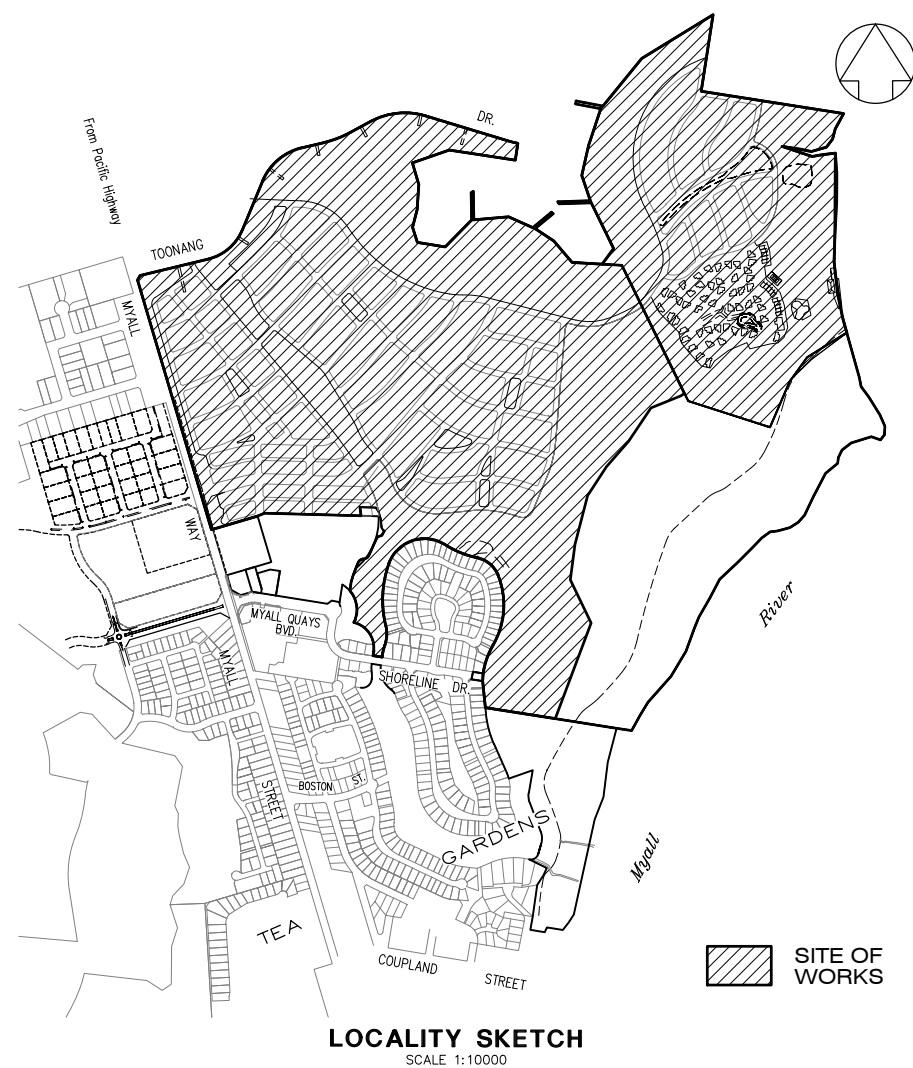


RIVERSIDE ESTATE

CONCEPT PLAN APPLICATION



Schedule of Drawings

Sheet	File Number	Description	Revision
1	21000188	COVER SHEET, LOCALITY SKETCH & INDEX	C
2	21000189	VOLUNTARY PLANNING AGREEMENT SHEET 1	B
3	21000190	VOLUNTARY PLANNING AGREEMENT SHEET 2	B
4	21000191	GENERAL LAYOUT PLAN, GENERAL NOTES & LEGEND	C
5	21200151	TYPICAL STREET DETAIL INCORPORATING BIOFILTRATION SWALES	A
6	21200152	TYPICAL STREET DETAIL PLAN INCORPORATING BIOFILTRATION SWALES	A
7	21000192	ROAD TYPICAL CROSS SECTIONS	B
8	21000193	BULK EARTHWORKS PLAN	C
9	21000194	OVERALL SITE DETAIL PLAN	B
10	21000195	SITE DETAIL PLAN SHEET 2	B
11	21000196	SITE DETAIL PLAN SHEET 3	B
12	21000197	CONSTRUCTION ACTIVITY STAGING PLAN & TRAFFIC CONTROL PLAN	B
13	21000198	BULK HAULAGE PLAN & WASTE MANAGEMENT FACILITIES	B
14	21200150	PRELIMINARY DESIGN SURFACE CONTOURS	A
15	21000160	PRELIMINARY CUT-FILL PLAN	D
16	21200148	PRELIMINARY DRAINAGE DESIGN DETAILS	A
17	21200149	PRELIMINARY FLOODWAY DESIGN DETAILS	A
18	21000199	PRELIMINARY COMMUNITY TITLE SUBDIVISION PLAN	C

Designed By

TATTERSALL LANDER PTY LTD
DEVELOPMENT CONSULTANTS IN ENGINEERING, SURVEYING & PLANNING
PO Box 580 RAYMOND TERRACE Phone (02) 4987 1500

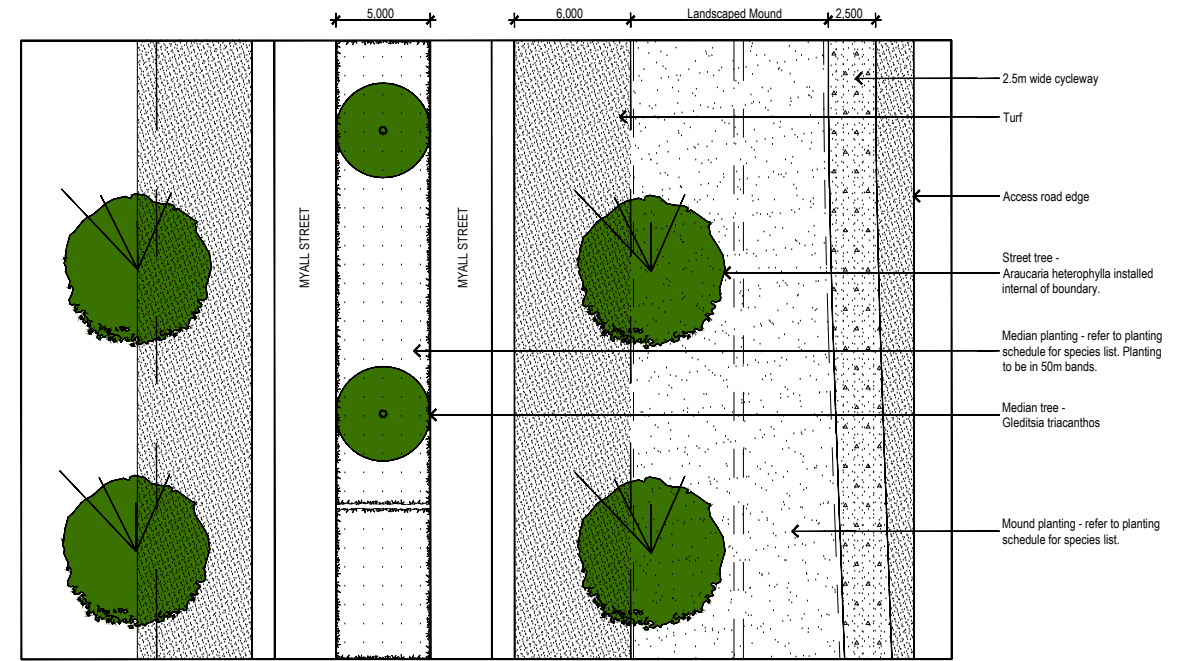
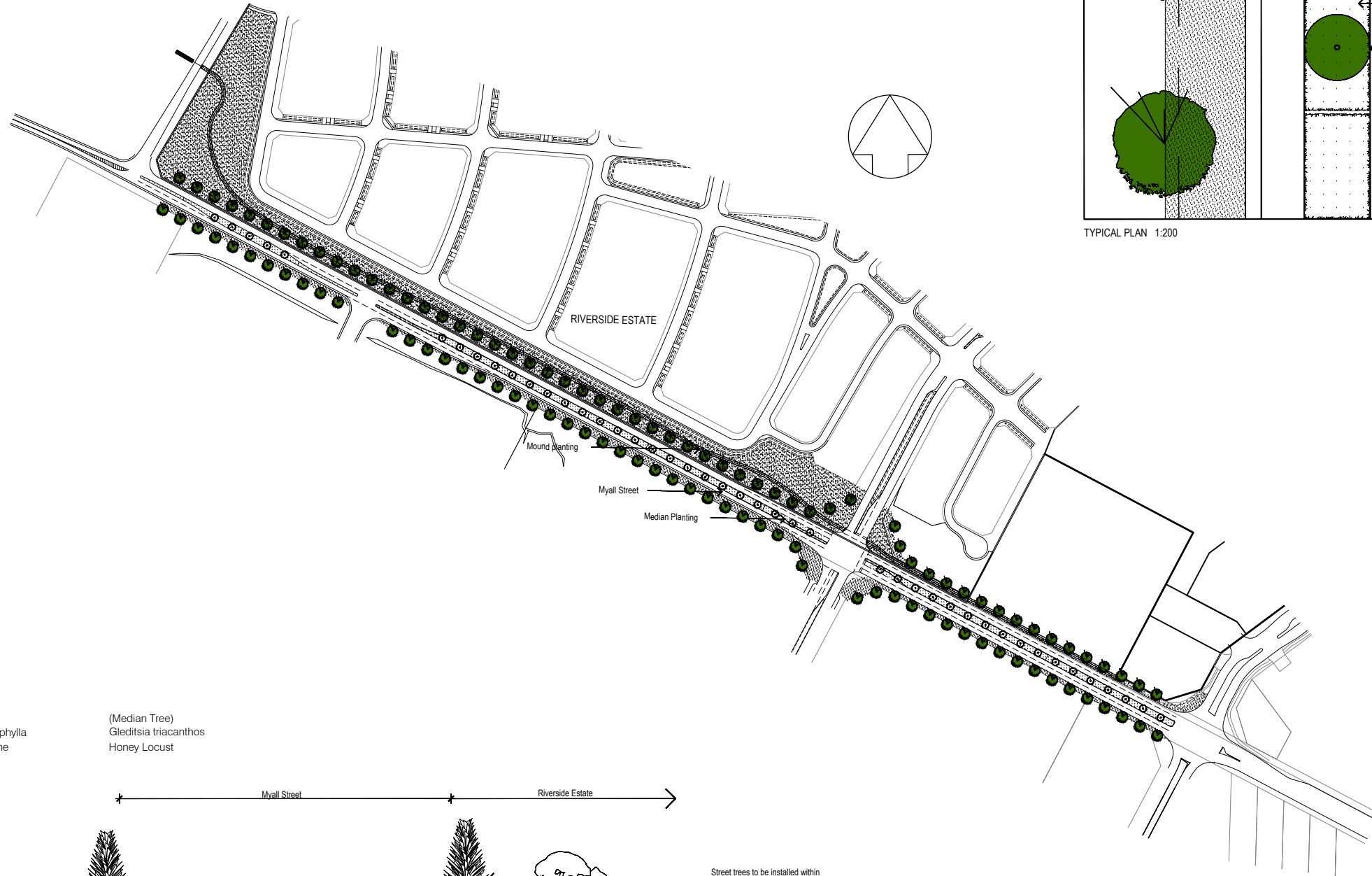


FILE : 21000188
JOB No. : 201479
SHEET No. : 1 of 18
Plotted 17/4/23/11/17

VOLUNTARY PLANNING AGREEMENT

SHEET 1

DETAILS	NOMINAL LENGTH (m) OR UNIT	UNIT RATE COST	TOTAL COST	COMMENTS
Myall Street Dual Carriageway Upgrade with Planted Median between the two roundabouts north of Shopping Centre	300	\$18,000.00	\$5,400,000.00	Includes 2x roundabouts @ a nominal cost of \$1.65M/structure
Myall Street Dual and Single Carriageway Upgrade with Planted Median between the northern roundabout and Toonang Drive	612	\$5,800.00	\$3,549,600.00	Dual lanes near roundabout transitioning to single lane
Lookout Development - Carpark	20	\$4,500.00	\$90,000.00	No formal Carpark available
Lookout Development - Observation Structure, furniture, improvements	1	\$50,000.00	\$50,000.00	Existing Site to be upgraded

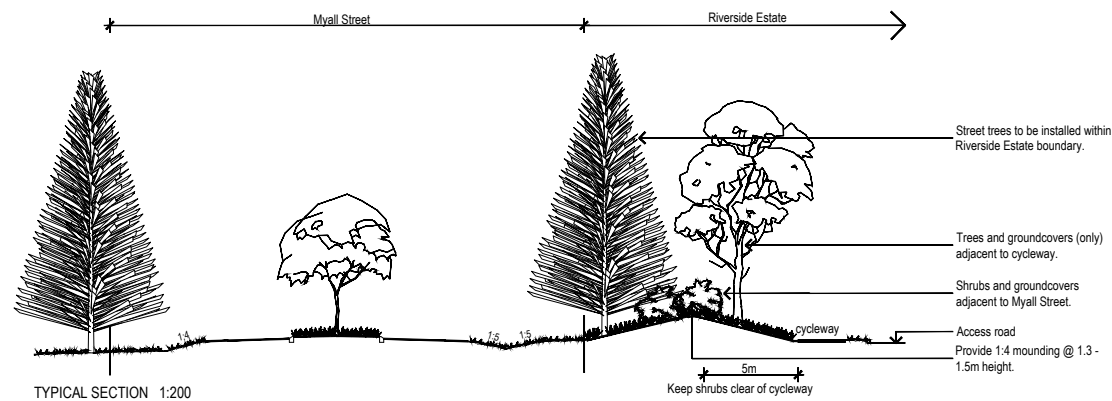


TYPICAL PLAN 1:200

KEY	SPECIES	SIZE	SPACING	QUANTITY
Street Tree				
	Araucaria heterophylla	400Lt	15m c/s	111
Median Planting				
	Gleditsia triacanthos	800Lt	15m c/s	44
	Dianella 'Little Jess'	150mm	6 /m ²	7200
	Lomandra 'Seascape'	150mm	6 /m ²	7200
	Pennisetum 'Nafra'	150mm	6 /m ²	7200
Mound Planting				
	Dianella 'Little Jess'	tubestock	6 /m ²	19290
	Lomandra 'Seascape'	tubestock	6 /m ²	19290
	Banksia integrifolia	150mm	1m c/s	1500
	Banksia serrata	150mm	1m c/s	1500
	Doryanthes excelsa	5Lt	2.5m c/s	365
	Melaleuca nodosa	5Lt	1m c/s	1500
	Xanthorrhoea sp.	5Lt	2.5m c/s	365
	Melaleuca quinquenervia	25Lt	5m c/s	40
	Eucalyptus robusta	25Lt	5m c/s	40

(Verge Tree)
Araucaria heterophylla
Norfolk Island Pine

(Median Tree)
Gleditsia triacanthos
Honey Locust



TYPICAL SECTION 1:200

REV	DETAILS OF AMENDMENT	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
B	Revised Layout - August 2012	AV	AV			2/11/10*
A	Original Issue	AV	AV	DWK*	BL*	
REV	DETAILS OF AMENDMENT	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

* Denote the original signature and date when revision was issued.

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SCALE : 1:2000 (or A1 Size Plot)

SHEET No. : 2
FILE : 21000189
JOB No. : 201479
DATE : Plotted 17-42 23/11/12
COMPUTER FILE : S:\projects\Riverside\dwg\SIG\9\Riverside 2nd Submission.dwg

VOLUNTARY PLANNING AGREEMENT
SHEET 2



LEGEND

- EXISTING PATHWAY / CYCLEWAY
- PROPOSED CYCLEWAY
- PROPOSED PATHWAY

DETAILS	NOMINAL LENGTH (m) OR UNIT	UNIT RATE COST	TOTAL COST	COMMENTS
Cycleways - Pedestrian Link to Tea Gardens Commercial Area via Foreshore	95 + 255	\$250.00	\$92,500.00	Two components with missing link on Foreshore needing to be relocated to the River side of Marine Drive to remove impact on Fig Trees near Police Station, generally free of service relocations
Pathways - Pedestrian Link to Tea Gardens Commercial Area via Myall Street	154	\$250.00	\$38,500.00	Additional pathway to the southern parts of the Commercial areas - from Myall Street to Marine Drive
Lookout Cycleway to Toonang Drive	560	\$250.00	\$140,000.00	General clearing with attractive route possible

B	Revised Development Footprint	AV	AV				
A	Original Issue	AV	AV	DWK*	BL*	2/11/10*	
REV	DETAILS OF AMENDMENT	DESIGNED	DRAWN	CHECKED	APPROVED	DATE	

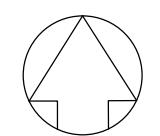
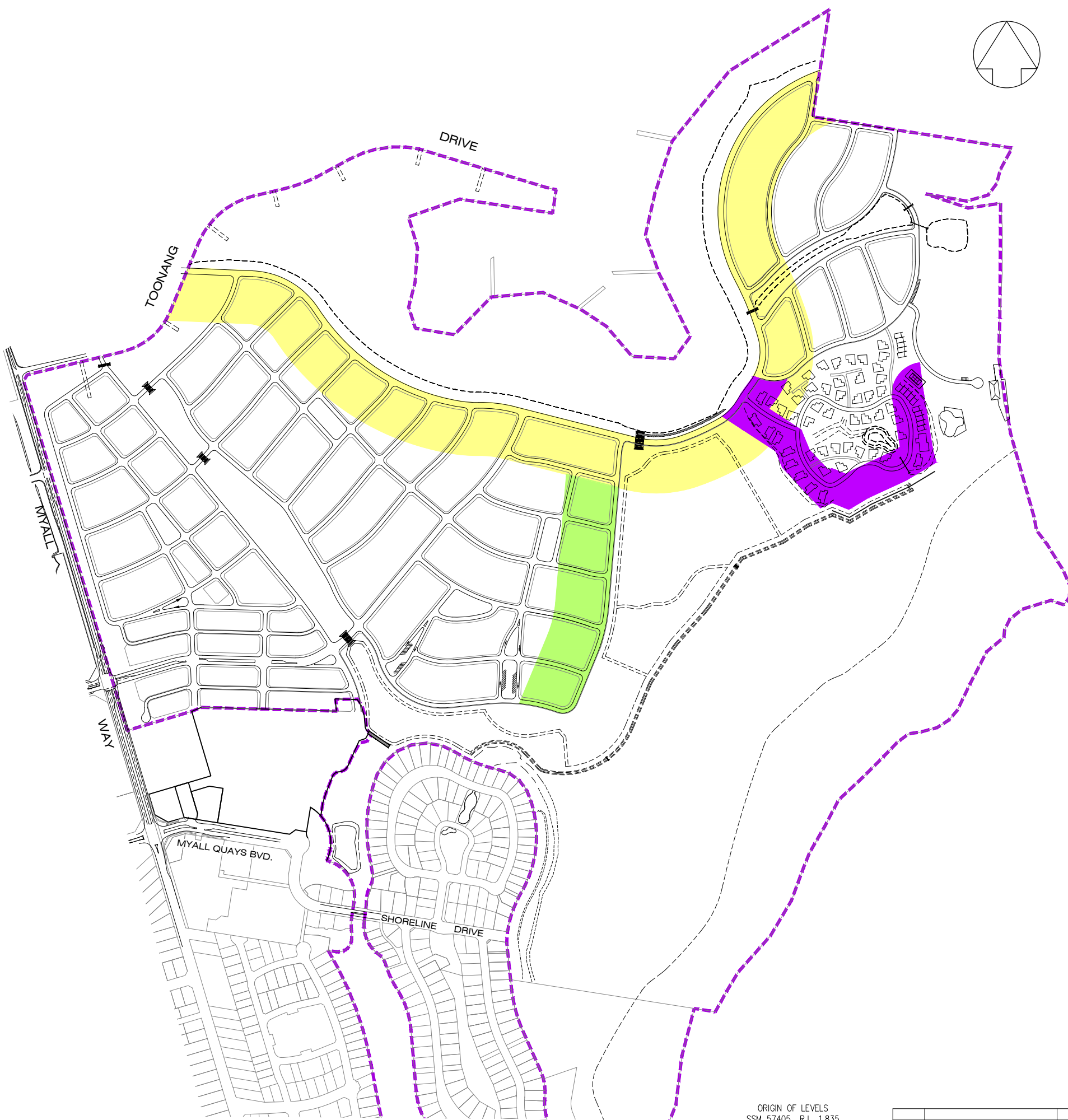
* Denote the original signature and date when revision was issued.

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SCALE : 1:5000 on A1

SHEET No. : 3	FILE : 21000190	SHEET SIZE
JOB No. : 201479	DATE : Plotted 15:18 23/11/12	A1

COMPUTER FILE : S:\projects\Riverside\dwg\STG9\VPA - Cycleways.dwg



LEGEND

- - - - - DENOTES CONCEPT PLAN BOUNDARY
- } ASSET PROTECTION ZONES AS DEFINED BY CONACHER ENVIRONMENTAL GROUP BUSHFIRE PROTECTION ASSESSMENT REPORT
- }
- }

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GENERAL LAYOUT PLAN
1: 4000

ORIGIN OF LEVELS
SSM 57405 R.L. 1.835
AUSTRALIAN HEIGHT DATUM
BUDGEREE ST. (NEAR BOSTON ROAD)
TEA GARDENS

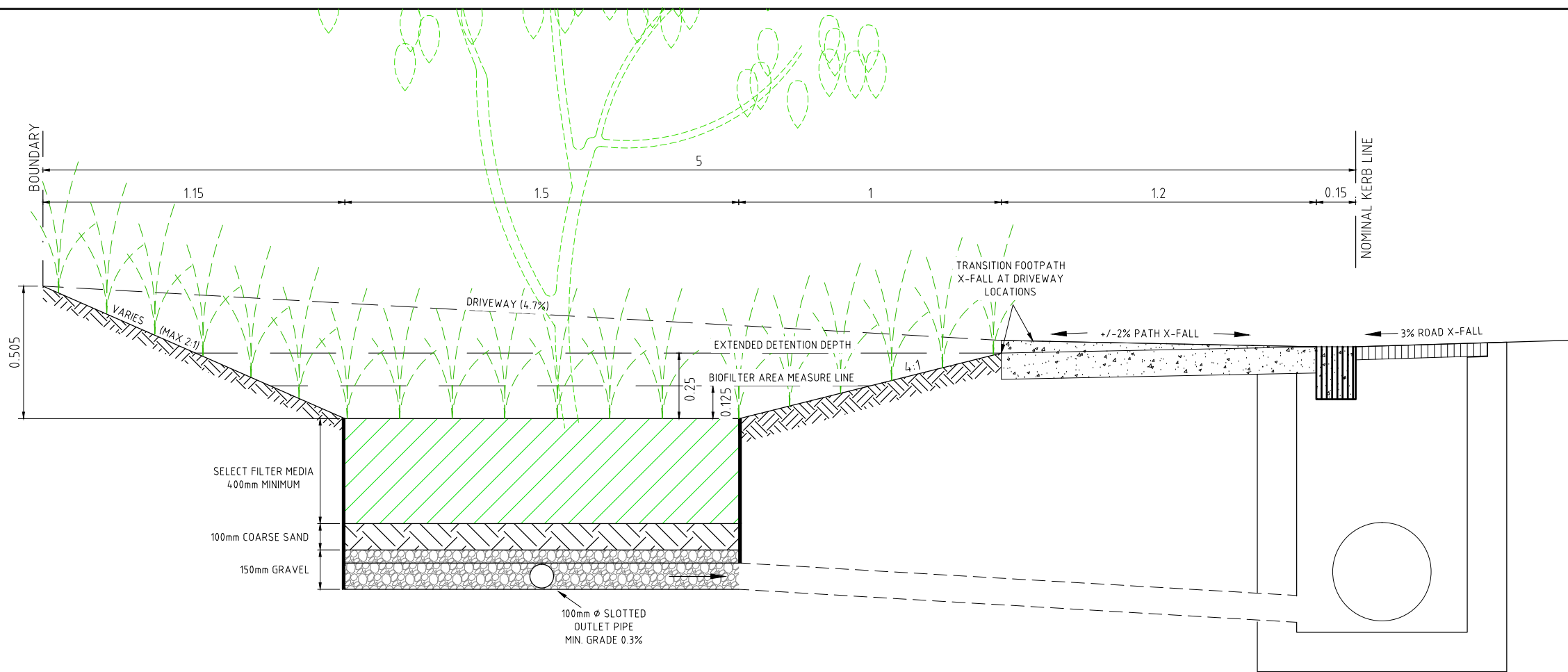
REV	DETAILS OF AMENDMENT	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
C	Revised Layout - August 2012					
B	Revised Development Footprint	AV	AV	DWK*	BL*	2/12/11*
A	Original Issue	AV	AV	-	-	24/11/11*

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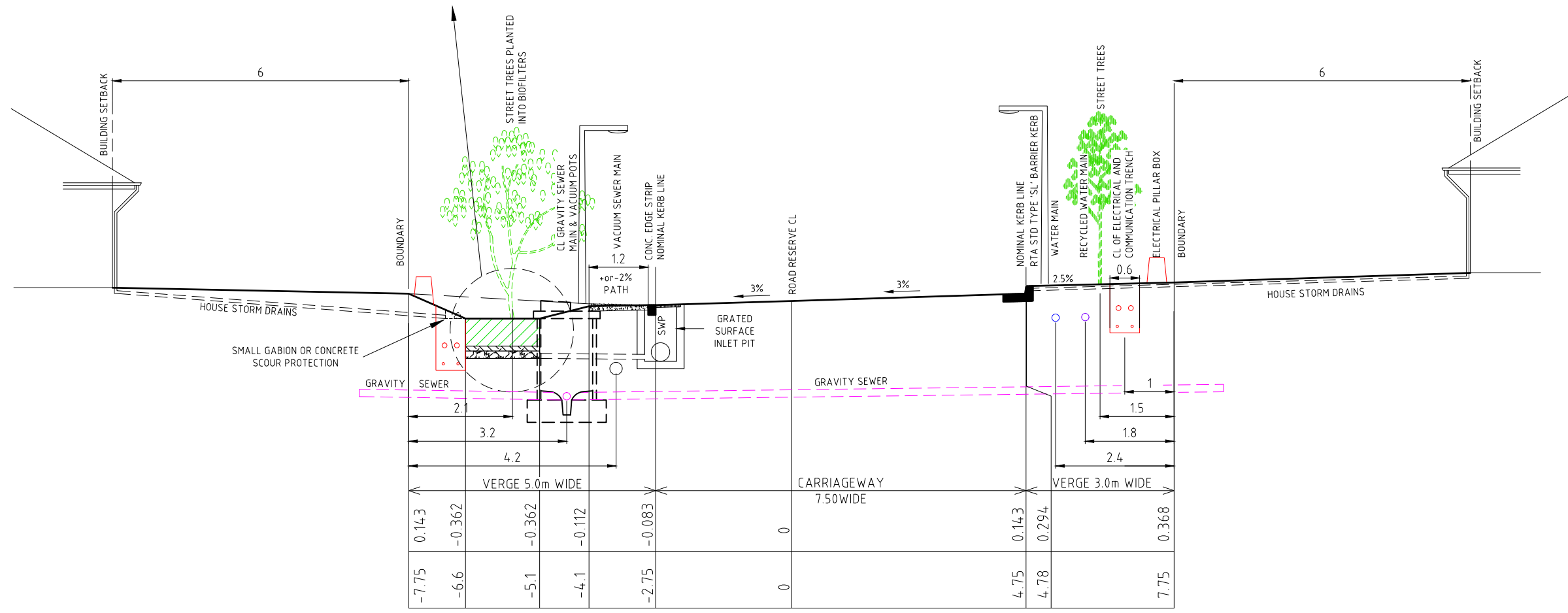
SCALE : 1:4000 (for A1 Size Plot)

SHEET No. : 4	FILE : 21000191	SHEET SIZE
JOB No. : 201479	DATE : Plotted 17-42 23/11/12	A1

COMPUTER FILE : S:\projects\Riverside\dwg\STG9\Riverside 2nd Submission.dwg



TYPICAL 5.0m WIDE VERGE PROFILE WITH BIO-FILTER DETAIL



T.S. 1 TYPICAL SECTION ROAD 15.5m WIDE SCALE 1:50

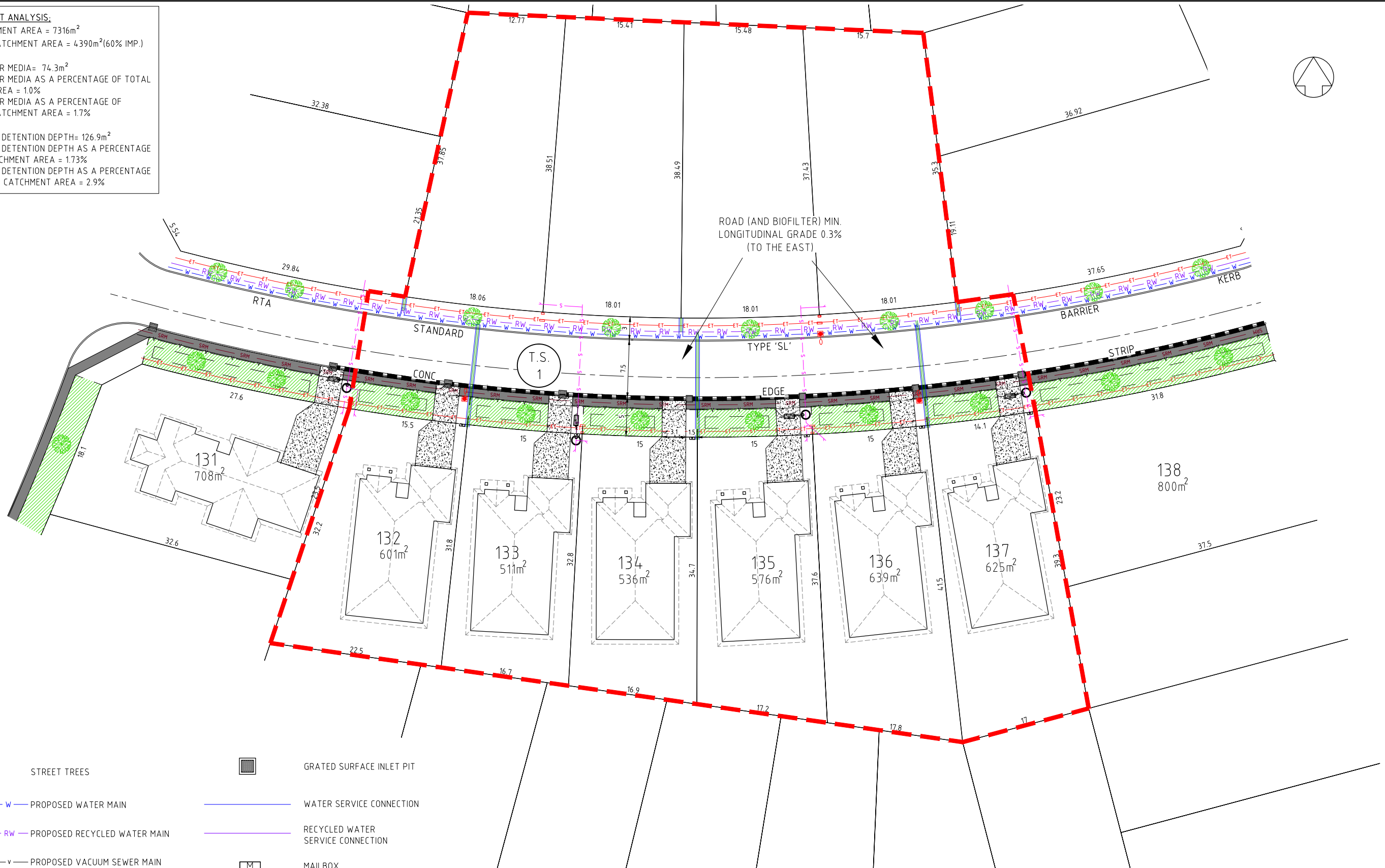
REV	DETAILS OF AMENDMENT	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
A	Original Issue	AV	AV			

TATTERSALL LANDER Pty Ltd
DEVELOPMENT CONSULTANTS

SCALE :	SHEET No. : 5	FILE : 21200151	SHEET SIZE
COMPUTER FILE : S:\projects\Riverside\dwg\ST69\Insertion of Biofilters into Riverside Lot Layout.dwg	JOB No. : 201479	DATE : Plotted 17-09 23/11/12	A1

TYPICAL CATCHMENT ANALYSIS:

- TOTAL CATCHMENT AREA = 7316m²
- IMPERVIOUS CATCHMENT AREA = 4390m²(60% IMP.)
- AREA OF FILTER MEDIA = 74.3m²
- AREA OF FILTER MEDIA AS A PERCENTAGE OF TOTAL CATCHMENT AREA = 1.0%
- AREA OF FILTER MEDIA AS A PERCENTAGE OF IMPERVIOUS CATCHMENT AREA = 1.7%
- AREA OF HALF DETENTION DEPTH = 126.9m²
- AREA OF HALF DETENTION DEPTH AS A PERCENTAGE OF TOTAL CATCHMENT AREA = 1.73%
- AREA OF HALF DETENTION DEPTH AS A PERCENTAGE OF IMPERVIOUS CATCHMENT AREA = 2.9%



LEGEND

- STREET TREES
- PROPOSED WATER MAIN
- PROPOSED RECYCLED WATER MAIN
- PROPOSED VACUUM SEWER MAIN
- PROPOSED GRAVITY MAIN
- CENTERLINE LINE OF ELECTRICAL AND COMMUNICATION TRENCH
- PROPOSED VACUUM POT/SEWER ACCESS CHAMBER
- DRIVEWAY
- LIGHT POLE
- BIOFILTER (INCLUDING PLANTED BATTER SLOPES)
- GRATED SURFACE INLET PIT
- WATER SERVICE CONNECTION
- RECYCLED WATER SERVICE CONNECTION
- MAILBOX
- KERB LINE
- VACUUM SEWER EXTERNAL VALVE PIT
- 1.2m WIDE FOOTPATH
- CATCHMENT BOUNDARIES

**TYPICAL RESIDENTIAL STREET DETAIL
INCORPORATING BIOFILTRATION SWALES**

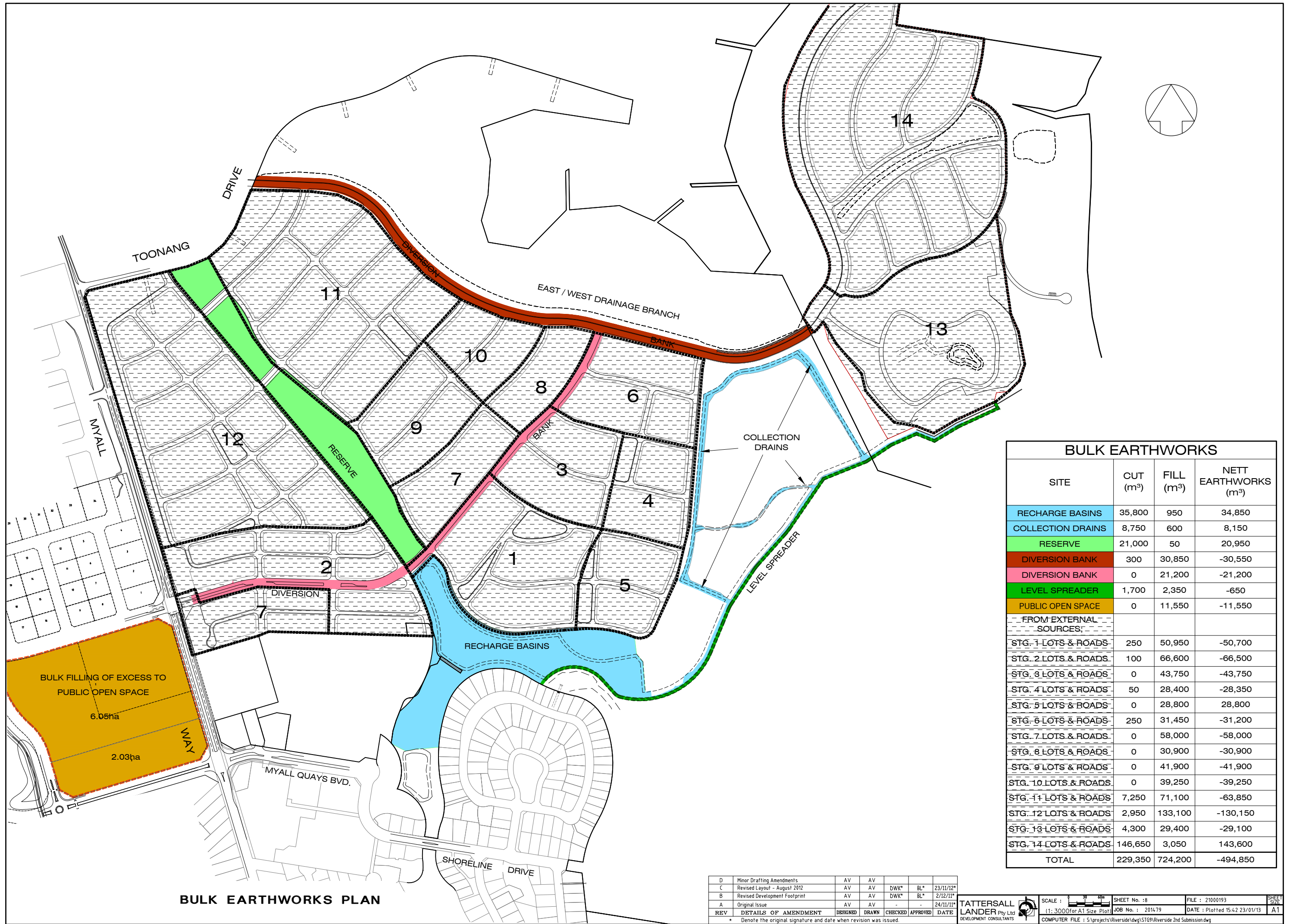
REV	DETAILS OF AMENDMENT	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
A	Original Issue	AV	AV			

**TATTERSALL
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SCALE : 1:250 for A1 Size Plot

SHEET No. : 6
FILE : 21200152
JOB No. : 201479
DATE : Plotted 17/09 23/11/12

SHEET 6 OF 6
A1



BULK EARTHWORKS			
SITE	CUT (m³)	FILL (m³)	NETT EARTHWORKS (m³)
RECHARGE BASINS	35,800	950	34,850
COLLECTION DRAINS	8,750	600	8,150
RESERVE	21,000	50	20,950
DIVERSION BANK	300	30,850	-30,550
DIVERSION BANK	0	21,200	-21,200
LEVEL SPREADER	1,700	2,350	-650
PUBLIC OPEN SPACE	0	11,550	-11,550
FROM EXTERNAL SOURCES:			
STG. 1 LOTS & ROADS	250	50,950	-50,700
STG. 2 LOTS & ROADS	100	66,600	-66,500
STG. 3 LOTS & ROADS	0	43,750	-43,750
STG. 4 LOTS & ROADS	50	28,400	-28,350
STG. 5 LOTS & ROADS	0	28,800	28,800
STG. 6 LOTS & ROADS	250	31,450	-31,200
STG. 7 LOTS & ROADS	0	58,000	-58,000
STG. 8 LOTS & ROADS	0	30,900	-30,900
STG. 9 LOTS & ROADS	0	41,900	-41,900
STG. 10 LOTS & ROADS	0	39,250	-39,250
STG. 11 LOTS & ROADS	7,250	71,100	-63,850
STG. 12 LOTS & ROADS	2,950	133,100	-130,150
STG. 13 LOTS & ROADS	4,300	29,400	-29,100
STG. 14 LOTS & ROADS	146,650	3,050	143,600
TOTAL	229,350	724,200	-494,850

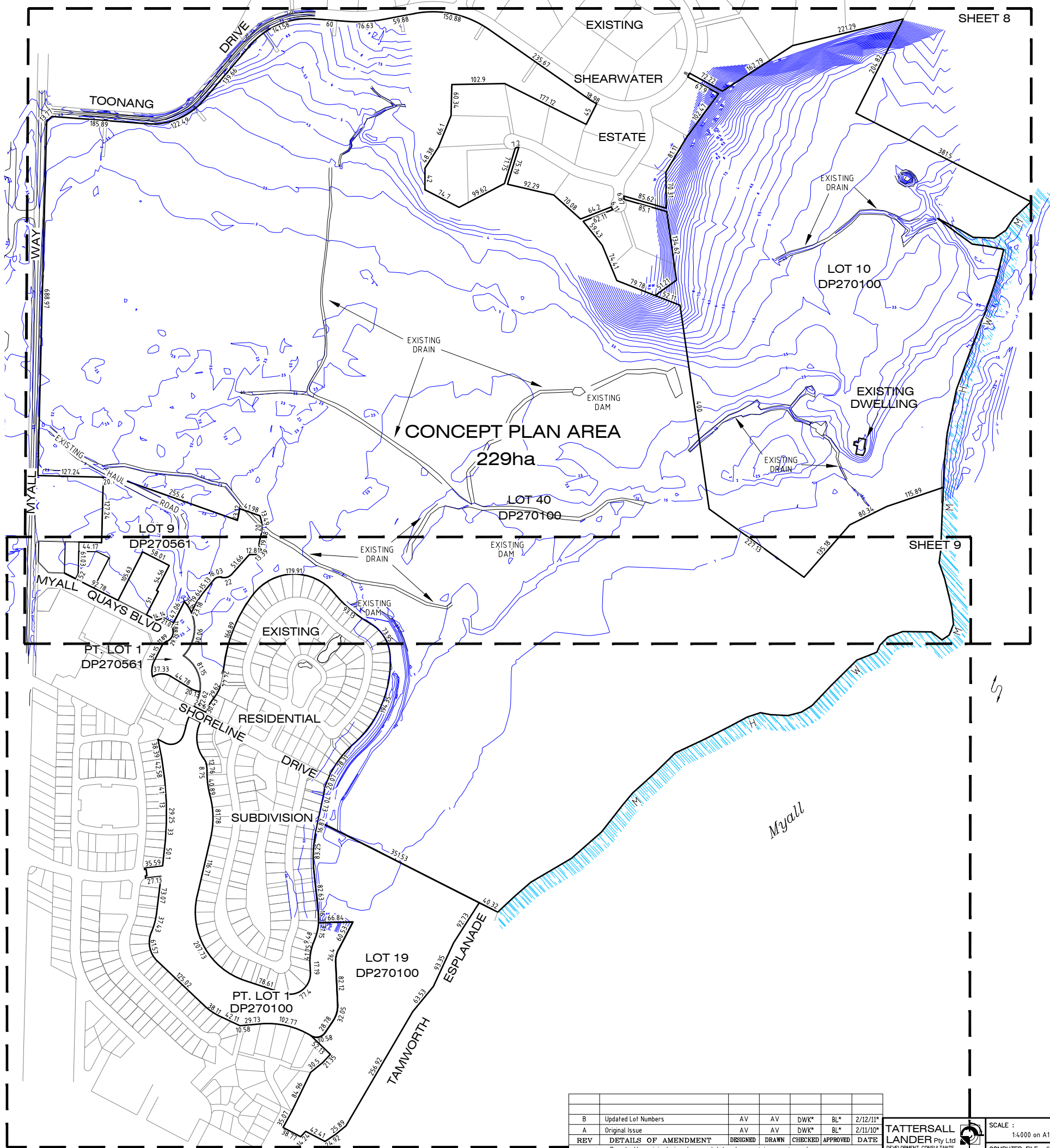
D	Minor Drafting Amendments	AV	AV			23/11/12*
C	Revised Layout - August 2012	AV	AV	DWK*	BL*	2/12/11*
B	Revised Development Footprint	AV	AV	DWK*	BL*	
A	Original Issue	AV	AV			24/11/11*
REV	DETAILS OF AMENDMENT	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

TATTERSALL LANDER Pty Ltd
 DEVELOPMENT CONSULTANTS

SCALE : 1:3000 for A1 Size Plot
 SHEET No. : 8
 JOB No. : 201479
 DATE : Plotted 15:42 23/01/13
 FILE : 21000193
 COMPUTER FILE : S:\projects\Riverside\dwg\STG9\Riverside 2nd Submission.dwg

BULK EARTHWORKS PLAN

BULK FILLING OF EXCESS TO PUBLIC OPEN SPACE
 6.05ha
 2.03ha



SHEET 8

SHEET 9

River

SITE DETAIL SURVEY

- 0.89 SPOT HEIGHT
- 3.5 EXISTING CONTOURS (0.5m INTERVAL)
- EXISTING FENCING
- EXISTING OVERHEAD POWER LINE
- FORESHORE BOUNDARY

REV	DETAILS OF AMENDMENT	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
B	Updated Lot Numbers	AV	AV	DWK*	BL*	2/12/11*
A	Original Issue	AV	AV	DWK*	BL*	2/11/10*







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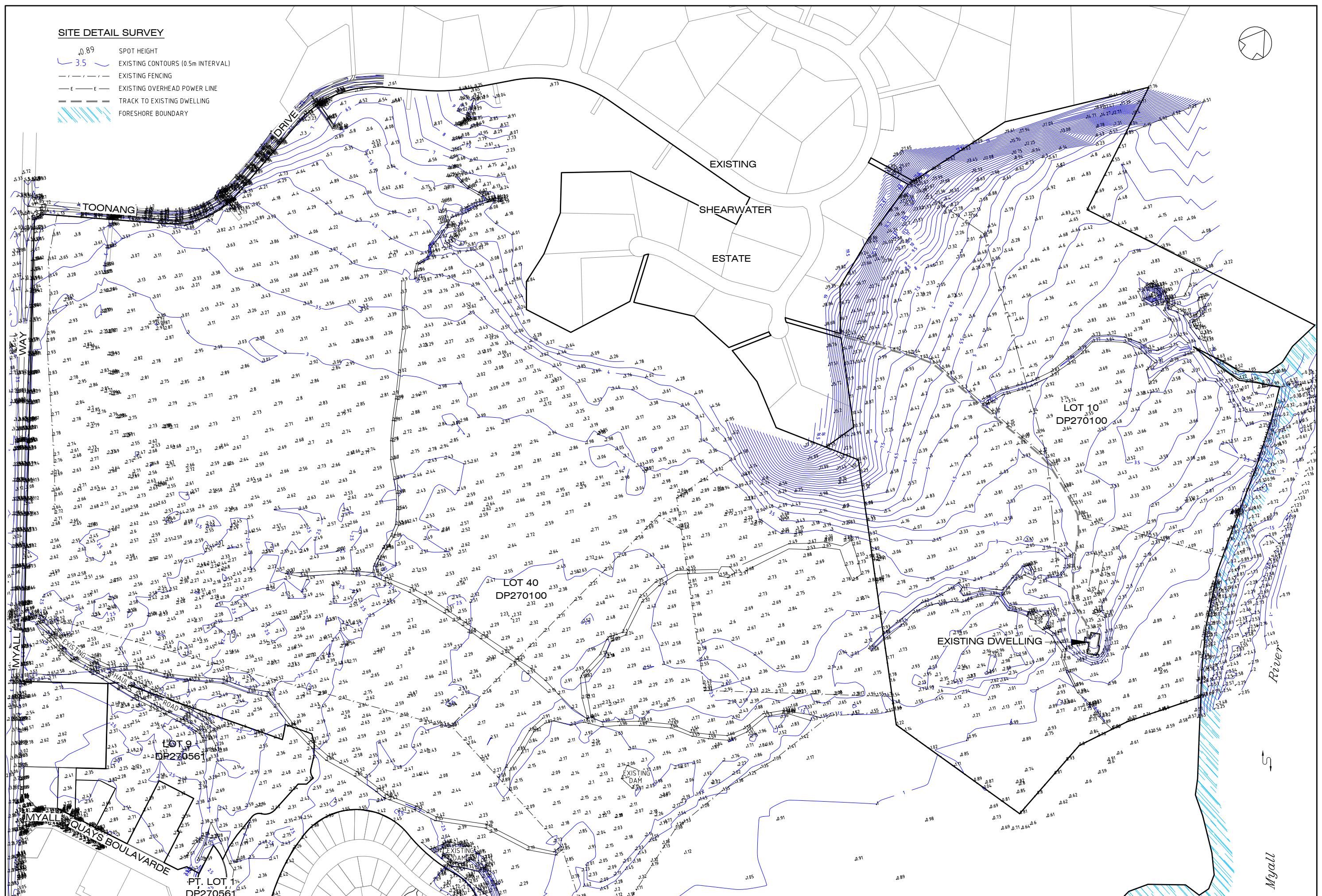
SCALE : 1:4000 on A1

SHEET No. : 9
JOB No. : 201479
DATE : Plotted 17:25 23/11/12
SHEET SIZE : A1

COMPUTER FILE : S:\projects\Riverside\dwg\STG9\Site detail survey plan.dwg

SITE DETAIL SURVEY

-  SPOT HEIGHT
-  EXISTING CONTOURS (0.5m INTERVAL)
-  EXISTING FENCING
-  EXISTING OVERHEAD POWER LINE
-  TRACK TO EXISTING DWELLING
-  FORESHORE BOUNDARY



REV	DESCRIPTION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
B	Updated Lot Numbers	AV	AV	DWK*	BL*	2/12/11*
A	Original Issue	AV	AV	DWK*	BL*	2/11/10*
REV	DETAILS OF AMENDMENT	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
* Denote the original signature and date when revision was issued.						

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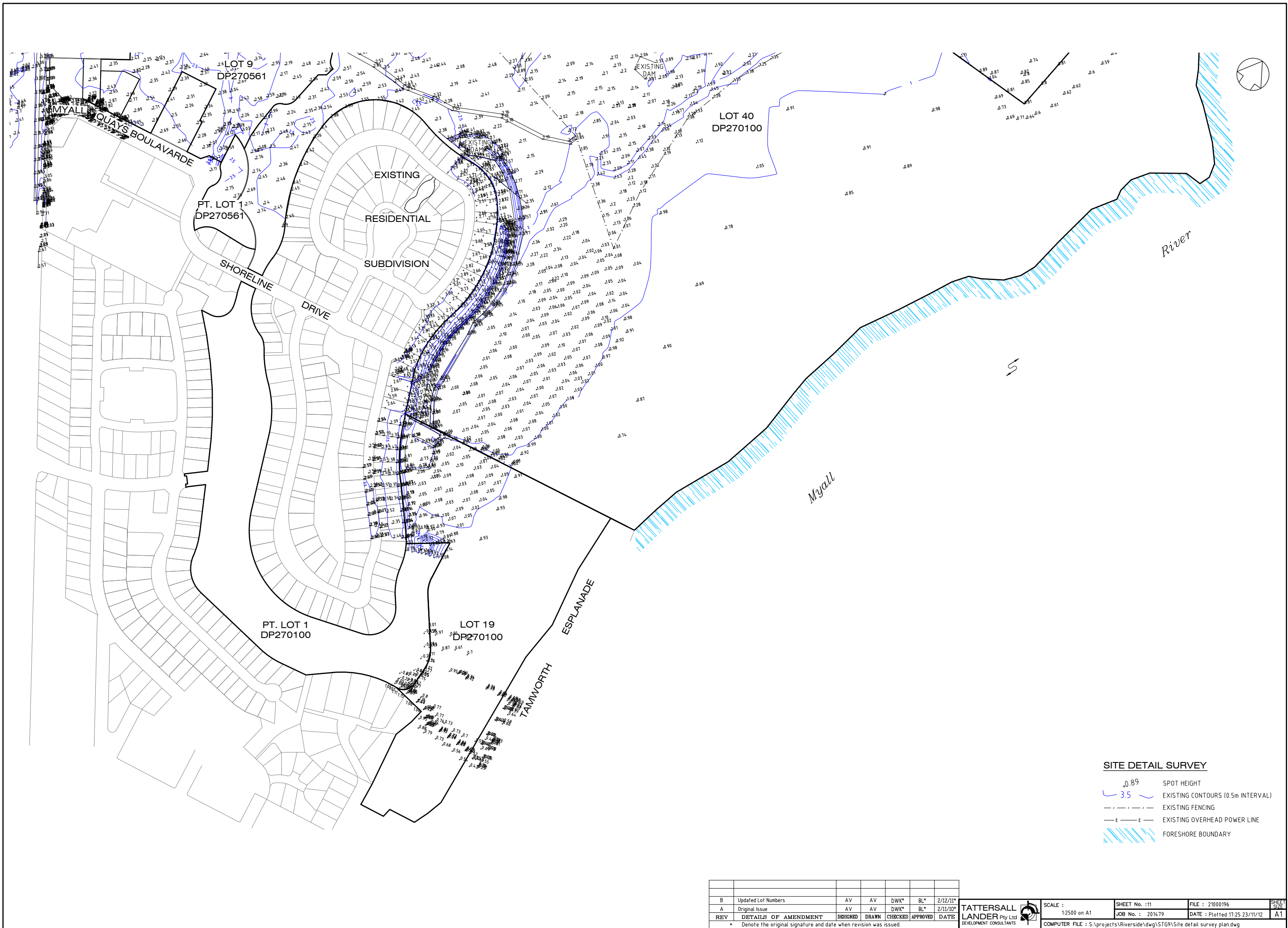
SCALE :
1:2500 on A1

SHEET No. : 10
JOB No. : 201479

FILE : 21000195
DATE : Plotted 17:25 23/11/12

SHEET SIZE
A1

COMPUTER FILE : S:\projects\Riverside\dwg\STG9\Site detail survey plan.dwg



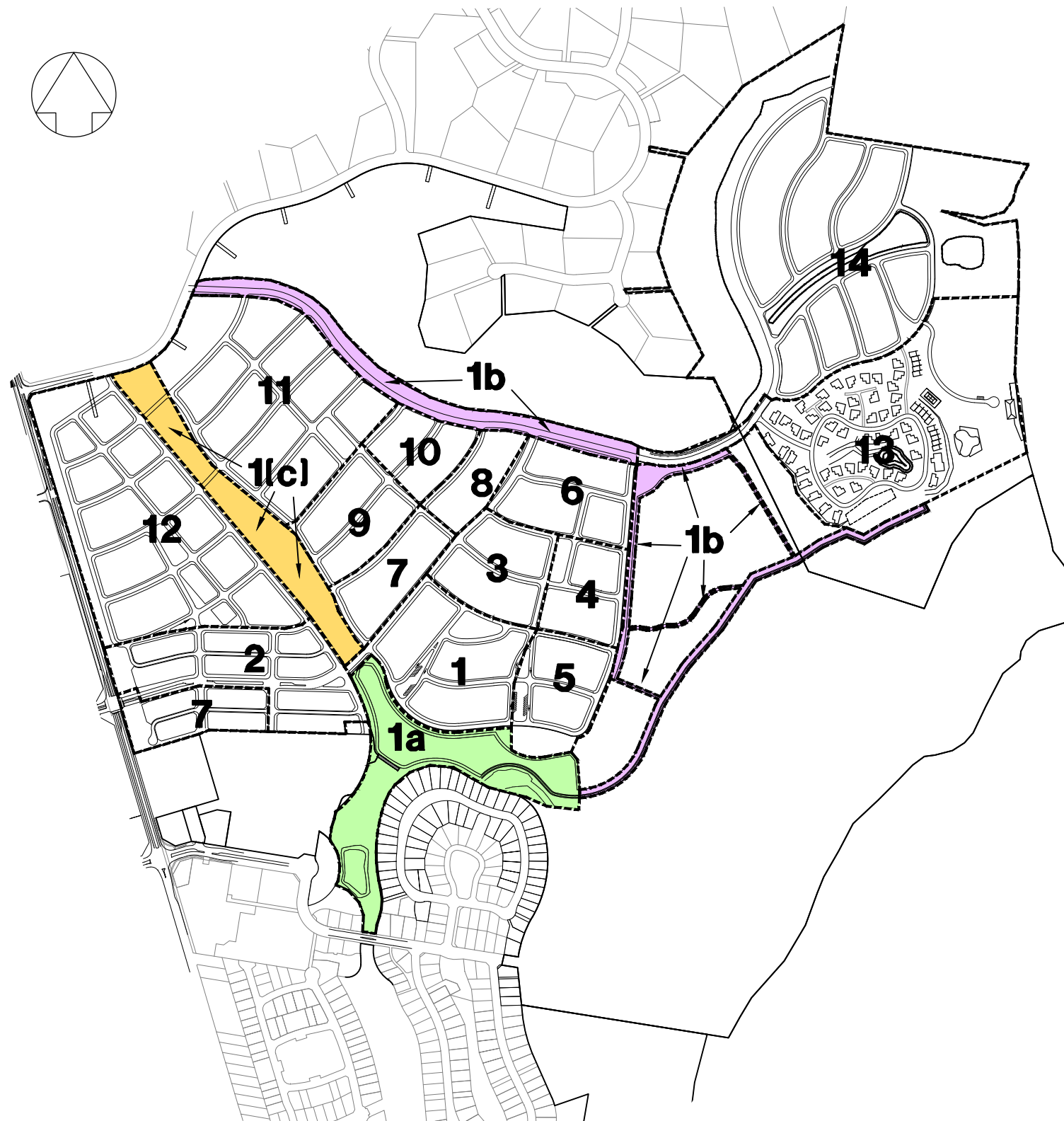
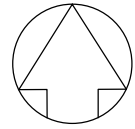
SITE DETAIL SURVEY

- Δ 0.89 SPOT HEIGHT
- \sim 3.5 EXISTING CONTOURS (0.5m INTERVAL)
- - - - - EXISTING FENCING
- - - - - EXISTING OVERHEAD POWER LINE
- FORESHORE BOUNDARY

REV	DETAILS OF AMENDMENT	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
B	Updated Lot Numbers	AV	AV	DWK*	BL*	2/12/11*
A	Original Issue	AV	AV	DWK*	BL*	2/11/10*

TATTERSALL LANDER Pty Ltd
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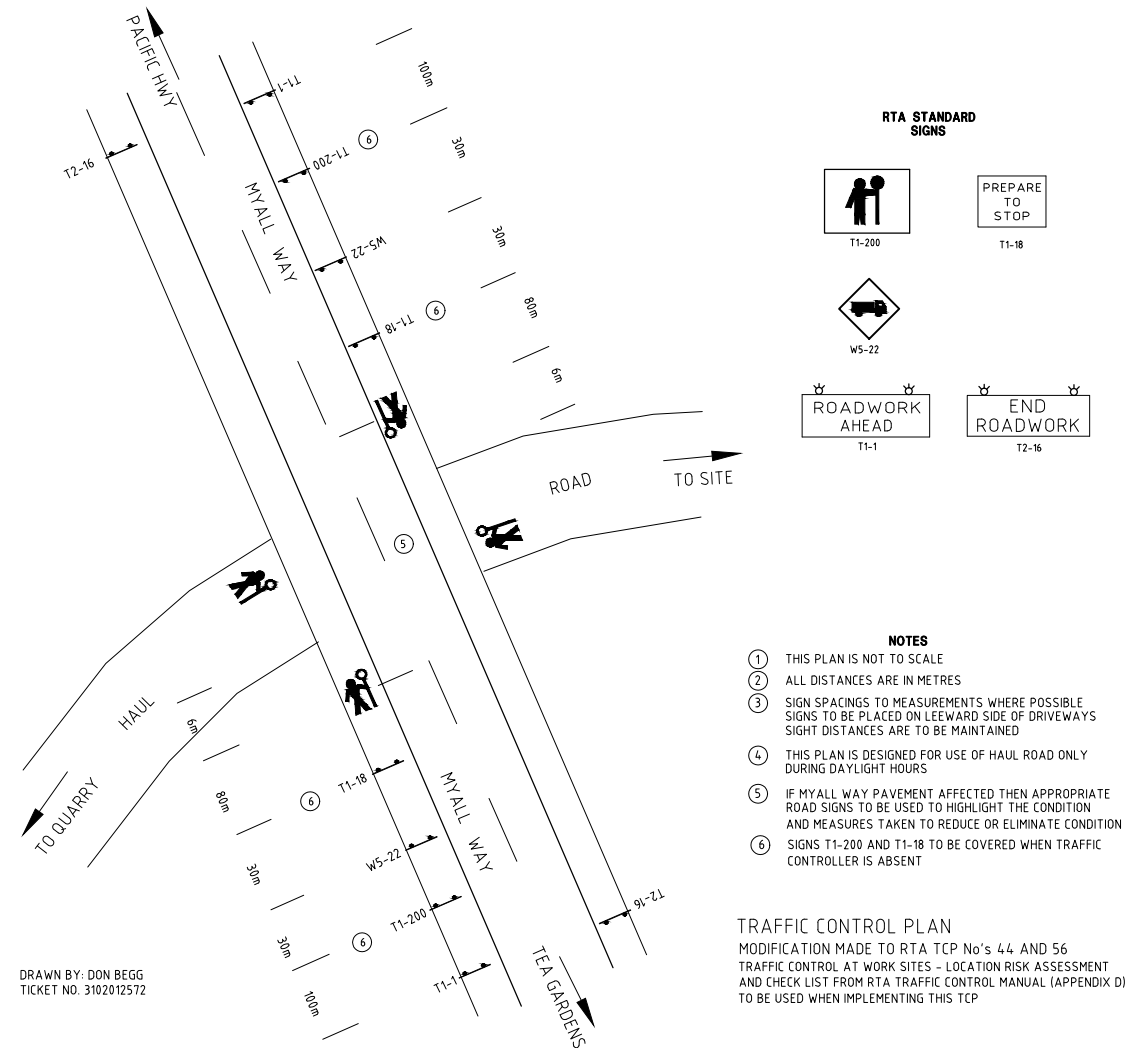
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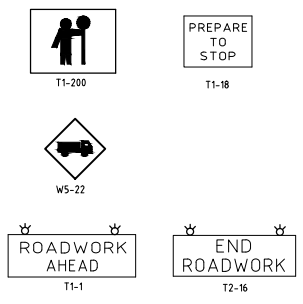
**CONSTRUCTION ACTIVITY STAGING PLAN
INDICATING STAGE 1 ACTIVITIES**

1:5000

- 1 CONSTRUCTION OF PRECINCT & ASSOCIATED INFRASTRUCTURE
- 1a CONSTRUCTION OF RECHARGE BASIN AND WORKS IN FINAL FORM
- 1b PARTIAL CONSTRUCTION OF 'EAST-WEST' DRAINAGE BRANCH & ROAD EMBANKMENT. ESTABLISHMENT OF FINAL FINISHED LEVELS FOR LEVEL SPREADER AND DRAINAGE SWALES
- 1c PARTIAL CONSTRUCTION OF 'EAST' & 'WEST' DRAINAGE BRANCHES
- 2 CONSTRUCTION OF PRECINCT & ASSOCIATED INFRASTRUCTURE
- 3 CONSTRUCTION OF PRECINCT & ASSOCIATED INFRASTRUCTURE
- 4 CONSTRUCTION OF PRECINCT & ASSOCIATED INFRASTRUCTURE
- 5 CONSTRUCTION OF PRECINCT & ASSOCIATED INFRASTRUCTURE
- 6 CONSTRUCTION OF PRECINCT & ASSOCIATED INFRASTRUCTURE
- 7 CONSTRUCTION OF PRECINCT & ASSOCIATED INFRASTRUCTURE
- 8 CONSTRUCTION OF PRECINCT & ASSOCIATED INFRASTRUCTURE
- 9 CONSTRUCTION OF PRECINCT & ASSOCIATED INFRASTRUCTURE
- 10 CONSTRUCTION OF PRECINCT & ASSOCIATED INFRASTRUCTURE
- 11 CONSTRUCTION OF PRECINCT & ASSOCIATED INFRASTRUCTURE
- 12 CONSTRUCTION OF PRECINCT & ASSOCIATED INFRASTRUCTURE
- 13 CONSTRUCTION OF PRECINCT & ASSOCIATED INFRASTRUCTURE
- 14 CONSTRUCTION OF PRECINCT & ASSOCIATED INFRASTRUCTURE



RTA STANDARD SIGNS



- NOTES**
- ① THIS PLAN IS NOT TO SCALE
 - ② ALL DISTANCES ARE IN METRES
 - ③ SIGN SPACINGS TO MEASUREMENTS WHERE POSSIBLE SIGN DISTANCES TO BE PLACED ON LEEWARD SIDE OF DRIVEWAYS SIGN DISTANCES ARE TO BE MAINTAINED
 - ④ THIS PLAN IS DESIGNED FOR USE OF HAUL ROAD ONLY DURING DAYLIGHT HOURS
 - ⑤ IF MYALL WAY PAVEMENT AFFECTED THEN APPROPRIATE ROAD SIGNS TO BE USED TO HIGHLIGHT THE CONDITION AND MEASURES TAKEN TO REDUCE OR ELIMINATE CONDITION
 - ⑥ SIGNS T1-200 AND T1-18 TO BE COVERED WHEN TRAFFIC CONTROLLER IS ABSENT

**TRAFFIC CONTROL PLAN
NOT TO SCALE**

DRAWN BY: DON BEGG
TICKET NO. 3102012572

REV	DETAILS OF AMENDMENT	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
B	Revised Development Footprint	AV	AV	DWK*	BL*	15/08/12*
A	Original Issue	AV	AV	DWK*	BL*	2/11/10*

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SCALE : 1:5000 (for A1 Size Plot)

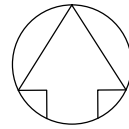
SHEET No. : 12
FILE : 21000197
JOB No. : 201479
DATE : Plotted 17.08.23/11/12

SHEET SIZE
A1



BULK HAULAGE PLAN

1:2500



DETAIL A - TYPICAL CIVIL CONTRACTORS SITE COMPOUND INCLUDING WASTE MANAGEMENT FACILITIES

1:500

REV	DETAILS OF AMENDMENT	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
B	Revised Development Footprint	AV	AV	DWK*	BL*	15/08/12*
A	Original Issue	AV	AV	DWK*	BL*	2/11/10*

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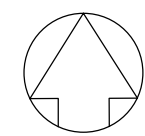


SCALE : 0 5 10m
(1:500 for A1 Size Plot)

SHEET No. : 13
JOB No. : 201479
DATE : Plotted 17/08 23/11/12

FILE : 21000198
SHEET SIZE : A1

COMPUTER FILE : S:\projects\Riverside\dwg\STG9\construction man details.dwg



PRELIMINARY DESIGN SURFACE CONTOURS
1:3000

REV	DETAILS OF AMENDMENT	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
A	Original Issue	AV	AV			

**TATTERSALL
LANDER** Pty Ltd
DEVELOPMENT CONSULTANTS

SCALE :
(1:3000 for A1 Size Plot)

SHEET No. : 14
JOB No. : 201479
DATE : Plotted 17-42 23/11/12

FILE : 21200150
SHEET 14 OF 14
A1