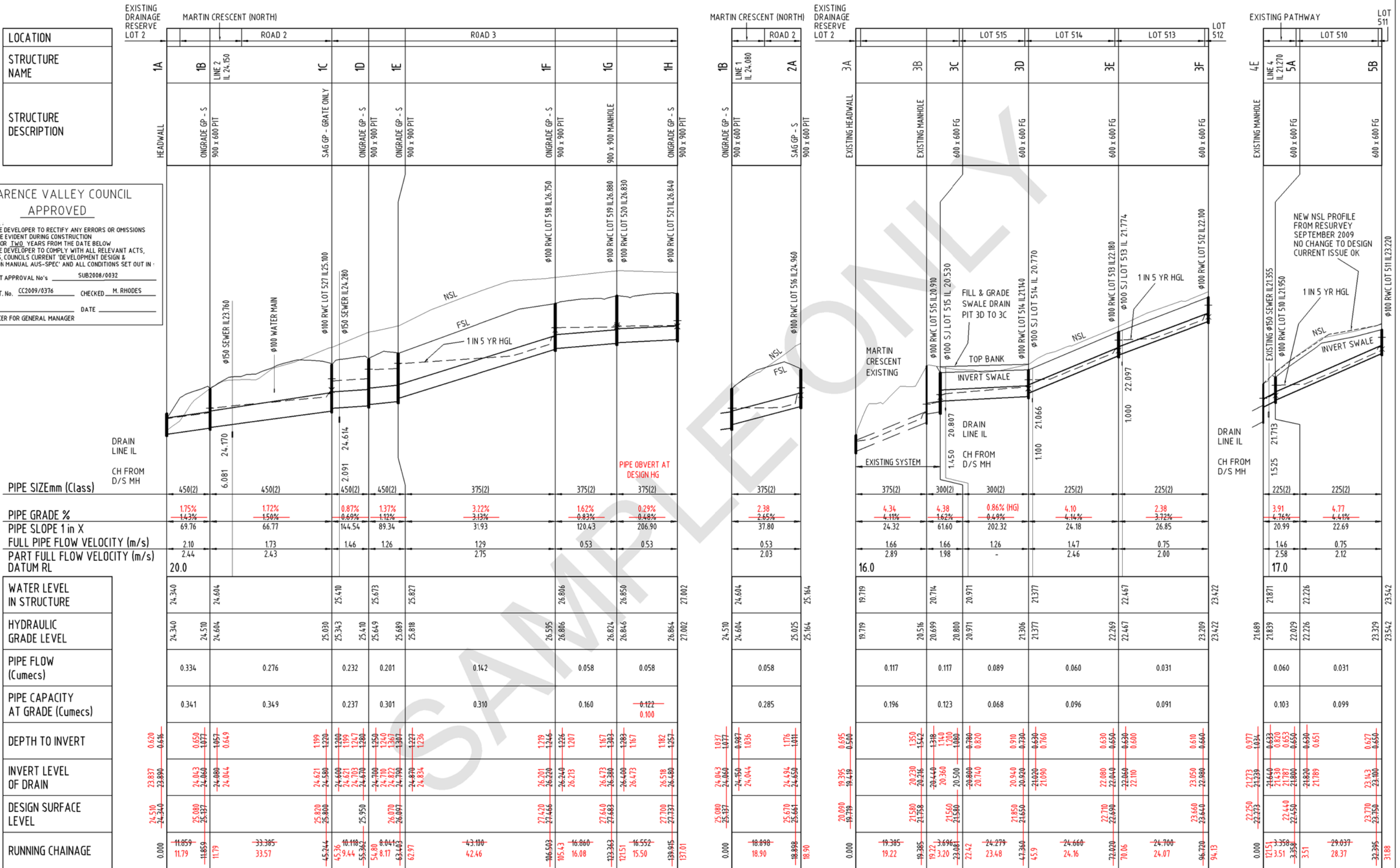


LOCATION
STRUCTURE NAME
STRUCTURE DESCRIPTION

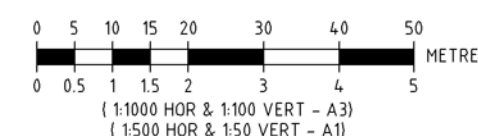
CLARENCE VALLEY COUNCIL
APPROVED

THIS APPROVAL
1. REQUIRES THE DEVELOPER TO RECTIFY ANY ERRORS OR OMISSIONS WHICH BECOME EVIDENT DURING CONSTRUCTION
2. IS CURRENT FOR TWO YEARS FROM THE DATE BELOW
3. REQUIRES THE DEVELOPER TO COMPLY WITH ALL RELEVANT ACTS, REGULATIONS, COUNCIL'S CURRENT 'DEVELOPMENT DESIGN & CONSTRUCTION MANUAL AUS-SPEC' AND ALL CONDITIONS SET OUT IN -
DEVELOPMENT APPROVAL No's SUB2008/0032
CONSTR. CERT. No. CC2009/0376 CHECKED M. RHODES
ISSUING OFFICER FOR GENERAL MANAGER



PIPE SIZE (mm) (Class)	450(2)	450(2)	450(2)	450(2)	375(2)	375(2)	375(2)
PIPE GRADE %	1.75%	1.72%	0.87%	1.37%	3.22%	1.62%	0.29%
PIPE SLOPE 1 in X	14.3%	15.0%	0.69%	1.12%	3.13%	0.83%	0.48%
FULL PIPE FLOW VELOCITY (m/s)	69.76	66.77	144.54	89.34	31.93	120.43	206.90
PART FULL FLOW VELOCITY (m/s)	2.10	1.73	1.46	1.26	1.29	0.53	0.53
DATUM RL	20.0						
WATER LEVEL IN STRUCTURE	24.340	24.604	25.410	25.673	26.806	26.850	27.002
HYDRAULIC GRADE LEVEL	24.340	24.510	25.030	25.343	26.595	26.806	26.864
PIPE FLOW (Cumecs)	0.334	0.276	0.232	0.201	0.142	0.058	0.058
PIPE CAPACITY AT GRADE (Cumecs)	0.341	0.349	0.237	0.301	0.310	0.160	0.122
DEPTH TO INVERT	24.510	24.340	24.621	24.600	26.201	26.240	26.213
INVERT LEVEL OF DRAIN	23.837	23.890	24.057	24.064	26.213	26.213	26.213
DESIGN SURFACE LEVEL	25.080	25.187	25.820	25.800	27.420	27.466	27.700
RUNNING CHAINAGE	11.79	11.79	33.385	33.385	43.100	43.100	137.01

PIPE SIZE (mm) (Class)	375(2)	300(2)	300(2)	225(2)	225(2)	225(2)	225(2)
PIPE GRADE %	2.38	4.34	4.38	0.86% (HG)	4.10	2.38	3.91
PIPE SLOPE 1 in X	2.65%	4.11%	4.62%	0.49%	4.14%	3.72%	4.77
FULL PIPE FLOW VELOCITY (m/s)	37.80	24.32	61.60	202.32	24.18	26.85	20.99
PART FULL FLOW VELOCITY (m/s)	0.53	1.66	1.66	1.26	1.47	0.75	1.46
DATUM RL	16.0						
WATER LEVEL IN STRUCTURE	19.719	19.719	20.714	20.971	21.306	22.467	21.871
HYDRAULIC GRADE LEVEL	19.719	20.516	20.699	20.800	21.306	22.269	21.839
PIPE FLOW (Cumecs)	0.117	0.117	0.089	0.060	0.031	0.060	0.031
PIPE CAPACITY AT GRADE (Cumecs)	0.196	0.123	0.068	0.096	0.091	0.103	0.099
DEPTH TO INVERT	24.043	24.060	24.044	26.201	26.240	26.213	26.213
INVERT LEVEL OF DRAIN	23.837	23.890	24.057	24.064	26.213	26.213	26.213
DESIGN SURFACE LEVEL	25.080	25.187	25.820	25.800	27.420	27.466	27.700
RUNNING CHAINAGE	18.90	18.90	33.385	33.385	43.100	43.100	137.01



NOTE :
PIPE LENGTHS (SURVEYED) ARE FROM D/S PIT WALL TO U/S PIT WALL

WORK AS EXECUTED
DEVELOPMENT APPROVAL SUB2008/0032
CONSTRUCTION CERTIFICATE CC2009/0376

SURVEY	JM & AR	DESIGN	ID	Mar08
VERT. DATUM	AHD	DRAWN	ID	Mar08
HORIZ. DATUM	-	PASSED		
AZUMITH	-			
LB/FB				

APPROVED	ISSUE	AMENDMENTS	BY	DATE
	A	Construction Certificate Application	ID	6-09
	B	CC Approval	ID	29-6-09
	C	Grade 1B to 1C for water main clearance	ID	28-7-09
	D	Line 3 lift 50mm for sewer hc clearance requested by RDB	ID	31-8-09
	E	WAE	ID	03-10



BAILEYS ESTATE - STAGE 2
WORK AS EXECUTED
DRAINAGE LONG SECTIONS
LINES 1, 2, 3 (PART EXISTING) & 5

SHEET No.	06 OF 35
PLAN No.	2008-006
ISSUE	E