	100	200	28	0.021	0.008	E
DP-9968	DJ-1337	DJ-8281	CI	100	150	14	0.006	0.004	E
P-2209	DJ-3352	J-743	DI	140	200	27	0.009	0.003	E
DP-3784	DJ-4857	DJ-10268	CI	100	300	2	0.02	0.003	E
DP-3147	DJ-7258	DJ-2227	CI	100	450	132	0.038	0.003	E
DP-1607	DJ-8083	DJ-8082	CI	100	200	55	0.007	0.003	E
DP-4033	DJ-6383	DJ-6382	CI	100	450	130	0.026	0.002	E
DP-948	DJ-8995	DJ-8994	MS	140	400	37	0.012	0.001	E
DP-6518	DJ-4642	DJ-8871	CI	100	200	1	0.001	0.001	E
DP-5451	DJ-8757	DJ-4266	DI	140	150	203	0	0	E
DP-2843	DJ-774	DJ-1270	CI	100	300	56	0.001	0	E
DP-2100	DJ-7354	DJ-7353	CI	100	150	69	0	0	E

Table D10-11(b): Junction results

Label	Elevation (m)	Demand (ML/day)	Hydraulic Grade (m)	Pressure (kg/cm ²)
DJ-4579	555	0.516	562.9	0.792
DJ-6037	555	1.141	564.3	0.926
DJ-4580	555	0.06	564.6	0.957
DJ-2640	555	0.286	564.6	0.96
DJ-5128	555	0.137	564.9	0.991
DJ-5129	555	0.036	565.1	1.004
DJ-1747	555	0.16	565.4	1.035
DJ-9920	555	0.034	565.4	1.037
DJ-9921	555	0.033	565.4	1.037
DJ-4081	555	0.019	565.5	1.044
DJ-6038	555	0.02	565.6	1.055
DJ-4208	555	0.018	565.8	1.082
DJ-2863	555	0.119	565.9	1.083
DJ-2864	555	0.019	566	1.098
DJ-1748	555	0.015	566.1	1.106
DJ-3200	555	0.053	567.3	1.222
DJ-1878	555	0.022	567.3	1.224
DJ-9992	555	0.05	567.3	1.225
DJ-9993	555	0.018	567.3	1.225
DJ-3389	555	0.026	567.3	1.225
DJ-3201	555	0.088	567.3	1.225
DJ-1877	555	0.093	567.3	1.229
DJ-7707	555	0.001	567.5	1.242
DJ-3455	555	0.106	567.5	1.243

DJ-2994	555	0.162	567.5	1.244
DJ-1361	555	0.029	567.5	1.247
DJ-1362	555	0.007	567.5	1.248
DJ-3390	555	0.007	567.5	1.249
DJ-3456	555	0.025	567.6	1.253
DJ-4374	555	0.053	567.6	1.253
DJ-4375	555	0.113	567.6	1.253
DJ-1409	555	0.043	567.6	1.256
DJ-1410	555	0.013	567.6	1.26
DJ-1399	555	0.021	567.6	1.261
DJ-1324	555	0.064	567.6	1.261
DJ-1400	555	0.021	567.7	1.262
DJ-4351	555	0.042	567.7	1.263
DJ-4352	555	0.062	567.7	1.263
DJ-3274	555	0.166	567.7	1.266
DJ-2971	555	0.355	567.8	1.272
DJ-1325	555	0.02	567.8	1.275
DJ-7708	555	0.034	567.8	1.276
DJ-6106	555	0.01	567.8	1.277
DJ-3275	555	0.018	567.8	1.279
DJ-1390	555	0.071	567.8	1.28
DJ-4654	555	0.503	567.8	1.281
DJ-2486	555	0.196	567.9	1.283
J-961	555.7	0.226	568.6	1.289
DJ-8481	555	0.262	567.9	1.29
DJ-8750	555	0.058	567.9	1.292
DJ-2995	555	0.034	568	1.292
DJ-8751	555	0.024	568	1.293
DJ-8175	555	0.064	568	1.294
DJ-8176	555	0.047	568	1.296
DJ-4641	555	0.125	568	1.297
DJ-8245	555	0.089	568	1.297
DJ-6903	555	0.341	568	1.297
DJ-1846	555	0.063	568	1.298
DJ-8482	555	0.018	568	1.298
DJ-8986	555	0.029	568	1.298
DJ-8987	555	0.024	568	1.299
DJ-8246	555	0.109	568	1.299
DJ-5816	555	0.393	568	1.299
DJ-9659	555	0.041	568	1.299
DJ-9660	555	0.037	568	1.3
DJ-1246	555	0.156	568	1.3
DJ-1248	555	0.127	568	1.301
DJ-2487	555	0.018	568	1.301
DJ-4733	555	0.236	568.1	1.303
J-960	555.6	0.171	568.7	1.305
DJ-1391	555	0.005	568.1	1.308
DJ-842	555	0.176	568.2	1.314
DJ-1174	555	0.114	568.2	1.316
J-974	555.5	0.022	568.7	1.318
DJ-7104	555	0.124	568.2	1.319
DJ-7763	555	0.077	568.2	1.321
DJ-6681	555	0.114	568.2	1.321
DJ-8871	555	0.105	568.3	1.322
DJ-4642	555	0.011	568.3	1.322
DJ-5030	555	0.138	568.3	1.323
DJ-8872	555	0.041	568.3	1.323
DJ-7764	555	0.075	568.3	1.323
J-962	555.4	0.015	568.7	1.323

DJ-7105	555	0.106	568.3	1.325
J-973	555.4	0.013	568.7	1.325
DJ-6876	555	0.067	568.3	1.326
DJ-7257	555	0.071	568.3	1.326
DJ-6682	555	0.065	568.3	1.327
DJ-6877	555	0.093	568.3	1.328
DJ-9770	555	0.472	568.3	1.329
DJ-630	555	0.105	568.3	1.33
DJ-8172	555	0.028	568.3	1.331
DJ-8193	555	0.137	568.3	1.331
DJ-10229	555	0.003	568.4	1.334
DJ-7407	555	0.033	568.4	1.334
J-970	555.3	0.051	568.7	1.334
DJ-9375	555	0.035	568.4	1.335
DJ-4349	555	0.1	568.4	1.335
DJ-1259	555	0.052	568.4	1.335
J-959	555.4	0.213	568.8	1.335
DJ-9374	555	0.049	568.4	1.335
DJ-844	555	0.104	568.4	1.336
DJ-4251	555	0.003	568.4	1.336
DJ-8703	555	0.073	568.4	1.336
DJ-9502	555	0.01	568.4	1.337
DJ-9582	555	0.013	568.4	1.337
DJ-8449	555	0.099	568.4	1.337
DJ-4209	555	0	568.4	1.337
DJ-773	555	0.055	568.4	1.337
DJ-9583	555	0.04	568.4	1.337
DJ-10230	555	0.002	568.4	1.337
DJ-5921	555	0.042	568.4	1.338
DJ-5031	555	0.494	568.4	1.338
DJ-1336	555	0.036	568.4	1.338
DJ-8280	555	0.092	568.4	1.338
DJ-6998	555	0.018	568.4	1.338
DJ-9061	555	0.005	568.4	1.338
DJ-9062	555	0.041	568.4	1.338
DJ-8715	555	0.005	568.4	1.338
DJ-9211	555	0.012	568.4	1.339
DJ-9212	555	0.024	568.4	1.339
J-963	555.3	0.016	568.7	1.339
DJ-8194	555	0.012	568.4	1.339
DJ-9392	555	0.021	568.4	1.34
DJ-9393	555	0.002	568.4	1.34
DJ-4350	555	0.007	568.4	1.34
DJ-8704	555	0.003	568.4	1.34
DJ-7109	555	0.051	568.4	1.34
DJ-1175	555	0.01	568.4	1.34
DJ-1847	555	0.017	568.4	1.34
DJ-6999	555	0.027	568.4	1.34
DJ-4734	555	0.013	568.4	1.34
DJ-8096	555	0.049	568.4	1.34
DJ-8281	555	0.009	568.4	1.341
DJ-1337	555	0.011	568.4	1.341
DJ-8450	555	0.016	568.4	1.341
DJ-1260	555	0.018	568.4	1.341
DJ-8095	555	0.014	568.4	1.341
DJ-7108	555	0.012	568.4	1.341
DJ-9241	555	0.038	568.4	1.341
DJ-8189	555	0.017	568.4	1.341
DJ-889	555	0.046	568.4	1.341

DJ-9242	555	0.015	568.4	1.341
DJ-8190	555	0.101	568.4	1.341
DJ-1247	555	0.01	568.5	1.342
DJ-8760	555	0.098	568.5	1.342
J-964	555.2	0.013	568.7	1.342
DJ-7258	555	0.151	568.5	1.343
DJ-2227	555	0.038	568.5	1.343
DJ-2228	555	0.109	568.5	1.343
DJ-1206	555	0.149	568.5	1.343
DJ-8185	555	0.02	568.5	1.343
DJ-8186	555	0.1	568.5	1.343
DJ-2008	555	0.13	568.5	1.344
DJ-8761	555	0.234	568.5	1.344
J-805	555	0.086	568.5	1.347
J-969	555.2	0.081	568.7	1.348
J-801	555	0.041	568.5	1.348
J-803	555	0.053	568.5	1.348
J-804	555	0.156	568.5	1.348
J-800	555.3	0.076	568.8	1.349
DJ-813	555	0.126	568.5	1.349
J-972	555.3	0.034	568.8	1.349
DJ-6670	555	0.095	568.5	1.35
DJ-7328	555	0.095	568.5	1.351
DJ-8468	555	0.066	568.5	1.352
DJ-8070	555	0.039	568.5	1.352
DJ-8352	555	0.032	568.5	1.352
DJ-7411	555	0.043	568.6	1.352
DJ-8353	555	0.019	568.6	1.352
DJ-8071	555	0.027	568.6	1.352
J-965	555.1	0.013	568.7	1.352
DJ-8469	555	0.039	568.6	1.352
DJ-1284	555	0.033	568.6	1.353
DJ-7410	555	0.03	568.6	1.353
DJ-7593	555	0.063	568.6	1.353
DJ-7204	555	0.051	568.6	1.353
DJ-7361	555	0.036	568.6	1.353
DJ-8467	555	0.104	568.6	1.353
DJ-6577	555	0.035	568.6	1.354
DJ-7354	555	0.006	568.6	1.354
DJ-7353	555	0	568.6	1.354
DJ-1269	555	0.04	568.6	1.354
DJ-9773	555	0.038	568.6	1.354
DJ-9774	555	0.009	568.6	1.354
DJ-5922	555	0.04	568.6	1.354
J-742	555	0.008	568.6	1.354
DJ-6579	555	0.017	568.6	1.354
DJ-2984	555	0.251	568.6	1.354
DJ-7205	555	0.057	568.6	1.354
DJ-3526	555	0.018	568.6	1.354
DJ-2985	555	0.057	568.6	1.354
DJ-6578	555	0.034	568.6	1.354
DJ-7362	555	0.029	568.6	1.354
DJ-1270	555	0.04	568.6	1.354
DJ-774	555	0.001	568.6	1.354
DJ-1285	555	0.017	568.6	1.354
DJ-6671	555	0.028	568.6	1.354
DJ-8311	555	0.023	568.6	1.354
DJ-938	555	0.009	568.6	1.354
DJ-7594	555	0.022	568.6	1.354

DJ-3527	555	0.013	568.6	1.354
DJ-7329	555	0.001	568.6	1.354
DJ-3523	555	0.007	568.6	1.354
DJ-8028	555	0.06	568.6	1.354
DJ-8282	555	0.216	568.6	1.355
DJ-1777	555	0.087	568.6	1.355
DJ-9406	555	0.093	568.6	1.355
DJ-1761	555	0.054	568.6	1.355
DJ-8029	555	0.058	568.6	1.356
DJ-1762	555	0.011	568.6	1.356
DJ-1778	555	0.044	568.6	1.356
DJ-9407	555	0.135	568.6	1.356
J-966	555.1	0.016	568.7	1.356
DJ-741	555	0.253	568.6	1.357
DJ-1193	555	0.084	568.6	1.358
DJ-845	555	0.066	568.6	1.358
J-967	555	0.081	568.6	1.358
DJ-1207	555	0.06	568.6	1.358
DJ-3674	555	0.014	568.6	1.358
DJ-6484	555	0.107	568.6	1.359
DJ-1194	555	0.048	568.6	1.359
J-799	555	0.043	568.6	1.36
J-798	555	0.064	568.6	1.36
J-797	555	0.135	568.6	1.36
J-795	555	0.065	568.6	1.36
J-796	555	0.037	568.6	1.36
DJ-10180	555	0.049	568.6	1.361
DJ-10181	555	0.005	568.6	1.361
DJ-8756	555	0.317	568.6	1.361
DJ-928	555	0.055	568.6	1.361
J-794	555	0.072	568.6	1.361
DJ-929	555	0.015	568.6	1.361
J-971	555.2	0.02	568.8	1.361
DJ-713	555	0.18	568.7	1.362
DJ-930	555	0.051	568.7	1.362
DJ-931	555	0.028	568.7	1.363
DJ-896	555	0.003	568.7	1.363
DJ-2330	555	0.054	568.7	1.363
DJ-495	555	0.057	568.7	1.363
DJ-5248	555	0.099	568.7	1.364
DJ-6485	555	0.022	568.7	1.364
DJ-5229	555	0.035	568.7	1.364
DJ-9710	555	0.1	568.7	1.364
DJ-5249	555	0.148	568.7	1.364
DJ-5733	555	0.036	568.7	1.364
DJ-1465	555	0.027	568.7	1.364
DJ-5092	555	0.107	568.7	1.364
DJ-5349	555	0.094	568.7	1.364
DJ-3283	555	0.058	568.7	1.365
DJ-3010	555	0.013	568.7	1.365
DJ-2494	555	0.01	568.7	1.365
J-793	555	0.021	568.7	1.365
J-949	555	0.059	568.7	1.366
DJ-908	555	0.123	568.7	1.366
DJ-8283	555	0.114	568.7	1.367
DJ-5608	555	0.011	568.7	1.368
DJ-708	555	0.165	568.7	1.368
DJ-6904	555	0.033	568.7	1.368
DJ-1869	555	0.015	568.7	1.369

DJ-8339	555	0.049	568.7	1.369
DJ-5607	555	0.084	568.7	1.369
DJ-8338	555	0.029	568.7	1.369
DJ-6383	555	0.061	568.7	1.369
DJ-6382	555	0.012	568.7	1.369
DJ-8083	555	0.012	568.7	1.37
DJ-8082	555	0.007	568.7	1.37
DJ-1938	555	0.009	568.7	1.37
DJ-8086	555	0.52	568.7	1.37
J-792	555	0.08	568.7	1.37
DJ-8555	555	0.212	568.7	1.371
DJ-720	555	0.028	568.8	1.372
DJ-714	555	0.032	568.8	1.372
DJ-8087	555	0.168	568.8	1.373
J-806	555.1	0.043	568.9	1.373
DJ-2972	555	0.054	568.8	1.374
DJ-1472	555	0.089	568.8	1.374
DJ-5817	555	0.023	568.8	1.375
DJ-1367	555	0.043	568.8	1.375
DJ-9970	555	0.025	568.8	1.375
DJ-9971	555	0.002	568.8	1.375
DJ-1473	555	0.218	568.8	1.375
DJ-1466	555	0.153	568.8	1.375
DJ-1552	555	0.018	568.8	1.376
J-968	555	0.009	568.8	1.376
DJ-1363	555	0.04	568.8	1.376
DJ-742	555	0.049	568.8	1.376
DJ-9176	555	0.058	568.8	1.377
DJ-2514	555	0.04	568.8	1.377
DJ-5581	555	0.062	568.8	1.378
DJ-5582	555	0.093	568.8	1.378
DJ-843	555	0.024	568.8	1.378
J-802	555	0.033	568.8	1.379
DJ-746	555	0.205	568.8	1.379
DJ-1366	555	0.031	568.8	1.379
DJ-2544	555	0.041	568.8	1.379
DJ-1364	555	0.041	568.8	1.379
DJ-8187	555	0.324	568.8	1.38
DJ-1121	555	0.009	568.8	1.381
DJ-8757	555	0.078	568.8	1.381
DJ-4266	555	0	568.8	1.381
J-807	555	0.01	568.8	1.381
DJ-4655	555	0.018	568.8	1.381
DJ-747	555	0.135	568.8	1.382
DJ-9197	555	0.008	568.9	1.382
DJ-1209	555	0.022	568.9	1.383
DJ-1213	555	0.019	568.9	1.383
DJ-734	555	0.204	568.9	1.383
DJ-9196	555	0.016	568.9	1.383
DJ-3673	555	0.012	568.9	1.384
DJ-5644	555	0.029	568.9	1.384
DJ-1447	555	0.004	568.9	1.384
DJ-2935	555	0.015	568.9	1.384
DJ-814	555	0.023	568.9	1.384
DJ-9177	555	0.034	568.9	1.384
DJ-8556	555	0.038	568.9	1.385
DJ-3784	555	0.085	568.9	1.385
DJ-2934	555	0.072	568.9	1.386
DJ-5966	555	0.069	568.9	1.386

DJ-6442	555	0.1	568.9	1.386
DJ-8995	555	0.012	568.9	1.386
DJ-8994	555	0.034	568.9	1.386
DJ-9699	555	0.308	568.9	1.386
DJ-9913	555	0.153	568.9	1.386
DJ-735	555	0.086	568.9	1.386
DJ-9912	555	0.003	568.9	1.386
DJ-9399	555	0.034	568.9	1.386
J-146	555	0.033	568.9	1.387
DJ-9398	555	0.003	568.9	1.387
DJ-3365	555	0.783	568.9	1.388
DJ-5230	555	0.025	568.9	1.388
DJ-1446	555	0.027	568.9	1.388
DJ-494	555	0.067	568.9	1.388
DJ-1870	555	0.028	568.9	1.389
DJ-9934	555	0.072	568.9	1.389
DJ-4063	555	0.023	568.9	1.389
DJ-9935	555	0.144	568.9	1.389
DJ-9009	555	0.127	568.9	1.39
DJ-6059	555	0.085	568.9	1.391
DJ-4856	555	0.012	568.9	1.391
DJ-641	555	0.269	569	1.392
DJ-1141	555	0.286	569	1.392
DJ-691	555	0.133	569	1.394
DJ-4064	555	0.045	569	1.395
DJ-6258	555	0.125	569	1.396
DJ-4721	555	0.017	569	1.397
DJ-692	555	0.01	569	1.397
DJ-709	555	0.056	569	1.398
DJ-6939	555	0.025	569	1.401
DJ-6940	555	0.015	569	1.401
DJ-7572	555	0.022	569	1.402
DJ-4650	555	0.195	569.1	1.406
DJ-8188	555	0.084	569.1	1.406
DJ-207	555	0.008	569.1	1.406
DJ-7571	555	0.013	569.1	1.407
J-746	555	0.009	569.1	1.407
DJ-9251	555	0.023	569.1	1.407
DJ-5063	555	0.037	569.1	1.407
DJ-8310	555	0.041	569.1	1.407
DJ-5062	555	0.012	569.1	1.407
DJ-9572	555	0.02	569.1	1.409
DJ-9571	555	0.022	569.1	1.409
DJ-4651	555	0.011	569.1	1.41
DJ-6661	555	0.001	569.1	1.41
DJ-909	555	0.018	569.1	1.411
DJ-936	555	0.093	569.1	1.411
DJ-937	555	0.001	569.2	1.413
DJ-9067	555	0.093	569.2	1.413
J-625	555	0.01	569.2	1.415
DJ-3785	555	0.008	569.2	1.415
DJ-9252	555	0.013	569.2	1.415
DJ-6259	555	0.041	569.2	1.415
DJ-9068	555	0.038	569.2	1.415
DJ-4716	555	0.011	569.2	1.415
DJ-6215	555	0.072	569.2	1.421
PNJ-9	555	0.058	569.3	1.425
DJ-4722	555	0.015	569.3	1.425
DJ-1532	555	0.035	569.3	1.425

DJ-10269	555	0.004	569.3	1.426
DJ-9975	555	0.072	569.3	1.426
DJ-10268	555	0.02	569.3	1.426
DJ-4857	555	0	569.3	1.426
DJ-6214	555	0.001	569.3	1.427
DJ-9974	555	0.003	569.3	1.427
DJ-10332	555	0.004	569.3	1.428
DJ-10333	555	0.05	569.3	1.428
J-745	555	0.071	569.4	1.434
DJ-3352	555	0.014	569.5	1.446
J-743	555	0.009	569.5	1.446
J-624	555	0.019	569.5	1.446
J-744	555	0.034	569.5	1.447
J-351	555	0.069	569.9	1.485
DJ-5965	555	0.046	570.2	1.512

13. Zone D13

Table D13(a): Pipe results

Label	Start Node	Stop Node	Material	Hazen-Williams C	Diameter (mm)	Length (m)	Flow (ML/day)	Velocity (m/s)
DP-4357	DJ-3494	DJ-2346	CI	100	100	7	1.226	1.807
P-1871	J-630	DJ-2643	HDPE	145	203.1	227	4.808	1.718
P-1869	J-629	J-630	HDPE	145	284.5	347	9.31	1.695
DP-9428	DJ-4739	DJ-5420	CI	100	150	34	2.521	1.651
DP-9429	DJ-5420	DJ-3904	CI	100	150	36	2.395	1.568
P-2644	J-632	J-983	HDPE	145	144.4	28	2.021	1.428
DP-4023	DJ-1350	DJ-1751	CI	100	250	4	5.948	1.403
P-1873	J-631	DJ-1751	CI	100	250	217	5.783	1.364
DP-2384	DJ-6895	DJ-6894	CI	100	100	76	0.911	1.343
P-2645	J-983	DJ-3494	HDPE	145	144.4	199	1.877	1.326
P-662	251	J-575	DI	140	400	33	14.08	1.296
DP-7237	DJ-3904	DJ-3701	CI	100	150	35	1.868	1.224
P-2638	J-977	J-631	CI	100	250	175	5.169	1.219
DP-6233	DJ-2684	DJ-2683	CI	100	100	269	0.791	1.166
P-2637	DJ-1162	J-977	CI	100	250	6	4.876	1.15
P-1866	J-575	J-629	DI	140	400	1,073	12.03	1.108
DP-5650	DJ-2644	DJ-2643	CI	100	250	216	4.685	1.105
P-1879	DJ-3546	DJ-1987	HDPE	145	99.3	257	0.732	1.093
DP-2154	DJ-9819	DJ-9916	CI	100	250	14	4.605	1.086
DP-4022	DJ-9916	DJ-1350	CI	100	250	332	4.594	1.083
P-2648	J-985	DJ-1162	CI	100	250	129	4.579	1.08
P-2650	DJ-2644	J-987	CI	100	250	202	4.492	1.059
P-2647	J-632	J-985	CI	100	250	110	4.42	1.042
DP-4962	DJ-3161	DJ-3160	CI	100	100	170	0.695	1.024
P-2651	J-987	DJ-2264	CI	100	250	34	4.234	0.998
P-1875	DJ-2264	DJ-2347	HDPE	145	252.9	20	4.219	0.972
DP-7239	DJ-3701	DJ-1349	CI	100	150	48	1.432	0.938
P-2221	DJ-1267	J-748	CI	100	250	71	3.969	0.936
DP-4517	DJ-3494	DJ-3493	CI	100	100	151	0.634	0.935
DP-3541	DJ-9850	DJ-3547	CI	100	250	37	3.947	0.931
DP-7155	DJ-3547	DJ-6895	CI	100	250	7	3.923	0.925
DP-3538	DJ-1267	DJ-9850	CI	100	250	290	3.697	0.872
P-1870	J-630	DJ-1350	HDPE	145	284.5	7	4.451	0.81
DP-7848	DJ-2347	DJ-4077	CI	100	100	191	0.545	0.803
P-1882	DJ-4303	J-634	CI	100	150	3	1.22	0.799

P-2219	DJ-5545	J-747	CI	100	200	360	2.062	0.76
P-1889	J-634	J-635	HDPE	145	99.3	213	0.493	0.737
DP-6969	DJ-3904	DJ-8675	CI	100	100	104	0.487	0.718
DP-8506	J-575	DJ-10285	MS	140	200	489	1.94	0.715
DP-8507	DJ-10285	DJ-9819	MS	140	200	592	1.933	0.712
DP-4554	DJ-5987	DJ-4303	CI	100	150	3	1.083	0.71
DP-8911	DJ-6895	DJ-8078	CI	100	250	60	2.997	0.707
P-2636	J-975	J-976	HDPE	145	99.3	160	0.458	0.684
P-1880	DJ-8078	J-633	CI	100	250	51	2.858	0.674
DP-3118	DJ-6123	DJ-6122	CI	100	150	98	1.015	0.665
DP-6096	DJ-2032	DJ-2031	CI	100	100	256	0.446	0.658
DP-3556	DJ-5986	DJ-5545	CI	100	100	114	0.445	0.656
P-1885	DJ-5987	J-635	CI	100	150	213	0.985	0.645
P-1884	J-633	J-634	HDPE	145	203.1	233	1.634	0.584
DP-8367	DJ-9849	DJ-5545	CI	100	200	4	1.57	0.578
P-1876	DJ-2347	J-632	CI	100	250	4	2.393	0.564
P-2224	DJ-2347	J-748	DI	140	400	26	6.065	0.559
DP-7342	DJ-1349	DJ-2032	CI	100	200	36	1.431	0.527
P-2223	J-748	J-747	HDPE	145	252.9	17	2.08	0.479
DP-6226	DJ-1988	DJ-1987	CI	100	50	268	0.081	0.478
DP-6971	DJ-8675	DJ-8892	CI	100	100	30	0.313	0.461
DP-5004	DJ-4077	DJ-4076	CI	100	100	173	0.303	0.446
P-2634	DJ-5859	J-975	CI	100	100	57	0.303	0.446
P-1886	J-635	DJ-5859	CI	100	150	8	0.662	0.433
DP-4330	DJ-3701	DJ-3700	CI	100	100	143	0.282	0.415
DP-8872	DJ-620	DJ-2684	CI	100	250	3	1.661	0.392
DP-8366	DJ-6122	DJ-9849	CI	100	200	56	1.039	0.383
DP-7761	DJ-6123	DJ-5987	CI	100	150	224	0.566	0.37
P-2639	J-977	J-978	HDPE	145	99.3	27	0.243	0.363
P-1888	J-635	DJ-5858	HDPE	145	99.3	107	0.232	0.347
DP-8303	DJ-8892	DJ-9095	CI	100	100	28	0.233	0.343
DP-7343	DJ-2032	DJ-3161	CI	100	200	42	0.92	0.339
P-2635	J-975	DJ-5858	CI	100	100	47	0.226	0.333
DP-347	DJ-9850	DJ-9849	CI	100	150	15	0.507	0.332
DP-2460	DJ-620	DJ-6123	CI	100	150	13	0.443	0.29
P-1881	J-633	DJ-620	CI	100	250	4	1.219	0.287
P-2652	J-987	J-988	HDPE	145	99.3	115	0.186	0.278
P-2640	J-978	J-979	HDPE	145	99.3	9	0.174	0.259
P-1867	J-629	DJ-9819	DI	140	400	3	2.69	0.248
DP-862	DJ-9095	DJ-9094	CI	100	100	36	0.168	0.247
DP-3288	DJ-5859	DJ-5858	CI	100	100	104	0.154	0.227
DP-4109	DJ-4739	DJ-4738	CI	100	100	134	0.152	0.224
DP-1185	DJ-8675	DJ-8674	CI	100	100	43	0.141	0.207

P-1874	DJ-2643	J-631	HDPE	145	203.1	5	0.58	0.207
DP-8873	DJ-2684	DJ-1988	CI	100	250	15	0.867	0.204
DP-2491	DJ-9094	DJ-6736	CI	100	100	79	0.131	0.193
DP-5423	DJ-4303	DJ-4302	CI	100	100	200	0.129	0.191
DP-6423	DJ-1988	DJ-3546	CI	100	250	10	0.779	0.184
DP-1612	DJ-8078	DJ-8077	CI	100	100	55	0.118	0.174
DP-628	DJ-4738	DJ-6488	CI	100	100	40	0.112	0.165
DP-8147	DJ-3057	DJ-5986	CI	100	150	48	0.235	0.154
DP-2062	DJ-8674	DJ-7420	CI	100	100	67	0.098	0.145
P-2646	J-983	J-984	HDPE	145	99.3	78	0.09	0.135
P-2641	J-979	J-980	HDPE	145	99.3	152	0.09	0.135
DP-1018	DJ-8892	DJ-8891	CI	100	100	39	0.071	0.104
P-2653	J-985	J-989	HDPE	145	99.3	11	0.061	0.091
DP-8304	DJ-9095	DJ-3903	CI	100	100	20	0.058	0.085
DP-2241	DJ-8891	DJ-7100	CI	100	100	73	0.055	0.081
P-2642	J-978	J-981	HDPE	145	99.3	95	0.053	0.079
P-1883	J-634	DJ-3057	CI	100	150	45	0.113	0.074
DP-4854	DJ-3057	DJ-3056	CI	100	100	167	0.046	0.067
P-779	DJ-2644	DJ-1162	HDPE	145	252.9	25	0.286	0.066
DP-7849	DJ-4077	DJ-3494	CI	100	100	33	0.038	0.056
P-2655	J-989	J-990	HDPE	145	99.3	28	0.033	0.049
DP-3609	DJ-5420	DJ-5419	CI	100	100	115	0.032	0.047
P-2643	J-979	J-982	HDPE	145	99.3	99	0.028	0.042
P-2654	J-989	J-986	HDPE	145	99.3	23	0.02	0.03
DP-626	DJ-6489	DJ-4738	CI	100	100	44	0.014	0.02

Table D13(b): Junction results

Label	Elevation (m)	Demand (ML/day)	Hydraulic Grade (m)	Pressure (kg/cm ²)
DJ-3160	570.8	0.695	577.1	0.627
DJ-2031	571.8	0.446	578.3	0.653
DJ-9094	571.7	0.037	580.5	0.881
DJ-3903	571.7	0.058	580.6	0.886
DJ-9095	571.7	0.007	580.6	0.886
DJ-8891	571.7	0.016	580.7	0.893
DJ-8892	571.7	0.01	580.7	0.894
DJ-8674	571.3	0.042	580.8	0.947
DJ-8675	571.3	0.033	580.8	0.952
DJ-6736	570.9	0.131	580.5	0.954
DJ-7100	570.9	0.055	580.6	0.972
DJ-1349	570.8	0.002	580.8	0.996
DJ-5419	572.7	0.032	582.9	1.022

DJ-7420	570.5	0.098	580.7	1.024
DJ-3161	570.3	0.225	580.6	1.027
DJ-2032	570.3	0.065	580.7	1.033
DJ-3701	570.9	0.154	581.3	1.041
DJ-3700	570.2	0.282	580.7	1.056
DJ-3904	570.9	0.039	581.9	1.104
DJ-6488	572.7	0.112	583.8	1.107
DJ-4738	572.7	0.027	583.8	1.113
DJ-5420	571.6	0.095	582.9	1.128
DJ-6489	571.7	0.014	583.8	1.21
DJ-4739	571.6	0.33	584	1.234
DJ-2683	562.3	0.791	575.6	1.325
DJ-3493	566.6	0.634	580.1	1.347
DJ-4076	568.2	0.303	582	1.378
J-976	565.2	0.458	580	1.474
DJ-3494	567.5	0.054	582.8	1.525
DJ-6894	564.9	0.911	580.4	1.547
J-979	571.3	0.055	587.1	1.575
DJ-2644	571.3	0.479	587.1	1.575
DJ-1162	571.3	0.011	587.1	1.575
J-977	571.3	0.05	587.2	1.578
J-978	571.3	0.016	587.1	1.581
J-984	568.8	0.09	584.9	1.608
DJ-2346	566.1	1.226	582.4	1.621
J-990	569.8	0.033	586.1	1.621
J-975	564.3	0.071	580.8	1.645
J-985	569.6	0.099	586.1	1.646
DJ-5858	564.4	0.16	580.9	1.649
J-989	569.5	0.008	586.1	1.652
DJ-4077	566.2	0.204	582.8	1.657
J-980	570.4	0.09	587.1	1.663
J-631	572.2	0.034	588.9	1.664
DJ-2643	572.2	0.703	588.9	1.665
J-986	569.4	0.02	586.1	1.665
DJ-5986	565.5	0.21	582.3	1.678
J-982	570.3	0.028	587.1	1.679
DJ-5859	564.2	0.205	581	1.679
J-635	564.2	0.584	581.1	1.68
J-981	570.2	0.053	587.1	1.683
DJ-1751	574.6	0.165	591.5	1.685
DJ-1350	574.6	0.092	591.5	1.687
J-630	574.6	0.051	591.5	1.688

J-983	567.9	0.054	584.9	1.699
J-987	568.5	0.071	585.6	1.7
J-629	577.2	0.031	594.3	1.705
DJ-9819	577.1	0.017	594.3	1.709
J-632	568.1	0.006	585.3	1.712
DJ-9916	577	0.012	594.2	1.715
DJ-2347	568.1	0.003	585.3	1.716
DJ-3056	565	0.046	582.3	1.72
DJ-2264	568.1	0.015	585.3	1.722
DJ-5987	564.9	0.664	582.2	1.726
DJ-4303	564.9	0.007	582.3	1.728
DJ-3057	565	0.076	582.3	1.728
J-634	564.9	0.034	582.3	1.731
J-747	567.8	0.018	585.2	1.739
DJ-4302	564.6	0.129	582.1	1.74
J-748	567.7	0.016	585.3	1.753
J-575	579.1	0.106	597	1.786
DJ-8078	564.9	0.02	582.8	1.787
DJ-1987	561.6	0.813	579.6	1.793
DJ-9850	565.3	0.257	583.3	1.794
DJ-6895	565	0.015	583	1.797
DJ-9849	565.3	0.023	583.3	1.797
J-633	564.6	0.006	582.7	1.797
DJ-1988	564.6	0.006	582.6	1.798
DJ-5545	565.3	0.047	583.3	1.798
DJ-2684	564.6	0.003	582.6	1.798
DJ-620	564.6	0.001	582.7	1.799
DJ-6123	564.6	0.006	582.7	1.8
DJ-3547	565	0.024	583.1	1.801
DJ-8077	564.6	0.118	582.8	1.811
DJ-1267	566.6	0.272	584.8	1.816
DJ-6122	565	0.024	583.2	1.817
DJ-3546	564.2	0.048	582.6	1.835
J-988	566.4	0.186	585.5	1.901
DJ-10285	576.6	0.007	595.8	1.911