

REFER SHEET 3 FOR CONTINUATION



REFER SHEET 6 FOR CONTINUATION

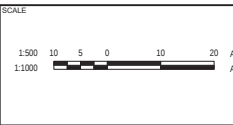
PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL



Approval no: DEV2019/1013
Date: 30 April 2020

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
1	26.02.19	25	CL	ORIGINAL ISSUE
2	21.08.19	MKP	MKP	LAYOUT AMENDED
3	24.09.19	MKP	MKP	COUNCIL IR RESPONSE
4	03.10.19	MKP	MKP	VARIOUS CHANGES
5	06.01.20	MKP	MKP	LAYOUT AMENDED

DRAWN	STATUS
FOR DEVELOPMENT APPLICATION	NOT FOR CONSTRUCTION
DESIGN	APPROVED
TROY SCHULTZ	RPEQ 20631
FOR AND ON BEHALF OF PEAKURBAN PTY LTD	



CLIENT	ORCHARD DEVELOPMENTS P.L.
ASSOCIATED CONSULTANT	SURVEYOR: LANDPARTNERS PH: (07) 3842 1032

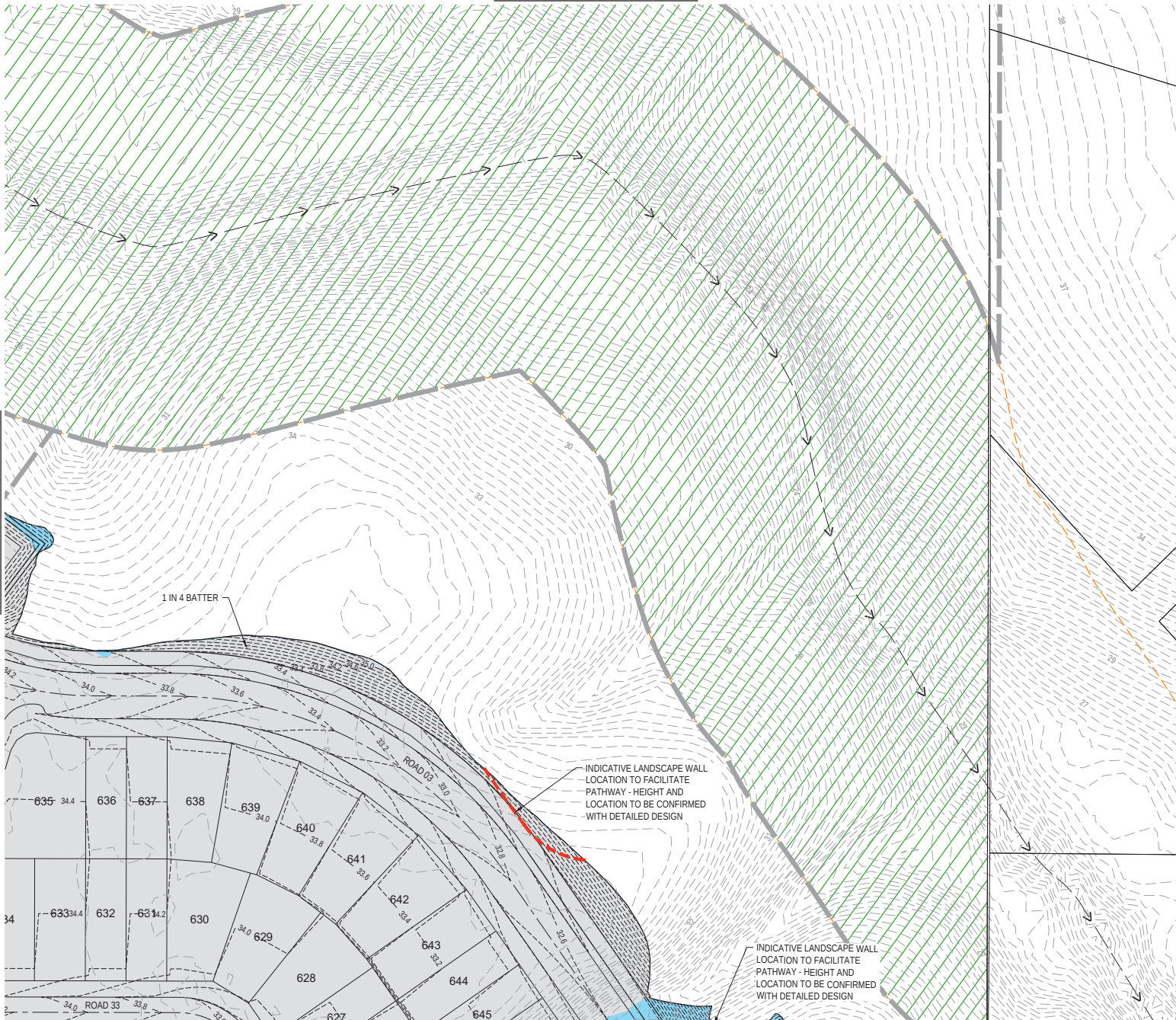
PROJECT NAME	PROPOSED RESIDENTIAL DEVELOPMENT
176-228 MOUNTAIN RIDGE ROAD, SOUTH MACLEAN	

DRAWING TITLE	CONCEPT BULK EARTHWORKS LAYOUT PLAN SHEET 5 OF 10
PROJECT No:	18-0153
DRAWING No:	P106
REVISION	5

REFER SHEET 4 FOR CONTINUATION



REFER SHEET 5 FOR CONTINUATION



REFER SHEET 8 FOR CONTINUATION

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

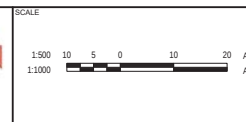
Approval no: DEV2019/1013

Date: 30 April 2020



REV	DATE	DESIGN	DRAWN	REVISION DETAILS
1	26.02.19	25	CL	ORIGINAL ISSUE
2	21.06.19	MKP	MKP	LAYOUT AMENDED
3	03.10.19	MKP	MKP	VARIOUS CHANGES
4	06.01.20	MKP	MKP	LAYOUT AMENDED

FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION
DESIGN APPROVED TROY SCHULTZ RPEQ 20631
FOR AND ON BEHALF OF PEAKURBAN PTY LTD



CLIENT ORCHARD DEVELOPMENTS P.L.
ASSOCIATED CONSULTANT SURVEYOR: LANDPARTNERS PH: (07) 3842 1032

PROJECT NAME PROPOSED RESIDENTIAL DEVELOPMENT
176-228 MOUNTAIN RIDGE ROAD, SOUTH MACLEAN

DRAWING TITLE CONCEPT BULK EARTHWORKS LAYOUT PLAN SHEET 6 OF 10
PROJECT No. 18-0153
DRAWING No. P107
REVISION 4



REFER SHEET 7 FOR CONTINUATION



REFER SHEET 10 FOR CONTINUATION

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL



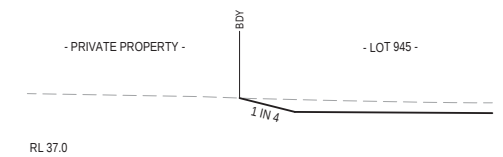
Approval no: DEV2019/1013
Date: 30 April 2020

REV	DATE	DESIGN	DRAWN	ORIGINAL ISSUE	REVISION DETAILS	DRAWN	STATUS	SCALE	CLIENT	PROJECT NAME	DRAWING TITLE
1	26.02.19	25	CL	ORIGINAL ISSUE							
2	21.08.19	MKP	MKP	LAYOUT AMENDED							
3	24.09.19	MKP	MKP	COUNCIL IR RESPONSE							
4	03.10.19	MKP	MKP	VARIOUS CHANGES							
5	06.03.20	MKP	MKP	LAYOUT AMENDED							
						DESIGN	APPROVED				
							TROY SCHULTZ	RPEQ 20631			
						FOR AND ON BEHALF OF PEAKURBAN PTY LTD		ENQUIRIES@PEAKURBAN.COM.AU			
						PEAKURBAN		DEVELOPMENT ENGINEERS • ADVISORS			
						1:500 10 5 0 10 20 A1		1:1000			
						ORCHARD DEVELOPMENTS P.L.					
						ASSOCIATED CONSULTANT					
						SURVEYOR: LANDPARTNERS					
						PH: (07) 3842 1032					
						PROPOSED					
						RESIDENTIAL DEVELOPMENT					
						176-228 MOUNTAIN RIDGE ROAD,					
						SOUTH MACLEAN					
						CONCEPT BULK EARTHWORKS					
						LAYOUT PLAN					
						SHEET 8 OF 10					
						PROJECT No:					
						18-0153					
						DRAWING No:					
						P109					
						REVISION					
						5					



Queensland
Government

Date: 30 April 2020



REV	DATE	DESIGN	DRAWN	REVISION DETAILS		DRAWN	STATUS	 PEAKURBAN DEVELOPMENT ENGINEERS - ADVISORS	SCALE 1:500 10 5 0 10 20 A1 1:1000 	CLIENT ORCHARD DEVELOPMENTS P.L. PROPOSED RESIDENTIAL DEVELOPMENT	PROJECT NAME 176-228 MOUNTAIN RIDGE ROAD, SOUTH MACLEAN	DRAWING TITLE CONCEPT BULK EARTHWORKS LAYOUT PLAN SHEET 9 OF 10					
1	20.02.19	JS	CL	ORIGINAL ISSUE			FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION								PROJECT No. 18-0153	DRAWING No. P110	REVISION 4
2	21.08.19	MKP	MKP	LAYOUT AMENDED													
3	24.09.19	MKP	MKP	COUNCIL IN RESPONSE													
4	06.01.20	MKP	MKP	LAYOUT AMENDED													
						DESIGN	APPROVED TROY SCHULTZ RPEQ 20631										
FOR AND ON BEHALF OF PEAKURBAN PTY LTD								ENQUIRIES@PEAKURBAN.COM.AU									

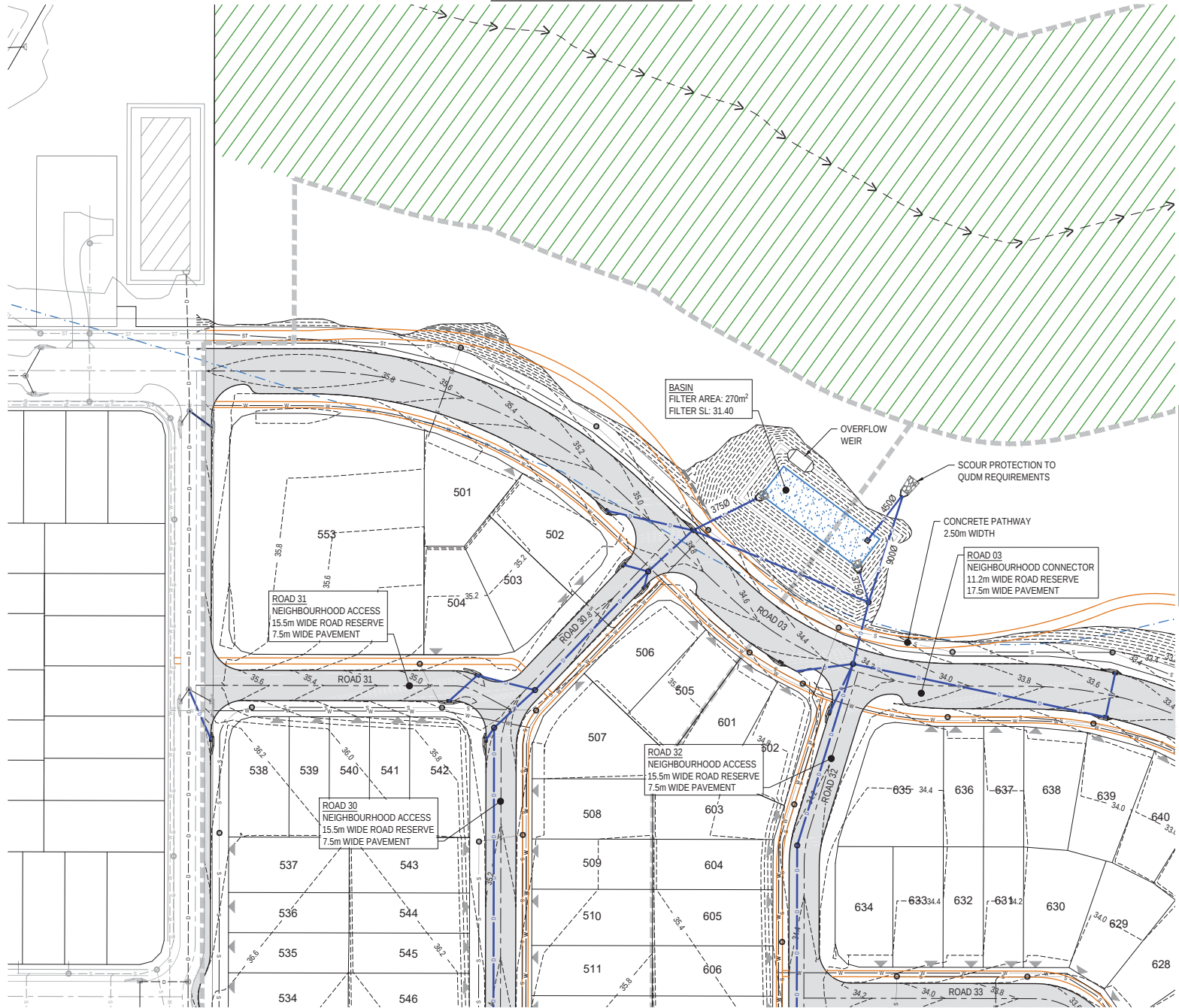


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Date: 30 April 2020

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REFER SHEET 3 FOR CONTINUATION



REFER SHEET 6 FOR CONTINUATION

REFER SHEET 7 FOR CONTINUATION

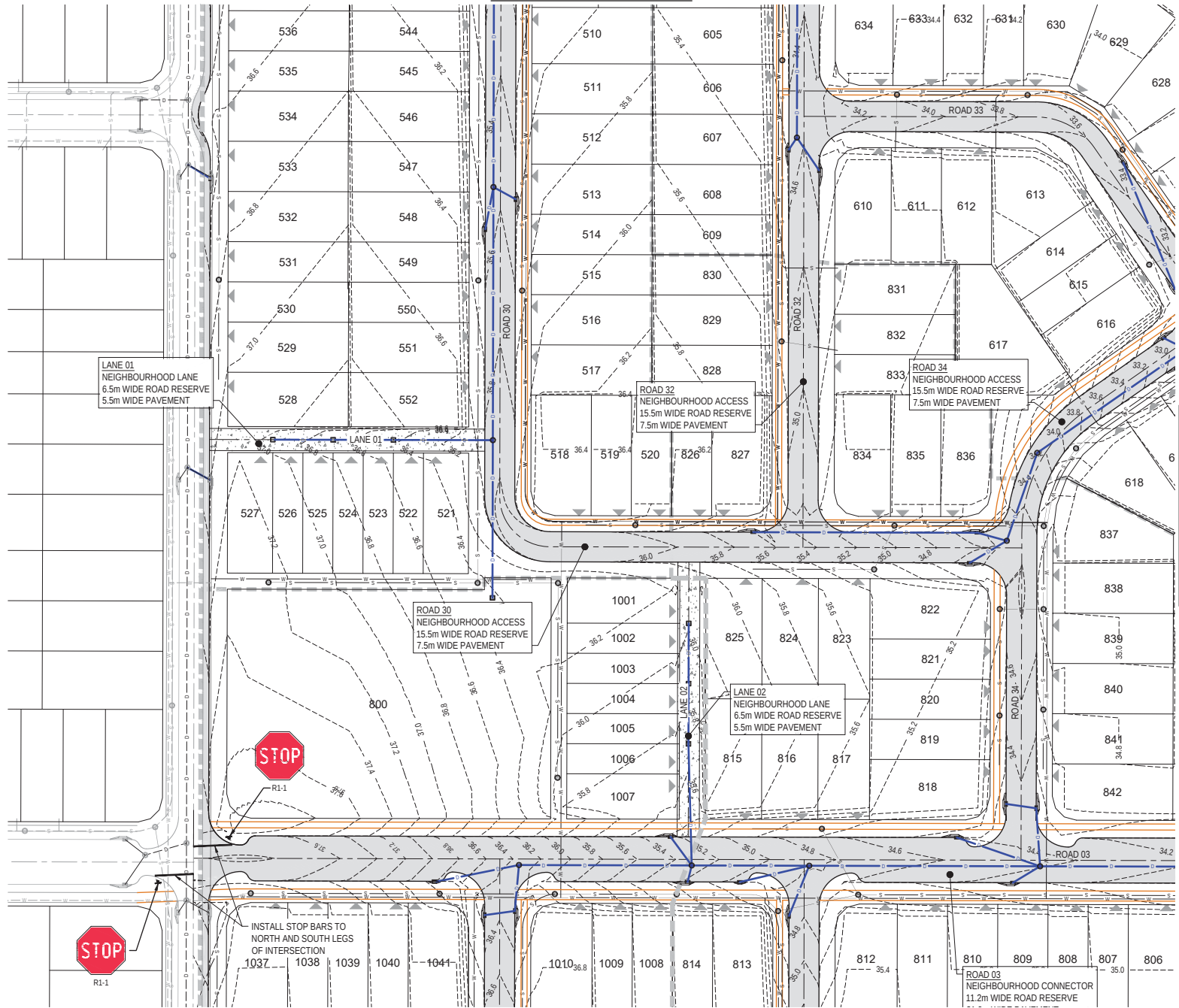
PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL



Approval no: DEV2019/1013
Date: 30 April 2020

REV	DATE	DESIGN	DRAWN	REVISION DETAILS	DRAWN	STATUS	SCALE	CLIENT	PROJECT NAME	DRAWING TITLE
1	26.02.19	25	CL	ORIGINAL ISSUE			1:500 10 5 0 10 20 A1	ORCHARD DEVELOPMENTS P.L.	PROPOSED RESIDENTIAL DEVELOPMENT	CONCEPT ROADWORKS AND DRAINAGE LAYOUT PLAN
2	21.06.19	MKP	MKP	LAYOUT AMENDED			1:1000			SHEET 5 OF 10
3	24.09.19	MKP	MKP	COUNCIL IR RESPONSE						
4	03.10.19	MKP	MKP	VARIOUS CHANGES						
5	06.01.20	MKP	MKP	LAYOUT AMENDED						
					DESIGN	APPROVED		ASSOCIATED CONSULTANT		
					TROY SCHULTZ	RPEQ 20631		SURVEYOR: LANDPARTNERS	176-228 MOUNTAIN RIDGE ROAD, SOUTH MACLEAN	PROJECT No: 18-0153
					FOR AND ON BEHALF OF PEAKURBAN PTY LTD		ENQUIRIES@PEAKURBAN.COM.AU			DRAWING No: P118
										REVISION 5

REFER SHEET 5 FOR CONTINUATION



REFER SHEET 8 FOR CONTINUATION

REFER SHEET 9 FOR CONTINUATION



PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

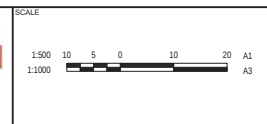
Approval no: DEV2019/1013

Date: 30 April 2020



REV	DATE	DESIGN	DRAWN	REVISION DETAILS
1	20.02.19	25	CL	ORIGINAL ISSUE
2	21.06.19	MKP	MKP	LAYOUT AMENDED
3	24.09.19	MKP	MKP	COUNCIL IR RESPONSE
4	06.01.20	MKP	MKP	LAYOUT AMENDED

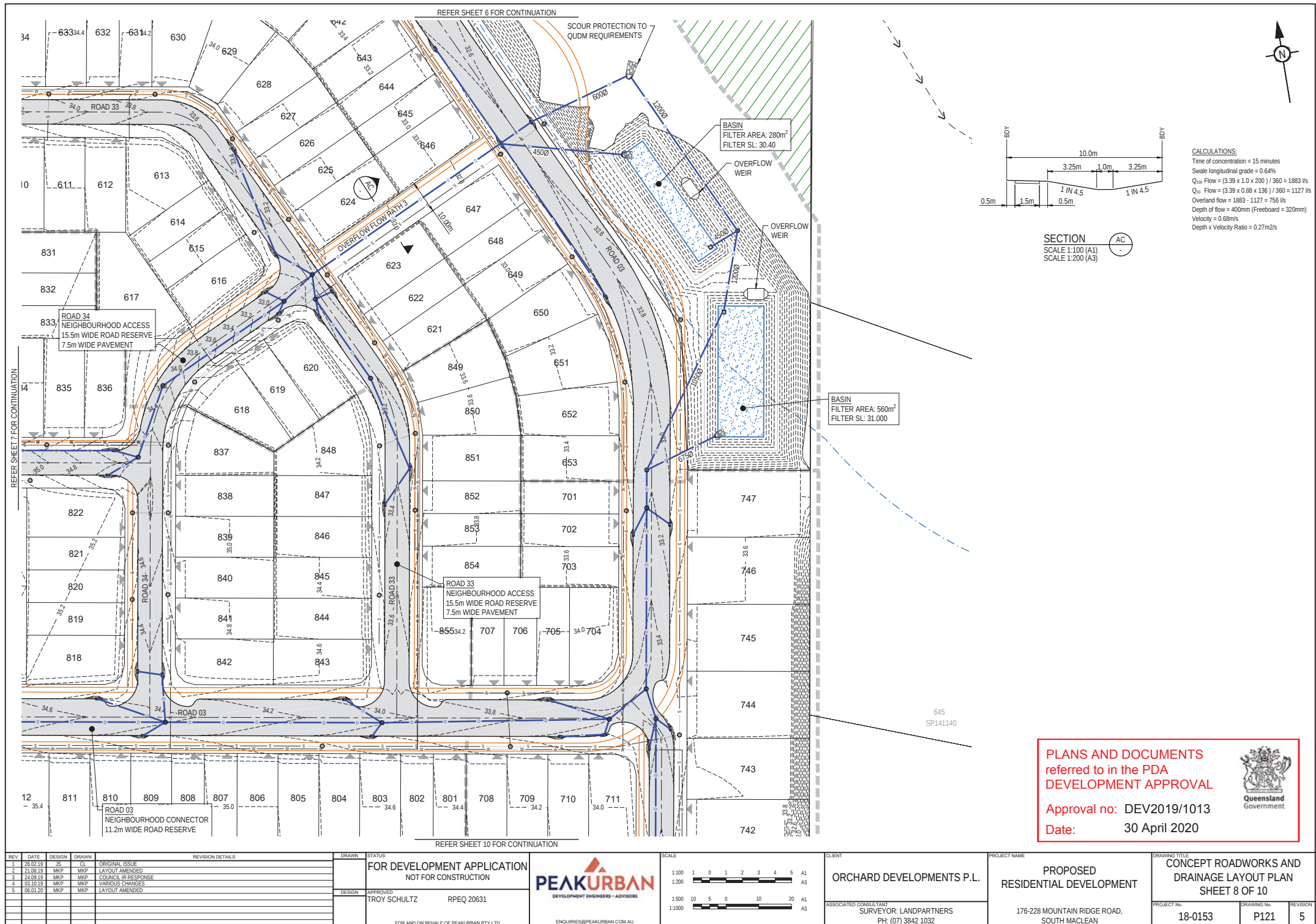
FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION
DESIGN APPROVED TROY SCHULTZ RPEQ 20631
FOR AND ON BEHALF OF PEAKURBAN PTY LTD



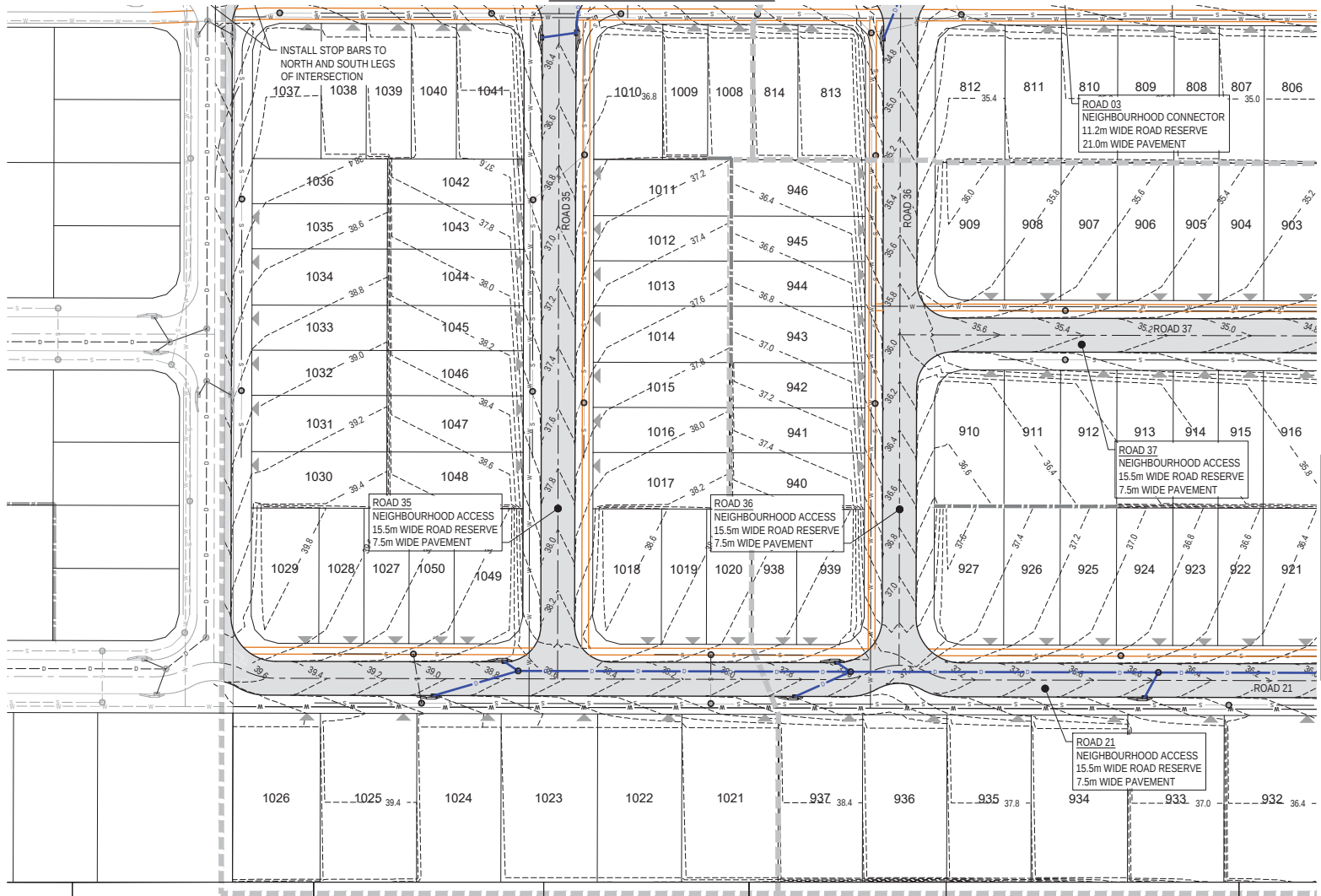
CLIENT ORCHARD DEVELOPMENTS P.L.
ASSOCIATED CONSULTANT SURVEYOR: LANDPARTNERS PH: (07) 3842 1032

PROJECT NAME PROPOSED RESIDENTIAL DEVELOPMENT
176-228 MOUNTAIN RIDGE ROAD, SOUTH MACLEAN

DRAWING TITLE CONCEPT ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 7 OF 10
PROJECT No: 18-0153
DRAWING No: P120
REVISION 4



REFER SHEET 7 FOR CONTINUATION



REFER SHEET 10 FOR CONTINUATION

631
SP100882

632
SP100882

633
SP100882

634
SP100882

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SP124764

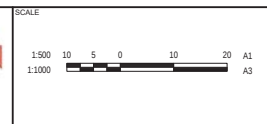
PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2019/1013
Date: 30 April 2020



REV	DATE	DESIGN	DRAWN	REVISION DETAILS
1	20.02.19	25	CL	ORIGINAL ISSUE
2	21.06.19	MKP	MKP	LAYOUT AMENDED
3	24.09.19	MKP	MKP	COUNCIL IR RESPONSE
4	06.01.20	MKP	MKP	LAYOUT AMENDED

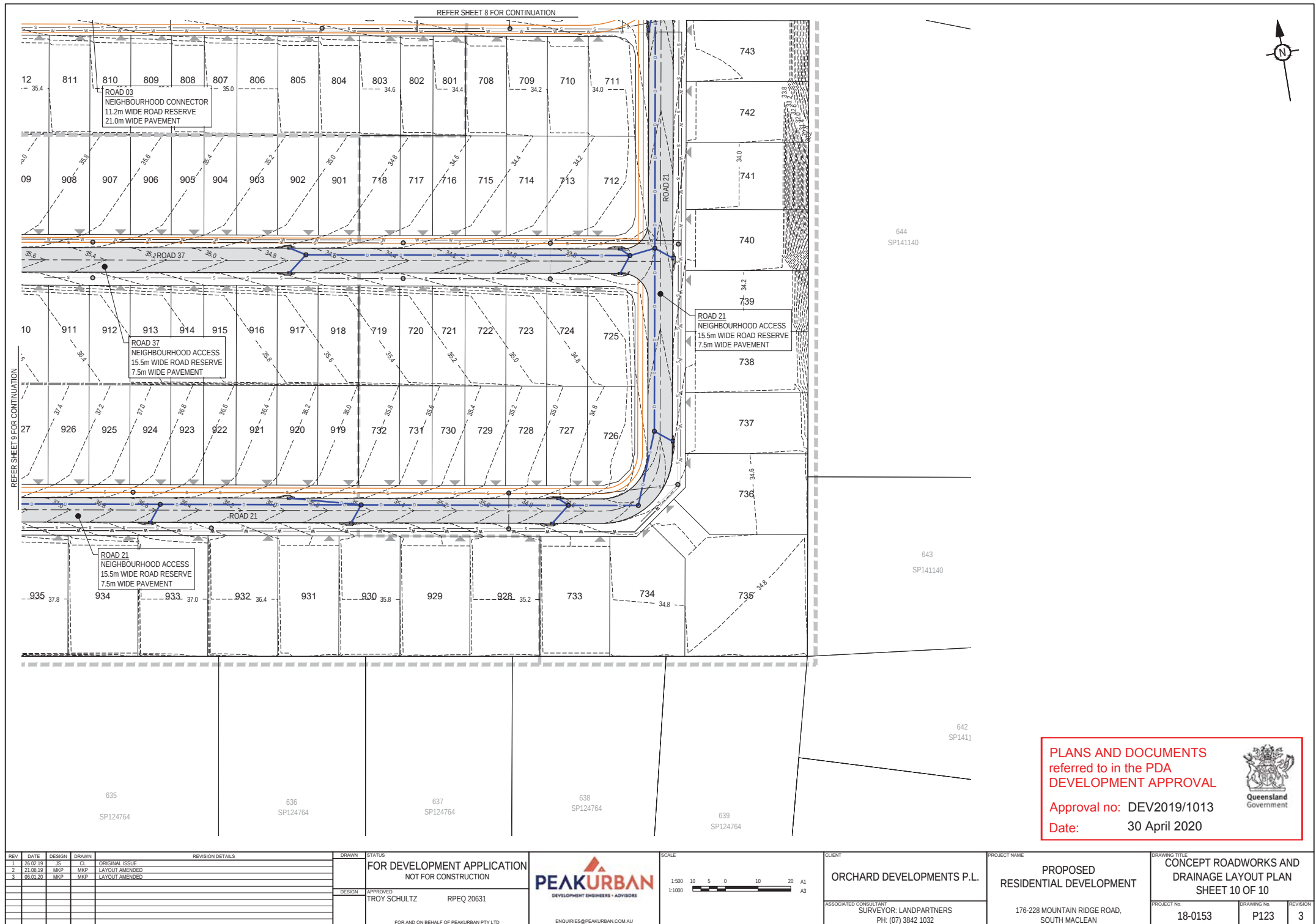
DRAWN	STATUS
FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION	
DESIGN	APPROVED
TROY SCHULTZ	RPEQ 20631
FOR AND ON BEHALF OF PEAKURBAN PTY LTD	



CLIENT	ORCHARD DEVELOPMENTS P.L.
ASSOCIATED CONSULTANT	SURVEYOR: LANDPARTNERS PH: (07) 3842 1032

PROJECT NAME	PROPOSED RESIDENTIAL DEVELOPMENT
176-228 MOUNTAIN RIDGE ROAD, SOUTH MACLEAN	

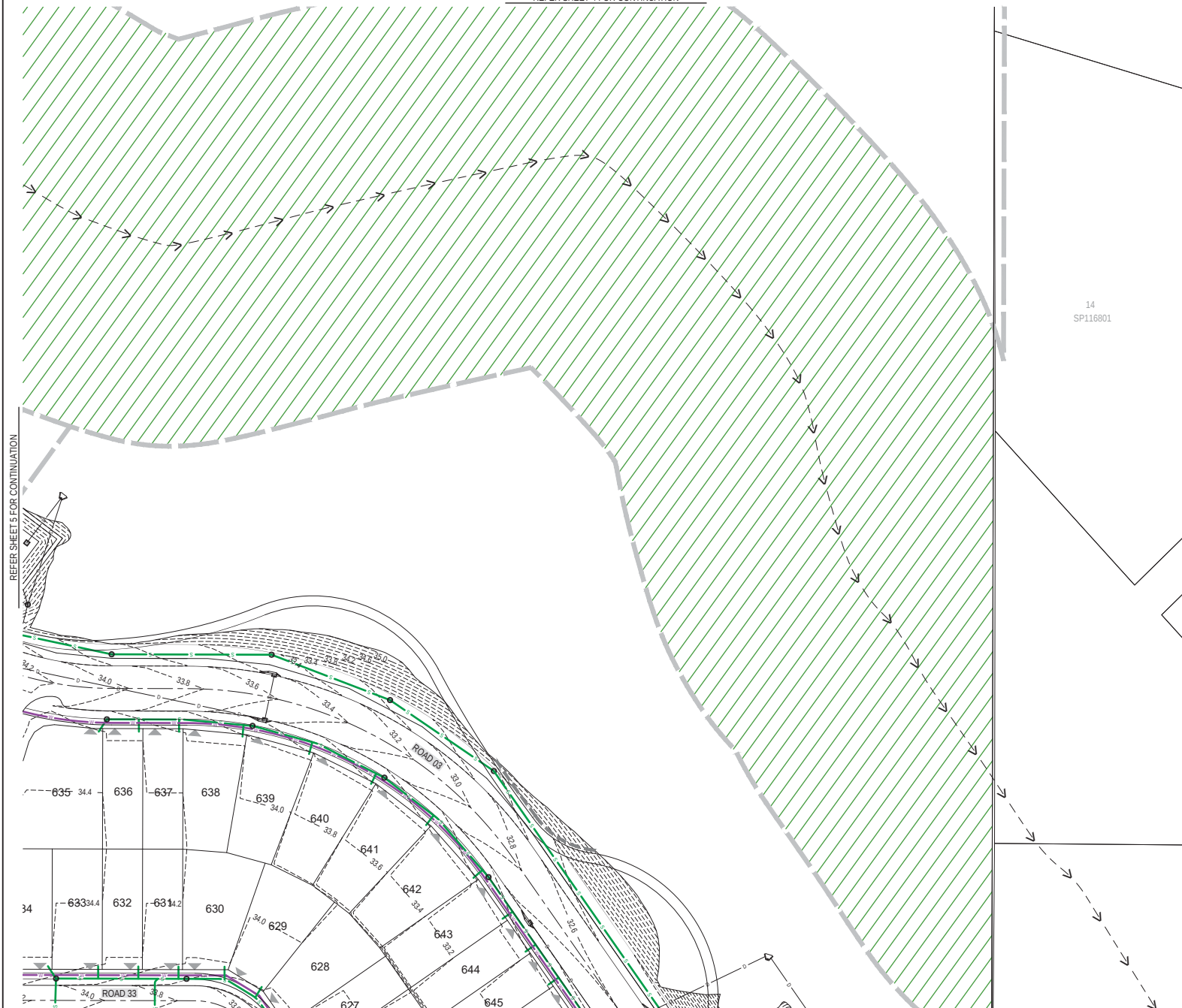
DRAWING TITLE	CONCEPT ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 9 OF 10
PROJECT No.	18-0153
DRAWING No.	P122
REVISION	4



REFER SHEET 4 FOR CONTINUATION



REFER SHEET 5 FOR CONTINUATION



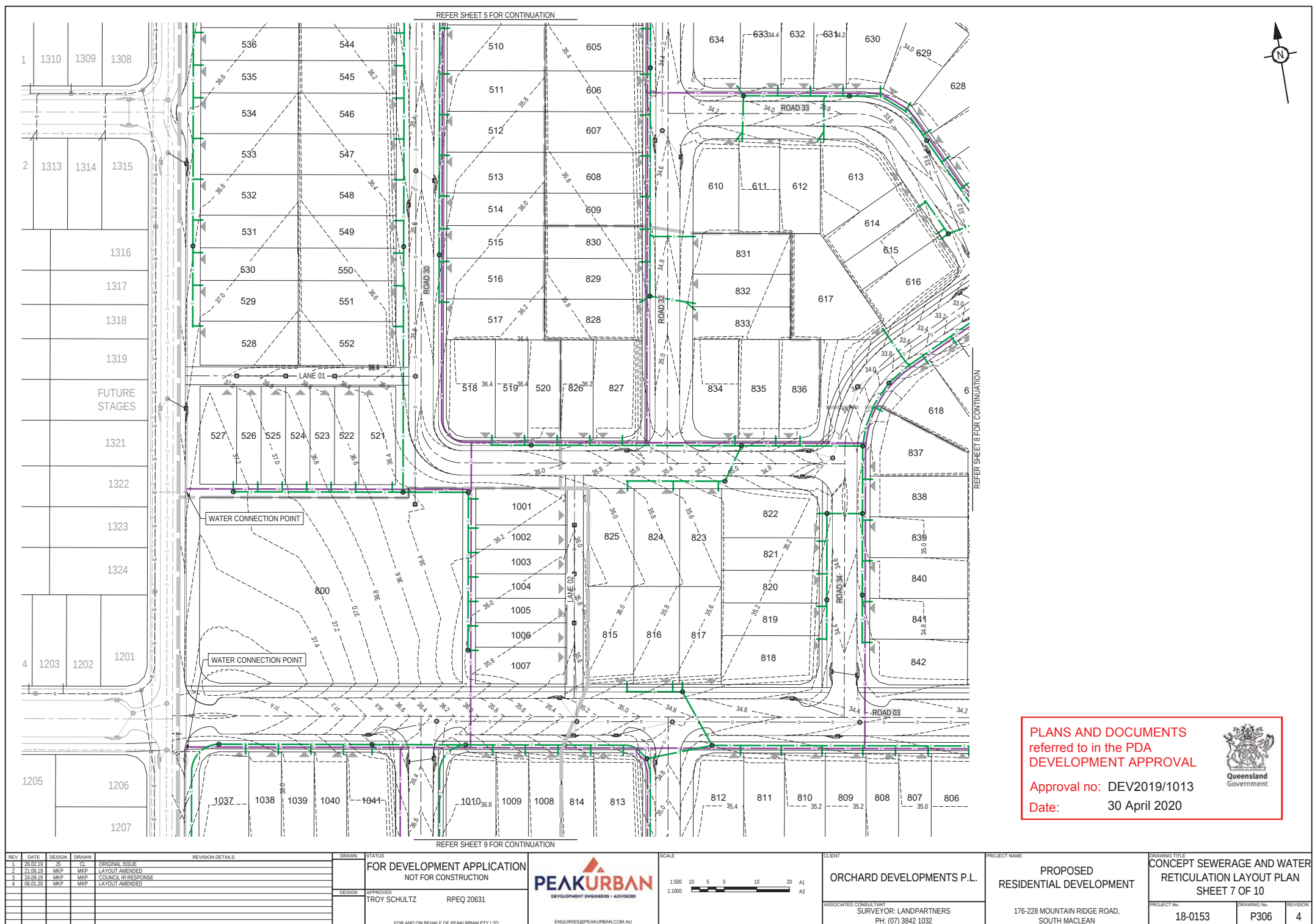
REFER SHEET 8 FOR CONTINUATION

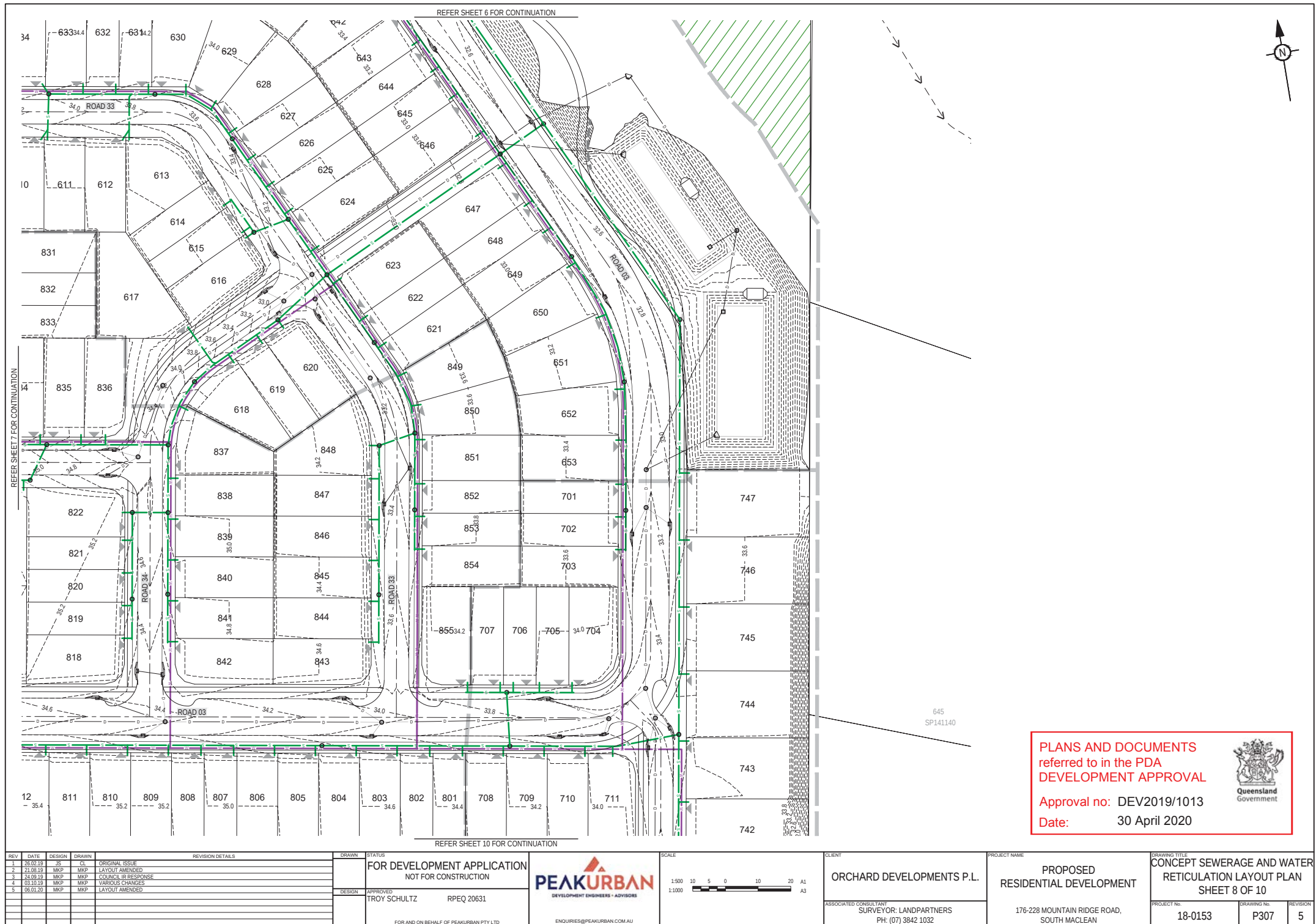
PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

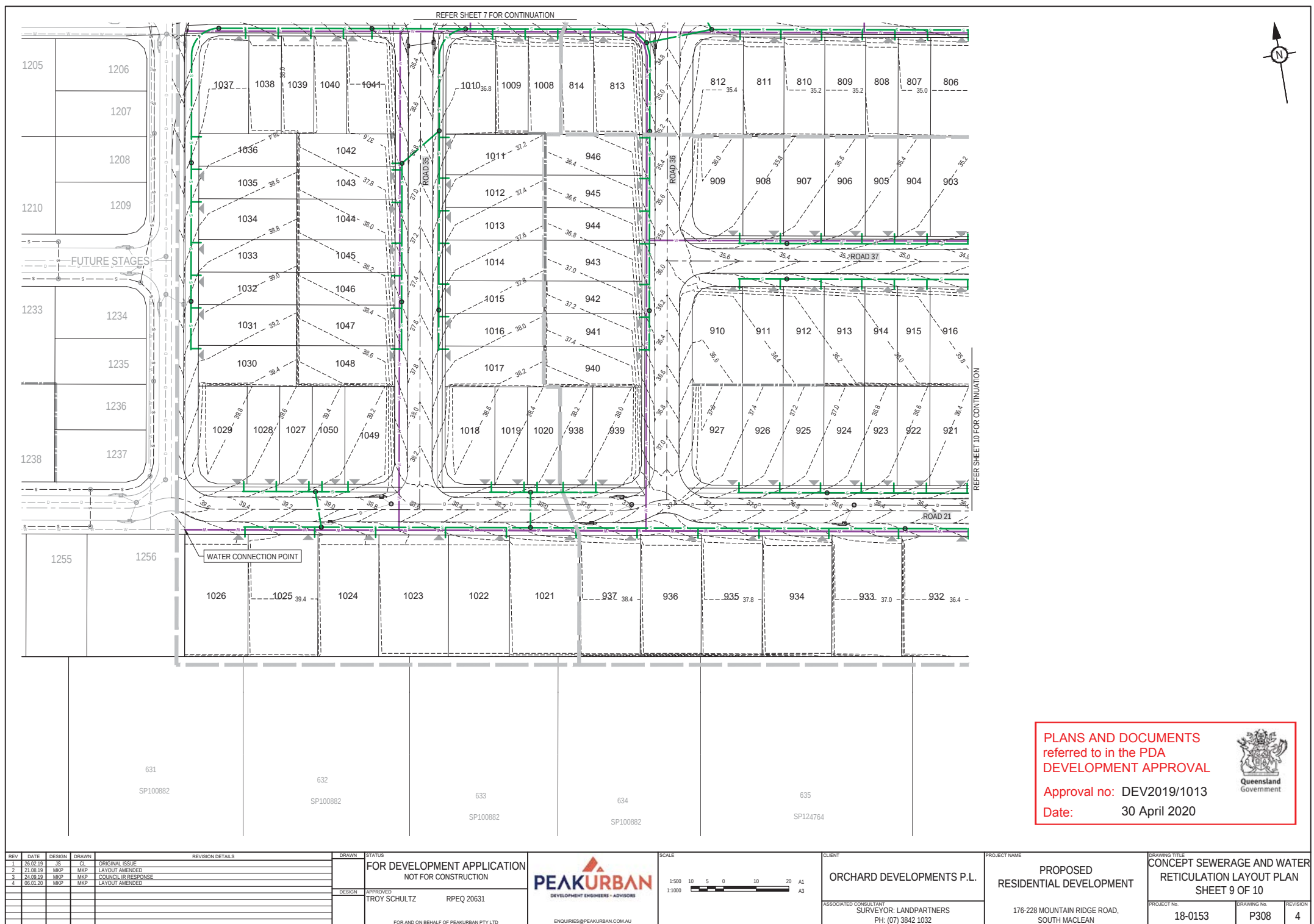
Approval no: DEV2019/1013
Date: 30 April 2020



REV	DATE	DESIGN	DRAWN	ORIGINAL ISSUE	REVISION DETAILS	DRAWN	STATUS	SCALE	CLIENT	PROJECT NAME	DRAWING TITLE
1	26.02.19	DS	CL	ORIGINAL ISSUE			FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION	1:500 1:1000	ORCHARD DEVELOPMENTS P.L.	PROPOSED RESIDENTIAL DEVELOPMENT	CONCEPT SEWERAGE AND WATER RETICULATION LAYOUT PLAN SHEET 6 OF 10
2	21.06.19	MKP	MKP	LAYOUT AMENDED							
3	24.09.19	MKP	MKP	COUNCIL IR RESPONSE							
4	03.10.19	MKP	MKP	VARIOUS CHANGES							
5	06.03.20	MKP	MKP	LAYOUT AMENDED							
						DESIGN	APPROVED TROY SCHULTZ RPEQ 20631		ASSOCIATED CONSULTANT SURVEYOR: LANDPARTNERS PH: (07) 3842 1032	176-228 MOUNTAIN RIDGE ROAD, SOUTH MACLEAN	PROJECT No: 18-0153
						FOR AND ON BEHALF OF PEAKURBAN PTY LTD		ENQUIRIES@PEAKURBAN.COM.AU			







LEGEND

- PROPOSED SEWER NETWORK
- SEWER CATCHMENT BOUNDARY
- SEWER NODE



Node	Catchment (Lot Number)	No. Lots	Area (ha)	Cumulative Area (ha)	Loading (EP/Lot or person)	Catchment Loading (EP)	Cumulative Loading (EP*)	PDWF Design Flow (L/s)	PWWF Design Flow (L/s)	Proposed Pipe Dia.
13 EXT	Catchment 9	212	11.02	11.02	2.7	572.4	572.4	4.41	6.63	150
L	Node 13 EXT + 14 EXT	212 110	11.02 6.47	17.49	2.7 2.7	572.4 297.0	869.4	5.98	10.06	150
M	Node K + Node L	916 322	52.53 17.49	70.02	2.7 2.7	2473.2 869.4	3342.6	16.98	38.69	300
N	Catchment 7	134	4.86	4.86	2.7	361.8	361.8	3.44	4.19	150
O	Catchment 8	80	7.40	7.40	2.7	216.0	216	1.84	2.50	150
P	Node N + Node O	134 80	4.86 7.40	12.26	2.7 2.7	361.8 216.0	577.8	4.33	6.69	150
Q	Catchment 11*	308	18.10	18.10	2.7	831.6	831.6	5.67	9.63	150
PS	Node M + Node P	1238 214	70.02 12.26	82.28	2.7 2.7	3342.6 577.8	3920.4	22.58	55.00	375
	* Node Q	308	18.10	100.38	2.7	831.6	4752.0			

* Note: allows SET for Child Care

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Pipe Capacities at Minimum Grade (PDWF @ 60% Depth)

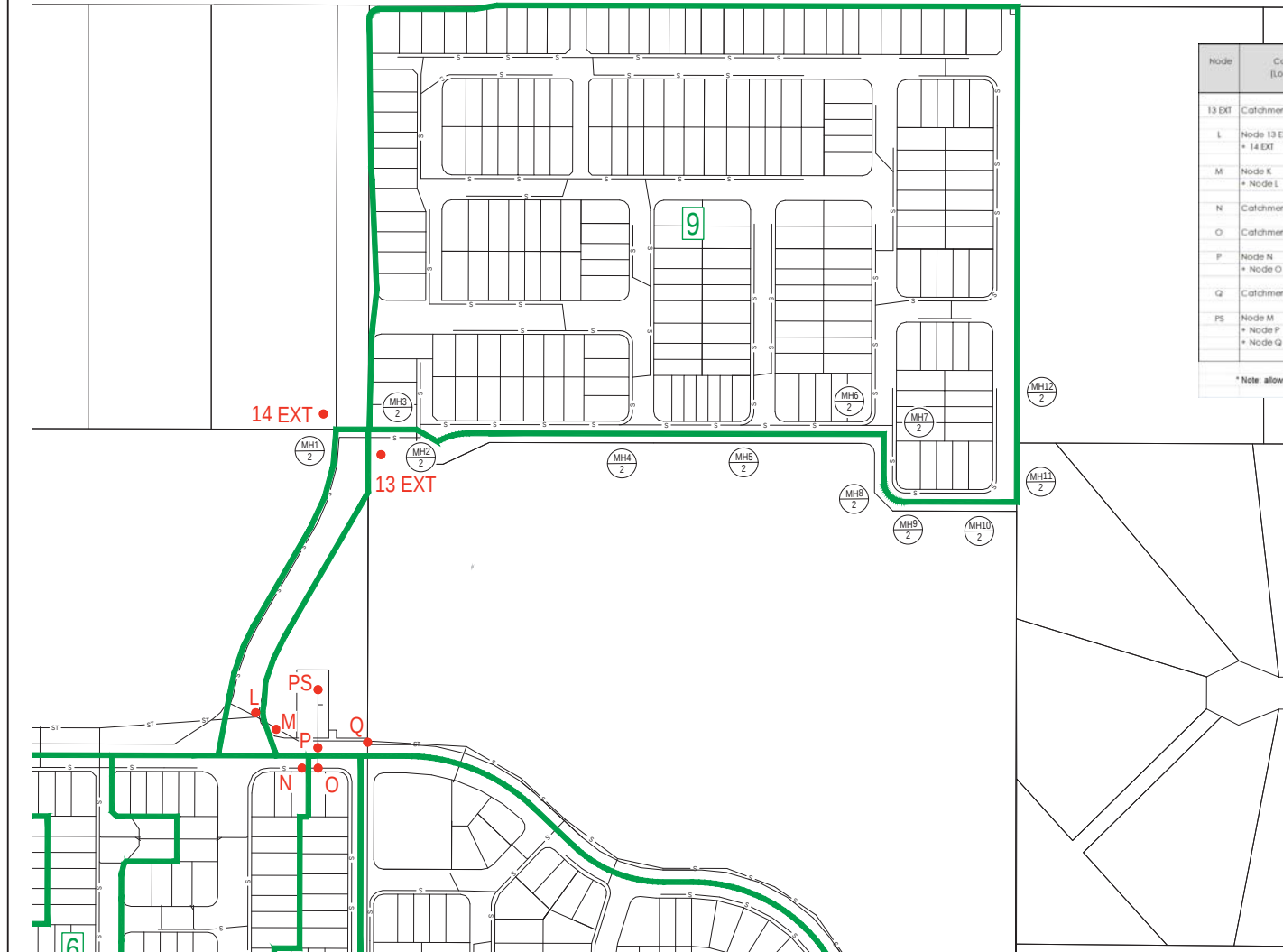
Pipe Diameter	Pipe Flow (L/s)	Grade (1in???)
150	7.7	180
225	17.6	300
300	32.8	400
375	53.0	500

Using Colebrook-White Formula

Pipe Capacities at Minimum Grade (PWWF @ 75% Depth)

Pipe Diameter	Pipe Flow (L/s)	Grade (1in???)
150	10.5	180
225	23.9	300
300	44.5	400
375	71.9	500

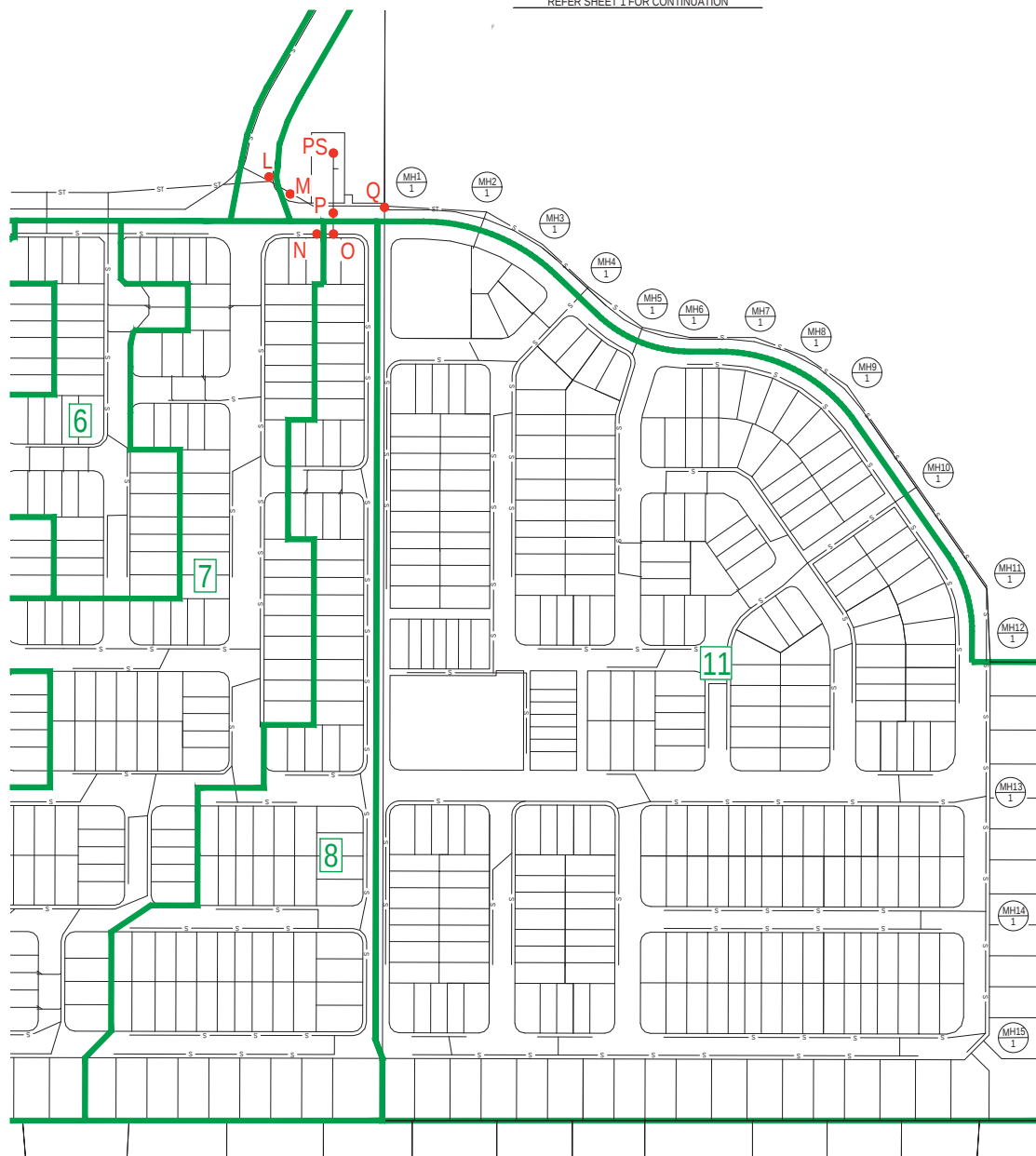
Using Colebrook-White Formula



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1	26.02.19	25	CL	ORIGINAL ISSUE		FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION	1:500 1:1000	ORCHARD DEVELOPMENTS P.L.	PROPOSED RESIDENTIAL DEVELOPMENT	CONCEPT FUNCTIONAL SEWER STRATEGY CATCHMENT PLAN SHEET 1 OF 2
2	21.08.19	MKP	MKP	LAYOUT AMENDED						
3	24.09.19	MKP	MKP	COUNCIL IR RESPONSE						
4	06.01.20	MKP	MKP	LAYOUT AMENDED						
					DESIGN	APPROVED TROY SCHULTZ RPEQ 20631		ASSOCIATED CONSULTANT SURVEYOR: LANDPARTNERS PH: (07) 3842 1032	176-228 MOUNTAIN RIDGE ROAD, SOUTH MACLEAN	PROJECT No: 18-0153
					FOR AND ON BEHALF OF PEAKURBAN PTY LTD		ENQUIRIES@PEAKURBAN.COM.AU			DRAWING No: P311
										REVISION 4



REFER SHEET 1 FOR CONTINUATION



PLANS AND DOCUMENTS
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DEVELOPMENT APPROVAL

Approval no: DEV2019/1013

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REV	DATE	DESIGN	DRAWN	REVISION DETAILS	DRAWN	STATUS	SCALE	CLIENT	PROJECT NAME	DRAWING TITLE
1	20.02.19	2S	CL	ORIGINAL ISSUE		FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION	1:500 1:1000	ORCHARD DEVELOPMENTS P.L.	PROPOSED RESIDENTIAL DEVELOPMENT	CONCEPT FUNCTIONAL SEWER STRATEGY CATCHMENT PLAN SHEET 2 OF 2
2	21.06.19	MKP	MKP	LAYOUT AMENDED						
3	24.09.19	MKP	MKP	COUNCIL IR RESPONSE						
4	06.01.20	MKP	MKP	LAYOUT AMENDED						
					DESIGN	APPROVED TROY SCHULTZ RPEQ 20631		ASSOCIATED CONSULTANT SURVEYOR: LANDPARTNERS PH: (07) 3842 1032	176-228 MOUNTAIN RIDGE ROAD, SOUTH MACLEAN	PROJECT No: 18-0153 DRAWING No: P312 REVISION: 4
					FOR AND ON BEHALF OF PEAKURBAN PTY LTD		ENQUIRIES@PEAKURBAN.COM.AU			