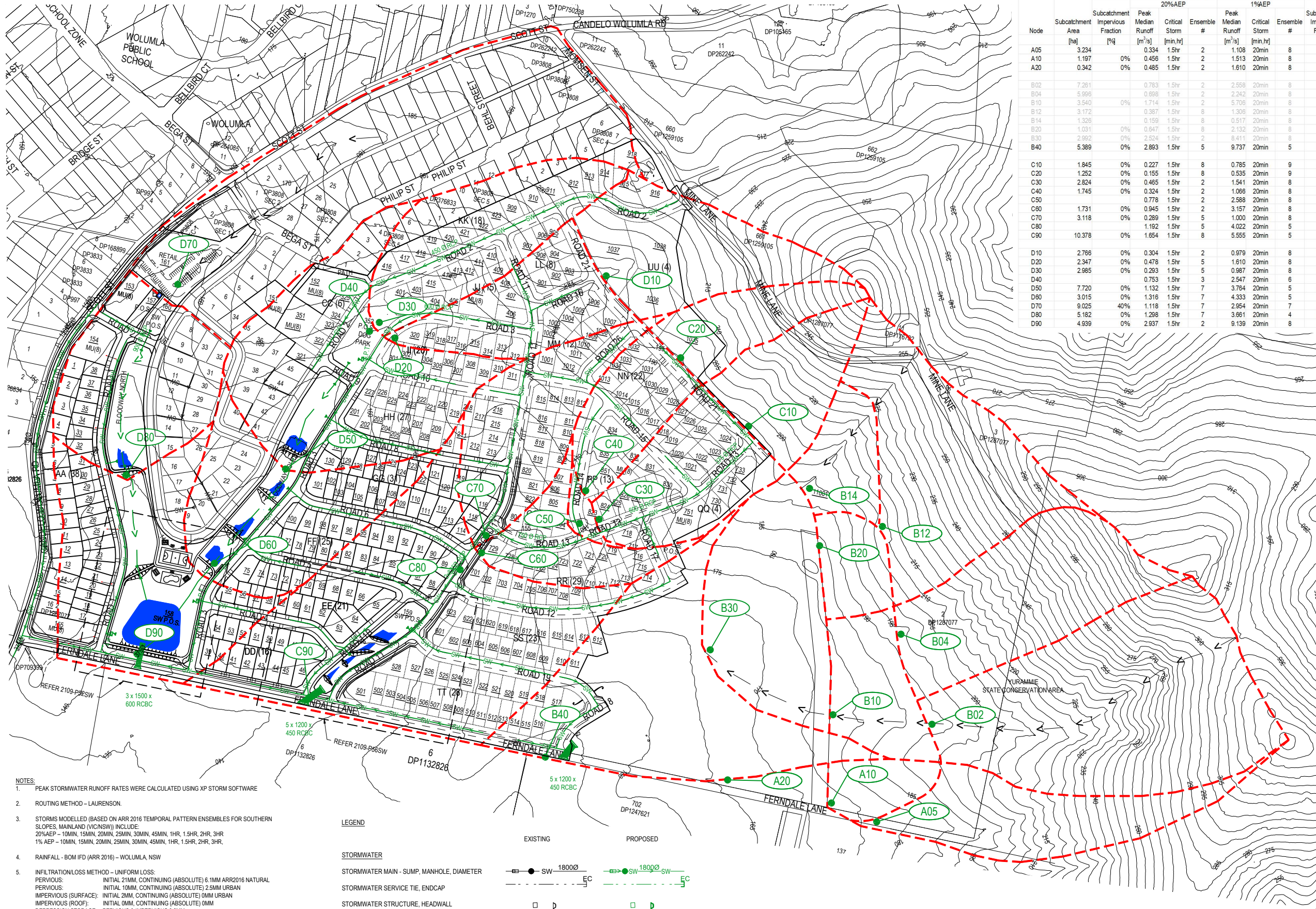




RESULTS:

Node	Subcatchment Area [ha]	Subcatchment Impervious Fraction [%]	Peak Median Runoff [m³/s]	Existing		20% AEP		1% AEP		Developed		1% AEP	
				Ensemble #	Peak Median Runoff [m³/s]	Ensemble #	Peak Median Runoff [m³/s]	Ensemble #	Peak Median Runoff [m³/s]	Ensemble #	Peak Median Runoff [m³/s]	Ensemble #	Peak Median Runoff [m³/s]
A05	3.234		0.334	2	1.108	8	0	0.334	2	1.108	8	0	0.334
A10	1.197	0%	0.456	2	1.513	8	50%	0.452	5	1.494	8	50%	0.452
A20	0.342	0%	0.485	2	1.610	8	50%	0.486	5	1.603	8	50%	0.486
B02	7.281		0.783	2	2.558	8	0%	0.783	2	2.558	8	0%	0.783
B04	5.996		0.698	2	2.242	8	0%	0.698	2	2.242	8	0%	0.698
B10	3.540	0%	1.714	2	5.706	8	50%	1.759	2	5.803	8	50%	1.759
B12	3.172		0.387	8	1.306	8	0%	0.387	8	1.306	8	0%	0.387
B14	1.326		0.159	8	0.517	8	0%	0.159	8	0.517	8	0%	0.159
B20	1.031	0%	0.647	8	2.132	8	50%	0.648	2	2.097	8	50%	0.648
B30	2.992	0%	2.524	2	8.411	8	70%	2.613	2	8.620	8	70%	2.613
B40	5.389	0%	2.893	5	9.737	5	70%	3.181	5	10.230	6	70%	3.181
C10	1.845	0%	0.227	1.5hr	0.785	20min	9	25%	0.371	20min	9	25%	0.371
C20	1.252	0%	0.155	1.5hr	0.535	20min	9	40%	0.259	20min	4	40%	0.259
C30	2.824	0%	0.465	1.5hr	1.541	20min	8	70%	0.893	20min	4	70%	0.893
C40	1.745	0%	0.324	1.5hr	1.066	20min	8	70%	0.629	20min	3	70%	0.629
C50			0.778	1.5hr	2.588	20min	8		1.465	20min	4		1.465
C60	1.731	0%	0.945	1.5hr	3.157	20min	8	70%	1.874	20min	3	70%	1.874
C70	3.118	0%	0.289	1.5hr	1.000	20min	8	70%	0.712	10min	1	70%	0.712
C80			1.192	1.5hr	4.022	20min	5		2.440	20min	3		2.440
C90	10.378	0%	1.654	1.5hr	5.555	20min	5	70%	4.191	10min	1	70%	4.191
D10	2.786	0%	0.304	1.5hr	0.979	20min	8	40%	0.520	20min	9	40%	0.520
D20	2.347	0%	0.478	1.5hr	1.610	20min	8	70%	1.016	1hr	7	70%	1.016
D30	2.985	0%	0.293	1.5hr	0.987	20min	8	70%	0.683	10min	1	70%	0.683
D40			0.753	1.5hr	2.547	20min	6		1.553	20min	7		1.553
D50	7.720	0%	1.132	1.5hr	3.764	20min	5	60%	2.795	10min	1	60%	2.795
D60	3.015	0%	1.316	1.5hr	4.333	20min	5	60%	3.262	10min	1	60%	3.262
D70	9.025	40%	1.118	1.5hr	2.954	20min	7	40%	1.118	1.5hr	7	40%	1.118
D80	5.182	0%	1.298	1.5hr	3.661	20min	4	40%	1.610	1.5hr	7	40%	1.610
D90	4.939	0%	2.937	1.5hr	9.139	20min	8	20%	4.827	30min	5	20%	4.827

- NOTES:
- PEAK STORMWATER RUNOFF RATES WERE CALCULATED USING XP STORM SOFTWARE
 - ROUTING METHOD - LAURENSEN
 - STORMS MODELLED (BASED ON ARR 2016 TEMPORAL PATTERN ENSEMBLES FOR SOUTHERN SLOPES, MAINLAND (VIC/NSW)) INCLUDE:
20% AEP - 10MIN, 15MIN, 20MIN, 25MIN, 30MIN, 45MIN, 1HR, 1.5HR, 2HR, 3HR
1% AEP - 10MIN, 15MIN, 20MIN, 25MIN, 30MIN, 45MIN, 1HR, 1.5HR, 2HR, 3HR
 - RAINFALL - BOM IFD (ARR 2016) - WOLUMLA, NSW
 - INFILTRATION/LOSS METHOD - UNIFORM LOSS:
PERVIOUS: INITIAL 21MM, CONTINUING (ABSOLUTE) 6.1MM ARR2016 NATURAL
PERVIOUS: INITIAL 10MM, CONTINUING (ABSOLUTE) 2.5MM URBAN
IMPERVIOUS (SURFACE): INITIAL 2MM, CONTINUING (ABSOLUTE) 0MM URBAN
IMPERVIOUS (ROOF): INITIAL 0MM, CONTINUING (ABSOLUTE) 0MM
DEPRESSION STORAGE: PERVIOUS & IMPERVIOUS 0.0MM
 - IMPERVIOUS FRACTION - AS PER TABLE
 - TOTAL SIMULATION TIME - 4 HOURS
 - STORMWATER MODELLING DID NOT INCLUDE ANY SURFACE WATER STORAGE
 - OPEN CHANNEL FLOW CALCULATIONS - MANNINGS, n=0.011 (RCP), 0.015 (PAVEMENT), 0.035 (GRASS)

LEGEND

STORMWATER

STORMWATER MAIN - SUMP, MANHOLE, DIAMETER

STORMWATER SERVICE TIE, ENDCAP

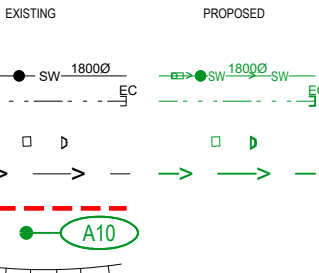
STORMWATER STRUCTURE, HEADWALL

GULLY, TABLE DRAIN OVERLAND FLOW PATH, DIRECTION

CATCHMENT BOUNDARY

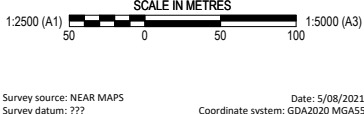
CATCHMENT NODE

EMBANKMENT



DO NOT SCALE

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TITLE STORMWATER CATCHMENT PLAN
DRAWING NUMBER 2109-P50SW
AMENDMENT: B