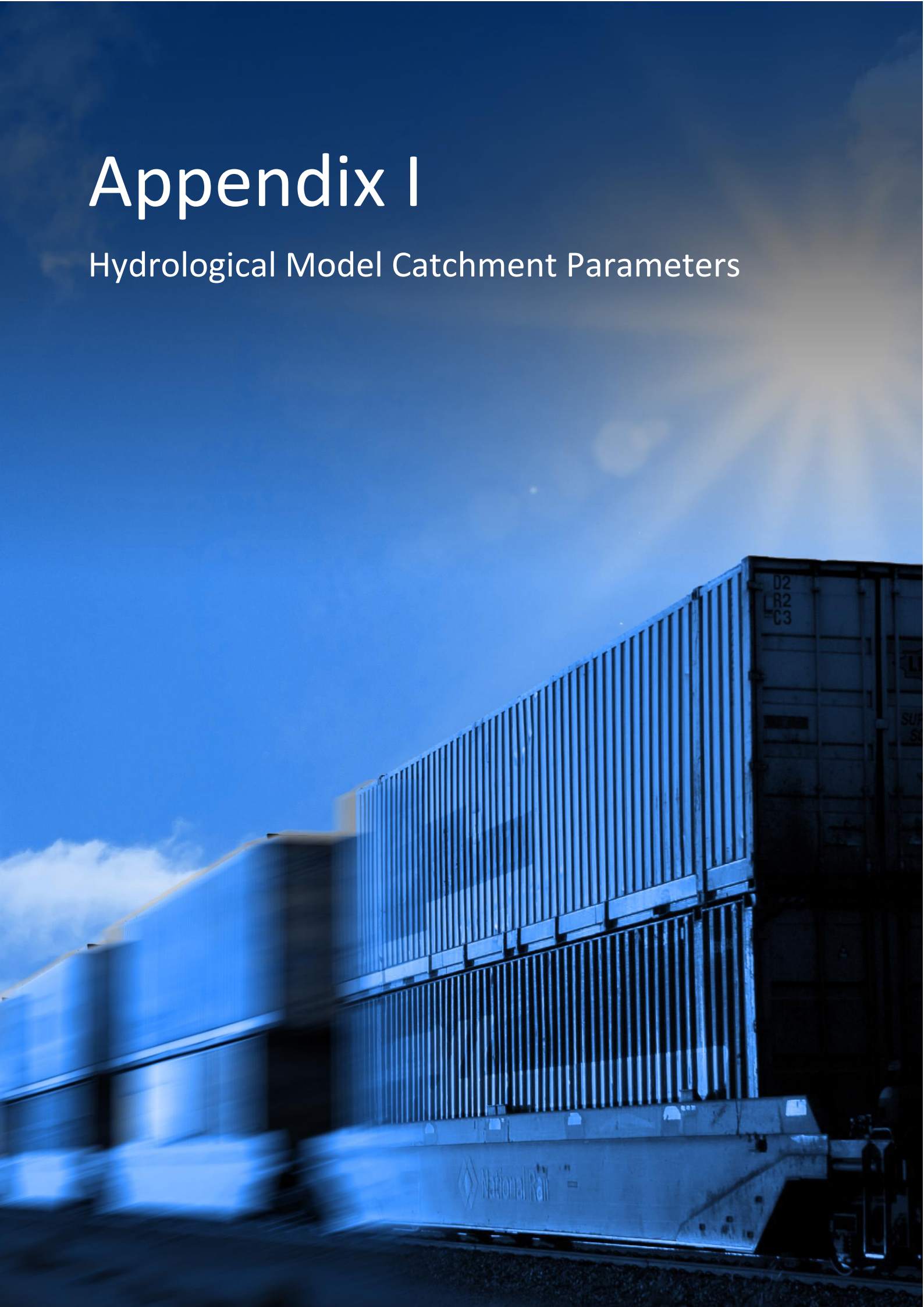
Appendix I

Hydrological Model Catchment Parameters



INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - LAC01

Date 14-09-18

Output by May-Wen Yeoh

Description Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design. LAC01
In particular:

Catchment Areas
Equal Area Slopes % (catchments)
Bed Slopes % (overflow routes)

SUB-CATCHMENT DETAILS

Name	Pit or Node	Total Area	Impervious Area	Avg Slope(%)	Mannings n	Time lag (mins)	Rainfall Multiplier	Hydrological Model	
C47	N9	99.989	0	1.0233	0.05	0		RAFTS Lachlan	
C10	N38	55.527	0	2.1871	0.05	0		RAFTS Lachlan	
C139a	N77	75.339	0	1.5284	0.05	0		RAFTS Lachlan	
C27	N89	189.25	0	1.1629	0.05	0		RAFTS Lachlan	
C69	N90	49.56	0	0.9437	0.05	0		RAFTS Lachlan	
C71	N94	80.321	0	1.0189	0.05	0		RAFTS Lachlan	
C42	N95	65.06	0	1.1215	0.05	0		RAFTS Lachlan	
C44	N96	91.919	0	0.662	0.05	0		RAFTS Lachlan	
C112	N103	68.902	0	0.5513	0.05	0		RAFTS Lachlan	
C111	N105	98.095	0	0.9605	0.05	0		RAFTS Lachlan	
C106	N109	127.187	0	0.1962	0.05	0		RAFTS Lachlan	
C29	N113	144.123	0	0.6051	0.05	0		RAFTS Lachlan	
C67	N114	135.844	0	0.8994	0.05	0		RAFTS Lachlan	
C127	N115	826.837	0	0.3365	0.05	0		RAFTS Lachlan	
C92	N116	407.747	0	0.8142	0.05	0		RAFTS Lachlan	
C45	N118	54.76	0	1.0737	0.05	0		RAFTS Lachlan	
C73	N123	349.124	0	1.1391	0.05	0		RAFTS Lachlan	
C66	N124	187.412	0	1.1573	0.05	0		RAFTS Lachlan	
C18	N125	126.955	0	0.6785	0.05	0		RAFTS Lachlan	
C81	N127	130.579	0	0.7517	0.05	0		RAFTS Lachlan	
C114	N134	59.856	0	0.7594	0.05	0		RAFTS Lachlan	
C46	N136	21.535	0	0.3673	0.05	0		RAFTS Lachlan	
C59a	N138	163.26	0	1.0027	0.05	0		RAFTS Lachlan	
C89	N140	64.439	0	3.0519	0.05	0		RAFTS Lachlan	
C31	N143	123.884	0	0.9734	0.05	0		RAFTS Lachlan	
C32	N144	89.555	0	1.0754	0.05	0		RAFTS Lachlan	
C86	N145	267.477	0	1.1272	0.05	0		RAFTS Lachlan	
C35	N147	163.146	0	1.2036	0.05	0		RAFTS Lachlan	
C72a	N149	12.626	0	2.8344	0.05	0		RAFTS Lachlan	
C109	N154	112.22	0	1.9426	0.05	0		RAFTS Lachlan	
C51	N155	63.687	0	2.6307	0.05	0		RAFTS Lachlan	
C5	N162	626.447	0	1.191	0.05	0		RAFTS Lachlan	
C4	N163	266.073	0	1.2615	0.05	0		RAFTS Lachlan	
C12	N164	227.864	0	1.6865	0.05	0		RAFTS Lachlan	
C120	N165	68.626	0	1.5896	0.05	0		RAFTS Lachlan	
C7	N166	115.707	0	1.4487	0.05	0		RAFTS Lachlan	
C13	N169	84.567	0	2.498	0.05	0		RAFTS Lachlan	
C91	N170	1067.5	0	0.7774	0.05	0		RAFTS Lachlan	
C129	N171	379.359	0	1.0318	0.05	0		RAFTS Lachlan	
C15	N172	144.666	0	1.3008	0.05	0		RAFTS Lachlan	
C77	N174	51.406	0	1.1375	0.05	0		RAFTS Lachlan	
C88	N178	71.459	0	3.1511	0.05	0		RAFTS Lachlan	
C24	N179	6.904	0	3.1214	0.05	0		RAFTS Lachlan	
C90	N180	418.789	0	1.2463	0.05	0		RAFTS Lachlan	
C52	N182	24.638	0	7.8139	0.05	0		RAFTS Lachlan	
C3	N183	83.82	0	2.0283	0.05	0		RAFTS Lachlan	
C62	N184	70.726	10	1.9556	0.05	0		RAFTS Lachlan	
C87	N186	15.948	0	2.2975	0.05	0		RAFTS Lachlan	
C95	N188	209.329	0	1.0418	0.05	0		RAFTS Lachlan	
C58a	N190	176.64	0	1.0658	0.05	0		RAFTS Lachlan	
C63	N191	302.989	0	0.8141	0.05	0		RAFTS Lachlan	
C61	N192	75.769	0	0.5808	0.05	0		RAFTS Lachlan	
C121	N193	9.569	0	2.2042	0.05	0		RAFTS Lachlan	
C123	N195	24.015	0	1.7679	0.05	0		RAFTS Lachlan	
C108	N197	247	0	0.8396	0.05	0		RAFTS Lachlan	
C134	N199	60.955	0	0.7659	0.05	0		RAFTS Lachlan	
C76	N200	34.286	0	1.2043	0.05	0		RAFTS Lachlan	
C136	N210	116.82	20	2.0073	0.05	0		RAFTS Lachlan	
C36	N212	44.953	0	0.4249	0.05	0		RAFTS Lachlan	
C130	N213	73.694	0	3.0823	0.05	0		RAFTS Lachlan	
C60a	N214	83.79	0	2.956	0.05	0		RAFTS Lachlan	
C64b	N633365	1.6216	0	0.4157	0.05	0		RAFTS Lachlan	
C64a	N633366	20.861	0	0.5371	0.05	0		RAFTS Lachlan	
C64c	N633367	18.776	0	1.1678	0.05	0		RAFTS Lachlan	
C58b	N633368	3.28	0	5.1278	0.05	0		RAFTS Lachlan	
C59c	N633369	1.16	0	5.8581	0.05	0		RAFTS Lachlan	
C59b	N633370	3.49	0	4.2237	0.025	0		RAFTS Lachlan	
C60b	N633375	51.66	0	2.6256	0.05	0		RAFTS Lachlan	
C128b	N633377	13.463	0	1.0616	0.05	0		RAFTS Lachlan	
C72b	N633378	1.9246	0	6.0243	0.05	0		RAFTS Lachlan	
C68	N70	108.778	0	0.864	0.05	0		RAFTS Lachlan	
C99	N81	38.171	0	0.6531	0.05	0		RAFTS Lachlan	
C2	N8	356.365	0	0.1889	0.05	0		RAFTS Lachlan	
C102	N111	209.531	0	0.4152	0.05	0		RAFTS Lachlan	
C80	N139	192.72	0	1.091	0.05	0		RAFTS Lachlan	
C75	N18	40.537	0	1.0853	0.05	0		RAFTS Lachlan	
C38	N133	15.616	0	0.6509	0.05	0		RAFTS Lachlan	
C49	N160	212.077	0	1.7216	0.05	0		RAFTS Lachlan	
C23	N158	50.27	0	1.6819	0.05	0		RAFTS Lachlan	
C55	N119	65.277	0	1.1186	0.05	0		RAFTS Lachlan	
C110	N39	53.441	0	0.8727	0.05	0		RAFTS Lachlan	
C16	N68	185.385	0	0.7342	0.05	0		RAFTS Lachlan	
C25	N64	218.219	0	0.7058	0.05	0		RAFTS Lachlan	
C125	N175	238.109	0	0.5174	0.05	0		RAFTS Lachlan	
C79	N159	66.474	0	1.802	0.05	0		RAFTS Lachlan	
C26	N29	27.968	0	2.5553	0.05	0		RAFTS Lachlan	
C8	N181	158.144	0	1.0832	0.05	0		RAFTS Lachlan	
C14	N53	205.667	0	1.094	0.05	0		RAFTS Lachlan	
C137	N56	100.916	0	0.5283	0.05	0		RAFTS Lachlan	
C50	N156	96.567	0	2.1146	0.05	0		RAFTS Lachlan	
C56	N23	32.489	0	1.7873	0.05	0		RAFTS Lachlan	
C122	N198	72.736	0	1.5224	0.05	0		RAFTS Lachlan	
C100	N157	0.696	0	2.3792	0.05	0		RAFTS Lachlan	
C48	N27	207.033	0	0.964	0.05	0		RAFTS Lachlan	
C39	N132	16.548	0	0.4696	0.05	0		RAFTS Lachlan	
C118	N17	40.661	0	0.7445	0.05	0		RAFTS Lachlan	
C117	N21	143.454	0	0.6763	0.05	0		RAFTS Lachlan	
C20	N152	489.893	2	1.1109	0.05	0		RAFTS Lachlan	

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - LAC01

Date 14-09-18

Output by May-Wen Yeoh

Description Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design. LAC01

C128a	N10	188.86	0	1.4588	0.05	0		RAFTS Lachlan	
C43	N11	30.882	0	0.6575	0.05	0		RAFTS Lachlan	
C41	N128	157.328	10	0.9648	0.05	0		RAFTS Lachlan	
C19	N187	103.844	0	0.9219	0.05	0		RAFTS Lachlan	
C22	N2	0.696	0	0.3376	0.05	0		RAFTS Lachlan	
C93	N189	295.955	0	0.9775	0.05	0		RAFTS Lachlan	
C94	N75	99.729	0	1.1983	0.05	0		RAFTS Lachlan	
C28	N74	87.96	0	0.7956	0.05	0		RAFTS Lachlan	
C70	N72	136.3	0	0.7275	0.05	0		RAFTS Lachlan	
C82	N93	110.82	0	0.5162	0.05	0		RAFTS Lachlan	
C83	N66	81.731	0	0.6106	0.05	0		RAFTS Lachlan	
C84	N62	114.807	0	0.7053	0.05	0		RAFTS Lachlan	
C57	N60	0.035	0	0.1358	0.05	0		RAFTS Lachlan	
C1	N58	165.66	0	0.3788	0.05	0		RAFTS Lachlan	
C65	N101	416.016	0	0.1702	0.05	0		RAFTS Lachlan	
C6	N102	378.568	0	0.7004	0.05	0		RAFTS Lachlan	
C97	N117	158.641	0	0.3203	0.05	0		RAFTS Lachlan	
C98	N100	17.514	0	0.2409	0.05	0		RAFTS Lachlan	
C74	N194	87.732	0	1.0472	0.05	0		RAFTS Lachlan	
C37	N45	0.048	0	0.9516	0.05	0		RAFTS Lachlan	
C9	N47	102.901	0	0.7732	0.05	0		RAFTS Lachlan	
C101	N51	2.78	0	0.7614	0.05	0		RAFTS Lachlan	
C54	N131	47.1	0	0.9805	0.05	0		RAFTS Lachlan	
C85	N15	21.217	0	0.6721	0.05	0		RAFTS Lachlan	
C133	N211	228.552	10	1.1941	0.05	0		RAFTS Lachlan	
C78	N148	161.046	1	1.0167	0.05	0		RAFTS Lachlan	
C53	N126	137.915	0	0.5386	0.05	0		RAFTS Lachlan	
C40	N6	10.261	0	0.6709	0.05	0		RAFTS Lachlan	
C21	N4	88.017	0	0.8708	0.05	0		RAFTS Lachlan	
C132	N85	63.776	0	0.7524	0.05	0		RAFTS Lachlan	
C131	N121	296.29	0	0.5554	0.05	0		RAFTS Lachlan	
C107	N87	175.573	0	0.4565	0.05	0		RAFTS Lachlan	
C138	N129	47.674	0	1.4585	0.05	0		RAFTS Lachlan	
C17	N130	52.975	0	0.9121	0.05	0		RAFTS Lachlan	
C126	N206	230.828	0	0.4507	0.05	0		RAFTS Lachlan	
C139b	N76	57.654	0	1.666	0.05	0		RAFTS Lachlan	
C96	N120	212.735	0	0.802	0.05	0		RAFTS Lachlan	
C113	N37	108.782	0	0.7089	0.05	0		RAFTS Lachlan	
C135	N135	78.63	0	0.6058	0.05	0		RAFTS Lachlan	
C11	N49	80.83	0	0.4552	0.05	0		RAFTS Lachlan	
C119	N43	378.173	0	0.3929	0.05	0		RAFTS Lachlan	
C160	N42	69.571	0	0.3392	0.05	0		RAFTS Lachlan	
C30	N33	0.111	0	0.6279	0.05	0		RAFTS Lachlan	
C33	N31	20.592	0	0.2127	0.05	0		RAFTS Lachlan	
C34	N25	84.206	0	0.3755	0.05	0		RAFTS Lachlan	
C116	N107	312.947	0	0.7081	0.05	0		RAFTS Lachlan	
C115	N108	289.797	0	0.5731	0.05	0		RAFTS Lachlan	
C124	N202	363.044	0	0.278	0.05	0		RAFTS Lachlan	
C103	N203	129.136	0	0.7097	0.05	0		RAFTS Lachlan	
C104	N204	26.408	0	0.8574	0.05	0		RAFTS Lachlan	
C105	N207	198.004	0	0.9825	0.05	0		RAFTS Lachlan	

OVERFLOW ROUTE DETAILS

Name	From	To	Travel Time (min)	Spill Level (m)	Crest Length (m)	Weir Coeff. C	Cross Section	Safe Depth Major Storms (m)	SafeDepth Minor Storms (m)	Safe DxV (sq.m/sec)	Bed Slope (%)	D/S Area Contributing %		id			
OF606484	N633365	N633366	31.3				Lachlan Floodpla	0.3	0.3	0.6	0.241	0		1859692			578.667
OF606487	N633366	N633367	5.9				Lachlan Floodpla	0.3	0.3	0.6	0.02	0		1859698			31.245
OF606490	N633367	N73	14.4				Lachlan Floodpla	0.3	0.3	0.6	1.171	0		1859701			589.054
OF606500	N633368	N72	31.3				Lachlan Floodpla	0.3	0.3	0.6	1.537	0		1859726			1463.93
OF606502	N633369	N90	34				Lachlan Floodpla	0.3	0.3	0.6	1.509	0		1859728			1571.78
OF606505	N633370	N90	37.9				Lachlan Floodpla	0.3	0.3	0.6	1.376	0		1859731			1673.15
OF606508	N633375	N135	47.3				Lachlan Floodpla	0.3	0.3	0.6	0.984	0		1859745			1769.66
OF606534	N633377	N10	4.6				Lachlan Floodpla	0.3	0.3	0.6	1.084	0		1859782			179.844
OF606536	N633378	N150	9.2				Lachlan Floodpla	0.3	0.3	0.6	1.852	0		1859790			470.491
L5	N9	N7	93.31				Lachlan Floodpla	0.3	0.3	0.6	0.508	0		1005			93.31
L20	N38	N34	219.91				Lachlan Floodpla	0.3	0.3	0.6	2.006	0		10020			219.91
L139	N77	N120	2134.29				Lachlan Floodpla	0.3	0.3	0.6	1.009	0		100139			2134.29
L48	N89	N71	5.001				Lachlan Floodpla	0.3	0.3	0.6	1.2	0		10048			5.001
L50	N90	N91	5.001				Lachlan Floodpla	0.3	0.3	0.6	0.01	0		10050			5.001
L53	N94	N65	5.001				Lachlan Floodpla	0.3	0.3	0.6	4.189	0		10053			5.001
L56	N95	N59	5.001				Lachlan Floodpla	0.3	0.3	0.6	1.91	0		10056			5.001
L58	N96	N57	5.001				Lachlan Floodpla	0.3	0.3	0.6	0.62	0		10058			5.001
L65	N103	N32	7.073				Lachlan Floodpla	0.3	0.3	0.6	1.046	0		10065			7.073
L69	N105	N24	12.074				Lachlan Floodpla	0.3	0.3	0.6	2.427	0		10069			12.074
L74	N109	N112	58.301				Lachlan Floodpla	0.3	0.3	0.6	0.194	0		10074			58.301
L76	N113	N69	67.445				Lachlan Floodpla	0.3	0.3	0.6	0.612	0		10076			67.445
L77	N114	N69	33.293				Lachlan Floodpla	0.3	0.3	0.6	0.563	0		10077			33.293
L78	N115	N80	149.537				Lachlan Floodpla	0.3	0.3	0.6	0.01	0		10078			149.537
L79	N116	N80	102.076				Lachlan Floodpla	0.3	0.3	0.6	0.793	0		10079			102.076
L81	N118	N39	53.552				Lachlan Floodpla	0.3	0.3	0.6	0.649	0		10081			53.552
L87	N123	N82	826.283				Lachlan Floodpla	0.3	0.3	0.6	0.13	0		10087			826.283
L88	N124	N7	77.627				Lachlan Floodpla	0.3	0.3	0.6	0.548	0		10088			77.627
L91	N125	N1	24.008				Lachlan Floodpla	0.3	0.3	0.6	0.068	0		10091			24.008
L93	N127	N5	105.482				Lachlan Floodpla	0.3	0.3	0.6	0.307	0		10093			105.482
L103	N134	N20	44.284				Lachlan Floodpla	0.3	0.3	0.6	2.086	0		100103			44.284
L108	N136	N137	158.925				Lachlan Floodpla	0.3	0.3	0.6	2.149	0		100108			158.925
L109	N138	N137	51.897				Lachlan Floodpla	0.3	0.3	0.6	0.568	0		100109			51.897
L113	N140	N141	66.701				Lachlan Floodpla	0.3	0.3	0.6	1.823	0		100113			66.701
L117	N143	N18	64.842				Lachlan Floodpla	0.3	0.3	0.6	0.01	0		100117			64.842
L118	N144	N18	35.643				Lachlan Floodpla	0.3	0.3	0.6	0.59	0		100118			35.643
L120	N145	N146	211.823				Lachlan Floodpla	0.3	0.3	0.6	0.671	0		100120			211.823
L121	N147	N146	87.712				Lachlan Floodpla	0.3	0.3	0.6	0.753	0		100121			87.712
L124	N149	N150	312.851				Lachlan Floodpla	0.3	0.3	0.6	1.675	0		100124			312.851
L127	N154	N153	19.147				Lachlan Floodpla	0.3	0.3	0.6	0.851	0		100127			19.147
L128	N155	N22	53.298				Lachlan Floodpla	0.3	0.3	0.6	1.069	0		100128			53.298
L136	N162	N161	992.657				Lachlan Floodpla	0.3	0.3	0.6	1.452	0		100136			992.657
L137	N163	N160	1681.03				Lachlan Floodpla	0.3	0.3	0.6	1.502	0		100137			1681.03
L138	N164	N34	56.743				Lachlan Floodpla	0.3	0.3	0.6	1.533	0		100138			56.743
L140	N165	N119	1425.37				Lachlan Floodpla	0.3	0.3	0.6	1.4624	0		100140			1425.37
L141	N166	N52	50.464				Lachlan Floodpla	0.3	0.3	0.6	0.887	0		100141			50.464
L143	N169	N168	37.952				Lachlan Floodpla	0.3	0.3	0.6	1.561	0		100143			37.952
L144	N170	N67	112.05				Lachlan Floodpla	0.3	0.3	0.6	0.482	0		100144			112.05
L145	N171	N67	57.142				Lachlan Floodpla	0.3	0.3	0.6	0.747	0		100145			57.142
L147	N172	N63	34.587				Lachlan Floodpla	0.3	0.3	0.6	0.372	0		100147			34.587
L148	N174	N175	4214.82				Lachlan Floodpla	0.3	0.3	0.6	0.57	0		100148			4214.82
L150	N178	N141	202.836				Lachlan Floodpla	0.3	0.3	0.6	0.151	0		100150			202.836

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - LAC01

Date 14-09-18

Output by May-Wen Yeoh

Description Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design. LAC01

L151	N179	N35	30.884				Lachlan Floodpla	0.3	0.3	0.6	3.915	0		100151			30.884
L153	N180	N181	2175.47				Lachlan Floodpla	0.3	0.3	0.6	1.001	0		100153			2175.47
L155	N182	N156	1549.45				Lachlan Floodpla	0.3	0.3	0.6	2.335	0		100155			1549.45
L156	N183	N152	4192.48				Lachlan Floodpla	0.3	0.3	0.6	1.223	0		100156			4192.48
L157	N184	N185	1182.03				Lachlan Floodpla	0.3	0.3	0.6	1.338	0		100157			1182.03
L158	N186	N187	2533.92				Lachlan Floodpla	0.3	0.3	0.6	1.021	0		100158			2533.92
L162	N188	N189	1143.28				Lachlan Floodpla	0.3	0.3	0.6	0.338	0		100162			1143.28
L164	N190	N75	14.129				Lachlan Floodpla	0.3	0.3	0.6	3.41	0		100164			14.129
L170	N191	N99	535.575				Lachlan Floodpla	0.3	0.3	0.6	0.678	0		100170			535.575
L172	N192	N46	37.022				Lachlan Floodpla	0.3	0.3	0.6	0.626	0		100172			37.022
L174	N193	N194	93.754				Lachlan Floodpla	0.3	0.3	0.6	0.329	0		100174			93.754
L176	N195	N194	48.347				Lachlan Floodpla	0.3	0.3	0.6	0.346	0		100176			48.347
L177	N197	N14	1155.89				Lachlan Floodpla	0.3	0.3	0.6	0.755	0		100177			1155.89
L181	N199	N50	9.552				Lachlan Floodpla	0.3	0.3	0.6	0.468	0		100181			9.552
L182	N200	N131	1028.19				Lachlan Floodpla	0.3	0.3	0.6	0.918	0		100182			1028.19
L196	N210	N211	1490.69				Lachlan Floodpla	0.3	0.3	0.6	1.109	0		100196			1490.69
L198	N212	N129	941.044				Lachlan Floodpla	0.3	0.3	0.6	0.828	0		100198			941.044
L199	N213	N76	1499.8				Lachlan Floodpla	0.3	0.3	0.6	1.326	0		100199			1499.8
L201	N214	N135	2068.07				Lachlan Floodpla	0.3	0.3	0.6	0.702	0		100201			2068.07
L37	N69	N70	1262.24				Lachlan Floodpla	0.3	0.3	0.6	0.483	0		10037			1262.24
L51	N70	N92	7.073				Lachlan Floodpla	0.3	0.3	0.6	0.311	0		10051			7.073
L43	N80	N81	768.799				Lachlan Floodpla	0.3	0.3	0.6	0.384	0		10043			768.799
L60	N81	N98	70.656				Lachlan Floodpla	0.3	0.3	0.6	1.344	0		10060			70.656
L4	N7	N8	2965.32				Lachlan Floodpla	0.3	0.3	0.6	0.297	0		1004			2965.32
L86	N8	N82	210.365				Lachlan Floodpla	0.3	0.3	0.6	0.021	0		10086			210.365
L44	N82	N111	1889.81				Lachlan Floodpla	0.3	0.3	0.6	0.171	0		10044			1889.81
L75	N111	N112	59.368				Lachlan Floodpla	0.3	0.3	0.6	0.045	0		10075			59.368
L110	N137	N139	720.647				Lachlan Floodpla	0.3	0.3	0.6	0.659	0		100110			720.647
L111	N139	N55	74.517				Lachlan Floodpla	0.3	0.3	0.6	1.686	0		100111			74.517
L10	N18	N19	421.386				Lachlan Floodpla	0.3	0.3	0.6	0.528	0		10010			421.386
L119	N19	N133	726.991				Lachlan Floodpla	0.3	0.3	0.6	0.595	0		100119			726.991
L101	N133	N16	100.424				Lachlan Floodpla	0.3	0.3	0.6	0.139	0		100101			100.424
L178	N146	N122	3965.95				Lachlan Floodpla	0.3	0.3	0.6	0.598	0		100178			3965.95
L85	N122	N86	102.914				Lachlan Floodpla	0.3	0.3	0.6	0.441	0		10085			102.914
L125	N150	N151	46.722				Lachlan Floodpla	0.3	0.3	0.6	0.345	0		100125			46.722
L134	N160	N161	68.499				Lachlan Floodpla	0.3	0.3	0.6	1.664	0		100134			68.499
L135	N161	N158	1447.32				Lachlan Floodpla	0.3	0.3	0.6	0.854	0		100135			1447.32
L131	N158	N28	35.597				Lachlan Floodpla	0.3	0.3	0.6	1.112	0		100131			35.597
L18	N34	N35	59.513				Lachlan Floodpla	0.3	0.3	0.6	0.94	0		10018			59.513
L82	N119	N39	94.532				Lachlan Floodpla	0.3	0.3	0.6	0.671	0		10082			94.532
L21	N39	N40	889.364				Lachlan Floodpla	0.3	0.3	0.6	0.543	0		10021			889.364
L104	N40	N36	47.936				Lachlan Floodpla	0.3	0.3	0.6	0.022	0		100104			47.936
L36	N67	N68	1738.48				Lachlan Floodpla	0.3	0.3	0.6	0.424	0		10036			1738.48
L146	N68	N63	33.937				Lachlan Floodpla	0.3	0.3	0.6	0.311	0		100146			33.937
L34	N63	N64	1784.2				Lachlan Floodpla	0.3	0.3	0.6	0.454	0		10034			1784.2
L112	N64	N54	33.645				Lachlan Floodpla	0.3	0.3	0.6	0.97	0		100112			33.645
L186	N175	N201	1788.13				Lachlan Floodpla	0.3	0.3	0.6	0.42	0		100186			1788.13
L175	N141	N194	300.122				Lachlan Floodpla	0.3	0.3	0.6	0.021	0		100175			300.122
L152	N35	N159	1018.59				Lachlan Floodpla	0.3	0.3	0.6	0.988	0		100152			1018.59
L132	N159	N28	22.726				Lachlan Floodpla	0.3	0.3	0.6	1.876	0		100132			22.726
L15	N28	N29	167.017				Lachlan Floodpla	0.3	0.3	0.6	0.58	0		10015			167.017
L133	N29	N26	19.956				Lachlan Floodpla	0.3	0.3	0.6	0.58	0		100133			19.956
L154	N181	N52	12.664				Lachlan Floodpla	0.3	0.3	0.6	0.422	0		100154			12.664
L28	N52	N53	1552.62				Lachlan Floodpla	0.3	0.3	0.6	0.71	0		10028			1552.62
L142	N53	N168	47.533				Lachlan Floodpla	0.3	0.3	0.6	1.006	0		100142			47.533
L171	N168	N54	1005.09				Lachlan Floodpla	0.3	0.3	0.6	0.911	0		100171			1005.09
L29	N54	N55	874.139				Lachlan Floodpla	0.3	0.3	0.6	0.564	0		10029			874.139
L30	N55	N56	2442.64				Lachlan Floodpla	0.3	0.3	0.6	0.486	0		10030			2442.64
L168	N56	N50	4.882				Lachlan Floodpla	0.3	0.3	0.6	0.887	0		100168			4.882
L129	N156	N22	28.81				Lachlan Floodpla	0.3	0.3	0.6	1.377	0		100129			28.81
L12	N22	N23	1045.53				Lachlan Floodpla	0.3	0.3	0.6	1.078	0		10012			1045.53
L180	N23	N198	579.41				Lachlan Floodpla	0.3	0.3	0.6	1.192	0		100180			579.41
L179	N198	N157	115.517				Lachlan Floodpla	0.3	0.3	0.6	1.91	0		100179			115.517
L130	N157	N26	19.741				Lachlan Floodpla	0.3	0.3	0.6	5.766	0		100130			19.741
L14	N26	N27	2243.94				Lachlan Floodpla	0.3	0.3	0.6	0.607	0		10014			2243.94
L116	N27	N132	840.22				Lachlan Floodpla	0.3	0.3	0.6	0.555	0		100116			840.22
L100	N132	N16	36.092				Lachlan Floodpla	0.3	0.3	0.6	0.06	0		100100			36.092
L9	N16	N17	947.957				Lachlan Floodpla	0.3	0.3	0.6	0.629	0		1009			947.957
L102	N17	N20	22.634				Lachlan Floodpla	0.3	0.3	0.6	0.61	0		100102			22.634
L11	N20	N21	2966.58				Lachlan Floodpla	0.3	0.3	0.6	0.469	0		10011			2966.58
L72	N21	N106	8.338				Lachlan Floodpla	0.3	0.3	0.6	0.469	0		10072			8.338
L126	N152	N153	18.278				Lachlan Floodpla	0.3	0.3	0.6	1.979	0		100126			18.278
L200	N153	N10	1596.73				Lachlan Floodpla	0.3	0.3	0.6	0.778	0		100200			1596.73
L6	N10	N11	1394.94				Lachlan Floodpla	0.3	0.3	0.6	0.73	0		1006			1394.94
L97	N11	N12	22.394				Lachlan Floodpla	0.3	0.3	0.6	0.73	0		10097			22.394
L167	N185	N128	2314.14				Lachlan Floodpla	0.3	0.3	0.6	0.881	0		100167			2314.14
L94	N128	N3	47.424				Lachlan Floodpla	0.3	0.3	0.6	0.52	0		10094			47.424
L159	N187	N1	18.412				Lachlan Floodpla	0.3	0.3	0.6	1.021	0		100159			18.412
L1	N1	N2	174.9				Lachlan Floodpla	0.3	0.3	0.6	0.263	0		1001			174.9
L90	N2	N84	26.22				Lachlan Floodpla	0.3	0.3	0.6	0.162	0		10090			26.22
L163	N189	N75	601.633				Lachlan Floodpla	0.3	0.3	0.6	0.496	0		100163			601.633
L40	N75	N73	10.003				Lachlan Floodpla	0.3	0.3	0.6	0.496	0		10040			10.003
L39	N73	N74	1539.08				Lachlan Floodpla	0.3	0.3	0.6	0.332	0		10039			1539.08
L49	N74	N71	5.001				Lachlan Floodpla	0.3	0.3	0.6	0.6	0		10049			5.001
L38	N71	N72	1385.26				Lachlan Floodpla	0.3	0.3	0.6	0.338	0		10038			1385.26
L169	N72	N91	356.014				Lachlan Floodpla	0.3	0.3	0.6	0.22	0		100169			356.014
L166	N91	N93	615.79				Lachlan Floodpla	0.3	0.3	0.6	0.474	0		100166			615.79
L52	N93	N92	5.001				Lachlan Floodpla	0.3	0.3	0.6	0.474	0		10052			5.001
L165	N92	N65	219.912				Lachlan Floodpla	0.3	0.3	0.6	0.251	0		100165			219.912
L35	N65	N66	998.026				Lachlan Floodpla	0.3	0.3	0.6	0.267	0		10035			998.026
L54	N66	N61	7.073				Lachlan Floodpla	0.3	0.3	0.6	0.926	0		10054			7.073
L33	N61	N62	59.158				Lachlan Floodpla	0.3	0.3	0.6	0.926	0		10033			59.158
L55	N62	N59	5.001				Lachlan Floodpla	0.3	0.3	0.6	1.04	0		10055			5.001
L32	N59	N60	24.149				Lachlan Floodpla	0.3	0.3	0.6	0.429	0		10032			24.149
L57	N60	N57	5.001				Lachlan Floodpla	0.3	0.3	0.6	1.74	0		10057			5.001
L31	N57	N58	1929.62				Lachlan Floodpla	0.3	0.3	0.6	0.252	0		10031			1929.62
L59	N58	N97	46.226				Lachlan Floodpla	0.3	0.3	0.6	0.426	0		10059			46.226
L160	N97	N101	2030.42				Lachlan Floodpla	0.3	0.3	0.6	0.199	0		100160			2030.42
L62	N101	N102	128.076				Lachlan Floodpla	0.3	0.3	0.6	0.199	0		10062			128.076
L161	N102	N117	1586.57				Lachlan Floodpla	0.3	0.3	0.6	0.217	0		100161			1586.57
L80	N117	N99	104.526				Lachlan Floodpla	0.3	0.3	0.6	0.35	0		10080			104.526
L61	N99	N100	394.312				Lachlan Floodpla	0.3	0.3	0.6	0.061	0		10061			394.312
L63	N100	N41	19.147				Lachlan Floodpla	0.3	0.3	0.6	0.23	0		10063			19.147
L42	N194	N79	1451.11				Lachlan Floodpla	0.3	0.3	0.6	1.151	0		10042			1451.11
L105	N79	N44	28.105				Lachlan Floodpla	0.3	0.3	0.6	0.348	0		100105			28.105
L24	N44	N45	30.264				Lachlan Floodpla	0.3	0.3	0.6	0.616	0		10024			30.264
L173	N45	N46	5.959				Lachlan Floodpla	0.3	0.3	0.6	1.671	0		100173			5.959
L25	N46	N47	1334.7				Lachlan Floodpla	0.3	0.3	0.6	0.45	0		10025			1334.7

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - LAC01

Date 14-09-18

Output by May-Wen Yeoh

Description Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design. LAC01

L114	N47	N142	27.063				Lachlan Floodpla	0.3	0.3	0.6	0.829	0		100114			27.063
L27	N50	N51	214.573				Lachlan Floodpla	0.3	0.3	0.6	0.378	0		10027			214.573
L106	N51	N48	31.915				Lachlan Floodpla	0.3	0.3	0.6	0.378	0		100106			31.915
L99	N131	N14	34.89				Lachlan Floodpla	0.3	0.3	0.6	0.481	0		10099			34.89
L8	N14	N15	33.293				Lachlan Floodpla	0.3	0.3	0.6	0.68	0		1008			33.293
L98	N15	N12	24.149				Lachlan Floodpla	0.3	0.3	0.6	0.629	0		10098			24.149
L7	N12	N13	1035.9				Lachlan Floodpla	0.3	0.3	0.6	0.513	0		1007			1035.9
L202	N211	N148	1702.19				Lachlan Floodpla	0.3	0.3	0.6	0.696	0		100202			1702.19
L123	N148	N126	2324.41				Lachlan Floodpla	0.3	0.3	0.6	0.615	0		100123			2324.41
L92	N126	N5	110.463				Lachlan Floodpla	0.3	0.3	0.6	0.337	0		10092			110.463
L3	N5	N6	226.352				Lachlan Floodpla	0.3	0.3	0.6	0.457	0		1003			226.352
L95	N6	N3	66.361				Lachlan Floodpla	0.3	0.3	0.6	0.344	0		10095			66.361
L2	N3	N4	1417.13				Lachlan Floodpla	0.3	0.3	0.6	0.537	0		1002			1417.13
L89	N4	N84	62.443				Lachlan Floodpla	0.3	0.3	0.6	0.329	0		10089			62.443
L45	N84	N85	1484.18				Lachlan Floodpla	0.3	0.3	0.6	0.484	0		10045			1484.18
L197	N85	N121	1078.47				Lachlan Floodpla	0.3	0.3	0.6	0.421	0		100197			1078.47
L84	N121	N86	143.327				Lachlan Floodpla	0.3	0.3	0.6	0.329	0		10084			143.327
L46	N86	N87	1523.29				Lachlan Floodpla	0.3	0.3	0.6	0.409	0		10046			1523.29
L193	N87	N209	186.017				Lachlan Floodpla	0.3	0.3	0.6	0.111	0		100193			186.017
L96	N129	N130	1369.14				Lachlan Floodpla	0.3	0.3	0.6	0.56	0		10096			1369.14
L122	N130	N13	118.288				Lachlan Floodpla	0.3	0.3	0.6	0.59	0		100122			118.288
L195	N13	N206	3781.45				Lachlan Floodpla	0.3	0.3	0.6	0.431	0		100195			3781.45
L190	N206	N205	558.062				Lachlan Floodpla	0.3	0.3	0.6	0.229	0		100190			558.062
L41	N76	N120	2056.62				Lachlan Floodpla	0.3	0.3	0.6	1.15189	0		10041			2056.62
L83	N120	N36	77.447				Lachlan Floodpla	0.3	0.3	0.6	0.214	0		10083			77.447
L19	N36	N37	693.411				Lachlan Floodpla	0.3	0.3	0.6	0.363	0		10019			693.411
L184	N37	N104	833.611				Lachlan Floodpla	0.3	0.3	0.6	0.353	0		100184			833.611
L66	N104	N30	14.146				Lachlan Floodpla	0.3	0.3	0.6	1.76	0		10066			14.146
L107	N135	N48	96.317				Lachlan Floodpla	0.3	0.3	0.6	1.143	0		100107			96.317
L26	N48	N49	1977.35				Lachlan Floodpla	0.3	0.3	0.6	0.359	0		10026			1977.35
L115	N49	N142	27.078				Lachlan Floodpla	0.3	0.3	0.6	0.654	0		100115			27.078
L183	N142	N43	2544.29				Lachlan Floodpla	0.3	0.3	0.6	0.368	0		100183			2544.29
L23	N43	N41	12.074				Lachlan Floodpla	0.3	0.3	0.6	1.048	0		10023			12.074
L22	N41	N42	1308.32				Lachlan Floodpla	0.3	0.3	0.6	0.171	0		10022			1308.32
L64	N42	N32	7.073				Lachlan Floodpla	0.3	0.3	0.6	2.022	0		10064			7.073
L17	N32	N33	27.079				Lachlan Floodpla	0.3	0.3	0.6	0.349	0		10017			27.079
L67	N33	N30	7.073				Lachlan Floodpla	0.3	0.3	0.6	0.349	0		10067			7.073
L16	N30	N31	609.076				Lachlan Floodpla	0.3	0.3	0.6	0.098	0		10016			609.076
L68	N31	N24	12.074				Lachlan Floodpla	0.3	0.3	0.6	2.625	0		10068			12.074
L13	N24	N25	1238.66				Lachlan Floodpla	0.3	0.3	0.6	0.082	0		10013			1238.66
L71	N25	N106	32.08				Lachlan Floodpla	0.3	0.3	0.6	0.334	0		10071			32.08
L70	N106	N107	687.852				Lachlan Floodpla	0.3	0.3	0.6	0.117	0		10070			687.852
L73	N107	N108	153.136				Lachlan Floodpla	0.3	0.3	0.6	0.117	0		10073			153.136
L185	N108	N201	1752.08				Lachlan Floodpla	0.3	0.3	0.6	0.245	0		100185			1752.08
L187	N201	N202	685.581				Lachlan Floodpla	0.3	0.3	0.6	0.245	0		100187			685.581
L194	N202	N205	586.686				Lachlan Floodpla	0.3	0.3	0.6	0.25	0		100194			586.686
L189	N205	N203	373.802				Lachlan Floodpla	0.3	0.3	0.6	0.25	0		100189			373.802
L188	N203	N204	248.081				Lachlan Floodpla	0.3	0.3	0.6	0.257	0		100188			248.081
L191	N204	N207	1340.32				Lachlan Floodpla	0.3	0.3	0.6	0.212	0		100191			1340.32
L192	N207	N208	256.269				Lachlan Floodpla	0.3	0.3	0.6	0.01	0		100192			256.269

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - BOG01

Date 14-09-18

Output by May-Wen Yeoh

Description Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design. BOG01
In particular:
Catchment Areas
Equal Area Slopes % (catchments)
Bed Slopes % (overflow routes)

SUB-CATCHMENT DETAILS

Name	Pit or Node	Total Area	Impervious Area	Avg Slope(%)	Mannings n	Time lag (mins)	Rainfall Multiplier	Hydrological Model	
C1	N1	916.079	0	1.00789	0.05	0		RAFTS	
C4	N7	944.597	0	0.93604	0.05	0		RAFTS	
C6	N12	74.595	0	0.58546	0.05	0		RAFTS	
C11	N19	641.102	0	1.28153	0.05	0		RAFTS	
C13	N23	728.552	0	1.20055	0.05	0		RAFTS	
C15	N27	586.407	0	2.45368	0.05	0		RAFTS	
C18	N33	623.387	0	0.63878	0.05	0		RAFTS	
C20	N37	545.794	0	0.3892	0.05	0		RAFTS	
C23	N43	908.815	0	1.01851	0.05	0		RAFTS	
C24	N45	813.297	0	0.37528	0.05	0		RAFTS	
C27	N51	838.545	0	2.25223	0.05	0		RAFTS	
C33	N63	2.51	0	0.46952	0.05	0		RAFTS	
C38	N73	607.911	0	0.90191	0.05	0		RAFTS	
C40	N77	571.602	0	0.56753	0.05	0		RAFTS	
C44	N85	507.27	0	2.55923	0.05	0		RAFTS	
C45	N87	518.285	0	2.29805	0.07	0		RAFTS	
C47	N91	30.602	0	2.09633	0.05	0		RAFTS	
C50	N97	43.337	0	2.37917	0.05	0		RAFTS	
C52	N102	727.373	0	0.80756	0.05	0		RAFTS	
C53	N103	549.84	0	0.95579	0.05	0		RAFTS	
C56	N109	646.842	0	0.90568	0.05	0		RAFTS	
C62	N121	643.49	0	0.13084	0.05	0		RAFTS	
C65	N127	701.472	0	1.13043	0.05	0		RAFTS	
C69	N137	851.815	0	0.37052	0.05	0		RAFTS	
C71	N142	259.333	0	0.79058	0.05	0		RAFTS	
C72	N143	552.97	0	0.1466	0.05	0		RAFTS	
C73	N145	515.069	0	0.72699	0.05	0		RAFTS	
C81	N161	157.431	30	2.32553	0.1	0		RAFTS	
C91	N181	49.68	0	0.92592	0.05	0		RAFTS	
C200	N182	128.6	0	0.63	0.05	0		RAFTS	
C95	N189	130.617	0	0.8964	0.05	0		RAFTS	
C96	N191	153.414	0	1.47425	0.05	0		RAFTS	
C98	N195	60.455	0	1.67659	0.05	0		RAFTS	
C102	N203	130.18	0	0.191	0.05	0		RAFTS	
C104	N207	57.323	0	1.56964	0.05	0		RAFTS	
C113	N225	164.202	0	1.75615	0.05	0		RAFTS	
C119	N237	44.615	0	2.0389	0.05	0		RAFTS	
C120	N239	22.359	0	1.76372	0.05	0		RAFTS	
C121	N241	118.81	0	1.26975	0.05	0		RAFTS	
C123	N245	128.349	0	0.74513	0.05	0		RAFTS	
C125	N249	56.521	0	0.71837	0.05	0		RAFTS	
C126	N251	26.359	0	1.05763	0.05	0		RAFTS	
C128	N256	1432.1	0	0.19655	0.05	0		RAFTS	
C131	N264	39.56	0	0.34258	0.05	0		RAFTS	
C134	N311	674.077	0	1.42831	0.05	0		RAFTS	
C135	N315	1917.526	0	1.33586	0.05	0		RAFTS	
C136	N317	565.567	0	0.90816	0.05	0		RAFTS	
C137	N331	2629.609	0	0.26196	0.05	0		RAFTS	
C138	N345	672.378	0	0.18789	0.05	0		RAFTS	
C139	N379	1527.496	0	0.75997	0.05	0		RAFTS	
C140	N381	1692.484	0	1.10556	0.05	0		RAFTS	
C141	N395	606.951	0	2.64135	0.07	0		RAFTS	
C142	N397	1386.264	0	2.59021	0.07	0		RAFTS	
C143	N401	865.024	0	1.77455	0.07	0		RAFTS	
C144	N407	2695.721	0	0.83268	0.07	0		RAFTS	
C145	N411	1424.52	0	0.80716	0.05	0		RAFTS	
C146	N415	1987.931	0	0.7959	0.05	0		RAFTS	
C147	N417	936.421	0	0.90269	0.05	0		RAFTS	
C148	N419	988.395	0	0.60437	0.05	0		RAFTS	
C149	N423	1188.579	0	0.55532	0.05	0		RAFTS	
C150	N435	853.583	0	0.1807	0.05	0		RAFTS	
C151	N441	997.567	0	0.13954	0.05	0		RAFTS	
C153	N451	1176.068	0	0.21654	0.05	0		RAFTS	
C154	N485	1644.644	0	0.34614	0.05	0		RAFTS	
C155	N487	2025.019	10	0.25791	0.05	0		RAFTS	
C156	N491	3012.387	0	0.25161	0.05	0		RAFTS	
C157	N493	2968.102	0	0.30113	0.05	0		RAFTS	
C158	N495	1885.158	20	0.1649	0.05	0		RAFTS	
C162	N509	1448.493	0	0.33328	0.05	0		RAFTS	
C163	N511	2359.544	0	0.33769	0.05	0		RAFTS	
C164	N517	2214.542	0	0.27434	0.05	0		RAFTS	
C165	N518	3382.716	0	0.23283	0.05	0		RAFTS	
C202	N283	56.076	0	0.6607	0.05	0		RAFTS	
C167	N284	21.37	0	1.763	0.05	0		RAFTS	
C87	N174	292.973	0	0.62448	0.05	0		RAFTS	
C99	N198	383.273	0	0.80694	0.05	0		RAFTS	
C100	N200	463.784	0	0.63343	0.05	0		RAFTS	
C17	N32	109.418	0	0.94225	0.05	0		RAFTS	
C28	N54	230.93	0	0.36448	0.05	0		RAFTS	
C34	N66	1140.498	0	0.21493	0.05	0		RAFTS	
C93	N186	166.618	0	0.18716	0.05	0		RAFTS	
C43	N84	65.269	0	1.98438	0.07	0		RAFTS	
C55	N108	89.949	0	1.06644	0.05	0		RAFTS	
C118	N236	249.025	0	0.55628	0.05	0		RAFTS	
C112	N224	353.09	0	0.87842	0.05	0		RAFTS	
C94	N188	74.762	0	0.40776	0.05	0		RAFTS	
C115	N230	721.584	0	0.70291	0.05	0		RAFTS	
C114	N228	165.191	0	0.27476	0.05	0		RAFTS	
C116	N232	465.398	0	0.41677	0.05	0		RAFTS	
C130	N259	124.718	0	0.9837	0.05	0		RAFTS	
C129	N258	256.113	0	0.55134	0.05	0		RAFTS	
C2	N4	436.56	0	0.4601	0.05	0		RAFTS	
C97	N194	501.457	0	0.94569	0.05	0		RAFTS	
C90	N180	75.299	0	1.23903	0.05	0		RAFTS	

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - BOG01

Date 14-09-18

Output by May-Wen Yeoh

Description Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design. BOG01

C10	N18	689.804	0	0.31633	0.05	0		RAFTS	
C103	N206	204.379	0	0.87725	0.05	0		RAFTS	
C101	N202	23.588	0	0.40422	0.05	0		RAFTS	
C59	N116	42.646	0	0.96299	0.05	0		RAFTS	
C60	N118	171.963	0	0.99198	0.05	0		RAFTS	
C111	N222	263.207	0	0.91366	0.05	0		RAFTS	
C127	N254	450.817	0	0.34868	0.05	0		RAFTS	
C124	N248	317.758	0	0.37349	0.05	0		RAFTS	
C88	N176	112.476	0	0.70881	0.05	0		RAFTS	
C3	N6	709.219	0	0.38631	0.05	0		RAFTS	
C8	N14	565.294	0	0.58332	0.05	0		RAFTS	
C9	N16	1168.643	0	0.35825	0.05	0		RAFTS	
C16	N30	1573.816	0	0.19551	0.05	0		RAFTS	
C46	N90	1225.138	0	0.2166	0.05	0		RAFTS	
C54	N106	980.379	0	0.16095	0.05	0		RAFTS	
C58	N114	1638.036	0	0.14648	0.05	0		RAFTS	
C92	N184	19.939	0	0.21408	0.05	0		RAFTS	
C57	N112	1133.075	0	1.66677	0.07	0		RAFTS	
C61	N120	577.661	0	0.88343	0.05	0		RAFTS	
C109	N218	576.485	0	1.26237	0.05	0		RAFTS	
C108	N216	96.09	0	1.131	0.05	0		RAFTS	
C106	N212	10.287	0	1.35136	0.05	0		RAFTS	
C107	N214	17.281	0	0.34925	0.05	0		RAFTS	
C105	N210	144.233	0	0.40157	0.05	0		RAFTS	
C64	N126	904.807	0	0.31206	0.05	0		RAFTS	
C76	N152	2009.6	0	0.216	0.05	0		RAFTS	
C78	N156	43.887	0	0.32971	0.05	0		RAFTS	
C42	N82	936.714	0	0.38641	0.05	0		RAFTS	
C41	N80	270.073	0	2.6414	0.07	0		RAFTS	
C39	N76	471.713	0	0.97396	0.05	0		RAFTS	
C25	N48	419.75	0	1.65099	0.05	0		RAFTS	
C19	N36	68.017	0	0.6411	0.05	0		RAFTS	
C22	N42	80.921	0	1.20498	0.05	0		RAFTS	
C30	N58	623.508	0	0.49797	0.05	0		RAFTS	
C29	N56	74.707	0	0.48344	0.05	0		RAFTS	
C35	N68	78.595	0	0.21981	0.05	0		RAFTS	
C36	N70	38.122	0	0.25753	0.05	0		RAFTS	
C5	N10	494.782	0	0.56544	0.05	0		RAFTS	
C12	N22	471.807	10	0.61355	0.05	0		RAFTS	
C14	N26	309.157	0	0.40509	0.05	0		RAFTS	
C21	N40	335.254	0	0.5153	0.05	0		RAFTS	
C31	N60	225.954	0	0.23758	0.05	0		RAFTS	
C89	N178	31.777	0	0.07026	0.05	0		RAFTS	
C117	N233	252.53	0	0.66072	0.05	0		RAFTS	
C63	N124	145.627	0	0.132	0.05	0		RAFTS	
C86	N172	103.682	0	0.13032	0.05	0		RAFTS	
C84	N168	2605.706	20	0.12898	0.05	0		RAFTS	
C83	N166	338.731	0	0.28279	0.05	0		RAFTS	
C48	N94	181.921	0	0.34833	0.05	0		RAFTS	
C85	N170	1665.322	0	0.0776	0.05	0		RAFTS	
C159	N498	36.239	0	0.3344	0.05	0		RAFTS	
C160	N500	1036.587	0	0.19901	0.07	0		RAFTS	
C161	N501	1866.942	0	0.21358	0.05	0		RAFTS	
C152	N447	2996.809	0	0.06024	0.05	0		RAFTS	
C49	N96	2271.009	0	0.23384	0.05	0		RAFTS	
C66	N130	414.951	0	0.1227	0.05	0		RAFTS	
C68	N134	309.702	0	0.1227	0.05	0		RAFTS	
C166	N135	122.435	0	0.49996	0.05	0		RAFTS	
C70	N140	72.879	0	0.20209	0.05	0		RAFTS	
C74	N148	34.334	0	2.01502	0.05	0		RAFTS	
C75	N150	527.906	0	0.16939	0.05	0		RAFTS	
C77	N154	976.71	0	0.15668	0.05	0		RAFTS	
C26	N50	126.589	0	0.41189	0.05	0		RAFTS	
C32	N62	8.773	0	0.13409	0.05	0		RAFTS	
C37	N72	698.188	0	0.25727	0.05	0		RAFTS	
C201	N282	300.71	0	0.27	0.05	0		RAFTS	
C110	N220	517.525	0	0.55244	0.05	0		RAFTS	
C122	N244	434.224	0	0.26044	0.05	0		RAFTS	
C132	N262	111.06	0	0.65575	0.05	0		RAFTS	
C51	N100	1475.2	0	0.13225	0.05	0		RAFTS	
C67	N132	691.319	0	0.19984	0.05	0		RAFTS	
C79	N158	46.88	0	0.14315	0.05	0		RAFTS	
C80	N160	511.153	0	0.17003	0.05	0		RAFTS	
C82	N164	110.552	0	0.30138	0.05	0		RAFTS	

OVERFLOW ROUTE DETAILS

Name	From	To	Length (m)	Spill Level (m)	Crest Length (m)	Weir Coeff. C	Cross Section	Safe Depth Major Storms (m)	SafeDepth Minor Storms (m)	Safe DxV (sq.m/sec)	Bed Slope (%)	D/S Area Contributing %		id			
L1	N1	N2	0.1				TypicalFloodplai	0.3	0.15	0.4	0.616	0		1001			0.1
L4	N7	N8	0.1				TypicalFloodplai	0.3	0.15	0.4	0.633	0		1004			0.1
L234	N12	N17	1				TypicalFloodplai	0.3	0.15	0.4	0.277	0		100234			1
L10	N19	N20	0.1				TypicalFloodplai	0.3	0.15	0.4	0.63	0		10010			0.1
L12	N23	N24	0.1				TypicalFloodplai	0.3	0.15	0.4	0.701	0		10012			0.1
L14	N27	N24	0.1				TypicalFloodplai	0.3	0.15	0.4	1.069	0		10014			0.1
L17	N33	N34	0.1				TypicalFloodplai	0.3	0.15	0.4	0.369	0		10017			0.1
L19	N37	N38	0.1				TypicalFloodplai	0.3	0.15	0.4	0.195	0		10019			0.1
L22	N43	N44	0.1				TypicalFloodplai	0.3	0.15	0.4	0.354	0		10022			0.1
L23	N45	N38	0.1				TypicalFloodplai	0.3	0.15	0.4	0.265	0		10023			0.1
L26	N51	N47	0.1				TypicalFloodplai	0.3	0.15	0.4	1.065	0		10026			0.1
L32	N63	N64	0.1				TypicalFloodplai	0.3	0.15	0.4	0.188	0		10032			0.1
L37	N73	N69	0.1				TypicalFloodplai	0.3	0.15	0.4	0.474	0		10037			0.1
480.35	N77	N78	1				TypicalFloodplai	0.3	0.15	0.4	0.01	0		10039			1
L43	N85	N83	0.1				TypicalFloodplai	0.3	0.15	0.4	1.585	0		10043			0.1
L44	N87	N83	0.1				TypicalFloodplai	0.3	0.15	0.4	1.348	0		10044			0.1
483.94	N91	N92	1419.33				TypicalFloodplai	0.3	0.15	0.4	1.035	0		10046			1419.33
484.829	N97	N98	456.002				TypicalFloodplai	0.3	0.15	0.4	1.217	0		10049			456.002
L165	N102	N104	0.1				TypicalFloodplai	0.3	0.15	0.4	0.369	0		100165			0.1
L52	N103	N104	0.1				TypicalFloodplai	0.3	0.15	0.4	0.317	0		10052			0.1
L55	N109	N110	0.1				TypicalFloodplai	0.3	0.15	0.4	0.895	0		10055			0.1
L61	N121	N122	0.1				TypicalFloodplai	0.3	0.15	0.4	0.042	0		10061			0.1
L64	N127	N128	0.1				TypicalFloodplai	0.3	0.15	0.4	0.514	0		10064			0.1
L69	N137	N135	0.1				TypicalFloodplai	0.3	0.15	0.4	0.369	0		10069			0.1

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - BOG01

Date 14-09-18

Output by May-Wen Yeoh

Description Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design. BOG01

L145	N142	N229	0.1				TypicalFloodplai	0.3	0.15	0.4	0.501	0		100145			0.1
L72	N143	N144	0.1				TypicalFloodplai	0.3	0.15	0.4	0.391	0		10072			0.1
L73	N145	N146	0.1				TypicalFloodplai	0.3	0.15	0.4	1.249	0		10073			0.1
L81	N161	N162	0.1				TypicalFloodplai	0.3	0.15	0.4	1.318	0		10081			0.1
473.905	N181	N259	1469				TypicalFloodplai	0.3	0.15	0.4	0.68	0		10091			1469
L131	N182	N262	1				TypicalFloodplai	0.3	0.15	0.4	0.633	0		100131			1
466.824	N189	N3	1				TypicalFloodplai	0.3	0.15	0.4	0.597	0		10095			1
469.524	N191	N13	1205.08				TypicalFloodplai	0.3	0.15	0.4	0.682	0		10096			1205.08
L98	N195	N193	0.1				TypicalFloodplai	0.3	0.15	0.4	1.676	0		10098			0.1
L102	N203	N204	0.1				TypicalFloodplai	0.3	0.15	0.4	0.7	0		100102			0.1
L104	N207	N115	0.1				TypicalFloodplai	0.3	0.15	0.4	1.188	0		100104			0.1
L113	N225	N125	500.306				TypicalFloodplai	0.3	0.15	0.4	0.356	0		100113			500.306
484.581	N237	N98	451.615				TypicalFloodplai	0.3	0.15	0.4	1.49	0		100119			451.615
483.549	N239	N92	1017.02				TypicalFloodplai	0.3	0.15	0.4	0.955	0		100120			1017.02
482.824	N241	N92	1				TypicalFloodplai	0.3	0.15	0.4	0.878	0		100121			1
481.921	N245	N246	1				TypicalFloodplai	0.3	0.15	0.4	0.594	0		100123			1
468.176	N249	N175	1				TypicalFloodplai	0.3	0.15	0.4	0.242	0		100125			1
470.467	N251	N13	1040.56				TypicalFloodplai	0.3	0.15	0.4	1.178	0		100126			1040.56
L179	N256	N105	562.126				TypicalFloodplai	0.3	0.15	0.4	0.218	0		100179			562.126
477.703	N264	N183	272.832				TypicalFloodplai	0.3	0.15	0.4	0.39	0		100214			272.832
L156	N311	N119	0.1				TypicalFloodplai	0.3	0.15	0.4	0.556	0		100156			0.1
L158	N315	N111	0.1				TypicalFloodplai	0.3	0.15	0.4	0.29	0		100158			0.1
L159	N317	N111	0.1				TypicalFloodplai	0.3	0.15	0.4	0.671	0		100159			0.1
L166	N331	N131	0.1				TypicalFloodplai	0.3	0.15	0.4	0.171	0		100166			0.1
L173	N345	N153	0.1				TypicalFloodplai	0.3	0.15	0.4	0.507	0		100173			0.1
L190	N379	N81	0.1				TypicalFloodplai	0.3	0.15	0.4	0.432	0		100190			0.1
L191	N381	N81	0.1				TypicalFloodplai	0.3	0.15	0.4	0.579	0		100191			0.1
L198	N395	N79	0.1				TypicalFloodplai	0.3	0.15	0.4	1.625	0		100198			0.1
L199	N397	N75	0.1				TypicalFloodplai	0.3	0.15	0.4	1.553	0		100199			0.1
L201	N401	N41	0.1				TypicalFloodplai	0.3	0.15	0.4	0.901	0		100201			0.1
L204	N407	N35	0.1				TypicalFloodplai	0.3	0.15	0.4	0.515	0		100204			0.1
L206	N411	N25	0.1				TypicalFloodplai	0.3	0.15	0.4	1.133	0		100206			0.1
L208	N415	N21	0.1				TypicalFloodplai	0.3	0.15	0.4	0.53	0		100208			0.1
L209	N417	N9	0.1				TypicalFloodplai	0.3	0.15	0.4	0.568	0		100209			0.1
L210	N419	N9	0.1				TypicalFloodplai	0.3	0.15	0.4	0.552	0		100210			0.1
L212	N423	N233	0.1				TypicalFloodplai	0.3	0.15	0.4	0.372	0		100212			0.1
L218	N435	N133	0.1				TypicalFloodplai	0.3	0.15	0.4	0.578	0		100218			0.1
L221	N441	N122	0.1				TypicalFloodplai	0.3	0.15	0.4	0.095	0		100221			0.1
L226	N451	N169	0.1				TypicalFloodplai	0.3	0.15	0.4	0.299	0		100226			0.1
L243	N485	N165	0.1				TypicalFloodplai	0.3	0.15	0.4	0.26	0		100243			0.1
L244	N487	N167	0.1				TypicalFloodplai	0.3	0.15	0.4	0.12	0		100244			0.1
L246	N491	N171	0.1				TypicalFloodplai	0.3	0.15	0.4	0.125	0		100246			0.1
L247	N493	N171	0.1				TypicalFloodplai	0.3	0.15	0.4	0.158	0		100247			0.1
L248	N495	N93	0.1				TypicalFloodplai	0.3	0.15	0.4	0.215	0		100248			0.1
L255	N509	N497	0.1				TypicalFloodplai	0.3	0.15	0.4	0.224	0		100255			0.1
L256	N511	N499	0.1				TypicalFloodplai	0.3	0.15	0.4	0.2	0		100256			0.1
L259	N517	N513	0.1				TypicalFloodplai	0.3	0.15	0.4	0.14	0		100259			0.1
L260	N518	N513	0.1				TypicalFloodplai	0.3	0.15	0.4	0.109	0		100260			0.1
478.796	N283	N50	817				TypicalFloodplai	0.05	0	0.6	0.282	0		3362839			817
482.947	N284	N92	1				TypicalFloodplai	0.05	0	0.6	0.668	0		3362864			1
L87	N2	N174	1754.02				TypicalFloodplai	0.3	0.15	0.4	0.61	0		10087			1754.02
468.366	N174	N175	924.602				TypicalFloodplai	0.3	0.15	0.4	0.385	0		100240			924.602
L99	N8	N198	1426.87				TypicalFloodplai	0.3	0.15	0.4	0.662	0		10099			1426.87
L235	N198	N179	589.843				TypicalFloodplai	0.3	0.15	0.4	0.39	0		100235			589.843
L100	N20	N200	2410.6				TypicalFloodplai	0.3	0.15	0.4	0.455	0		100100			2410.6
L216	N200	N257	398.883				TypicalFloodplai	0.3	0.15	0.4	0.575	0		100216			398.883
L16	N24	N32	949.26				TypicalFloodplai	0.3	0.15	0.4	0.737	0		10016			949.26
L203	N32	N35	768.14				TypicalFloodplai	0.3	0.15	0.4	0.619	0		100203			768.14
L27	N38	N54	1880.19				TypicalFloodplai	0.3	0.15	0.4	0.196	0		10027			1880.19
L229	N54	N64	430.138				TypicalFloodplai	0.3	0.15	0.4	0.246	0		100229			430.138
L33	N64	N66	4218.22				TypicalFloodplai	0.3	0.15	0.4	0.175	0		10033			4218.22
L228	N66	N89	679.396				TypicalFloodplai	0.3	0.15	0.4	0.079	0		100228			679.396
L93	N78	N186	1659.54				TypicalFloodplai	0.3	0.15	0.4	0.168	0		10093			1659.54
L181	N186	N71	897.306				TypicalFloodplai	0.3	0.15	0.4	0.227	0		100181			897.306
L42	N83	N84	443.278				TypicalFloodplai	0.3	0.15	0.4	1.028	0		10042			443.278
L197	N84	N79	351.444				TypicalFloodplai	0.3	0.15	0.4	1.208	0		100197			351.444
L54	N104	N108	855.821				TypicalFloodplai	0.3	0.15	0.4	0.542	0		10054			855.821
L163	N108	N201	108.232				TypicalFloodplai	0.3	0.15	0.4	0.156	0		100163			108.232
L118	N110	N236	2559.91				TypicalFloodplai	0.3	0.15	0.4	0.527	0		100118			2559.91
L161	N236	N115	219.799				TypicalFloodplai	0.3	0.15	0.4	0.114	0		100161			219.799
L112	N128	N224	1261.61				TypicalFloodplai	0.3	0.15	0.4	0.357	0		100112			1261.61
L147	N224	N187	384.377				TypicalFloodplai	0.3	0.15	0.4	0.492	0		100147			384.377
L94	N187	N188	398.234				TypicalFloodplai	0.3	0.15	0.4	0.766	0		10094			398.234
L148	N188	N125	281.787				TypicalFloodplai	0.3	0.15	0.4	0.303	0		100148			281.787
L115	N229	N230	887.702				TypicalFloodplai	0.3	0.15	0.4	0.466	0		100115			887.702
L146	N230	N227	418.836				TypicalFloodplai	0.3	0.15	0.4	0.611	0		100146			418.836
L114	N227	N228	1671.34				TypicalFloodplai	0.3	0.15	0.4	0.244	0		100114			1671.34
L143	N228	N151	338.731				TypicalFloodplai	0.3	0.15	0.4	0.601	0		100143			338.731
L116	N162	N232	4976.5				TypicalFloodplai	0.3	0.15	0.4	0.286	0		100116			4976.5
L135	N232	N163	538.878				TypicalFloodplai	0.3	0.15	0.4	1.079	0		100135			538.878
L130	N259	N257	0.1				TypicalFloodplai	0.3	0.15	0.4	0.716	0		100130			0.1
L129	N257	N258	2297.29				TypicalFloodplai	0.3	0.15	0.4	0.377	0		100129			2297.29
476.771	N262	N258	782				TypicalFloodplai	0.3	0.15	0.4	0.328	0		100132			782
L215	N258	N183	224.716				TypicalFloodplai	0.3	0.15	0.4	0.259	0		100215			224.716
L2	N3	N4	1756.76				TypicalFloodplai	0.3	0.15	0.4	0.443	0		1002			1756.76
L241	N4	N5	453.156				TypicalFloodplai	0.3	0.15	0.4	0.185	0		100241			453.156
L97	N193	N194	3163.03				TypicalFloodplai	0.3	0.15	0.4	1.042	0		10097			3163.03
L236	N194	N179	822				TypicalFloodplai	0.3	0.15	0.4	0.436	0		100236			822
472.03	N179	N180	599.555				TypicalFloodplai	0.3	0.15	0.4	0.385	0		10090			599.555
L233	N180	N17	533.432				TypicalFloodplai	0.3	0.15	0.4	0.423	0		100233			533.432
L9	N17	N18	6517.14				TypicalFloodplai	0.3	0.15	0.4	0.342	0		1009			6517.14
L231	N18	N29	851.536				TypicalFloodplai	0.3	0.15	0.4	0.298	0		100231			851.536
L103	N204	N206	588.397				TypicalFloodplai	0.3	0.15	0.4	0.648	0		100103			588.397
L164	N206	N201	148.186				TypicalFloodplai	0.3	0.15	0.4	0.027	0		100164			148.186
L101	N201	N202	904.63				TypicalFloodplai	0.3	0.15	0.4	0.437	0		100101			904.63
L162	N202	N115	67.824				TypicalFloodplai	0.3	0.15	0.4	0.133	0		100162			67.824
L58	N115	N116	539.958				TypicalFloodplai	0.3	0.15	0.4	0.406	0		10058			539.958
L160	N116	N117	217.417				TypicalFloodplai	0.3	0.15	0.4	0.092	0		100160			217.417
L59	N117	N118	449.726				TypicalFloodplai	0.3	0.15	0.4	0.243	0		10059			449.726
L151	N118	N209	425.2				TypicalFloodplai	0.3	0.15	0.4	0.404	0		100151			425.2
L111	N98	N222	2333.33				TypicalFloodplai	0.3	0.15	0.4	0.897	0		100111			2333.33
L170	N222	N253	440.519				TypicalFloodplai	0.3	0.15	0.4	0.787	0		100170			440.519
L127	N253	N254	2567.04				TypicalFloodplai	0.3	0.15	0.4	0.485	0		100127			2567.04
L168	N254	N99	618.814				TypicalFloodplai	0.3	0.15	0.4	0.268	0		100168			618.814

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - BOG01

Date 14-09-18

Output by May-Wen Yeoh

Description Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design. BOG01

L124	N246	N248	3067.45				TypicalFloodplai	0.3	0.15	0.4	0.434	0		100124			3067.45
L172	N248	N344	468.583				TypicalFloodplai	0.3	0.15	0.4	0.264	0		100172			468.583
L88	N175	N176	1336.32				TypicalFloodplai	0.3	0.15	0.4	0.554	0		10088			1336.32
L239	N176	N5	759.214				TypicalFloodplai	0.3	0.15	0.4	0.322	0		100239			759.214
L3	N5	N6	3475.31				TypicalFloodplai	0.3	0.15	0.4	0.276	0		1003			3475.31
L238	N6	N15	600.02				TypicalFloodplai	0.3	0.15	0.4	0.315	0		100238			600.02
L7	N13	N14	2143.24				TypicalFloodplai	0.3	0.15	0.4	0.706	0		1007			2143.24
L237	N14	N15	546.665				TypicalFloodplai	0.3	0.15	0.4	0.497	0		100237			546.665
L8	N15	N16	4189.93				TypicalFloodplai	0.3	0.15	0.4	0.179	0		1008			4189.93
L232	N16	N29	753.77				TypicalFloodplai	0.3	0.15	0.4	0.163	0		100232			753.77
L15	N29	N30	8881.87				TypicalFloodplai	0.3	0.15	0.4	0.132	0		10015			8881.87
L230	N30	N89	638.071				TypicalFloodplai	0.3	0.15	0.4	0.156	0		100230			638.071
L45	N89	N90	4274.11				TypicalFloodplai	0.3	0.15	0.4	0.115	0		10045			4274.11
L227	N90	N93	622.267				TypicalFloodplai	0.3	0.15	0.4	0.01	0		100227			622.267
L53	N105	N106	2912				TypicalFloodplai	0.3	0.15	0.4	0.123	0		10053			2912
L178	N106	N113	613.999				TypicalFloodplai	0.3	0.15	0.4	0.07	0		100178			613.999
L57	N113	N114	7430.06				TypicalFloodplai	0.3	0.15	0.4	0.135	0		10057			7430.06
L177	N114	N136	445.325				TypicalFloodplai	0.3	0.15	0.4	0.75	0		100177			445.325
L92	N183	N184	902.89				TypicalFloodplai	0.3	0.15	0.4	0.269	0		10092			902.89
L213	N184	N49	299.749				TypicalFloodplai	0.3	0.15	0.4	0.194	0		100213			299.749
L56	N111	N112	3887.54				TypicalFloodplai	0.3	0.15	0.4	0.465	0		10056			3887.54
L157	N112	N119	362.954				TypicalFloodplai	0.3	0.15	0.4	0.668	0		100157			362.954
L60	N119	N120	1190.05				TypicalFloodplai	0.3	0.15	0.4	0.448	0		10060			1190.05
L155	N120	N217	212.86				TypicalFloodplai	0.3	0.15	0.4	1.135	0		100155			212.86
L109	N217	N218	2448.33				TypicalFloodplai	0.3	0.15	0.4	0.377	0		100109			2448.33
L154	N218	N215	305.021				TypicalFloodplai	0.3	0.15	0.4	0.162	0		100154			305.021
L108	N215	N216	433.12				TypicalFloodplai	0.3	0.15	0.4	0.013	0		100108			433.12
L153	N216	N211	198.775				TypicalFloodplai	0.3	0.15	0.4	0.443	0		100153			198.775
L106	N211	N212	254.946				TypicalFloodplai	0.3	0.15	0.4	0.681	0		100106			254.946
L152	N212	N213	178.65				TypicalFloodplai	0.3	0.15	0.4	0.214	0		100152			178.65
L107	N213	N214	600.834				TypicalFloodplai	0.3	0.15	0.4	0.26	0		100107			600.834
L150	N214	N209	330.007				TypicalFloodplai	0.3	0.15	0.4	0.54	0		100150			330.007
L105	N209	N210	1641.99				TypicalFloodplai	0.3	0.15	0.4	0.191	0		100105			1641.99
L149	N210	N125	621.143				TypicalFloodplai	0.3	0.15	0.4	0.264	0		100149			621.143
L63	N125	N126	6552.64				TypicalFloodplai	0.3	0.15	0.4	0.236	0		10063			6552.64
L144	N126	N151	345.041				TypicalFloodplai	0.3	0.15	0.4	0.198	0		100144			345.041
L76	N151	N152	5584.92				TypicalFloodplai	0.3	0.15	0.4	0.171	0		10076			5584.92
L142	N152	N155	361.95				TypicalFloodplai	0.3	0.15	0.4	0.322	0		100142			361.95
L78	N155	N156	648.535				TypicalFloodplai	0.3	0.15	0.4	0.245	0		10078			648.535
L140	N156	N157	369.279				TypicalFloodplai	0.3	0.15	0.4	0.176	0		100140			369.279
L41	N81	N82	4108.77				TypicalFloodplai	0.3	0.15	0.4	0.27	0		10041			4108.77
L189	N82	N67	308.228				TypicalFloodplai	0.3	0.15	0.4	0.096	0		100189			308.228
L40	N79	N80	1017.6				TypicalFloodplai	0.3	0.15	0.4	0.996	0		10040			1017.6
L196	N80	N75	440.519				TypicalFloodplai	0.3	0.15	0.4	1.255	0		100196			440.519
L38	N75	N76	4151.94				TypicalFloodplai	0.3	0.15	0.4	0.827	0		10038			4151.94
L195	N76	N47	895.868				TypicalFloodplai	0.3	0.15	0.4	0.754	0		100195			895.868
L24	N47	N48	2874.73				TypicalFloodplai	0.3	0.15	0.4	0.497	0		10024			2874.73
L194	N48	N57	1082.4				TypicalFloodplai	0.3	0.15	0.4	0.486	0		100194			1082.4
L18	N35	N36	307.522				TypicalFloodplai	0.3	0.15	0.4	0.263	0		10018			307.522
L202	N36	N41	629.377				TypicalFloodplai	0.3	0.15	0.4	0.655	0		100202			629.377
L21	N41	N42	786.992				TypicalFloodplai	0.3	0.15	0.4	0.467	0		10021			786.992
L200	N42	N57	493.12				TypicalFloodplai	0.3	0.15	0.4	0.362	0		100200			493.12
L29	N57	N58	5010.38				TypicalFloodplai	0.3	0.15	0.4	0.354	0		10029			5010.38
L193	N58	N44	532.534				TypicalFloodplai	0.3	0.15	0.4	0.548	0		100193			532.534
L28	N44	N56	1330.44				TypicalFloodplai	0.3	0.15	0.4	0.256	0		10028			1330.44
L192	N56	N67	346.914				TypicalFloodplai	0.3	0.15	0.4	0.033	0		100192			346.914
L34	N67	N68	2064.66				TypicalFloodplai	0.3	0.15	0.4	0.275	0		10034			2064.66
L188	N68	N69	404.375				TypicalFloodplai	0.3	0.15	0.4	0.157	0		100188			404.375
L35	N69	N70	684.061				TypicalFloodplai	0.3	0.15	0.4	0.195	0		10035			684.061
L186	N70	N59	363.238				TypicalFloodplai	0.3	0.15	0.4	0.012	0		100186			363.238
L5	N9	N10	3205.82				TypicalFloodplai	0.3	0.15	0.4	0.37	0		1005			3205.82
L211	N10	N21	268.915				TypicalFloodplai	0.3	0.15	0.4	0.325	0		100211			268.915
L11	N21	N22	2960.57				TypicalFloodplai	0.3	0.15	0.4	0.321	0		10011			2960.57
L207	N22	N25	523.01				TypicalFloodplai	0.3	0.15	0.4	0.421	0		100207			523.01
L13	N25	N26	3192.55				TypicalFloodplai	0.3	0.15	0.4	0.267	0		10013			3192.55
L205	N26	N34	422.194				TypicalFloodplai	0.3	0.15	0.4	0.276	0		100205			422.194
L20	N34	N40	2557.47				TypicalFloodplai	0.3	0.15	0.4	0.222	0		10020			2557.47
L187	N40	N59	279.432				TypicalFloodplai	0.3	0.15	0.4	0.461	0		100187			279.432
L30	N59	N60	4225.17				TypicalFloodplai	0.3	0.15	0.4	0.181	0		10030			4225.17
479.3	N60	N177	403.71				TypicalFloodplai	0.3	0.15	0.4	0.496	0		100185			403.71
L89	N177	N178	724.987				TypicalFloodplai	0.3	0.15	0.4	0.147	0		10089			724.987
L183	N178	N61	639.535				TypicalFloodplai	0.3	0.15	0.4	0.003	0		100183			639.535
L117	N233	N49	1033.54				TypicalFloodplai	0.3	0.15	0.4	0.242	0		100117			1033.54
478.262	N49	N50	1119.91				TypicalFloodplai	0.3	0.15	0.4	0.163	0		10025			1119.91
L62	N122	N124	1377.96				TypicalFloodplai	0.3	0.15	0.4	0.054	0		10062			1377.96
L220	N124	N129	608.561				TypicalFloodplai	0.3	0.15	0.4	0.519	0		100220			608.561
L86	N171	N172	1168.51				TypicalFloodplai	0.3	0.15	0.4	0.109	0		10086			1168.51
L245	N172	N167	816.353				TypicalFloodplai	0.3	0.15	0.4	0.139	0		100245			816.353
L84	N167	N168	4985.05				TypicalFloodplai	0.3	0.15	0.4	0.092	0		10084			4985.05
L242	N168	N165	909.648				TypicalFloodplai	0.3	0.15	0.4	0.06	0		100242			909.648
L83	N165	N166	712.378				TypicalFloodplai	0.3	0.15	0.4	0.14	0		10083			712.378
L254	N166	N497	837.541				TypicalFloodplai	0.3	0.15	0.4	0.114	0		100254			837.541
L47	N93	N94	1490.94				TypicalFloodplai	0.3	0.15	0.4	0.128	0		10047			1490.94
L225	N94	N169	370.746				TypicalFloodplai	0.3	0.15	0.4	0.072	0		100225			370.746
L85A	N169	N263	187				TypicalFloodplai	0.3	0.15	0.4	0.062	0		201244			187
L85B	N263	N170	9999				TypicalFloodplai	0.3	0.15	0.4	0.062	0		10085			9999
L223	N170	N95	528.052				TypicalFloodplai	0.3	0.15	0.4	0.01	0		100223			528.052
L249	N497	N498	245.586				TypicalFloodplai	0.3	0.15	0.4	0.01	0		100249			245.586
L253	N498	N499	347.23				TypicalFloodplai	0.3	0.15	0.4	0.239	0		100253			347.23
L250	N499	N500	2800.59				TypicalFloodplai	0.3	0.15	0.4	0.071	0		100250			2800.59
L252	N500	N502	701.669				TypicalFloodplai	0.3	0.15	0.4	0.01	0		100252			701.669
L257	N513	N501	7089.58				TypicalFloodplai	0.3	0.15	0.4	0.123	0		100257			7089.58
L251	N501	N502	1120.99				TypicalFloodplai	0.3	0.15	0.4	0.077	0		100251			1120.99
L258	N502	N447	8976.61				TypicalFloodplai	0.3	0.15	0.4	0.047	0		100258			8976.61
L224	N447	N95	350.64				TypicalFloodplai	0.3	0.15	0.4	0.581	0		100224			350.64
L48	N95	N96	3126.22				TypicalFloodplai	0.3	0.15	0.4	0.091	0		10048			3126.22
L222	N96	N129	572.042				TypicalFloodplai	0.3	0.15	0.4	0.01	0		100222			572.042
L65	N129	N130	2964.63				TypicalFloodplai	0.3	0.15	0.4	0.056	0		10065			2964.63
L219	N130	N133	612.781				TypicalFloodplai	0.3	0.15	0.4	0.076	0		100219			612.781
L67	N133	N134	846.412				TypicalFloodplai	0.3	0.15	0.4	0.028	0		10067			846.412
L217	N134	N135	337.385				TypicalFloodplai	0.3	0.15	0.4	0.01	0		100217			337.385
L68	N135	N136	1457.3				TypicalFloodplai	0.3	0.15	0.4	0.042	0		10068			1457.3
L70	N136	N140	884.689				TypicalFloodplai	0.3	0.15	0.4	0.01	0		10070			884.689
L176	N140	N146	492.086				TypicalFloodplai	0.3	0.15	0.4	0.018	0		100176			492.086

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - BOG01

Date 14-09-18

Output by May-Wen Yeoh

Description Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design. BOG01

L74	N146	N148	267.952				TypicalFloodplai	0.3	0.15	0.4	0.01	0		10074			267.952
L175	N148	N144	143.938				TypicalFloodplai	0.3	0.15	0.4	0.125	0		100175			143.938
L75	N144	N150	2977.44				TypicalFloodplai	0.3	0.15	0.4	0.032	0		10075			2977.44
L174	N150	N153	214.977				TypicalFloodplai	0.3	0.15	0.4	0.003	0		100174			214.977
L77	N153	N154	4995.95				TypicalFloodplai	0.05	0	0.6	0.032	0		10077			4995.95
L137	N154	N159	248.309				TypicalFloodplai	0.3	0.15	0.4	1.26	0		100137			248.309
L184	N50	N61	433.92				TypicalFloodplai	0.3	0.15	0.4	0.088	0		100184			433.92
L31	N61	N62	396.723				TypicalFloodplai	0.3	0.15	0.4	0.034	0		10031			396.723
L182	N62	N71	337.372				TypicalFloodplai	0.3	0.15	0.4	0.134	0		100182			337.372
L36	N71	N72	2741.58				TypicalFloodplai	0.3	0.15	0.4	0.152	0		10036			2741.58
L180	N72	N255	758.535				TypicalFloodplai	0.3	0.15	0.4	0.121	0		100180			758.535
L128	N255	N282	2603				TypicalFloodplai	0.3	0.15	0.4	0.163	0		100128			2603
L263	N282	N262	3665				TypicalFloodplai	0.3	0.15	0.4	0.163	0		3362747			3665
L110	N92	N220	2720.26				TypicalFloodplai	0.3	0.15	0.4	0.58	0		100110			2720.26
L171	N220	N243	653.888				TypicalFloodplai	0.3	0.15	0.4	0.333	0		100171			653.888
L122	N243	N244	3143.84				TypicalFloodplai	0.3	0.15	0.4	0.275	0		100122			3143.84
L169	N244	N99	598.163				TypicalFloodplai	0.3	0.15	0.4	0.202	0		100169			598.163
L50A	N99	N262	1834				TypicalFloodplai	0.3	0.15	0.4	0.127	0		10050			1834
L50B	N262	N100	6705				TypicalFloodplai	0.3	0.15	0.4	0.127	0		201232			6705
L167	N100	N131	560.065				TypicalFloodplai	0.3	0.15	0.4	0.165	0		100167			560.065
L66	N131	N132	5893.25				TypicalFloodplai	0.3	0.15	0.4	0.151	0		10066			5893.25
L139	N132	N157	279.219				TypicalFloodplai	0.3	0.15	0.4	0.244	0		100139			279.219
L79	N157	N158	919.616				TypicalFloodplai	0.3	0.15	0.4	0.186	0		10079			919.616
L138	N158	N159	471.85				TypicalFloodplai	0.3	0.15	0.4	0.278	0		100138			471.85
L80	N159	N160	1275.18				TypicalFloodplai	0.3	0.15	0.4	0.105	0		10080			1275.18
L136	N160	N163	282.034				TypicalFloodplai	0.3	0.15	0.4	0.221	0		100136			282.034
L82	N163	N164	1829.84				TypicalFloodplai	0.3	0.15	0.4	0.051	0		10082			1829.84
L134	N164	N268	332.246				TypicalFloodplai	0.3	0.15	0.4	0.01	0		100134			332.246

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - BOG03

Date 14-09-18

Output by May-Wen Yeoh

Descriptio Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design. BOG03

In particular:

Catchment Areas

Equal Area Slopes % (catchments)

Bed Slopes % (overflow routes)

SUB-CATCHMENT DETAILS									
Name	Pit or Node	Total Area	Impervious Area	Avg Slope(%)	Mannings n	Time lag (mins)	Rainfall Multiplier	Hydrological Model	
C17	N37	579.1832	0	2.22985188	0.05	0		RAFTS	
C69	N124	1.6774	0	0.94062001	0.05	0		RAFTS	
C316	N125	62.855	25	2.06981118	0.05	0		RAFTS	
C68	N126	35.0026	24	1.70711836	0.05	0		RAFTS	
C318	N128	201.3763	0	0.59967541	0.05	0		RAFTS	
C319	N130	18.2419	0	0.39154478	0.05	0		RAFTS	
C320	N131	144.3389	0	1.04608568	0.05	0		RAFTS	
C307	N133	22.7495	1	0.9858988	0.05	0		RAFTS	
C334	N136	125.2193	0	0.59854256	0.05	0		RAFTS	
C333	N138	145.3488	0	0.35616273	0.05	0		RAFTS	
C72	N206	788.4759	0	0.88890048	0.05	0		RAFTS	
C35	N216	582.1907	0	0.59601464	0.05	0		RAFTS	
C34	N218	1289.691	0	0.7461227	0.05	0		RAFTS	
C23	N227	708.2823	0	2.35954138	0.05	0		RAFTS	
C22	N229	1037.268	0	2.51410941	0.05	0		RAFTS	
C24	N232	1201.481	0	1.76463152	0.05	0		RAFTS	
C20	N234	605.4609	0	2.65426033	0.05	0		RAFTS	
C82	N240	684.6081	0	1.17426896	0.05	0		RAFTS	
C14	N241	536.0187	0	2.97085967	0.05	0		RAFTS	
C88	N246	13.433	0	0.17493254	0.05	0		RAFTS	
C89	N249	6.5367	0	0.22221717	0.05	0		RAFTS	
C87	N252	164.8319	0	0.27352291	0.05	0		RAFTS	
C94	N299	1683.983	0	2.03661784	0.05	0		RAFTS	
C322	N340	85.0652	0	0.34739758	0.05	0		RAFTS	
C321	N471	50.075	10	1.34667805	0.05	0		RAFTS	
C317	N472	25.7992	1	0.81157902	0.05	0		RAFTS	
C376	N474	84.9274	18	1.85660423	0.05	0		RAFTS	
C363	N476	674.0766	0	1.42831148	0.05	0		RAFTS	
C347	N477	1917.526	0	1.33585731	0.05	0		RAFTS	
C349	N478	565.5666	0	0.90816028	0.05	0		RAFTS	
C338	N479	727.3726	0	0.80756171	0.05	0		RAFTS	
C339	N480	549.8405	0	0.95579421	0.05	0		RAFTS	
C366	N483	646.8423	0	0.90567454	0.05	0		RAFTS	
C348	N497	130.1796	0	1.02241345	0.05	0		RAFTS	
C346	N501	21.4091	0	1.51610274	0.05	0		RAFTS	
C361	N503	701.4723	0	1.13042636	0.05	0		RAFTS	
C362	N516	259.3327	0	0.79057117	0.05	0		RAFTS	
C360	N517	144.063	0	1.0278939	0.05	0		RAFTS	
C367	N526	35.9136	0	0.97942158	0.05	0		RAFTS	
C371	N528	2.1219	0	4.27911639	0.05	0		RAFTS	
C369	N530	18.0176	0	2.43549245	0.05	0		RAFTS	
C358	N531	111.9807	0	0.80048014	0.05	0		RAFTS	
C372	N533	27.3952	0	0.94685329	0.05	0		RAFTS	
C373	N534	434.8309	0	0.70290535	0.05	0		RAFTS	
C375	N536	25.4956	23	2.59833759	0.05	0		RAFTS	
C343	N537	47.0083	0	2.27334436	0.05	0		RAFTS	
C50	N59	328.4581	0	0.17299916	0.05	0		RAFTS	
C84	N208	2067.713	0	0.33293307	0.05	0		RAFTS	
C85	N211	478.8174	0	0.50665339	0.05	0		RAFTS	
C36	N72	50.9019	0	0.8139487	0.05	0		RAFTS	
C26	N55	8.4485	0	1.04939319	0.05	0		RAFTS	
C83	N35	1802.729	0	1.22332165	0.05	0		RAFTS	
C21	N41	452.7407	0	0.94521474	0.05	0		RAFTS	
C25	N44	809.0716	0	0.9038044	0.05	0		RAFTS	
C27	N48	70.7722	0	1.03754633	0.05	0		RAFTS	
C30	N57	615.8799	0	1.21915433	0.05	0		RAFTS	
C310	N255	275.2162	0	0.23988229	0.05	0		RAFTS	
C102	N301	103.2334	0	1.60824981	0.05	0		RAFTS	
C31	N221	121.5793	0	1.61332828	0.05	0		RAFTS	
C101	N62	180.6781	0	0.43448564	0.05	0		RAFTS	
C77	N140	103.713	0	0.35343717	0.05	0		RAFTS	
C71	N142	12.1767	0	0.36804281	0.05	0		RAFTS	
C70	N69	112.5745	0	0.22787626	0.05	0		RAFTS	
C86	N65	109.0711	0	0.31864481	0.05	0		RAFTS	
C51	N244	271.2613	0	0.14070442	0.05	0		RAFTS	
C323	N73	555.155	0	0.33487331	0.05	0		RAFTS	
C129	N74	153.1889	0	0.19833654	0.05	0		RAFTS	
C52	N46	465.3369	0	0.18884161	0.05	0		RAFTS	
C309	N52	405.6838	0	0.22420495	0.05	0		RAFTS	
C364	N488	1133.075	0	1.66676869	0.05	0		RAFTS	
C357	N494	577.6611	0	0.88343139	0.05	0		RAFTS	
C359	N514	576.485	0	1.26237116	0.05	0		RAFTS	
C341	N512	96.0902	0	1.13099956	0.05	0		RAFTS	
C337	N508	10.2871	0	1.3513629	0.05	0		RAFTS	
C353	N510	17.2806	0	0.34924814	0.05	0		RAFTS	
C350	N482	89.9485	0	1.06644474	0.05	0		RAFTS	
C365	N525	249.0254	0	0.5562837	0.05	0		RAFTS	
C351	N499	204.3788	0	0.87725332	0.05	0		RAFTS	
C345	N515	353.0895	0	0.87842226	0.05	0		RAFTS	
C342	N487	74.7618	0	0.40775741	0.05	0		RAFTS	
C374	N535	147.3795	0	1.79097599	0.05	0		RAFTS	
C352	N496	23.5875	0	0.40423694	0.05	0		RAFTS	
C356	N490	42.6464	0	0.96299223	0.05	0		RAFTS	
C355	N492	171.9625	0	0.99197739	0.05	0		RAFTS	
C354	N506	144.2332	0	0.40156583	0.05	0		RAFTS	
C336	N502	904.807	0	0.31206063	0.05	0		RAFTS	
C335	N519	165.1912	0	0.27475479	0.05	0		RAFTS	
C344	N524	2109.717	0	0.21600146	0.05	0		RAFTS	
C340	N522	465.3978	0	0.41677515	0.05	0		RAFTS	

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - BOG03

Date 14-09-18

Output by May-Wen Yeoh

Descriptio Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design. BOG03

OVERFLOW ROUTE DETAILS

Name	From	To	Length	Spill	Crest	Weir	Cross	Safe Depth	SafeDepth	Safe	Bed	D/S Area		id			
			(m)	Level	Length	Coeff. C	Section	Major Storms	Minor Storms	DxV	Slope	Contributing					
				(m)	(m)			(m)	(m)	(sq.m/sec)	(%)	%					
L115	N37	N39	17.937				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10215			17.937
499.577	N124	N45	1512.91				TypicalFloodpla	0.3	0.15	0.4	0.539	0		10144			1512.91
498.87	N125	N45	2150.41				TypicalFloodpla	0.3	0.15	0.4	0.408	0		10145			2150.41
498.625	N126	N45	1098.18				TypicalFloodpla	0.3	0.15	0.4	0.921	0		10146			1098.18
501.167	N128	N50	2820.88				TypicalFloodpla	0.3	0.15	0.4	0.248	0		10147			2820.88
500.663	N130	N50	2029.73				TypicalFloodpla	0.3	0.15	0.4	0.3	0		10148			2029.73
500.558	N131	N50	2473.26				TypicalFloodpla	0.3	0.15	0.4	0.28	0		10149			2473.26
500.138	N133	N50	2743.36				TypicalFloodpla	0.3	0.15	0.4	0.275	0		10150			2743.36
502.456	N136	N58	2688.71				TypicalFloodpla	0.3	0.15	0.4	0.188	0		10151			2688.71
502.974	N138	N58	2687.67				TypicalFloodpla	0.3	0.15	0.4	0.177	0		10152			2687.67
L96	N206	N208	5423.3				TypicalFloodpla	0.3	0.15	0.4	0.264	0		10196			5423.3
L102	N216	N70	15.107				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10202			15.107
L103	N218	N70	10.595				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10203			10.595
L109	N227	N54	9.184				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10209			9.184
L110	N229	N54	15.889				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10210			15.889
L112	N232	N47	28.243				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10212			28.243
L113	N234	N43	53.911				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10213			53.911
L117	N240	N30	21.711				TypicalFloodpla	0.3	0.15	0.4	1.148	0		10217			21.711
L118	N241	N28	731.592				TypicalFloodpla	0.3	0.15	0.4	0.651	0		10218			731.592
503.72	N246	N247	224.205				TypicalFloodpla	0.3	0.15	0.4	0.376	0		10220			224.205
504.798	N249	N251	149.797				TypicalFloodpla	0.3	0.15	0.4	0.211	0		10221			149.797
504.707	N252	N251	171.029				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10222			171.029
L151	N299	N301	3036.01				TypicalFloodpla	0.3	0.15	0.4	1.679	0		10251			3036.01
L186	N340	N73	3181.74				TypicalFloodpla	0.3	0.15	0.4	0.276	0		10286			3181.74
499.545	N471	N45	1484.97				TypicalFloodpla	0.3	0.15	0.4	0.56	0		10530			1484.97
500.482	N472	N50	2472.18				TypicalFloodpla	0.3	0.15	0.4	0.334	0		10531			2472.18
497.78	N474	N475	1				TypicalFloodpla	0.3	0.15	0.4	0.312	0		10542			1
L448	N476	N493	1				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10548			1
L450	N477	N486	1				TypicalFloodpla	0.3	0.15	0.4	0.324	0		10550			1
L451	N478	N486	1				TypicalFloodpla	0.3	0.15	0.4	0.231	0		10551			1
L458	N479	N481	1				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10558			1
L474	N480	N481	1				TypicalFloodpla	0.3	0.15	0.4	0.523	0		10574			1
L476	N483	N484	1				TypicalFloodpla	0.3	0.15	0.4	0.468	0		10576			1
487.96	N497	N498	1				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10560			1
488.908	N501	N489	1				TypicalFloodpla	0.3	0.15	0.4	0.452	0		10562			1
L482	N503	N505	1				TypicalFloodpla	0.3	0.15	0.4	0.324	0		10582			1
L435	N516	N520	1				TypicalFloodpla	0.3	0.15	0.4	0.314	0		10535			1
492.947	N517	N500	500.306				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10569			500.306
488.694	N526	N496	604				TypicalFloodpla	0.3	0.15	0.4	0.688	0		10583			604
493.293	N528	N527	78				TypicalFloodpla	0.3	0.15	0.4	3.812	0		10585			78
493.749	N530	N529	121				TypicalFloodpla	0.3	0.15	0.4	2.261	0		10587			121
495.535	N531	N532	816				TypicalFloodpla	0.3	0.15	0.4	0.857	0		10591			816
496.067	N533	N532	136				TypicalFloodpla	0.3	0.15	0.4	1.035	0		10589			136
496.885	N534	N518	418.836				TypicalFloodpla	0.3	0.15	0.4	0.167	0		10536			418.836
498.061	N536	N475	413				TypicalFloodpla	0.3	0.15	0.4	0.257	0		10593			413
497.613	N537	N475	204				TypicalFloodpla	0.3	0.15	0.4	0.617	0		10592			204
L19	N58	N59	1438.76				TypicalFloodpla	0.3	0.15	0.4	0.173	0		10119			1438.76
L157	N59	N313	62.88				TypicalFloodpla	0.3	0.15	0.4	0.159	0		10257			62.88
L97	N208	N211	2037.54				TypicalFloodpla	0.3	0.15	0.4	0.103	0		10197			2037.54
L98	N211	N64	9.061				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10198			9.061
L23	N70	N72	643.355				TypicalFloodpla	0.3	0.15	0.4	0.175	0		10123			643.355
L101	N72	N67	7.073				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10201			7.073
L17	N54	N55	495.7				TypicalFloodpla	0.3	0.15	0.4	0.595	0		10117			495.7
L107	N55	N56	20.336				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10207			20.336
L10	N28	N30	426.873				TypicalFloodpla	0.3	0.15	0.4	1.009	0		10110			426.873
L11	N30	N35	4471.07				TypicalFloodpla	0.3	0.15	0.4	0.355	0		10111			4471.07
L116	N35	N39	14.994				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10216			14.994
L12	N39	N41	2039.4				TypicalFloodpla	0.3	0.15	0.4	0.286	0		10112			2039.4
L114	N41	N43	28.595				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10214			28.595
L13	N43	N44	2036.05				TypicalFloodpla	0.3	0.15	0.4	0.146	0		10113			2036.05
L111	N44	N47	29.22				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10211			29.22
L15	N47	N48	621.361				TypicalFloodpla	0.3	0.15	0.4	0.041	0		10115			621.361
L108	N48	N56	8.133				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10208			8.133
L18	N56	N57	1998.96				TypicalFloodpla	0.3	0.15	0.4	0.263	0		10118			1998.96
L106	N57	N61	18.879				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10206			18.879
L123	N251	N255	3500.77				TypicalFloodpla	0.3	0.15	0.4	0.252	0		10223			3500.77
L162	N301	N221	3302.73				TypicalFloodpla	0.3	0.15	0.4	1.408	0		10262			3302.73
L105	N221	N61	16.066				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10205			16.066
L20	N61	N62	3013.29				TypicalFloodpla	0.3	0.15	0.4	0.429	0		10120			3013.29
L161	N62	N140	2049.89				TypicalFloodpla	0.3	0.15	0.4	0.162	0		10261			2049.89
L53	N140	N142	1114.22				TypicalFloodpla	0.3	0.15	0.4	0.366	0		10153			1114.22
L100	N142	N67	8.21				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10200			8.21
L22	N67	N69	837.47				TypicalFloodpla	0.3	0.15	0.4	0.197	0		10122			837.47
L99	N69	N64	356.792				TypicalFloodpla	0.3	0.15	0.4	0.073	0		10199			356.792
L21	N64	N65	2423.43				TypicalFloodpla	0.3	0.15	0.4	0.219	0		10121			2423.43
503.599	N65	N219	159.261				TypicalFloodpla	0.3	0.15	0.4	0.583	0		10204			159.261
L119	N219	N244	4418.12				TypicalFloodpla	0.3	0.15	0.4	0.161	0		10219			4418.12
L158	N244	N313	47.518				TypicalFloodpla	0.3	0.15	0.4	0.094	0		10258			47.518
505.502	N73	N74	3923.21				TypicalFloodpla	0.3	0.15	0.4	0.193	0		10124			3923.21
L14	N45	N46	4585.4				TypicalFloodpla	0.3	0.15	0.4	0.147	0		10114			4585.4
L155	N46	N309	16.244				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10255			16.244
L16	N50	N52	1972.52				TypicalFloodpla	0.3	0.15	0.4	0.14	0		10116			1972.52
L156	N52	N309	19.807				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10256			19.807
L477	N486	N488	3887.54				TypicalFloodpla	0.3	0.15	0.4	0.463	0		10577			3887.54
L449	N488	N493	362.954				TypicalFloodpla	0.3	0.15	0.4	0.554	0		10549			362.954
L480	N493	N494	1190.05				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10580			1190.05
L447	N494	N513	212.86				TypicalFloodpla	0.3	0.15	0.4	0.731	0		10547			212.86
L467	N513	N514	2448.33				TypicalFloodpla	0.3	0.15	0.4	0.634	0		10567			2448.33
L446	N514	N511	305.021				TypicalFloodpla	0.3	0.15	0.4	0.057	0		10546			305.021
L466	N511	N512	433.12				TypicalFloodpla	0.3	0.15	0.4	0.663	0		10566			433.12
L445	N512	N507	198.775				TypicalFloodpla	0.3	0.15	0.4	0.319	0		10545			198.775
L464	N507	N508	254.946				TypicalFloodpla	0.3	0.15	0.4	0.6	0		10564			254.946
L444	N508	N509	178.65				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10544			178.65
490.553	N509	N510	600.834				TypicalFloodpla	0.3	0.15	0.4	0.174	0		10565			600.834
L441	N510	N504	330.007				TypicalFloodpla	0.3	0.15	0.4	0.409	0		10541			330.007
L475	N481	N482	855.821				TypicalFloodpla	0.3	0.15	0.4	0.438	0		10575			855.821

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - BOG03

Date 14-09-18

Output by May-Wen Yeoh

Descriptio Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design. BOG03

L455	N482	N495	108.232				TypicalFloodpla	0.3	0.15	0.4	0.429	0		10555			108.232
L473	N484	N525	2559.91				TypicalFloodpla	0.3	0.15	0.4	0.672	0		10573			2559.91
L453	N525	N489	219.799				TypicalFloodpla	0.3	0.15	0.4	0.601	0		10553			219.799
L461	N498	N499	588.397				TypicalFloodpla	0.3	0.15	0.4	0.734	0		10561			588.397
L457	N499	N495	148.186				TypicalFloodpla	0.3	0.15	0.4	0.236	0		10557			148.186
L459	N495	N496	904.63				TypicalFloodpla	0.3	0.15	0.4	0.542	0		10559			904.63
L468	N505	N515	1261.61				TypicalFloodpla	0.3	0.15	0.4	0.355	0		10568			1261.61
L438	N515	N485	384.377				TypicalFloodpla	0.3	0.15	0.4	1.491	0		10538			384.377
491.834	N485	N487	398.234				TypicalFloodpla	0.3	0.15	0.4	0.325	0		10556			398.234
L439	N487	N500	281.787				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10539			281.787
L471	N520	N535	887.702				TypicalFloodpla	0.3	0.15	0.4	1.127	0		10571			887.702
494.815	N535	N519	812				TypicalFloodpla	0.3	0.15	0.4	0.328	0		10588			812
L454	N496	N489	67.824				TypicalFloodpla	0.3	0.15	0.4	1.12	0		10554			67.824
L478	N489	N490	539.958				TypicalFloodpla	0.3	0.15	0.4	0.286	0		10578			539.958
L452	N490	N491	217.417				TypicalFloodpla	0.3	0.15	0.4	0.011	0		10552			217.417
489.844	N491	N492	449.726				TypicalFloodpla	0.3	0.15	0.4	0.229	0		10579			449.726
L443	N492	N504	425.2				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10543			425.2
L463	N504	N506	1641.99				TypicalFloodpla	0.3	0.15	0.4	0.22	0		10563			1641.99
L440	N506	N500	621.143				TypicalFloodpla	0.3	0.15	0.4	0.061	0		10540			621.143
L481	N500	N527	1180				TypicalFloodpla	0.3	0.15	0.4	0.191	0		10581			1180
L484	N527	N529	554				TypicalFloodpla	0.3	0.15	0.4	0.213	0		10584			554
L486	N529	N502	4818				TypicalFloodpla	0.3	0.15	0.4	0.249	0		10586			4818
L434	N502	N523	345.041				TypicalFloodpla	0.3	0.15	0.4	0.24	0		10534			345.041
L490	N532	N518	512				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10590			512
L470	N518	N519	1671.34				TypicalFloodpla	0.3	0.15	0.4	0.299	0		10570			1671.34
L433	N519	N523	338.731				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10533			338.731
L437	N523	N524	5584.92				TypicalFloodpla	0.3	0.15	0.4	0.224	0		10537			5584.92
L432	N524	N473	361.95				TypicalFloodpla	0.3	0.15	0.4	0.01	0		10532			361.95
L472	N475	N522	4976.5				TypicalFloodpla	0.3	0.15	0.4	0.299	0		10572			4976.5

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - BOG05

Date 14-09-18

Output by May-Wen Yeoh

Description Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design. BOG05
In particular:
Catchment Areas
Equal Area Slopes % (catchments)
Bed Slopes % (overflow routes)

SUB-CATCHMENT DETAILS

Name	Pit or Node	Total Area	Impervious Area	Avg Slope(%)	Mannings n	Time lag (mins)	Rainfall Multiplier	Hydrological Model	
C181	N9	48.468	2	0.26392749	0.05	0		RAFTS	
C180	N12	1.7927	0	0.27942949	0.05	0		RAFTS	
C243	N27	581.7755	0	0.61406296	0.05	0		RAFTS	
C142	N33	1516.581	0	0.96149035	0.05	0		RAFTS	
C143	N36	1176.213	0	0.92921167	0.05	0		RAFTS	
C210	N49	39.1402	0	0.34567013	0.05	0		RAFTS	
C184	N60	1214.185	0	0.81868091	0.05	0		RAFTS	
C186	N66	1333.533	0	0.93612821	0.05	0		RAFTS	
C81	N75	707.7299	0	1.26646201	0.05	0		RAFTS	
C185	N77	553.8851	0	0.74542904	0.05	0		RAFTS	
C271	N85	236.8712	0	0.32835555	0.05	0		RAFTS	
C305	N91	365.0918	0	0.29207672	0.05	0		RAFTS	
C121	N95	697.5026	0	0.50866523	0.05	0		RAFTS	
C44	N99	42.3228	0	0.28091317	0.05	0		RAFTS	
C10	N119	503.9463	0	1.39857789	0.05	0		RAFTS	
C29	N148	2513.857	0	0.77462778	0.05	0		RAFTS	
C32	N153	1139.51	0	1.0164939	0.05	0		RAFTS	
C37	N158	1352.206	14	0.39068207	0.05	0		RAFTS	
C18	N164	954.3145	0	0.72824649	0.05	0		RAFTS	
C15	N165	623.2995	0	0.83334067	0.05	0		RAFTS	
C8	N169	988.0493	0	1.60959845	0.05	0		RAFTS	
C6	N171	538.4035	0	2.00053875	0.05	0		RAFTS	
C4	N176	1534.091	0	1.61651092	0.05	0		RAFTS	
C2	N177	1110.316	0	1.62783157	0.05	0		RAFTS	
C1	N179	759.4699	0	1.52896388	0.05	0		RAFTS	
C12	N188	1735.538	0	1.02155813	0.05	0		RAFTS	
C7	N191	1665.306	0	1.22935125	0.05	0		RAFTS	
C48	N193	357.6413	0	0.33423785	0.05	0		RAFTS	
C315	N197	159.6313	0	0.34730151	0.05	0		RAFTS	
C168	N209	93.5605	0	0.68727159	0.05	0		RAFTS	
C172	N215	32.406	0	0.60959144	0.05	0		RAFTS	
C176	N220	28.3538	0	1.05527508	0.05	0		RAFTS	
C174	N226	73.104	0	0.20880333	0.05	0		RAFTS	
C221	N230	359.8783	0	0.4347733	0.05	0		RAFTS	
C331	N231	577.9453	0	0.54530574	0.05	0		RAFTS	
C233	N233	200.6815	0	0.51474753	0.05	0		RAFTS	
C141	N238	3.177	0	0.01	0.025	0		RAFTS	
C188	N239	1854.388	0	0.45804573	0.05	0		RAFTS	
C283	N245	47.1146	0	0.23104668	0.05	0		RAFTS	
C158	N254	648.9739	0	0.81853199	0.05	0		RAFTS	
C157	N256	590.1027	0	0.83552501	0.05	0		RAFTS	
C91	N257	70.9393	0	0.95995744	0.05	0		RAFTS	
C282	N259	0.9029	0	0.09212401	0.05	0		RAFTS	
C90	N260	48.6645	0	1.0383972	0.05	0		RAFTS	
C46	N262	96.8303	0	0.82260317	0.05	0		RAFTS	
C272	N264	25.4267	0	0.22502506	0.05	0		RAFTS	
C67	N265	131.5673	0	0.83307935	0.05	0		RAFTS	
C47	N266	75.589	0	0.96646854	0.05	0		RAFTS	
C54	N269	91.6249	0	0.30208245	0.05	0		RAFTS	
C65	N273	59.7775	0	0.29091932	0.05	0		RAFTS	
C64	N274	200.5699	0	0.33050567	0.05	0		RAFTS	
C93	N278	2.0159	0	0.18094321	0.05	0		RAFTS	
C62	N282	22.9765	0	0.33125937	0.05	0		RAFTS	
C75	N293	210.4476	0	0.30344742	0.05	0		RAFTS	
C60	N295	133.8664	0	0.31307293	0.05	0		RAFTS	
C137	N297	1746.133	0	1.18373082	0.05	0		RAFTS	
C96	N303	1054.413	0	0.57275868	0.05	0		RAFTS	
C61	N307	433.9332	0	0.39641313	0.05	0		RAFTS	
C294	N310	245.483	0	1.23343459	0.05	0		RAFTS	
C293	N312	252.6458	0	0.94561509	0.05	0		RAFTS	
C170	N316	4.5398	0	0.73077442	0.05	0		RAFTS	
C169	N317	117.2277	0	1.1727954	0.05	0		RAFTS	
C103	N318	605.9677	0	1.842711	0.05	0		RAFTS	
C104	N320	377.7997	0	0.8950499	0.05	0		RAFTS	
C106	N322	674.4904	0	1.33550918	0.05	0		RAFTS	
C109	N325	72.9682	0	0.33303661	0.05	0		RAFTS	
C111	N326	392.7008	0	0.34367848	0.05	0		RAFTS	
C112	N328	133.6447	0	0.35107522	0.05	0		RAFTS	
C114	N329	126.8053	0	0.38196612	0.05	0		RAFTS	
C115	N330	33.3153	0	0.3531483	0.05	0		RAFTS	
C63	N331	28.259	0	0.35876224	0.05	0		RAFTS	
C325	N332	212.1477	0	0.37478518	0.05	0		RAFTS	
C117	N333	37.7844	0	0.36968724	0.05	0		RAFTS	
C118	N334	67.4228	0	0.39347975	0.05	0		RAFTS	
C119	N336	7.5891	0	0.31740058	0.05	0		RAFTS	
C120	N337	15.034	0	0.31974023	0.05	0		RAFTS	
C123	N339	27.6113	0	0.4466072	0.05	0		RAFTS	
C156	N341	305.3405	0	0.28052711	0.05	0		RAFTS	
C193	N347	453.2976	0	0.45391538	0.05	0		RAFTS	
C329	N349	511.46	0	0.88766922	0.05	0		RAFTS	
C268	N353	116.5912	0	0.33085355	0.05	0		RAFTS	
C179	N355	688.5176	0	0.43277347	0.05	0		RAFTS	
C182	N359	258.8262	0	0.3794194	0.05	0		RAFTS	
C187	N383	840.4814	0	0.58864249	0.05	0		RAFTS	
C295	N391	226.4964	0	0.24251028	0.05	0		RAFTS	
C234	N400	555.9841	0	0.54679017	0.05	0		RAFTS	
C59	N470	162.9899	0	0.26612559	0.05	0		RAFTS	
C194	N29	540.0804	0	0.30919177	0.05	0		RAFTS	
C303	N31	157.8621	0	0.22985091	0.05	0		RAFTS	
C227	N32	196.4402	0	0.22387058	0.05	0		RAFTS	

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - BOG05

Date 14-09-18

Output by May-Wen Yeoh

Description Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design. BOG05

C302	N24	45.7184	0	0.23087	0.05	0		RAFTS	
C245	N323	1247.654	0	0.61958065	0.05	0		RAFTS	
C304	N53	453.8802	0	0.58514094	0.05	0		RAFTS	
C244	N38	247.2436	0	0.39133597	0.05	0		RAFTS	
C301	N40	160.5938	0	0.31955119	0.05	0		RAFTS	
C229	N319	76.436	0	0.29253375	0.05	0		RAFTS	
C298	N42	42.3639	0	0.26147351	0.05	0		RAFTS	
C299	N51	133.1223	0	0.32066149	0.05	0		RAFTS	
C326	N15	134.9645	0	0.21809758	0.05	0		RAFTS	
C269	N68	251.6994	0	0.40771742	0.05	0		RAFTS	
C270	N63	38.6066	0	0.48492659	0.05	0		RAFTS	
C43	N76	799.6501	0	0.30435089	0.05	0		RAFTS	
C78	N146	472.3083	0	0.30407851	0.05	0		RAFTS	
C191	N364	641.8191	0	0.34665875	0.05	0		RAFTS	
C327	N87	240.8304	0	0.23567239	0.05	0		RAFTS	
C274	N83	100.6588	0	0.16990158	0.05	0		RAFTS	
C73	N96	317.4904	0	0.2715084	0.05	0		RAFTS	
C3	N115	125.7869	0	3.39123998	0.05	0		RAFTS	
C5	N113	375.516	0	1.62412934	0.05	0		RAFTS	
C9	N118	338.6777	0	1.08599132	0.05	0		RAFTS	
C11	N121	45.6164	0	0.84717182	0.05	0		RAFTS	
C16	N123	212.0106	0	0.87368699	0.05	0		RAFTS	
C99	N11	48.645	0	0.32888494	0.05	0		RAFTS	
C19	N163	11.7443	0	0.37282022	0.05	0		RAFTS	
C80	N18	880.7553	6	0.36300192	0.05	0		RAFTS	
C79	N160	226.93	0	0.24952856	0.05	0		RAFTS	
C246	N195	236.7024	0	0.38407714	0.05	0		RAFTS	
C232	N228	286.3589	0	0.28018837	0.05	0		RAFTS	
C138	N225	270.1669	0	0.20394407	0.05	0		RAFTS	
C332	N223	98.0899	0	0.28297432	0.05	0		RAFTS	
C281	N395	116.2451	0	0.38356211	0.05	0		RAFTS	
C130	N217	28.572	0	0.43386253	0.05	0		RAFTS	
C240	N370	494.4202	0	0.34435211	0.05	0		RAFTS	
C230	N456	460.73	0	0.29591513	0.05	0		RAFTS	
C284	N253	396.2792	0	0.23656107	0.05	0		RAFTS	
C273	N243	322.7356	0	0.13315307	0.05	0		RAFTS	
C128	N7	656.8936	0	0.17453078	0.05	0		RAFTS	
C55	N267	406.2143	0	0.20437153	0.05	0		RAFTS	
C311	N1	456.9765	0	0.30647179	0.05	0		RAFTS	
C56	N294	90.2597	0	0.26010848	0.05	0		RAFTS	
C125	N202	425.2697	0	0.20412555	0.05	0		RAFTS	
C13	N26	855.2695	0	0.65882465	0.05	0		RAFTS	
C97	N23	1166.779	0	0.36910199	0.05	0		RAFTS	
C39	N305	199.8221	0	0.2994672	0.05	0		RAFTS	
C108	N324	220.8128	0	0.37356773	0.05	0		RAFTS	
C107	N182	61.007	0	0.31933545	0.05	0		RAFTS	
C100	N304	169.9688	0	0.33698979	0.05	0		RAFTS	
C95	N186	274.7649	0	0.33457049	0.05	0		RAFTS	
C76	N184	78.7716	0	0.28737523	0.05	0		RAFTS	
C74	N21	185.5142	0	0.28449637	0.05	0		RAFTS	
C126	N181	329.0074	0	0.19705283	0.05	0		RAFTS	
C98	N14	483.0505	0	0.32888494	0.05	0		RAFTS	
C28	N150	119.6301	0	0.52185907	0.05	0		RAFTS	
C40	N80	796.2808	0	0.49696912	0.05	0		RAFTS	
C122	N321	100.8936	0	0.55416621	0.05	0		RAFTS	
C41	N93	41.0389	0	0.34730869	0.05	0		RAFTS	
C33	N155	76.8287	0	0.58956068	0.05	0		RAFTS	
C38	N111	97.4828	0	0.24069779	0.05	0		RAFTS	
C105	N109	170.2817	0	0.40888124	0.05	0		RAFTS	
C92	N103	4.6472	0	0.250321	0.05	0		RAFTS	
C110	N327	97.2374	0	0.32483078	0.05	0		RAFTS	
C113	N198	277.4584	0	0.31941961	0.05	0		RAFTS	
C49	N290	200.5539	0	0.34488623	0.05	0		RAFTS	
C58	N292	496.382	0	0.18031104	0.05	0		RAFTS	
C116	N284	235.4089	0	0.31475507	0.05	0		RAFTS	
C324	N280	376.443	0	0.29576029	0.05	0		RAFTS	
C57	N277	528.9033	0	0.27143642	0.05	0		RAFTS	
C308	N107	525.4038	0	0.32170325	0.05	0		RAFTS	
C53	N2	62.0098	0	0.19369137	0.05	0		RAFTS	
C306	N97	42.239	0	0.22319487	0.05	0		RAFTS	
C124	N152	66.6805	0	0.3597995	0.05	0		RAFTS	
C42	N90	5.5198	0	0.30572018	0.05	0		RAFTS	
C45	N88	38.8308	0	0.26818044	0.05	0		RAFTS	
C66	N84	448.9923	0	0.44007157	0.05	0		RAFTS	
C127	N4	196.9116	0	0.1363018	0.05	0		RAFTS	
C226	N348	271.8259	0	0.2812493	0.05	0		RAFTS	
C196	N352	35.6307	0	0.2569231	0.05	0		RAFTS	
C330	N350	234.6063	0	0.30187586	0.05	0		RAFTS	
C195	N366	214.5556	0	0.32755833	0.05	0		RAFTS	
C328	N71	82.19	0	0.24577621	0.05	0		RAFTS	
C247	N354	612.3791	0	0.31220477	0.05	0		RAFTS	
C225	N356	116.2821	0	0.2805849	0.05	0		RAFTS	
C178	N368	136.9496	0	0.15866044	0.05	0		RAFTS	
C314	N268	49.4203	0	0.16508715	0.05	0		RAFTS	
C215	N374	69.4227	0	0.22590178	0.05	0		RAFTS	
C218	N372	79.039	0	0.23010618	0.05	0		RAFTS	
C228	N360	213.7358	0	0.36878848	0.05	0		RAFTS	
C300	N3	190.2154	0	0.22247081	0.05	0		RAFTS	
C183	N363	224.8957	0	0.25783381	0.05	0		RAFTS	
C285	N20	257.3213	0	0.2121987	0.05	0		RAFTS	
C267	N272	154.0524	0	0.20821505	0.05	0		RAFTS	
C177	N382	455.3565	0	0.38229884	0.05	0		RAFTS	
C231	N235	304.0555	0	0.2328555	0.05	0		RAFTS	
C296	N237	432.1119	0	0.23074198	0.05	0		RAFTS	
C222	N214	315.0441	0	0.40061462	0.05	0		RAFTS	
C297	N222	461.6667	0	0.34280346	0.05	0		RAFTS	
C135	N345	167.5257	0	0.30622263	0.05	0		RAFTS	

OVERFLOW ROUTE DETAILS

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - BOG05

Date 14-09-18

Output by May-Wen Yeoh

Description Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design. BOG05

Name	From	To	Length	Spill	Crest	Weir	Cross	Safe Depth	SafeDepth	Safe	Bed	D/S Area		id			
			(m)	Level	Length	Coeff. C	Section	Major Storms	Minor Storms	DxV	Slope	Contributing					
				(m)	(m)			(m)	(m)	(sq.m/sec)	(%)	%					
528.668	N9	N6	261.752				TypicalFloodpl	0.3	0.15	0.4	0.401	0		10360			261.752
528.741	N12	N6	181.772				TypicalFloodpl	0.3	0.15	0.4	0.447	0		10361			181.772
L266	N27	N29	4854.24				TypicalFloodpl	0.3	0.15	0.4	0.287	0		10366			4854.24
L268	N33	N34	75.599				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10368			75.599
L269	N36	N34	58.538				TypicalFloodpl	0.3	0.15	0.4	1.047	0		10369			58.538
L274	N49	N51	1906.19				TypicalFloodpl	0.3	0.15	0.4	0.291	0		10374			1906.19
L278	N60	N361	106.816				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10378			106.816
L280	N66	N68	4909.7				TypicalFloodpl	0.3	0.15	0.4	0.368	0		10380			4909.7
L25	N75	N76	7360.38				TypicalFloodpl	0.3	0.15	0.4	0.342	0		10125			7360.38
L284	N77	N361	63.3				TypicalFloodpl	0.3	0.15	0.4	0.234	0		10384			63.3
L287	N85	N87	1519.53				TypicalFloodpl	0.3	0.15	0.4	0.267	0		10387			1519.53
531.132	N91	N81	466.55				TypicalFloodpl	0.3	0.15	0.4	0.306	0		10389			466.55
L32	N95	N96	3012.22				TypicalFloodpl	0.3	0.15	0.4	0.127	0		10132			3012.22
L34	N99	N100	56.227				TypicalFloodpl	0.3	0.15	0.4	0.277	0		10134			56.227
L75	N119	N122	20.646				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10175			20.646
L58	N148	N79	21.015				TypicalFloodpl	0.3	0.15	0.4	0.515	0		10158			21.015
L63	N153	N110	24.518				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10163			24.518
L66	N158	N108	10.519				TypicalFloodpl	0.3	0.15	0.4	0.636	0		10166			10.519
L71	N164	N16	39.424				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10171			39.424
L72	N165	N10	44.125				TypicalFloodpl	0.3	0.15	0.4	1.163	0		10172			44.125
L76	N169	N120	5.424				TypicalFloodpl	0.3	0.15	0.4	4.676	0		10176			5.424
L78	N171	N117	5.518				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10178			5.518
L81	N176	N112	13.18				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10181			13.18
L82	N177	N114	13.796				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10182			13.796
L83	N179	N114	10.608				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10183			10.608
L88	N188	N22	15.41				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10188			15.41
L90	N191	N25	20.004				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10190			20.004
524.18	N193	N195	2590.48				TypicalFloodpl	0.3	0.15	0.4	0.247	0		10191			2590.48
524.984	N197	N195	2294.33				TypicalFloodpl	0.3	0.15	0.4	0.364	0		10192			2294.33
539.707	N209	N210	769.145				TypicalFloodpl	0.3	0.15	0.4	0.765	0		10455			769.145
537.993	N215	N212	114.6				TypicalFloodpl	0.3	0.15	0.4	0.128	0		10459			114.6
536.891	N220	N396	461.047				TypicalFloodpl	0.3	0.15	0.4	0.804	0		10463			461.047
535.106	N226	N224	126.861				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10467			126.861
L369	N230	N228	2989.83				TypicalFloodpl	0.3	0.15	0.4	0.286	0		10469			2989.83
L370	N231	N223	1549.07				TypicalFloodpl	0.3	0.15	0.4	0.221	0		10470			1549.07
L371	N233	N395	655.527				TypicalFloodpl	0.3	0.15	0.4	0.522	0		10471			655.527
533.149	N238	N236	513.592				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10474			513.592
L375	N239	N381	512.214				TypicalFloodpl	0.3	0.15	0.4	0.191	0		10475			512.214
532.351	N245	N242	2013.35				TypicalFloodpl	0.3	0.15	0.4	0.184	0		10478			2013.35
L381	N254	N369	68.031				TypicalFloodpl	0.3	0.15	0.4	0.476	0		10481			68.031
L382	N256	N369	70.372				TypicalFloodpl	0.3	0.15	0.4	0.536	0		10482			70.372
507.025	N257	N258	446.349				TypicalFloodpl	0.3	0.15	0.4	0.663	0		10224			446.349
531.757	N259	N261	748.513				TypicalFloodpl	0.3	0.15	0.4	0.278	0		10483			748.513
506.799	N260	N258	428.79				TypicalFloodpl	0.3	0.15	0.4	0.447	0		10225			428.79
506.676	N262	N258	482.996				TypicalFloodpl	0.3	0.15	0.4	0.319	0		10226			482.996
531.543	N264	N261	723.293				TypicalFloodpl	0.3	0.15	0.4	0.334	0		10486			723.293
508.164	N265	N78	1286.5				TypicalFloodpl	0.3	0.15	0.4	0.507	0		10228			1286.5
510.815	N266	N267	2917.24				TypicalFloodpl	0.3	0.15	0.4	0.219	0		10230			2917.24
513.671	N269	N270	924.497				TypicalFloodpl	0.3	0.15	0.4	0.329	0		10232			924.497
514.218	N273	N270	1239.72				TypicalFloodpl	0.3	0.15	0.4	0.265	0		10234			1239.72
515.601	N274	N275	729.552				TypicalFloodpl	0.3	0.15	0.4	0.302	0		10235			729.552
515.084	N278	N279	246.504				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10237			246.504
516.484	N282	N286	322.371				TypicalFloodpl	0.3	0.15	0.4	0.311	0		10240			322.371
518.556	N293	N294	1494.31				TypicalFloodpl	0.3	0.15	0.4	0.322	0		10247			1494.31
521.918	N295	N204	429.862				TypicalFloodpl	0.3	0.15	0.4	0.127	0		10249			429.862
L150	N297	N25	5.772				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10250			5.772
L152	N303	N304	4067.2				TypicalFloodpl	0.3	0.15	0.4	0.329	0		10252			4067.2
L154	N307	N13	903.003				TypicalFloodpl	0.3	0.15	0.4	0.294	0		10254			903.003
L414	N310	N311	428.501				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10514			428.501
L415	N312	N311	770.812				TypicalFloodpl	0.3	0.15	0.4	0.218	0		10515			770.812
538.563	N316	N212	727.17				TypicalFloodpl	0.3	0.15	0.4	0.559	0		10518			727.17
539.013	N317	N210	163.503				TypicalFloodpl	0.3	0.15	0.4	0.929	0		10519			163.503
L163	N318	N150	4348.96				TypicalFloodpl	0.3	0.15	0.4	0.637	0		10263			4348.96
L164	N320	N321	3121.43				TypicalFloodpl	0.3	0.15	0.4	0.483	0		10264			3121.43
L166	N322	N155	3267.64				TypicalFloodpl	0.3	0.15	0.4	0.609	0		10266			3267.64
L169	N325	N198	2746.13				TypicalFloodpl	0.3	0.15	0.4	0.327	0		10269			2746.13
L170	N326	N327	630.76				TypicalFloodpl	0.3	0.15	0.4	0.45	0		10270			630.76
L172	N328	N198	2015.82				TypicalFloodpl	0.3	0.15	0.4	0.165	0		10272			2015.82
L173	N329	N290	3586.69				TypicalFloodpl	0.3	0.15	0.4	0.369	0		10273			3586.69
L174	N330	N290	3757.08				TypicalFloodpl	0.3	0.15	0.4	0.383	0		10274			3757.08
L175	N331	N284	4334.91				TypicalFloodpl	0.3	0.15	0.4	0.341	0		10275			4334.91
L176	N332	N280	3897.15				TypicalFloodpl	0.3	0.15	0.4	0.334	0		10276			3897.15
L177	N333	N280	3762.6				TypicalFloodpl	0.3	0.15	0.4	0.287	0		10277			3762.6
L178	N334	N335	439.439				TypicalFloodpl	0.3	0.15	0.4	0.484	0		10278			439.439
L180	N336	N335	369.017				TypicalFloodpl	0.3	0.15	0.4	0.371	0		10280			369.017
L181	N337	N107	3967.94				TypicalFloodpl	0.3	0.15	0.4	0.312	0		10281			3967.94
L185	N339	N338	151.94				TypicalFloodpl	0.3	0.15	0.4	0.329	0		10285			151.94
L187	N341	N342	123.733				TypicalFloodpl	0.3	0.15	0.4	0.415	0		10287			123.733
L189	N347	N348	3672.47				TypicalFloodpl	0.3	0.15	0.4	0.229	0		10289			3672.47
L190	N349	N350	5127.79				TypicalFloodpl	0.3	0.15	0.4	0.328	0		10290			5127.79
525.984	N353	N354	3915.3				TypicalFloodpl	0.3	0.15	0.4	0.273	0		10292			3915.3
L193	N355	N356	2792.16				TypicalFloodpl	0.3	0.15	0.4	0.245	0		10293			2792.16
L195	N359	N360	2796.09				TypicalFloodpl	0.3	0.15	0.4	0.348	0		10295			2796.09
L208	N383	N381	490.033				TypicalFloodpl	0.3	0.15	0.4	0.12	0		10308			490.033
L213	N391	N392	334.168				TypicalFloodpl	0.3	0.15	0.4	0.129	0		10313			334.168
537.571	N400	N401	1105.84				TypicalFloodpl	0.3	0.15	0.4	0.292	0		10318			1105.84
523.223	N470	N345	2793.55				TypicalFloodpl	0.3	0.15	0.4	0.226	0		10529			2793.55
L427	N29	N31	2919.65				TypicalFloodpl	0.3	0.15	0.4	0.301	0		10527			2919.65
L267	N31	N32	3828.23				TypicalFloodpl	0.3	0.15	0.4	0.147	0		10367			3828.23
L425	N32	N24	2113.47				TypicalFloodpl	0.3	0.15	0.4	0.183	0		10525			2113.47
L265	N24	N351	10.003				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10365			10.003
L424	N34	N323	7321.1				TypicalFloodpl	0.3	0.15	0.4	0.407	0		10524			7321.1
L428	N323	N53	3582.78				TypicalFloodpl	0.3	0.15	0.4	0.375	0		10528			3582.78
L275	N53	N38	4677.59				TypicalFloodpl	0.3	0.15	0.4	0.346	0		10375			4677.59
L270	N38	N40	1976.38				TypicalFloodpl	0.3	0.15	0.4	0.451	0		10370			1976.38
L426	N40	N319	1780.93				TypicalFloodpl	0.3	0.15	0.4	0.147	0		10526			1780.93
L422	N319	N42	1954.2				TypicalFloodpl	0.3	0.15	0.4	0.318	0		10522			1954.2

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - BOG05

Date 14-09-18

Output by May-Wen Yeoh

Description Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design. BOG05

L271	N42	N357	15.004				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10371			15.004
L421	N51	N15	2523.13				TypicalFloodpl	0.3	0.15	0.4	0.242	0		10521			2523.13
529.274	N15	N17	923.981				TypicalFloodpl	0.3	0.15	0.4	0.402	0		10362			923.981
L285	N68	N63	1959.67				TypicalFloodpl	0.3	0.15	0.4	0.428	0		10385			1959.67
L279	N63	N362	81.013				TypicalFloodpl	0.3	0.15	0.4	0.46	0		10379			81.013
L60	N76	N146	4239.98				TypicalFloodpl	0.3	0.15	0.4	0.216	0		10160			4239.98
L56	N146	N86	26.325				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10156			26.325
L196	N361	N362	172.824				TypicalFloodpl	0.3	0.15	0.4	0.35	0		10296			172.824
L198	N362	N364	3323.37				TypicalFloodpl	0.3	0.15	0.4	0.154	0		10298			3323.37
L277	N364	N365	80.375				TypicalFloodpl	0.3	0.15	0.4	0.382	0		10377			80.375
530.705	N87	N81	563.723				TypicalFloodpl	0.3	0.15	0.4	0.312	0		10388			563.723
L286	N81	N83	1425.68				TypicalFloodpl	0.3	0.15	0.4	0.133	0		10386			1425.68
L389	N83	N373	45.266				TypicalFloodpl	0.3	0.15	0.4	0.294	0		10489			45.266
L54	N96	N82	24.567				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10154			24.567
L40	N114	N115	530.566				TypicalFloodpl	0.3	0.15	0.4	1.044	0		10140			530.566
L80	N115	N112	29.46				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10180			29.46
L39	N112	N113	3303.11				TypicalFloodpl	0.3	0.15	0.4	0.559	0		10139			3303.11
L79	N113	N117	14.768				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10179			14.768
L41	N117	N118	3038.96				TypicalFloodpl	0.3	0.15	0.4	0.64	0		10141			3038.96
L77	N118	N120	6.601				TypicalFloodpl	0.3	0.15	0.4	3.842	0		10177			6.601
L42	N120	N121	1170.72				TypicalFloodpl	0.3	0.15	0.4	0.76	0		10142			1170.72
L74	N121	N122	17.077				TypicalFloodpl	0.3	0.15	0.4	0.34	0		10174			17.077
L43	N122	N123	3526.34				TypicalFloodpl	0.3	0.15	0.4	0.423	0		10143			3526.34
L73	N123	N10	7.912				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10173			7.912
L4	N10	N11	2234.25				TypicalFloodpl	0.3	0.15	0.4	0.309	0		10104			2234.25
L159	N11	N163	1584.56				TypicalFloodpl	0.3	0.15	0.4	0.532	0		10259			1584.56
L70	N163	N16	19.112				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10170			19.112
L6	N16	N18	8197.93				TypicalFloodpl	0.3	0.15	0.4	0.416	0		10106			8197.93
L69	N18	N160	3580.5				TypicalFloodpl	0.3	0.15	0.4	0.265	0		10169			3580.5
L67	N160	N105	23.433				TypicalFloodpl	0.3	0.15	0.4	0.651	0		10167			23.433
534.776	N228	N224	340.127				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10468			340.127
L366	N224	N225	3400.38				TypicalFloodpl	0.3	0.15	0.4	0.216	0		10466			3400.38
L417	N225	N315	301.268				TypicalFloodpl	0.3	0.15	0.4	0.281	0		10517			301.268
536.243	N223	N398	1001.44				TypicalFloodpl	0.3	0.15	0.4	0.276	0		10465			1001.44
536.539	N395	N396	398.199				TypicalFloodpl	0.3	0.15	0.4	0.561	0		10315			398.199
L362	N396	N217	413.038				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10462			413.038
L361	N217	N397	88.049				TypicalFloodpl	0.3	0.15	0.4	0.155	0		10461			88.049
L201	N369	N370	4941.69				TypicalFloodpl	0.3	0.15	0.4	0.268	0		10301			4941.69
L247	N370	N456	4961.42				TypicalFloodpl	0.3	0.15	0.4	0.347	0		10347			4961.42
L380	N456	N253	2738.21				TypicalFloodpl	0.3	0.15	0.4	0.187	0		10480			2738.21
531.906	N253	N263	1453.86				TypicalFloodpl	0.3	0.15	0.4	0.242	0		10479			1453.86
L127	N258	N78	2137.97				TypicalFloodpl	0.3	0.15	0.4	0.194	0		10227			2137.97
L385	N261	N263	467.546				TypicalFloodpl	0.3	0.15	0.4	0.192	0		10485			467.546
L384	N263	N242	669.987				TypicalFloodpl	0.3	0.15	0.4	0.024	0		10484			669.987
L377	N242	N243	1911.64				TypicalFloodpl	0.3	0.15	0.4	0.14	0		10477			1911.64
L387	N243	N371	51.152				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10487			51.152
L26	N78	N7	2939				TypicalFloodpl	0.3	0.15	0.4	0.179	0		10126			2939
L3	N7	N5	811.243				TypicalFloodpl	0.3	0.15	0.4	0.159	0		10103			811.243
L133	N270	N1	2775.89				TypicalFloodpl	0.3	0.15	0.4	0.295	0		10233			2775.89
L1	N1	N2	456.908				TypicalFloodpl	0.3	0.15	0.4	0.202	0		10101			456.908
L148	N294	N288	1614.16				TypicalFloodpl	0.3	0.15	0.4	0.249	0		10248			1614.16
L95	N204	N201	2541.01				TypicalFloodpl	0.3	0.15	0.4	0.194	0		10195			2541.01
L94	N201	N202	2030.94				TypicalFloodpl	0.3	0.15	0.4	0.183	0		10194			2030.94
L9	N25	N26	6294.41				TypicalFloodpl	0.3	0.15	0.4	0.452	0		10109			6294.41
L89	N26	N22	11.807				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10189			11.807
OF1275018	N22	N1284351	5000				TypicalFloodpl	0.3	0.15	0.4	0.231	0		3573961			5000
OF1275023	N1284351	N23	6224				TypicalFloodpl	0.3	0.15	0.4	0.231	0		3573966			6224
L153	N23	N305	4779.07				TypicalFloodpl	0.3	0.15	0.4	0.211	0		10253			4779.07
L167	N305	N324	3283.45				TypicalFloodpl	0.3	0.15	0.4	0.272	0		10267			3283.45
L168	N324	N182	1941.05				TypicalFloodpl	0.3	0.15	0.4	0.266	0		10268			1941.05
L85	N182	N19	11.017				TypicalFloodpl	0.3	0.15	0.4	7.247	0		10185			11.017
L160	N304	N186	4255.06				TypicalFloodpl	0.3	0.15	0.4	0.334	0		10260			4255.06
L87	N186	N184	3267.7				TypicalFloodpl	0.3	0.15	0.4	0.257	0		10187			3267.7
L86	N184	N19	25.809				TypicalFloodpl	0.3	0.15	0.4	3.254	0		10186			25.809
L7	N19	N21	2727.01				TypicalFloodpl	0.3	0.15	0.4	0.2	0		10107			2727.01
519.224	N21	N181	4637.05				TypicalFloodpl	0.3	0.15	0.4	0.231	0		10184			4637.05
L5	N13	N14	2611.69				TypicalFloodpl	0.3	0.15	0.4	0.28	0		10105			2611.69
517.428	N14	N287	827.058				TypicalFloodpl	0.3	0.15	0.4	0.167	0		10245			827.058
L356	N210	N212	1356.11				TypicalFloodpl	0.3	0.15	0.4	0.354	0		10456			1356.11
L357	N212	N401	1041.82				TypicalFloodpl	0.3	0.15	0.4	0.453	0		10457			1041.82
L59	N150	N79	97.574				TypicalFloodpl	0.3	0.15	0.4	0.508	0		10159			97.574
L27	N79	N80	4073.24				TypicalFloodpl	0.3	0.15	0.4	0.38	0		10127			4073.24
L183	N80	N338	602.597				TypicalFloodpl	0.3	0.15	0.4	0.336	0		10283			602.597
L182	N321	N92	795.891				TypicalFloodpl	0.3	0.15	0.4	0.628	0		10282			795.891
L31	N92	N93	465.424				TypicalFloodpl	0.3	0.15	0.4	0.153	0		10131			465.424
L62	N93	N89	5.967				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10162			5.967
L64	N155	N110	36.18				TypicalFloodpl	0.3	0.15	0.4	0.263	0		10164			36.18
L38	N110	N111	3587.87				TypicalFloodpl	0.3	0.15	0.4	0.242	0		10138			3587.87
L65	N111	N108	14.555				TypicalFloodpl	0.3	0.15	0.4	0.421	0		10165			14.555
L37	N108	N109	666.86				TypicalFloodpl	0.3	0.15	0.4	0.152	0		10137			666.86
L165	N109	N100	1892.28				TypicalFloodpl	0.3	0.15	0.4	0.301	0		10265			1892.28
L35	N100	N103	376.058				TypicalFloodpl	0.3	0.15	0.4	0.189	0		10135			376.058
L131	N103	N105	11.527				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10231			11.527
L36	N105	N107	1637.92				TypicalFloodpl	0.3	0.15	0.4	0.16	0		10136			1637.92
L171	N327	N198	2331.46				TypicalFloodpl	0.3	0.15	0.4	0.173	0		10271			2331.46
520.339	N198	N200	2005.08				TypicalFloodpl	0.3	0.15	0.4	0.301	0		10193			2005.08
516.98	N290	N287	866.055				TypicalFloodpl	0.3	0.15	0.4	0.19	0		10244			866.055
L143	N287	N288	2891.32				TypicalFloodpl	0.3	0.15	0.4	0.214	0		10243			2891.32
L146	N288	N292	736.363				TypicalFloodpl	0.3	0.15	0.4	0.141	0		10246			736.363
516.313	N284	N286	297.138				TypicalFloodpl	0.3	0.15	0.4	0.575	0		10241			297.138
L142	N286	N277	2954.51				TypicalFloodpl	0.3	0.15	0.4	0.243	0		10242			2954.51
515.001	N280	N279	277.703				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10238			277.703
L139	N279	N275	482.685				TypicalFloodpl	0.3	0.15	0.4	0.608	0		10239			482.685
L136	N275	N277	3630.2				TypicalFloodpl	0.3	0.15	0.4	0.164	0		10236			3630.2
L179	N335	N107	3895.7				TypicalFloodpl	0.3	0.15	0.4	0.304	0		10279			3895.7
512.108	N107	N2	4329.52				TypicalFloodpl	0.3	0.15	0.4	0.202	0		10168			4329.52
L33	N2	N97	326.863				TypicalFloodpl	0.3	0.15	0.4	0.066	0		10133			326.863
L184	N338	N152	1406.98				TypicalFloodpl	0.3	0.15	0.4	0.327	0		10284			1406.98
L61	N152	N89	10.002				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10161			10.002
L30	N89	N90	242.545				TypicalFloodpl	0.3	0.15	0.4	0.186	0		10130			242.545

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - BOG05

Date 14-09-18

Output by May-Wen Yeoh

Description Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design. BOG05

L57	N90	N86	114.173				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10157			114.173
L29	N86	N88	1497.6				TypicalFloodpl	0.3	0.15	0.4	0.21	0		10129			1497.6
L55	N88	N82	38.888				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10155			38.888
L28	N82	N84	1239.2				TypicalFloodpl	0.3	0.15	0.4	0.194	0		10128			1239.2
509.64	N84	N4	4673.73				TypicalFloodpl	0.3	0.15	0.4	0.173	0		10229			4673.73
L2	N4	N5	739.688				TypicalFloodpl	0.3	0.15	0.4	0.165	0		10102			739.688
L264	N348	N351	17.075				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10364			17.075
L191	N351	N352	2478.43				TypicalFloodpl	0.3	0.15	0.4	0.379	0		10291			2478.43
L272	N352	N357	17.076				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10372			17.076
L194	N357	N358	561.628				TypicalFloodpl	0.3	0.15	0.4	0.13	0		10294			561.628
L276	N350	N365	153.578				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10376			153.578
L199	N365	N366	1331.88				TypicalFloodpl	0.3	0.15	0.4	0.168	0		10299			1331.88
L281	N366	N71	2031.88				TypicalFloodpl	0.3	0.15	0.4	0.21	0		10381			2031.88
L283	N71	N367	81.59				TypicalFloodpl	0.3	0.15	0.4	0.081	0		10383			81.59
L394	N354	N276	296.352				TypicalFloodpl	0.3	0.15	0.4	0.096	0		10494			296.352
L282	N356	N367	58.984				TypicalFloodpl	0.3	0.15	0.4	0.224	0		10382			58.984
L200	N367	N368	2841.82				TypicalFloodpl	0.3	0.15	0.4	0.18	0		10300			2841.82
529.768	N368	N268	2607.11				TypicalFloodpl	0.3	0.15	0.4	0.15	0		10520			2607.11
L390	N268	N373	50.783				TypicalFloodpl	0.3	0.15	0.4	1.502	0		10490			50.783
L203	N373	N374	984.816				TypicalFloodpl	0.3	0.15	0.4	0.115	0		10303			984.816
L388	N374	N371	56.44				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10488			56.44
L202	N371	N372	1417.13				TypicalFloodpl	0.3	0.15	0.4	0.168	0		10302			1417.13
L391	N372	N271	56.733				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10491			56.733
L423	N360	N3	1868.06				TypicalFloodpl	0.3	0.15	0.4	0.191	0		10523			1868.06
L258	N3	N358	32.747				TypicalFloodpl	0.3	0.15	0.4	0.411	0		10358			32.747
L197	N358	N363	37.081				TypicalFloodpl	0.3	0.15	0.4	0.193	0		10297			37.081
528.371	N363	N6	461.978				TypicalFloodpl	0.3	0.15	0.4	0.262	0		10373			461.978
L259	N6	N17	1229.78				TypicalFloodpl	0.3	0.15	0.4	0.243	0		10359			1229.78
L263	N17	N20	971.376				TypicalFloodpl	0.3	0.15	0.4	0.106	0		10363			971.376
L393	N20	N272	2781.88				TypicalFloodpl	0.3	0.15	0.4	0.153	0		10493			2781.88
L392	N272	N271	72.385				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10492			72.385
L207	N381	N382	2444.59				TypicalFloodpl	0.3	0.15	0.4	0.277	0		10307			2444.59
L376	N382	N235	4154.38				TypicalFloodpl	0.3	0.15	0.4	0.219	0		10476			4154.38
533.611	N235	N236	655.233				TypicalFloodpl	0.3	0.15	0.4	0.01	0		10472			655.233
L373	N236	N237	3133.14				TypicalFloodpl	0.3	0.15	0.4	0.282	0		10473			3133.14
L358	N401	N214	637.424				TypicalFloodpl	0.3	0.15	0.4	0.258	0		10458			637.424
L360	N214	N397	83.009				TypicalFloodpl	0.3	0.15	0.4	0.378	0		10460			83.009
L216	N397	N398	285.416				TypicalFloodpl	0.3	0.15	0.4	0.012	0		10316			285.416
L364	N398	N222	1687.72				TypicalFloodpl	0.3	0.15	0.4	0.15	0		10464			1687.72
L416	N222	N314	289.987				TypicalFloodpl	0.3	0.15	0.4	0.059	0		10516			289.987
L188	N345	N346	231.597				TypicalFloodpl	0.3	0.15	0.4	0.285	0		10288			231.597

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - MACQ01

Date 14-09-18

Output by May-Wen Yeoh

Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design.

Descriptio MACQ01

In particular:

Catchment Areas
Equal Area Slopes % (catchments)
Bed Slopes % (overflow routes)

SUB-CATCHMENT DETAILS

Name	Pit or Node	Total Area	Imperviou Area	Avg Slope(%)	Mannings n	Time lag (mins)	Rainfall Multiplier	Hydrological Model	
C152	N94	711.1797	0	0.611433	0.05	0		RAFTS	
C140	N101	593.8501	0	1.591286	0.05	0		RAFTS	
C139	N104	945.0367	0	1.070721	0.05	0		RAFTS	
C167	N116	885.194	0	0.414497	0.05	0		RAFTS	
C208	N129	652.8685	0	0.338466	0.05	0		RAFTS	
C163	N135	54.2029	0	0.357166	0.05	0		RAFTS	
C212	N137	18.9812	0	0.305167	0.05	0		RAFTS	
C224	N143	10.4729	0	0.165923	0.05	0		RAFTS	
C175	N144	261.3212	0	0.275061	0.05	0		RAFTS	
C132	N147	2.4313	0	0.260589	0.05	0		RAFTS	
C276	N149	34.7016	0	0.240175	0.05	0		RAFTS	
C223	N151	5.7614	0	0.09748	0.05	0		RAFTS	
C151	N154	34.3233	0	0.058505	0.05	0		RAFTS	
C288	N157	411.8174	0	0.116825	0.05	0		RAFTS	
C220	N161	53.7732	0	0.073571	0.05	0		RAFTS	
C251	N167	1310.841	0	1.114519	0.05	0		RAFTS	
C159	N168	801.3574	0	1.167158	0.05	0		RAFTS	
C147	N174	1.2287	0	0.774758	0.05	0		RAFTS	
C192	N183	1529.342	0	0.433217	0.05	0		RAFTS	
C313	N185	1048.693	0	0.376878	0.05	0		RAFTS	
C205	N187	550.9579	0	0.458808	0.05	0		RAFTS	
C235	N192	266.5565	0	0.474201	0.05	0		RAFTS	
C165	N196	18.1112	0	0.444147	0.05	0		RAFTS	
C144	N205	55.5872	0	0.530526	0.05	0		RAFTS	
C286	N289	1643.759	0	1.405113	0.05	0		RAFTS	
C216	N298	256.5094	0	0.523026	0.05	0		RAFTS	
C290	N306	265.9819	0	0.463508	0.05	0		RAFTS	
C292	N308	298.11	0	0.385325	0.05	0		RAFTS	
C149	N386	532.2852	0	1.474526	0.05	0		RAFTS	
C259	N393	1178.484	0	1.767058	0.05	0		RAFTS	
C160	N402	531.2982	0	3.186931	0.05	0		RAFTS	
C171	N408	515.749	0	1.001599	0.05	0		RAFTS	
C242	N410	538.5957	0	0.50535	0.05	0		RAFTS	
C199	N413	585.349	0	0.303667	0.05	0		RAFTS	
C198	N416	655.9882	0	0.776858	0.05	0		RAFTS	
C275	N426	390.5691	0	0.306839	0.05	0		RAFTS	
C164	N434	232.6887	0	0.317574	0.05	0		RAFTS	
C250	N445	606.1574	0	0.450696	0.05	0		RAFTS	
C214	N454	396.5611	0	0.204178	0.05	0		RAFTS	
C146	N463	636.6778	0	1.875485	0.05	0		RAFTS	
C263	N467	411.7863	0	0.954916	0.05	0		RAFTS	
C264	N468	416.2177	0	1.816771	0.05	0		RAFTS	
C260	N469	207.8952	0	0.729681	0.05	0		RAFTS	
C261	N102	680.5936	0	1.071167	0.05	0		RAFTS	
C262	N106	945.2888	0	1.184577	0.05	0		RAFTS	
C148	N376	925.913	0	0.650982	0.05	0		RAFTS	
C241	N461	509.2769	0	0.246721	0.05	0		RAFTS	
C239	N462	83.1535	0	0.251301	0.05	0		RAFTS	
C278	N437	226.2602	0	0.127567	0.05	0		RAFTS	
C279	N159	54.2514	0	0.031347	0.05	0		RAFTS	
C162	N448	724.9128	0	0.145213	0.05	0		RAFTS	
C252	N166	1840.756	0	0.309184	0.05	0		RAFTS	
C249	N453	540.1496	0	0.206876	0.05	0		RAFTS	
C236	N407	1552.442	0	0.272029	0.05	0		RAFTS	
C206	N178	108.1658	0	0.165523	0.05	0		RAFTS	
C312	N180	199.076	0	0.293833	0.05	0		RAFTS	
C209	N423	23.7924	0	0.527884	0.05	0		RAFTS	
C131	N175	0.9634	0	0.418439	0.05	0		RAFTS	
C145	N194	23.879	0	0.338246	0.05	0		RAFTS	
C173	N285	69.8654	0	0.488594	0.05	0		RAFTS	
C289	N300	651.4103	0	0.341146	0.05	0		RAFTS	
C291	N190	174.1028	0	0.312517	0.05	0		RAFTS	
C280	N172	493.8116	0	0.345536	0.05	0		RAFTS	
C237	N173	951.1146	0	0.073722	0.05	0		RAFTS	
C217	N302	410.0125	0	0.206233	0.05	0		RAFTS	
C155	N385	178.1965	0	0.588653	0.05	0		RAFTS	
C254	N403	655.9375	0	1.827348	0.05	0		RAFTS	
C253	N458	122.3164	0	0.672942	0.05	0		RAFTS	
C197	N421	587.2854	0	0.600218	0.05	0		RAFTS	
C256	N459	164.1517	0	0.286825	0.05	0		RAFTS	
C287	N409	151.8487	0	0.458509	0.05	0		RAFTS	
C190	N411	227.5143	0	0.343532	0.05	0		RAFTS	
C255	N417	602.5281	0	0.313883	0.05	0		RAFTS	
C200	N439	63.2849	0	0.256238	0.05	0		RAFTS	
C201	N440	84.9769	0	0.157737	0.05	0		RAFTS	
C277	N427	4.5111	0	0.247681	0.05	0		RAFTS	
C133	N145	20.8823	0	0.182629	0.05	0		RAFTS	
C211	N429	12.2354	0	0.217161	0.05	0		RAFTS	
C238	N435	391.0036	0	0.17233	0.05	0		RAFTS	
C150	N141	104.5359	0	0.125677	0.05	0		RAFTS	
C134	N431	261.4959	0	0.109804	0.05	0		RAFTS	
C219	N433	228.5317	0	0.166615	0.05	0		RAFTS	
C202	N451	41.9033	0	0.122739	0.05	0		RAFTS	
C204	N450	593.3699	0	0.168893	0.05	0		RAFTS	
C248	N455	581.1603	30	0.054763	0.05	0		RAFTS	
C161	N457	646.7071	0	0.045255	0.05	0		RAFTS	
C266	N465	639.4277	0	1.530649	0.05	0		RAFTS	
C265	N379	138.1671	0	0.703419	0.05	0		RAFTS	
C153	N380	366.7453	0	0.501048	0.05	0		RAFTS	
C154	N388	85.5093	0	1.223975	0.05	0		RAFTS	

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - MACQ01

Date 14-09-18

Output by May-Wen Yeoh

Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design.

Descriptio MACQ01

C258	N390	674.1675	0	0.891804	0.05	0		RAFTS	
C166	N399	741.8253	0	0.394871	0.05	0		RAFTS	
C189	N405	303.5787	0	0.336166	0.05	0		RAFTS	
C257	N415	443.8018	0	0.186582	0.05	0		RAFTS	
C203	N460	137.1562	0	0.276485	0.05	0		RAFTS	
C207	N444	541.2638	0	0.323203	0.05	0		RAFTS	
C213	N442	416.9757	0	0.183069	0.05	0		RAFTS	
C136	N162	120.4991	0	0.092753	0.05	0		RAFTS	

OVERFLOW ROUTE DETAILS

Name	From	To	Length	Spill	Crest	Weir	Cross	Safe Depth	SafeDepth	Safe	Bed	D/S Area		id			
			(m)	Level	Length	Coeff. C	Section	Major Storms	Minor Storms	DxV	Slope	Contributing					
				(m)	(m)			(m)	(m)	(sq.m/sec)	(%)	%					
L290	N94	N387	70.108				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10390			70.108
L292	N101	N102	5317.6				TypicalFloodplain_V2	0.3	0.15	0.4	0.751	0		10392			5317.6
L293	N104	N106	5322.97				TypicalFloodplain_V2	0.3	0.15	0.4	0.877	0		10393			5322.97
L298	N116	N404	95.585				TypicalFloodplain_V2	0.3	0.15	0.4	0.147	0		10398			95.585
L306	N129	N461	4831.62				TypicalFloodplain_V2	0.3	0.15	0.4	0.22	0		10406			4831.62
549.027	N135	N132	173.702				TypicalFloodplain_V2	0.3	0.15	0.4	0.095	0		10409			173.702
548.581	N137	N139	620.437				TypicalFloodplain_V2	0.3	0.15	0.4	0.235	0		10410			620.437
547.282	N143	N430	1851.43				TypicalFloodplain_V2	0.3	0.15	0.4	0.151	0		10412			1851.43
547.559	N144	N428	711.484				TypicalFloodplain_V2	0.3	0.15	0.4	0.122	0		10413			711.484
L315	N147	N428	71.586				TypicalFloodplain_V2	0.3	0.15	0.4	0.114	0		10415			71.586
547.841	N149	N427	314.799				TypicalFloodplain_V2	0.3	0.15	0.4	0.394	0		10417			314.799
547.739	N151	N145	563.515				TypicalFloodplain_V2	0.3	0.15	0.4	0.305	0		10418			563.515
550.835	N154	N156	90.191				TypicalFloodplain_V2	0.3	0.15	0.4	0.028	0		10422			90.191
551.146	N157	N159	409.533				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10424			409.533
551.571	N161	N159	547.553				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10426			547.553
L332	N167	N166	8465.17				TypicalFloodplain_V2	0.3	0.15	0.4	0.336	0		10432			8465.17
L334	N168	N420	52.457				TypicalFloodplain_V2	0.3	0.15	0.4	0.558	0		10434			52.457
L338	N174	N424	14.706				TypicalFloodplain_V2	0.3	0.15	0.4	0.441	0		10438			14.706
L344	N183	N406	123.669				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10444			123.669
L345	N185	N406	74.515				TypicalFloodplain_V2	0.3	0.15	0.4	0.187	0		10445			74.515
L346	N187	N180	3676.21				TypicalFloodplain_V2	0.3	0.15	0.4	0.26	0		10446			3676.21
543.766	N192	N194	717.278				TypicalFloodplain_V2	0.3	0.15	0.4	0.353	0		10449			717.278
544.452	N196	N194	57.203				TypicalFloodplain_V2	0.3	0.15	0.4	0.271	0		10450			57.203
L354	N205	N207	318.976				TypicalFloodplain_V2	0.3	0.15	0.4	0.479	0		10454			318.976
L402	N289	N285	2857.84				TypicalFloodplain_V2	0.3	0.15	0.4	0.497	0		10502			2857.84
L409	N298	N300	2949.51				TypicalFloodplain_V2	0.3	0.15	0.4	0.362	0		10509			2949.51
L412	N306	N190	1132.83				TypicalFloodplain_V2	0.3	0.15	0.4	0.23	0		10512			1132.83
L413	N308	N302	2604.34				TypicalFloodplain_V2	0.3	0.15	0.4	0.133	0		10513			2604.34
L210	N386	N384	759.573				TypicalFloodplain_V2	0.3	0.15	0.4	0.669	0		10310			759.573
L214	N393	N394	5335.59				TypicalFloodplain_V2	0.3	0.15	0.4	0.732	0		10314			5335.59
L219	N402	N403	4926.62				TypicalFloodplain_V2	0.3	0.15	0.4	1.442	0		10319			4926.62
L222	N408	N409	2649.53				TypicalFloodplain_V2	0.3	0.15	0.4	0.401	0		10322			2649.53
L223	N410	N411	3218.51				TypicalFloodplain_V2	0.3	0.15	0.4	0.224	0		10323			3218.51
L403	N413	N439	292.512				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10503			292.512
L226	N416	N417	5689.93				TypicalFloodplain_V2	0.3	0.15	0.4	0.348	0		10326			5689.93
548.064	N426	N427	350.649				TypicalFloodplain_V2	0.3	0.15	0.4	0.339	0		10331			350.649
L235	N434	N435	3600.1				TypicalFloodplain_V2	0.3	0.15	0.4	0.199	0		10335			3600.1
L241	N445	N446	781.986				TypicalFloodplain_V2	0.3	0.15	0.4	0.035	0		10341			781.986
L246	N454	N455	1414.07				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10346			1414.07
L253	N463	N465	4332.13				TypicalFloodplain_V2	0.3	0.15	0.4	1.05	0		10353			4332.13
L255	N467	N377	202.924				TypicalFloodplain_V2	0.3	0.15	0.4	1.185	0		10355			202.924
L256	N468	N466	364.021				TypicalFloodplain_V2	0.3	0.15	0.4	0.951	0		10356			364.021
L257	N469	N377	243.432				TypicalFloodplain_V2	0.3	0.15	0.4	0.595	0		10357			243.432
L395	N102	N375	151.325				TypicalFloodplain_V2	0.3	0.15	0.4	0.915	0		10495			151.325
L396	N106	N375	133.881				TypicalFloodplain_V2	0.3	0.15	0.4	0.392	0		10496			133.881
L204	N375	N376	5325.08				TypicalFloodplain_V2	0.3	0.15	0.4	0.467	0		10304			5325.08
L294	N376	N384	173.643				TypicalFloodplain_V2	0.3	0.15	0.4	0.294	0		10394			173.643
L252	N461	N462	2613.2				TypicalFloodplain_V2	0.3	0.15	0.4	0.184	0		10352			2613.2
L305	N462	N441	44.152				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10405			44.152
L323	N156	N436	1525.05				TypicalFloodplain_V2	0.3	0.15	0.4	0.05	0		10423			1525.05
L236	N436	N437	2257.43				TypicalFloodplain_V2	0.3	0.15	0.4	0.125	0		10336			2257.43
L321	N437	N432	26.22				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10421			26.22
L325	N159	N447	3020.22				TypicalFloodplain_V2	0.3	0.15	0.4	0.142	0		10425			3020.22
L242	N447	N448	2231.8				TypicalFloodplain_V2	0.3	0.15	0.4	0.06	0		10342			2231.8
L404	N448	N291	118.857				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10504			118.857
L331	N166	N452	60.488				TypicalFloodplain_V2	0.3	0.15	0.4	0.074	0		10431			60.488
L245	N452	N453	1284.6				TypicalFloodplain_V2	0.3	0.15	0.4	0.031	0		10345			1284.6
L330	N453	N446	49.153				TypicalFloodplain_V2	0.3	0.15	0.4	0.561	0		10430			49.153
L221	N406	N407	4549.48				TypicalFloodplain_V2	0.3	0.15	0.4	0.199	0		10321			4549.48
L343	N407	N178	2008.07				TypicalFloodplain_V2	0.3	0.15	0.4	0.1	0		10443			2008.07
L341	N178	N422	70.373				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10441			70.373
L342	N180	N422	149.387				TypicalFloodplain_V2	0.3	0.15	0.4	0.301	0		10442			149.387
L229	N422	N423	212.331				TypicalFloodplain_V2	0.3	0.15	0.4	0.041	0		10329			212.331
546.542	N423	N175	93.307				TypicalFloodplain_V2	0.3	0.15	0.4	0.029	0		10440			93.307
L339	N175	N424	24.148				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10439			24.148
L230	N424	N425	121.769				TypicalFloodplain_V2	0.3	0.15	0.4	0.088	0		10330			121.769
L351	N194	N199	2003.81				TypicalFloodplain_V2	0.3	0.15	0.4	0.272	0		10451			2003.81
542.605	N207	N172	4587.09				TypicalFloodplain_V2	0.3	0.15	0.4	0.392	0		10453			4587.09
L400	N285	N412	60.773				TypicalFloodplain_V2	0.3	0.15	0.4	0.274	0		10500			60.773
L411	N300	N418	546.511				TypicalFloodplain_V2	0.3	0.15	0.4	0.06	0		10511			546.511
545.968	N190	N425	559.257				TypicalFloodplain_V2	0.3	0.15	0.4	0.192	0		10448			559.257
L347	N425	N199	1069.36				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10447			1069.36
L352	N199	N172	2008.9				TypicalFloodplain_V2	0.3	0.15	0.4	0.242	0		10452			2008.9
L337	N172	N173	5028.57				TypicalFloodplain_V2	0.3	0.15	0.4	0.062	0		10437			5028.57
L407	N173	N296	112.458				TypicalFloodplain_V2	0.3	0.15	0.4	0.058	0		10507			112.458
L410	N302	N418	105.412				TypicalFloodplain_V2	0.3	0.15	0.4	0.045	0		10510			105.412
L227	N418	N419	526.782				TypicalFloodplain_V2	0.3	0.15	0.4	0.115	0		10327			526.782
L408	N419	N296	180.388				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10508			180.388
L209	N384	N385	2216.89				TypicalFloodplain_V2	0.3	0.15	0.4	0.38	0		10309			2216.89
L296	N385	N389	46.983				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10396			46.983
L249	N403	N458	4445.77				TypicalFloodplain_V2	0.3	0.15	0.4	0.693	0		10349			4445.77
L333	N458	N420	104.058				TypicalFloodplain_V2	0.3	0.15	0.4	0.125	0		10433			104.058
L228	N420	N421	3484.78				TypicalFloodplain_V2	0.3	0.15	0.4	0.47	0		10328			3484.78
L250	N421	N459	3483.39				TypicalFloodplain_V2	0.3	0.15	0.4	0.342	0		10350			3483.39
L398	N459	N438	54.584				TypicalFloodplain_V2	0.3	0.15	0.4	0.268	0		10498			54.584
L401	N409	N412	76.847				TypicalFloodplain_V2	0.3	0.15	0.4	0.459	0		10501			76.847

INLAND RAIL: PARKES TO NARROMINE 100% DETAILED DESIGN - MACQ01

Date 14-09-18

Output by May-Wen Yeoh

Extract of DRAINS model inputs used in the Hydrological Models at 100% Detailed Design.

Descriptio MACQ01

L224	N412	N417	7490.65				TypicalFloodplain_V2	0.3	0.15	0.4	0.301	0		10324			7490.65
L301	N411	N414	55.068				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10401			55.068
L399	N417	N438	56.88				TypicalFloodplain_V2	0.3	0.15	0.4	0.257	0		10499			56.88
L237	N438	N439	629.697				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10337			629.697
L238	N439	N440	1295.47				TypicalFloodplain_V2	0.3	0.15	0.4	0.21	0		10338			1295.47
L328	N440	N449	368.279				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10428			368.279
L316	N427	N145	338.931				TypicalFloodplain_V2	0.3	0.15	0.4	0.14	0		10416			338.931
L314	N145	N428	25.006				TypicalFloodplain_V2	0.3	0.15	0.4	0.126	0		10414			25.006
L232	N428	N429	503.137				TypicalFloodplain_V2	0.3	0.15	0.4	0.062	0		10332			503.137
L406	N429	N430	326.833				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10506			326.833
549.09	N435	N132	323.147				TypicalFloodplain_V2	0.3	0.15	0.4	0.128	0		10407			323.147
L308	N132	N139	699.501				TypicalFloodplain_V2	0.3	0.15	0.4	0.218	0		10408			699.501
L311	N139	N141	385.658				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10411			385.658
L319	N141	N430	15.004				TypicalFloodplain_V2	0.3	0.15	0.4	0.089	0		10419			15.004
L233	N430	N431	1252				TypicalFloodplain_V2	0.3	0.15	0.4	0.065	0		10333			1252
L320	N431	N432	151.459				TypicalFloodplain_V2	0.3	0.15	0.4	0.131	0		10420			151.459
L234	N432	N433	2267.6				TypicalFloodplain_V2	0.3	0.15	0.4	0.066	0		10334			2267.6
L405	N433	N291	56.338				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10505			56.338
L244	N446	N451	519.609				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10344			519.609
L329	N451	N449	72.592				TypicalFloodplain_V2	0.3	0.15	0.4	0.081	0		10429			72.592
L243	N449	N450	2728.95				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10343			2728.95
L303	N450	N443	97.461				TypicalFloodplain_V2	0.3	0.15	0.4	0.387	0		10403			97.461
554.243	N455	N457	4722.06				TypicalFloodplain_V2	0.3	0.15	0.4	0.121	0		10348			4722.06
L336	N457	N170	88.398				TypicalFloodplain_V2	0.3	0.15	0.4	0.081	0		10436			88.398
L254	N465	N466	616.204				TypicalFloodplain_V2	0.3	0.15	0.4	0.996	0		10354			616.204
L397	N466	N377	2448.45				TypicalFloodplain_V2	0.3	0.15	0.4	0.653	0		10497			2448.45
L205	N377	N379	415.653				TypicalFloodplain_V2	0.3	0.15	0.4	0.326	0		10305			415.653
L206	N379	N380	3914.13				TypicalFloodplain_V2	0.3	0.15	0.4	0.413	0		10306			3914.13
L291	N380	N387	48.343				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10391			48.343
L211	N387	N388	229.424				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10311			229.424
L295	N388	N389	39.127				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10395			39.127
L212	N389	N390	909.254				TypicalFloodplain_V2	0.3	0.15	0.4	0.235	0		10312			909.254
L297	N390	N394	20.004				TypicalFloodplain_V2	0.3	0.15	0.4	0.687	0		10397			20.004
L217	N394	N399	6622.68				TypicalFloodplain_V2	0.3	0.15	0.4	0.302	0		10317			6622.68
L299	N399	N404	53.77				TypicalFloodplain_V2	0.3	0.15	0.4	0.285	0		10399			53.77
L220	N404	N405	3468.71				TypicalFloodplain_V2	0.3	0.15	0.4	0.233	0		10320			3468.71
L300	N405	N414	43.069				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10400			43.069
L225	N414	N415	5703.14				TypicalFloodplain_V2	0.3	0.15	0.4	0.217	0		10325			5703.14
L251	N415	N460	2873.65				TypicalFloodplain_V2	0.3	0.15	0.4	0.109	0		10351			2873.65
L302	N460	N443	241.424				TypicalFloodplain_V2	0.3	0.15	0.4	0.759	0		10402			241.424
L240	N443	N444	1231.78				TypicalFloodplain_V2	0.3	0.15	0.4	0.049	0		10340			1231.78
L304	N444	N441	34.7				TypicalFloodplain_V2	0.3	0.15	0.4	0.01	0		10404			34.7
L239	N441	N442	4491.57				TypicalFloodplain_V2	0.3	0.15	0.4	0.09	0		10339			4491.57
552.631	N442	N162	2082.53				TypicalFloodplain_V2	0.3	0.15	0.4	0.132	0		10427			2082.53
L335	N162	N170	81.884				TypicalFloodplain_V2	0.3	0.15	0.4	1.683	0		10435			81.884