

MEMORANDUM

TO City of Kwinana

FROM Lee Galer & Daniel Panickar (Eco Logical Australia) on behalf of Matt Cousins (QUBE Property Group)



DATE 2/6/2023

PURPOSE For Information

SUBJECT Bushfire Management Plan Compliance Certification: Stage 13 Apsley Estate, Mandogalup

Document purpose

Eco Logical Australia (ELA) has prepared this Bushfire Management Plan (BMP) compliance report for 38 lots within Stage 13 of Apsley Estate, Mandogalup (the subject site; Figure 1). Lots within Stage 13 are subject to Western Australian Planning Commission (WAPC) subdivision approval WAPC Ref. 155567.

This report provides a post-subdivisional works compliance assessment of bushfire management measures required to clear Condition 30 of subdivision approval as follows:

30. Information is to be provided to demonstrate that the developer responsibilities contained in the approved Bushfire Management Plan have been implemented during subdivision works.

Advice: The landowner/applicant is advised that the current plans referred to are: Bushfire Management Plan – Lot 682 Rowley Road, Mandogalup prepared by Strategen Environmental dated November 2017.

The approach for preparation of this BMP compliance report is consistent with Section 4.2 of the *Guidelines for Planning in Bushfire Prone Areas v 1.4* (the Guidelines; WAPC 2021).

Compliance assessment

Strategen (2017) includes 17 bushfire management measures that are required to ensure the proposed development will comply with the bushfire protection criteria in the Guidelines.

ELA has undertaken a bushfire risk assessment and compliance assessment to determine if the relevant bushfire management measures documented in the endorsed BMP have been undertaken (Table 1).

Some of the management measures in Strategen (2017) are difficult to assess compliance against due to the way they are written. In these cases, ELA has tried to assess compliance based on works completed to date and probability of compliance in the future.

Based on our assessment, ELA can confirm that the relevant bushfire management measures detailed in the endorsed BMP have been implemented as intended, or have been progressed to a point that they are likely to be compliant, once completed.

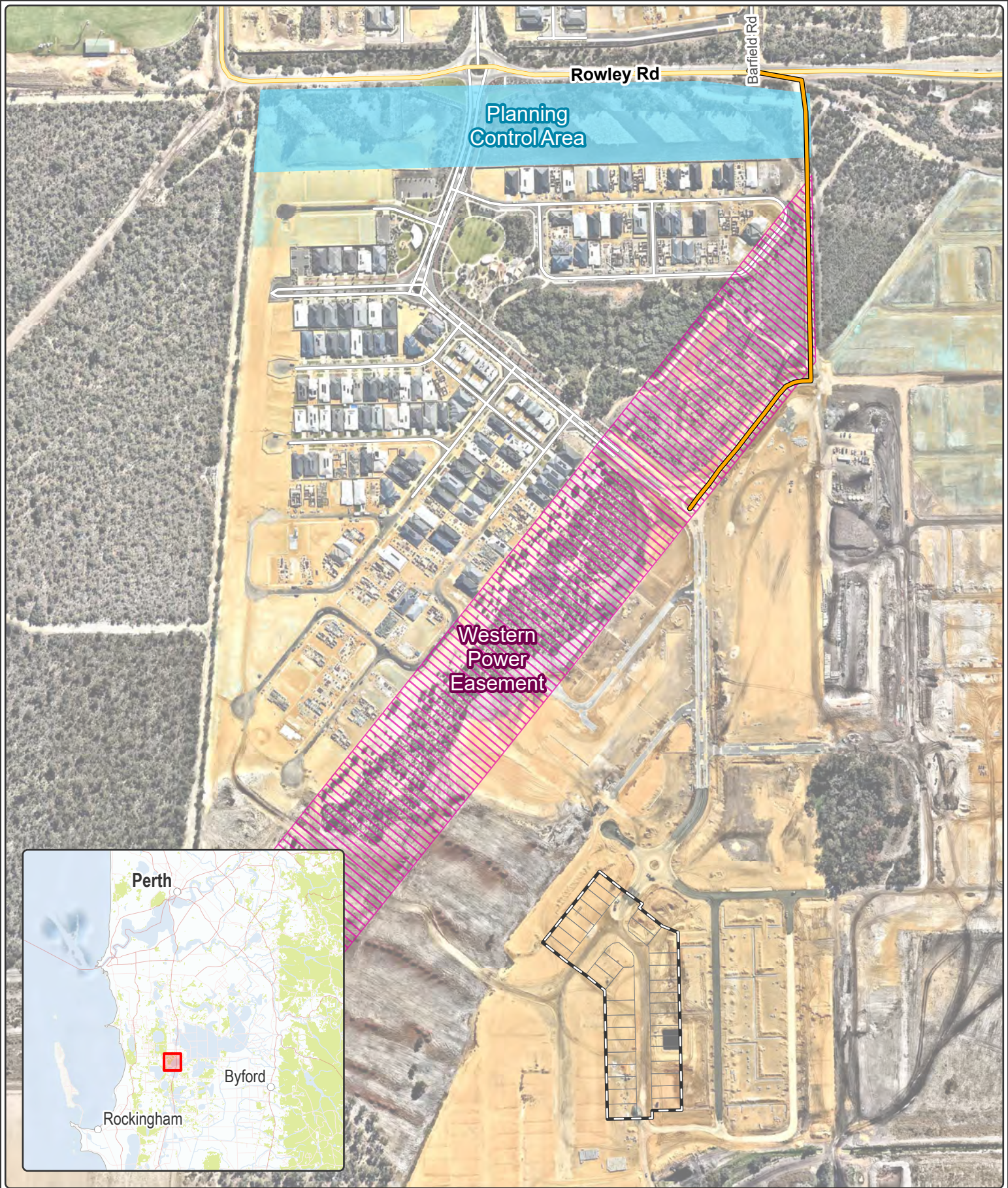
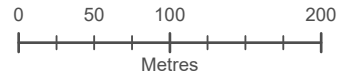


Figure 1: Site Overview

-  Subject site
-  Emergency Access Way
-  Lot boundary
-  Planning Control Area
-  Western Power Easement



Datum/Projection:
GDA 1994 MGA Zone 50
20PER16783-SM Date: 2/06/2023



Table 1: Bushfire compliance assessment

BMP reference	Action	Implementation status	Compliance assessment
Bushfire Management Plan: Strategen (2017)			
1a	Establish and maintain bushfire fuels within all residential lots to achieve exclusion Clause 2.2.3.2 (f) of AS 3959 ¹ .	Earthworks have ensured that bushfire fuels have been cleared within the subject site. The developer is responsible for ongoing management until sale/transfer of land.	Compliant Refer to Plate 1-Plate 3 in Appendix A.
1b	Establish and maintain portions of POS ² to be cleared/excluded as depicted on Figure 4 ³ in a low threat state to achieve exclusion Clause 2.2.3.2 (f) of AS 3959.	N/A. No POS areas are located within Stage 13	N/A.
1c	Maintain new road verges in a low threat state to achieve exclusion Clause 2.2.3.2 (f) of AS 3959.	Road verges have been cleared and will be landscaped to achieve the desired exclusion clauses as per the Roadworks layout plan. These will be maintained by the developer until transfer to the City.	Expected to be compliant when completed Verges will be landscaped as part of front landscaping rebate applicable to all lots in a low threat state. Refer to Plate 3 (roads under construction in neighbouring Stage 12) and Plate 4 and Plate 5 (completed roads and verges in surrounding stages) in Appendix A which show representations of road verges likely to be replicated throughout Stage 13.
1d	Establish and maintain Western Power easement in a low threat state to achieve exclusion Clause 2.2.3.2 (f) of AS 3959.	N/A. The Western Power easement is located outside of the assessment area for Stage 13.	N/A.
1e	Establish and maintain Planning Control Area in a low threat state to achieve exclusion Clause 2.2.3.2 (f) of AS 3959.	N/A. The Planning Control Area is located outside of the assessment area for Stage 13.	N/A.
1f	Establish and maintain onsite low fuel buffers for development stages to achieve exclusion Clause 2.2.3.2 (f) of AS 3959.	Complete. All land within of Stage 13 has been cleared or developed to ensure no BAL ratings apply to the stage 13.	Compliant. Refer to Plate 1-Plate 3 in Appendix A.

BMP reference	Action	Implementation status	Compliance assessment
1g	Implement staged building exclusion for lots adjoining the western, eastern and south-western boundaries of the project area impacted by BAL-40 or BAL-FZ, as depicted on Figure 4 ³ , based on progress of clearing within Lot 2 to the west, Lot 9033 to the east and balance Lot 682 to the southwest.	N/A. Development of lots at the direct bushland interfaces have been delayed through staging and do not form part of Stage 13.	N/A.
2a	Undertake updated BAL ⁴ assessment via BAL compliance checks.	Updated BAL assessment included within this document.	Compliant. Refer to Appendix B.
2b	Construct buildings in accordance with AS 3959, either in accordance with this BMP or future reassessment of the BAL to support the building permit stage.	N/A. This applies to construction of dwellings and not subdivision clearance.	N/A.
3a	Provide and maintain temporary emergency access way as right of way or public access easements in gross with sign posting and any gates unlocked.	The compliant temporary emergency access way (EAW) has been constructed.	Compliant. Refer to Figure 1 as well as Plate 6 and Plate 8 in Appendix A.
3b	Construct public roads, cul-de-sacs, battle-axes and emergency access way in accordance with subdivision approval and relevant technical requirements of the Guidelines.	All public roads will be constructed in accordance with the approved Roadworks layout plan, which meets technical requirements of the current Guidelines and <i>IPWEA subdivisional guidelines</i> 2016 v2.3. All proposed roads are through roads. The emergency access way has been constructed.	Expected to be compliant when completed. Roads not fully constructed yet, however if constructed in accordance with Roadworks layout plan in Appendix C, these will be compliant.
3c	Construct firebreaks around boundaries of relevant lots in accordance with requirements of the City of Kwinana annual firebreak order.	N/A. Lots within Stage 13 do not require firebreaks as per City of Kwinana Firebreak notice.	N/A.

BMP reference	Action	Implementation status	Compliance assessment
4a	Construct reticulated water supply and network of hydrants in accordance with DA approval and water authority, DFES and City technical requirements.	Water supply for Stage 13 not fully constructed at the time of assessment. Reticulated water supply and network of hydrants will be constructed in accordance with the approved Water reticulation plan. Fire hydrant installation is required under Building Code of Australia and <i>Australian Standard 2419 – Fire hydrant installations, - System design, installation and commissioning.</i>	Expected to be compliant when completed. Water supply not fully constructed yet, however if constructed in accordance with Water Reticulation Plan in Appendix D, this will be compliant. Refer to Plate 8 and Plate 9 as examples of water supply in neighbouring Stage 12 in Appendix A .
5a	Reassess BALs for individual lots.	N/A.. This applies to construction of dwellings and not subdivision clearance.	N/A.
5b	Place notification on the Certificates of Title of all proposed lots with a BAL rating of 12.5 or above.	N/A No lots within Stage 13 are subject to a BAL rating of 12.5 or above.	N/A No lots within Stage 13 are subject to a BAL rating of 12.5 or above. Refer to Appendix B
5c	Comply with the City of Kwinana annual firebreak order.	Compliant. Lots within Stage 13 are less than 1,499m ² . Stage 13 is devoid of vegetation.	Compliant. Refer to Photo Point 8 & 9 in BAL assessment.
5d	Prepare Bushfire Emergency Evacuation Plans for any vulnerable land uses.	N/A. No vulnerable land uses are contained within Stage 13.	N/A.

1. AUSTRALIAN STANDARD AS 3959: 2018 CONSTRUCTION OF BUILDINGS IN BUSHFIRE PRONE AREAS (AS 3959: 2018; SA 2018)

2. PUBLIC OPEN SPACE

3. FIGURE 4 OF THE BUSHFIRE MANAGEMENT PLAN

4. BUSHFIRE ATTACK LEVEL

References

City of Kwinana, 2021, Fire-break/hazard Compliance Notice, [Fire-break/hazard compliance Notice \(kwinana.wa.gov.au\)](https://www.kwinana.wa.gov.au)

Department of Planning (DoP), 2016, *Visual guide for bushfire risk assessment in Western Australia*. DoP, Perth.

Standards Australia, 2018, *Construction of buildings in bushfire-prone areas, AS 3959: 2018*. SAI Global, Sydney.

Strategen, 2017, *Bushfire Management Plan: Lot 682 Rowley Road, Mandogalup*, prepared for QUBE Property Group Pty Ltd.

Western Australian Planning Commission, 2015, *State Planning Policy 3.7 Planning in Bushfire Prone Areas*. WAPC, Perth.

Western Australian Planning Commission, 2021, *Guidelines for Planning in Bushfire Prone Areas Version 1.4 (including appendices)*, WAPC, Perth.

Appendix A Photographic evidence of compliance



Plate 1: Clearing and maintenance of residential lots within neighbouring Stage 12.



Plate 2: Clearing and maintenance of residential lots within neighbouring Stage 12. .



Plate 3: Current condition of road and road verge construction within neighbouring Stage 12.



Plate 4: Standard of road and road verge in completed stage nearby.



Plate 5: Standard of road and road verge in completed stage nearby.



Plate 6: Route to temporary Emergency access way.



Plate 7: Temporary Emergency access way.

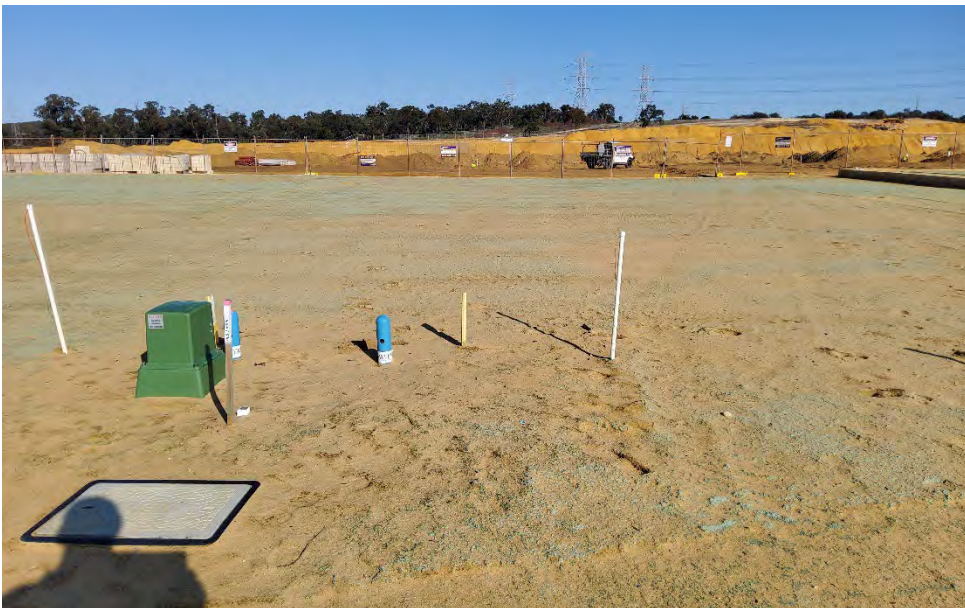


Plate 8: Installation of water reticulation within neighbouring Stage 12



Plate 9: Installation of hydrant within neighbouring Stage 12

Appendix B Updated Bushfire Attack Level assessment

An updated Bushfire Attack Level (BAL) assessment for Stage 13 Apsley Estate has been undertaken for the subject site to assist assessing compliance with the endorsed BMP. The assessment has been undertaken in accordance with *Australian Standard AS 3959: 2018 Construction of Buildings in Bushfire Prone Areas* (AS 3959: 2018; SA 2018) Simplified Procedure (Method 1).

This assessment has been prepared by Bushfire Consultant Lee Galer (FPAA BPAD Level 1 Certified Practitioner No. BPAD55096-L1) and Principal Bushfire Consultant Daniel Panickar (FPAA BPAD Level 3 Certified Practitioner No. BPAD37802-L3).

Vegetation classification assessment

Vegetation within the subject area and surrounding 150 m (the assessment area) was assessed in accordance with the *Guidelines for Planning in Bushfire Prone Areas v 1.4* (the Guidelines; WAPC 2021) and AS 3959: 2018 with regard given to the *Visual guide for bushfire risk assessment in Western Australia* (DoP 2016). Site assessment has been undertaken multiple times since 2020 to inform staged development. The most recent assessment was undertaken on 30 August 2022.

The following vegetation classes and exclusions were identified within the assessment area as depicted in Table 2 and Figure 2. Photographs relating to each vegetation type are included in Table 3.

Table 2: Classified vegetation as per AS 3959-2018

Plot	Vegetation Classification	Effective Slope
1	Excluded AS 3959: 2018 2.2.3.2 (e) & (f)	-
2	Class G Grassland	All upslopes and flat land (0 degrees)
3	Excluded AS 3959-2009 2.2.3.2 (e) & (f)	-

Slope under vegetation

Effective slope under vegetation was assessed for a distance of 150 m from the subject site in accordance with the Guidelines and AS 3959: 2018 and is depicted in Table 3 and Figure 2.

Table 3: Vegetation classifications

Plot	1	Classification or Exclusion Clause	Excluded AS 3959: 2018 clause 2.2.3.2 (e) & (f)
Photo Point 1	<p>This area is devoid of classifiable vegetation and is comprised of cleared/developed areas.</p>		
Photo Point 2		<p>Classified vegetation within this plot is comprised of exotic grasses and herbs and a row of trees considered a windbreak.</p> <p>Slope under the vegetation has been assessed as upslope/flat land.</p>	
Photo Point 3	<p>Classified vegetation within this plot is comprised of exotic grasses and herbs and a row of trees considered a windbreak.</p> <p>Slope under the vegetation has been assessed as upslope/flat land.</p>	<p>Classified vegetation within this plot is comprised of exotic grasses and herbs and a row of trees considered a windbreak.</p> <p>Slope under the vegetation has been assessed as upslope/flat land.</p>	

Plot 2 Classification or Exclusion Clause Class G Grassland

Photo Point 4

Classified vegetation within this plot is comprised of exotic grasses and herbs and a row of trees considered a windbreak.

Slope under the vegetation has been assessed as upslope/flat land.



Plot 2 Classification or Exclusion Clause Class G Grassland

Photo Point 5

Classified vegetation within this plot is comprised of exotic grasses and herbs and a row of trees considered a windbreak.

Slope under the vegetation has been assessed as upslope/flat land.



Plot 2 Classification or Exclusion Clause Class G Grassland

Photo Point 6

Classified vegetation within this plot is comprised of exotic grasses and herbs growing on a soil stockpile.

Slope under the vegetation has been assessed as upslope/flat land.



Plot	Classification or Exclusion Clause	Class G Grassland
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Photo Point 7

Classified vegetation within this plot is comprised of exotic grasses and herbs growing on a soil stockpile. Slope under the vegetation has been assessed as upslope/flat land.



Plot	Classification or Exclusion Clause	Excluded AS 3959: 2018 clause 2.2.3.2 (e) & (f)
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Photo Point 8

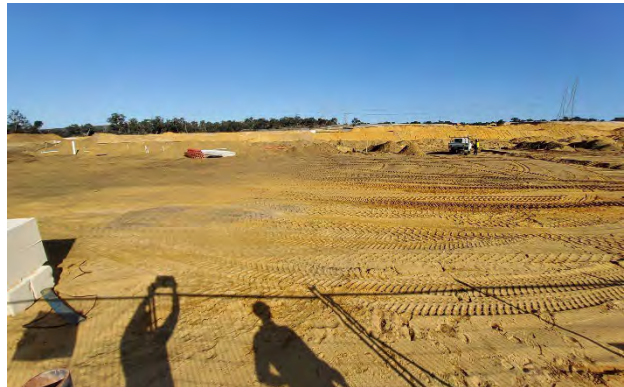
This area is devoid of classifiable vegetation and is comprised of cleared/developed areas within Stage 13 itself.



Plot	Classification or Exclusion Clause	Excluded AS 3959: 2018 clause 2.2.3.2 (e) & (f)
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Photo Point 9

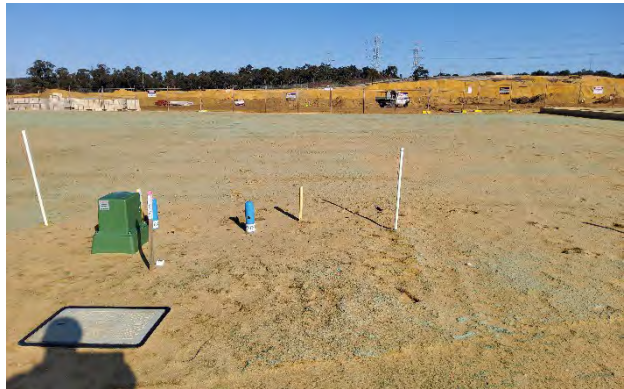
This area is devoid of classifiable vegetation and is comprised of cleared/developed areas within Stage 13 itself.



Plot 3 Classification or Exclusion Clause Excluded AS 3959: 2018 clause 2.2.3.2 (e) & (f)

Photo Point 10

This area is devoid of classifiable vegetation and is comprised of cleared/developed areas within neighbouring Stage 12.



Plot 3 Classification or Exclusion Clause Excluded AS 3959: 2018 clause 2.2.3.2 (e) & (f)

Photo Point 11

This area is devoid of classifiable vegetation and is comprised of cleared/developed areas within neighbouring Stage 12.



Plot 3 Classification or Exclusion Clause Excluded AS 3959: 2018 clause 2.2.3.2 (e) & (f)

Photo Point 12

This area is devoid of classifiable vegetation and is comprised of cleared/developed areas within neighbouring Stage 12.



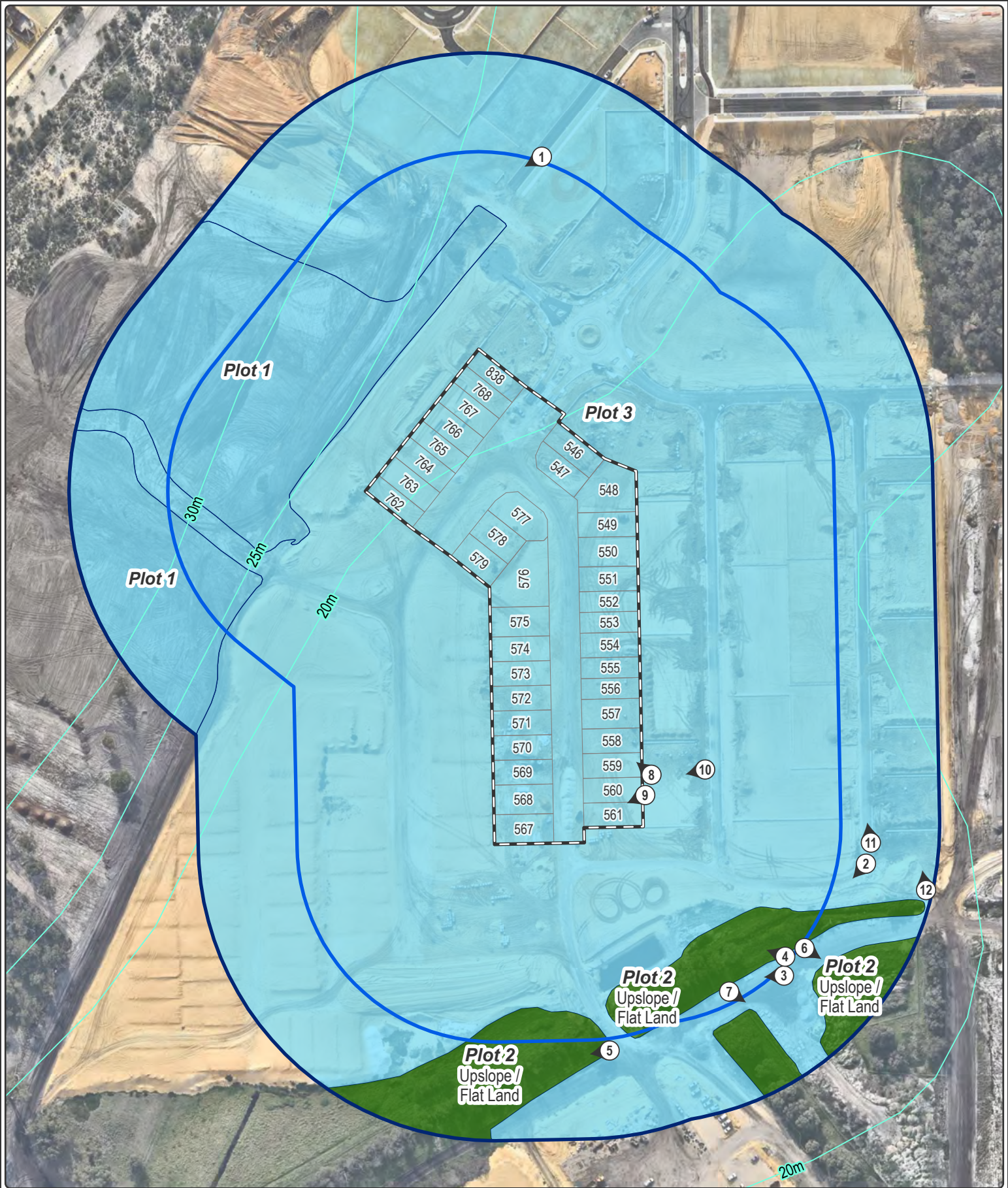












Figure 2: Vegetation Classification

 Subject site	 Photo location	<p>Vegetation classification</p> <p> Class G grassland</p> <p> Excluded as per clause 2.2.3.2 (e) and (f)</p>	<p>0 20 40 80</p> <p>Metres</p>
 100m site assessment	 Lot boundary		
 150m site assessment	 Contour (5m)		

Datum/Projection:
GDA 1994 MGA Zone 50

20PER16783-SM Date: 2/06/2023

Bushfire Attack Level (BAL) assessment

A Bushfire Attack Level (BAL) assessment has been undertaken in accordance with *State Planning Policy 3.7 Planning in Bushfire Prone Areas* (SPP 3.7), the Guidelines, AS 3959: 2018 and the bushfire assessment inputs above.

All land located within 100 m of the classified vegetation depicted in Figure 2 is considered bushfire prone and is subject to a BAL assessment in accordance with AS 3959: 2018.

A Method 1 BAL assessment (as outlined in AS 3959: 2018) has been completed for the proposed development and incorporates the following factors:

- State adopted Fire Danger Index (FDI) rating;
- Vegetation class;
- Slope under classified vegetation; and
- Distance between proposed development area and the classified vegetation.

Based on the identified BAL, construction requirements for the proposed buildings can then be assigned. The BAL rating gives an indication of the expected level of bushfire attack (i.e. radiant heat flux, flame contact and ember penetration) that may be received by proposed buildings and subsequently informs the standard of construction required to increase building survivability.

Table 4 and Figure 3 display the Method 1 BAL assessment (in the form of BAL contours) that has been completed for the proposed development in accordance with AS 3959: 2018 methodology.

Table 4: Method BAL calculation (BAL contours)

Plot	Vegetation Classification	Effective Slope	Separation distances required				
			BAL-FZ	BAL-40	BAL-29	BAL-19	BAL-12.5
1	Excluded AS 3959: 2018 clause 2.2.3.2 (e) & (f)	-	No separation distances required – BAL-LOW				
2	Class G Grassland	All upslopes and flat land (0 degrees)	<6	6-<8	8-<12	12-<17	17-<50
3	Excluded AS 3959: 2018 clause 2.2.3.2 (e) & (f)	-	No separation distances required – BAL-LOW				

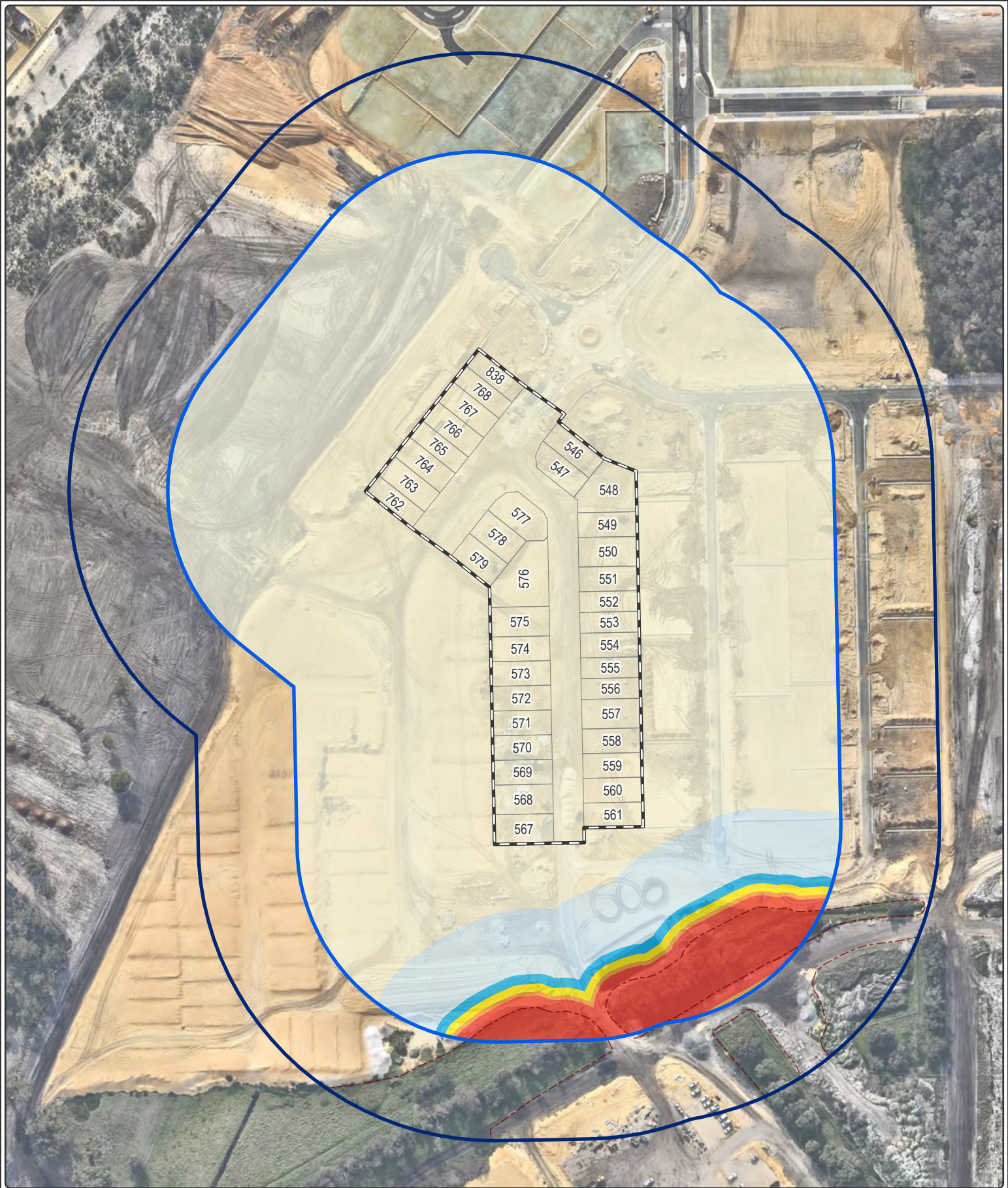











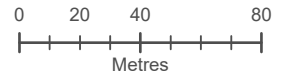


Figure 3: Bushfire Attack Level (BAL) Contours

-  Subject site
-  100m site assessment
-  150m site assessment
-  Lot boundary
-  Bushfire hazard interface

Bushfire Attack Level (BAL)

-  BAL - FZ
-  BAL - 40
-  BAL - 29
-  BAL - 19
-  BAL - 12.5
-  BAL - LOW

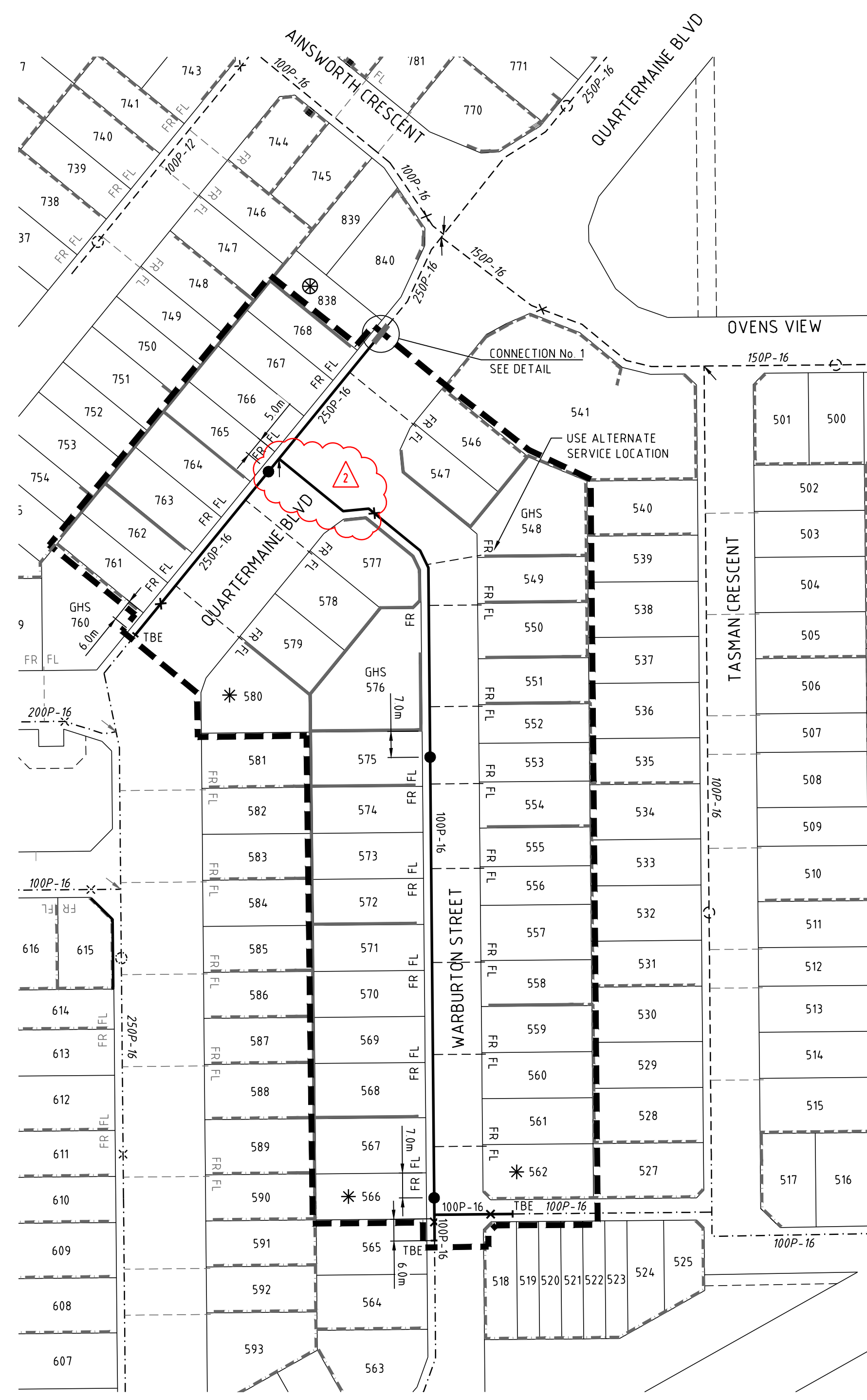


Datum/Projection:
GDA 1994 MGA Zone 50
20PER16783-SM Date: 2/06/2023

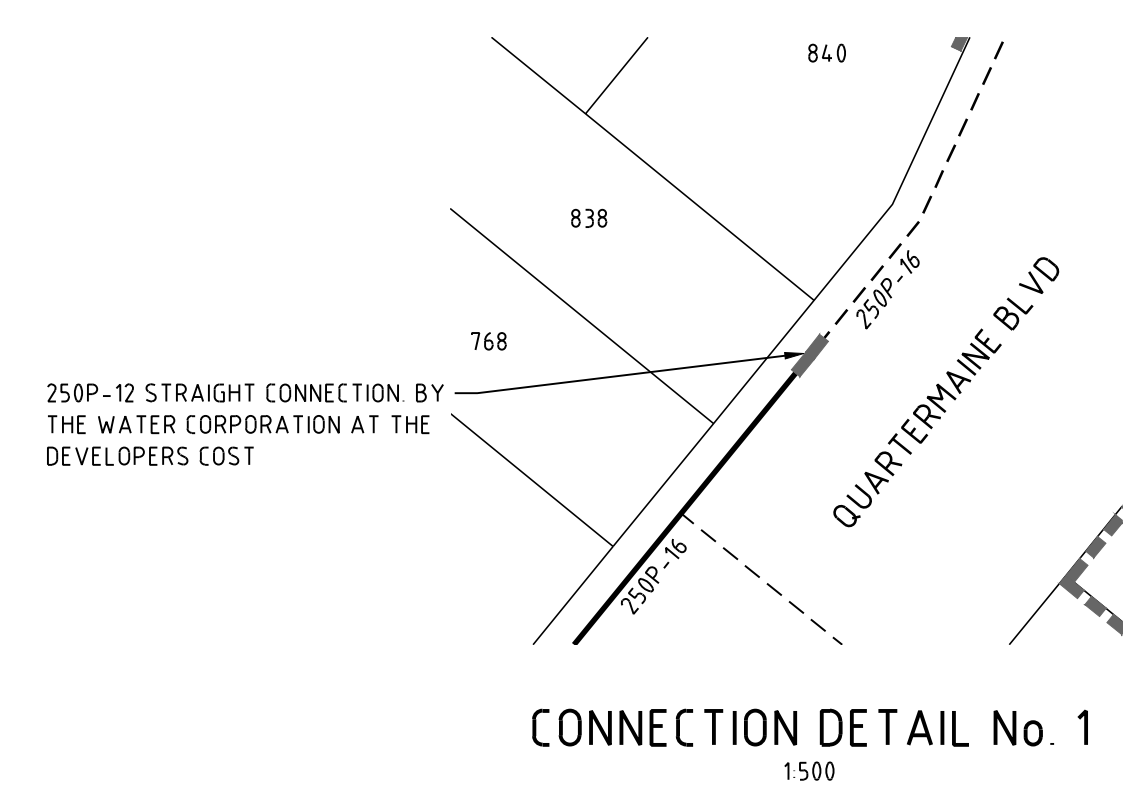


Appendix C Roadworks plan

Appendix D Water reticulation plan



RETICULATION PLAN
1:1000



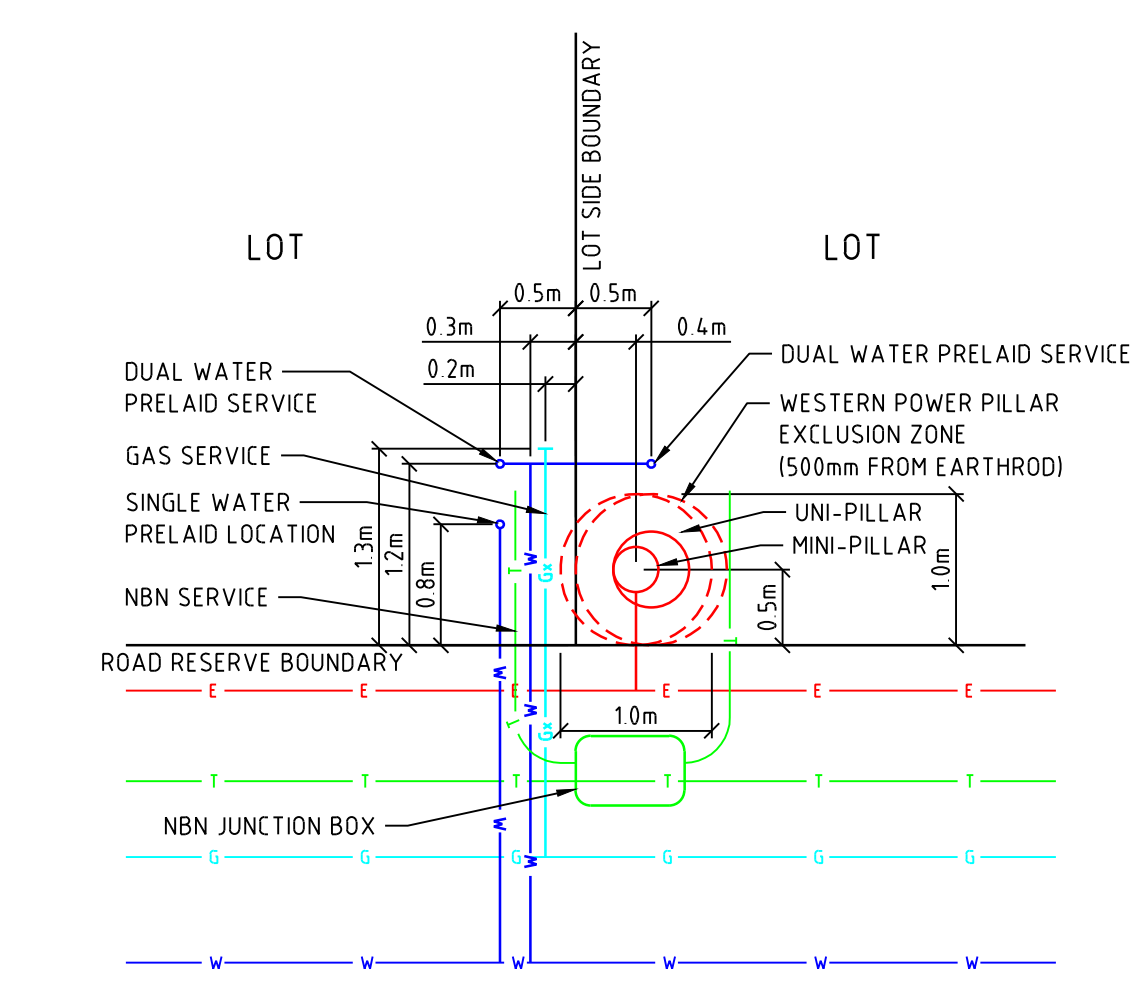
CONNECTION DETAIL No. 1
1:500

LEGEND	
DESCRIPTION	SYMBOL
RETICULATION AREA BOUNDARY	---
PROPOSED MAINS	---
PROPOSED VALVE (No. = 4)	⊗
PROPOSED HYDRANT (No. = 3)	⊙
PROPOSED PRELAI LONG SERVICE	---
CHANGE IN PIPE SIZE	↘
FLUSHING POINT (No. = 0)	FP
TEMPORARY BLANK END AND FLUSHING POINT (No. = 3)	TBE
CONNECTION BY WATER CORPORATION (No. = 1)	---
EXISTING MAIN, HYDRANT AND VALVE	---
FUTURE MAIN, HYDRANT AND VALVE	---
FUTURE DISTRIBUTION MAINS	WI
PROPOSED RETAINING WALL	---
EXISTING RETAINING WALL	---
FUTURE RETAINING WALL	---
DEFERRED SERVICE	'D'
SERVICE LAID IN THIS STAGE FOR RELEASE IN FUTURE STAGE	*
SERVICE LAID IN PREVIOUS STAGE TO BE RELEASED IN THIS STAGE	⊗
SERVICE UNDER RETAINING WALL	#1
SERVICE IN BELOW GROUND PIT (REFER WC DWG BD62-2-9)	#2

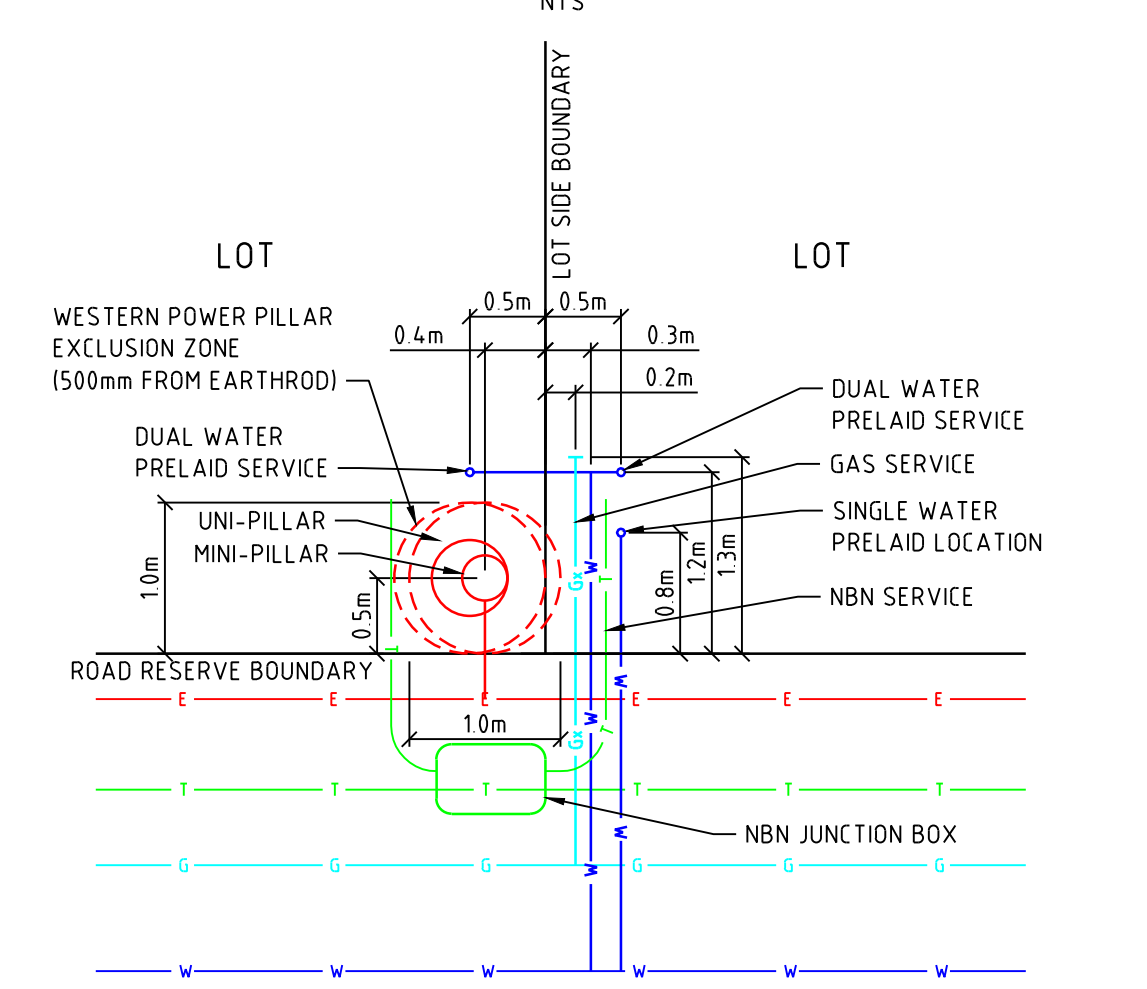
CONTRACTOR'S RESPONSIBILITY
IT IS THE CONTRACTOR'S RESPONSIBILITY TO CO-ORDINATE THE INSTALLATION OF ALL SERVICES WITHIN THE SUBDIVISION. THE CONSULTANT SHOULD ENSURE THAT THERE IS NO CONFLICT BETWEEN THE POSITIONING OF FULLY PRE-LAI WATER SERVICES WITHIN THE LOT AND AND WESTERN POWER UNDERGROUND POWER CONNECTION PILLARS. THE SUPERINTENDENT SHOULD BE CONSULTED IF AMENDMENTS TO FULLY PRE-LAI SERVICES ARE REQUIRED.

- SERVICES**
- ALL WATER MAINS SHALL BE INSTALLED ON 2m ALIGNMENT EXCEPT AS OTHERWISE AGREED.
 - FULLY PRE-LAI WATER SERVICES TO BE INSTALLED IN ACCORDANCE WITH W.C. WATER RETICULATION DESIGN STANDARD DS 63 VERSION 3 REVISION 15, DECEMBER 2021 AND READ IN CONJUNCTION WITH W.C. STANDARD ARRANGEMENT DRG No's BD 62-8-15 AND BD62-8-24.
 - WATER SERVICE LOCATIONS SHALL BE IN ACCORDANCE WITH THE GUIDELINES FOR POSITIONING CONTAINED IN DRG No. BD62-8-14.
 - WHERE POSSIBLE LOTS ARE ARRANGED IN PAIRS WITH A DUAL SERVICE PIPE ENTERING THE RIGHT HAND SIDE OF THE PAIR OF LOTS AND SPLITTING LEFT AND RIGHT TO SUPPLY EACH PAIR OF METERS.
 - WHERE SHORT AND LONG SINGLE SERVICES ARE INDICATED THE SERVICE PIPE AND METER SHOULD, IF POSSIBLE, BE LOCATED AT THE LEFT HAND SIDE BOUNDARY OF LOTS.
 - FOR A STRAIGHT ROAD RESERVE, SERVICE PIPES SHALL BE ALIGNED AT RIGHT ANGLES TO FRONT BOUNDARIES, RATHER THAN TO THE SUPPLY WATER MAINS.
 - WHERE THERE IS A BEND IN THE ROAD RESERVE AT THE SIDE BOUNDARY, THE SERVICE PIPE SHALL BE POSITIONED PARALLEL TO THE LINE BISECTING THE ANGLE.
 - FL AND FR (FULLY PRELAI LEFT & RIGHT) INDICATES THE SIDE OF THE LOT WHEN VIEWED FROM THE ROAD FRONTAGE WHICH IS SELECTED FOR ITS METER LOCATION.
 - FULLY PRE-LAI WATER SERVICES INSTALLED IN STAIR LANDINGS ARE TO BE INSTALLED IN ACCORDANCE WITH STANDARD WATER CORPORATION DRG No. BD62-2-9.

SERVICES	QTY (No.)
PRELAI SHORT DUAL	9
PRELAI LONG DUAL	11
PRELAI SHORT SINGLE	1
PRELAI LONG SINGLE	0
TOTAL	21
TOTAL NUMBER OF LOTS SERVED	41
NUMBER OF DEFERRED SERVICES	2
EXTENSION	
100 P-16	256.9
250 P-16	105.5



TYPICAL ALTERNATE SERVICE LOCATIONS PLAN



TYPICAL SERVICE LOCATIONS PLAN

NOTICE TO CONTRACTOR
IT IS THE CONTRACTORS RESPONSIBILITY TO INVESTIGATE THE NATURE AND LOCATION OF ALL SERVICES WHICH MAY BE ENCOUNTERED AND TO CONSULT WITH THE RELEVANT SERVICE AUTHORITIES PRIOR TO COMMENCEMENT OF EXCAVATIONS. FAILURE TO DO SO OR TO TAKE DUE CARE SHALL NOT LIMIT THE CONTRACTORS LIABILITY FOR REPAIR OF ALL SERVICES DAMAGED BY HIM DURING CONSTRUCTION WORKS. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY FOR THE PROTECTION OF ALL EXISTING SERVICES.

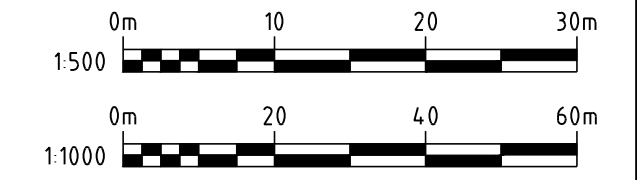
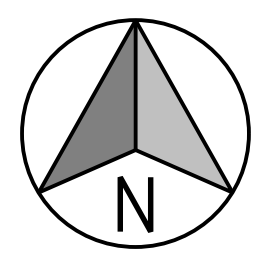
MSWA RETICULATION SUBMISSION
This plan is accepted as being in accordance with the endorsed Concept Plan: MW03-200-001-01B
Compliance with relevant design standards and manuals remains the responsibility of the Design Engineer.
No works are to commence on site until start-up meeting requirements have been made with the relevant Asset Inspector. Refer to the Developers' Manual for contact details.

NX36-203-001-01A

FILE: 133528943

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REV	DATE	DRN	CKD	APP	AMENDMENT
2	31/08/22	ARH	SM		WATER CROSSING RE-ALIGNED
1	30/06/22	ARH	SM	A. THOMSON	LINE EXTENDED IN LANE WITH VALVE ADDED
0	29/04/22	ARH	SM	A. THOMSON	ISSUED FOR CONSTRUCTION
B	16/03/22	CNJ	SM	A. THOMSON	AMENDED TO WATER CORPORATION COMMENTS
A	18/02/22	CNJ	SM	A. THOMSON	ISSUED FOR APPROVAL



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This plan is not to be used for construction unless issued as revision 0 or higher.

CW Cossill & Webley CONSULTING ENGINEERS
Mailing Address: PO Box 680, Subiaco WA 6904
Street Address: B12 (Level 2) 431 Roberts Road, Subiaco WA 6008

CLIENT: **QUBE**
APPROVED: AVRIL THOMSON
DESIGNED: ARH/CNJ
SCALE: AS SHOWN

PROJECT: APSLEY - STAGE 13
TITLE: WATER RETICULATION PLAN SHEET 1 OF 1
WAPC No.: 155567
DRAWING No.: 6027-13-500
REVISION: 2

ORIGINAL SIZE: A1

Appendix E Deposited plan

Plan Information

Tenure Type	Freehold
Plan Type	Deposited Plan
Plan Purpose	Subdivision

Plan Heading

Lots 462, 541, 546-561, 567-579, 762-768, 838, 9012, Roads, Road Widening, Easements and Restrictive Covenant

Locality & Local Government

Locality	Mandogalup
Local Government	City of Kwinana

Department of Planning, Lands and Heritage

File Number	
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Examination

Examined	Date
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Planning Approval

Planning Authority	Western Australian Planning Commission
Reference	155567

Delegated under S. 16 P&D Act 2005	Date
------------------------------------	------

In Order For Dealings

Subject To	
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For Inspector of Plans and Surveys	Date
------------------------------------	------

Plan Approved Reg. 26A (1), (4)

Inspector of Plans and Surveys	Date
--------------------------------	------

Survey Details

Field Records	142336
Declared as Special Survey Area	Yes

Survey Method Regulatory Statement

Survey carried out under Reg. 26A Special Survey Area Guidelines. See survey sheet(s) to determine the true final position and type of all survey marks placed for this plan.

Survey Method and Plan Content Variations

Approved Variation Type REG 26A(1) FINAL MARKING DEFERRED	Reference (Approved ID D140-22 - Dated 07 October 2022, Landgate File 06909-2021)
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Survey Certificate - Regulation 54

I, Nigel J. SIMPSON hereby certify that this plan is accurate and is a correct representation of the -
(a) survey; and
(b) calculations from measurements recorded in the field records, undertaken for the purposes of this plan and that it complies with the relevant written law(s) in relation to which it is lodged.

FINAL

Licensed Surveyor	Date
-------------------	------

Survey Organisation

Name	MNG MCMULLEN NOLAN GROUP
Address	SUCCESS 6964
Phone	6436 1599
Fax	6436 1500
Email	info @ mngsurvey.com.au
Reference	96755dp-164h

Amendments

Version	Lodgement Type	Amendment Description	Authorised By	Date
2	Replacement Plan	Revise Easement 'K'	Nigel J. SIMPSON	25/10/2022
3	Replacement Plan	Remove easement 'B' from lot 9012	Nigel J. SIMPSON	17/11/2022
4	Replacement Plan	Added 70A Notification to lot 462	Nigel J. SIMPSON	24/01/2023

Former Tenure

New Lot / Land	Parent Plan Number	Parent Lot Number	Title Reference	Subject Land Description
462, 541, 546-561, 567-579, 762-768, 838, 9012	DP 421705	PT LOT 9009	4022/727	

Former Tenure Interests and Notifications

Subject	Purpose	Statutory Reference	Origin	Land Burdened	Benefit To	Comments
(A), (A)1	EASEMENT		DOC C10720	LOT 9012	STATE ENERGY COMMISSION OF WESTERN AUSTRALIA	SEE 'Z' NOTE
(C)	EASEMENT	SEC 195 & 196 OF THE LAA 1997	DOC O1724.10	LOT 9012	CITY OF KWINANA AND THE PUBLIC AT LARGE	(Public Access)
(33b), (33b)1	EASEMENT (Sewerage)	SEC 167 OF THE P&D ACT 2005 Reg 33(b)	DP 4.18375	LOT 9012	WATER CORPORATION	
(P)	EASEMENT	SEC 195 & 196 OF THE LAA 1997	DOC O807722	LOT 9012	CITY OF KWINANA AND THE PUBLIC AT LARGE	(Public Access)
(33b)2	EASEMENT (Sewerage)	SEC 167 OF THE P&D ACT 2005 Reg 33(b)	DP 4.21705	LOT 9012	WATER CORPORATION	
(G)	RESTRICTIVE COVENANT	SEC 129BA OF THE TLA 1893	DOC P204097	LOT 462	ELECTRICITY NETWORKS CORPORATION	FIRE ZONE
(G)1	RESTRICTIVE COVENANT	SEC 129BA OF THE TLA 1893	DOC P204097	LOT 9012	ELECTRICITY NETWORKS CORPORATION	FIRE ZONE
(H)	EASEMENT	SEC 195 & 196 OF THE LAA 1997	DOC P204.102	LOT 9012	CITY OF KWINANA AND THE PUBLIC AT LARGE	(Public Access)

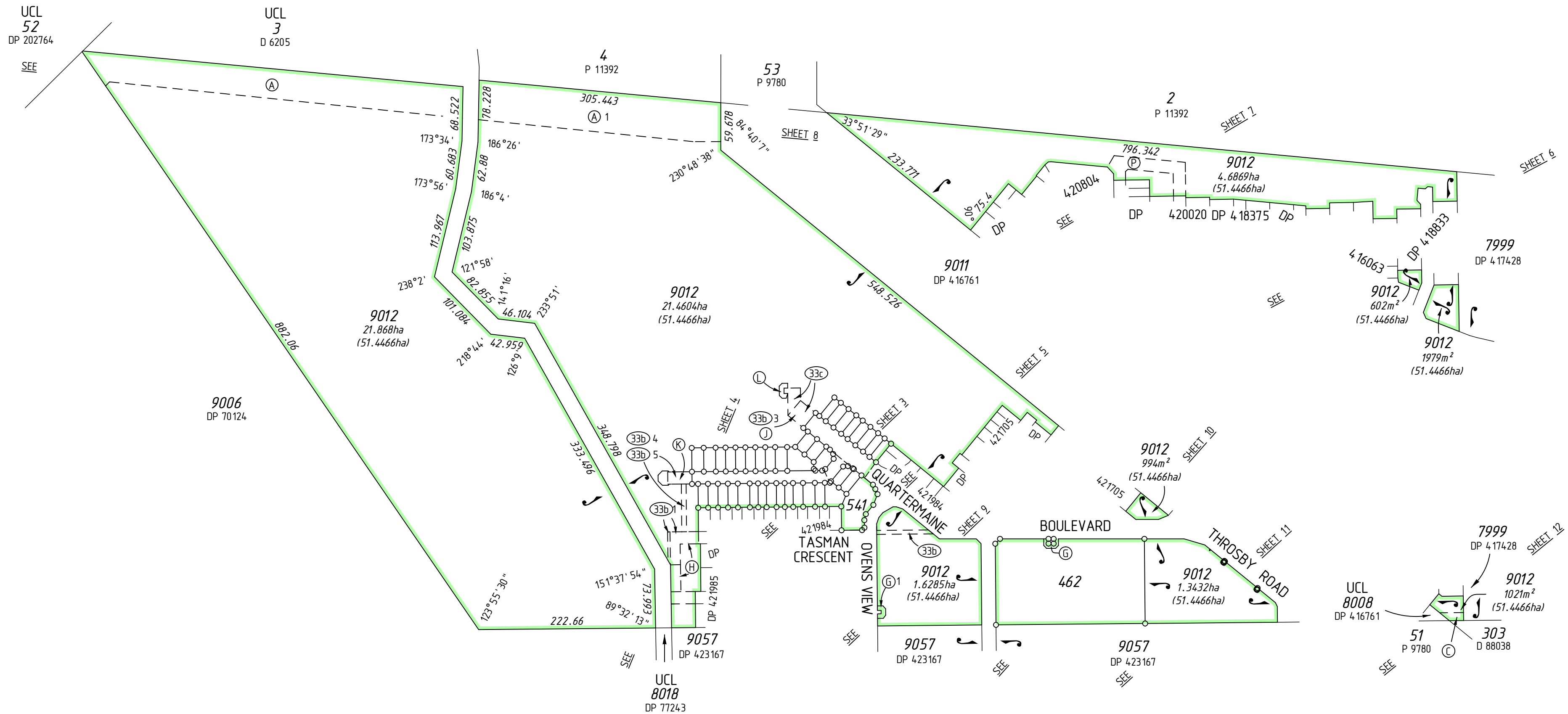
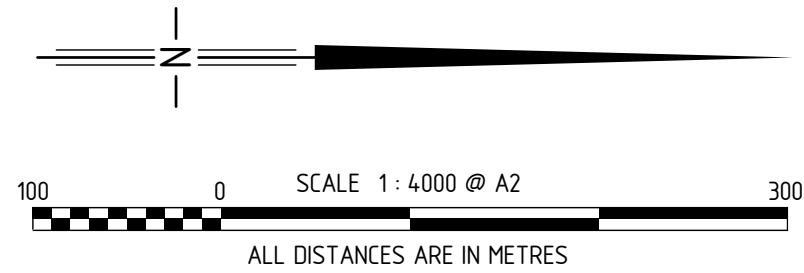
New Interests

Subject	Purpose	Statutory Reference	Origin	Land Burdened	Benefit To	Comments
(33b)3, (33b)5	EASEMENT (Sewerage)	SEC 167 OF THE P&D ACT 2005 REG 33 (b)	THIS PLAN	LOT 9012	WATER CORPORATION	
(33b)4	EASEMENT (Water Supply)	SEC 167 OF THE P&D ACT 2005 REG 33 (b)	THIS PLAN	LOT 9012	WATER CORPORATION	
(33c), (33c)1	EASEMENT (Electricity Supply)	SEC 167 OF THE P&D ACT 2005 REG 33 (c)	THIS PLAN	LOT 9012	ELECTRICITY NETWORKS CORPORATION	
	RESTRICTIVE COVENANT	SEC 136D OF THE TLA 1893	THIS PLAN & DOC	ALL LOTS EXCEPT LOTS 462, 541 & 9012	ALL LOTS EXCEPT LOTS 462, 541 & 9012	
(L)	RESTRICTIVE COVENANT	SEC 129BA OF THE TLA 1893	DOC	LOT 9012	ELECTRICITY NETWORKS CORPORATION	FIRE ZONE
(J), (K)	EASEMENT	SEC 195 & 196 OF THE LAA 1997	DOC	LOT 9012	CITY OF KWINANA & PUBLIC AT LARGE	VEHICLE TURNING

New Notifications and Memorials

Subject	Purpose	Statutory Reference	Origin	Land Burdened	Benefit To	Comments
	NOTIFICATION (Factors Affecting Use or Enjoyment of Land)	SEC 70A OF THE TLA 1893	DOC	ALL LOTS EXCEPT LOT 9012		RELATES TO ACCESS VIA THE ESTATE ENTRY AND ROWLEY ROAD
	NOTIFICATION (Factors Affecting Use or Enjoyment of Land)	SEC 70A OF THE TLA 1893	DOC	ALL LOTS EXCEPT LOT 9012		RELATES TO ACCESS VIA ANKETELL ROAD/HOFFMAN ROAD INTERSECTION
	NOTIFICATION (Factors Affecting Use or Enjoyment of Land)	SEC 70A OF THE TLA 1893	DOC	LOT 462		NO ELECTRICAL SERVICE SUPPLY

NOTE Z - The dimensions and position of this Easement are based on accurate surveyed alignments



MC MULLEN NOLAN GROUP
 PO Box 3526, Success W.A. 6964
 Tel: (08) 6436 1599
 Fax: (08) 6436 1500
 Email: info@mngsurvey.com.au

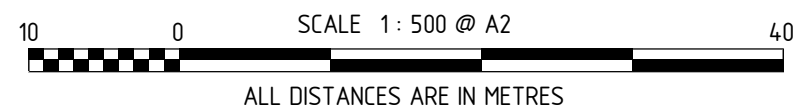
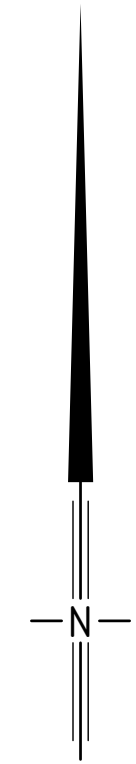
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ADDITIONAL SHEETS
 SURVEY SHEET

SHEET SHEETS
 2 OF 12

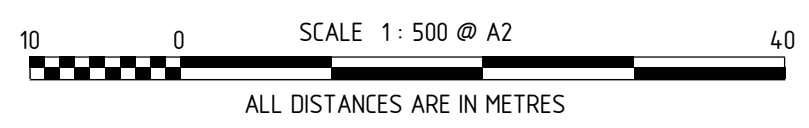
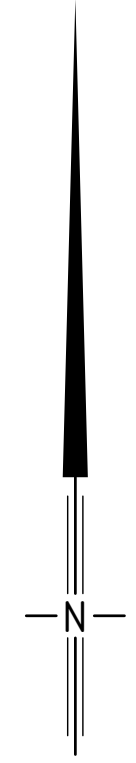
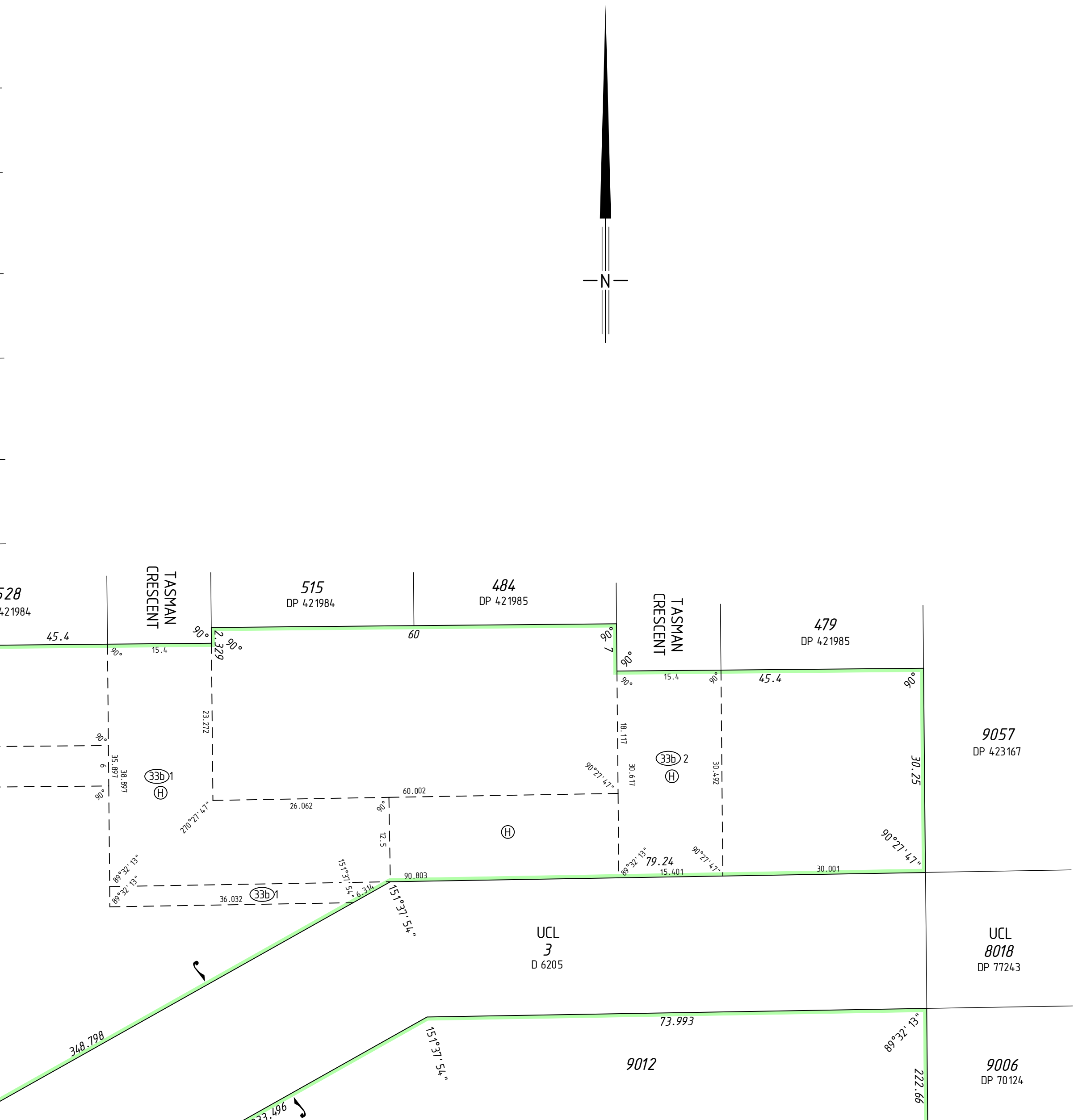
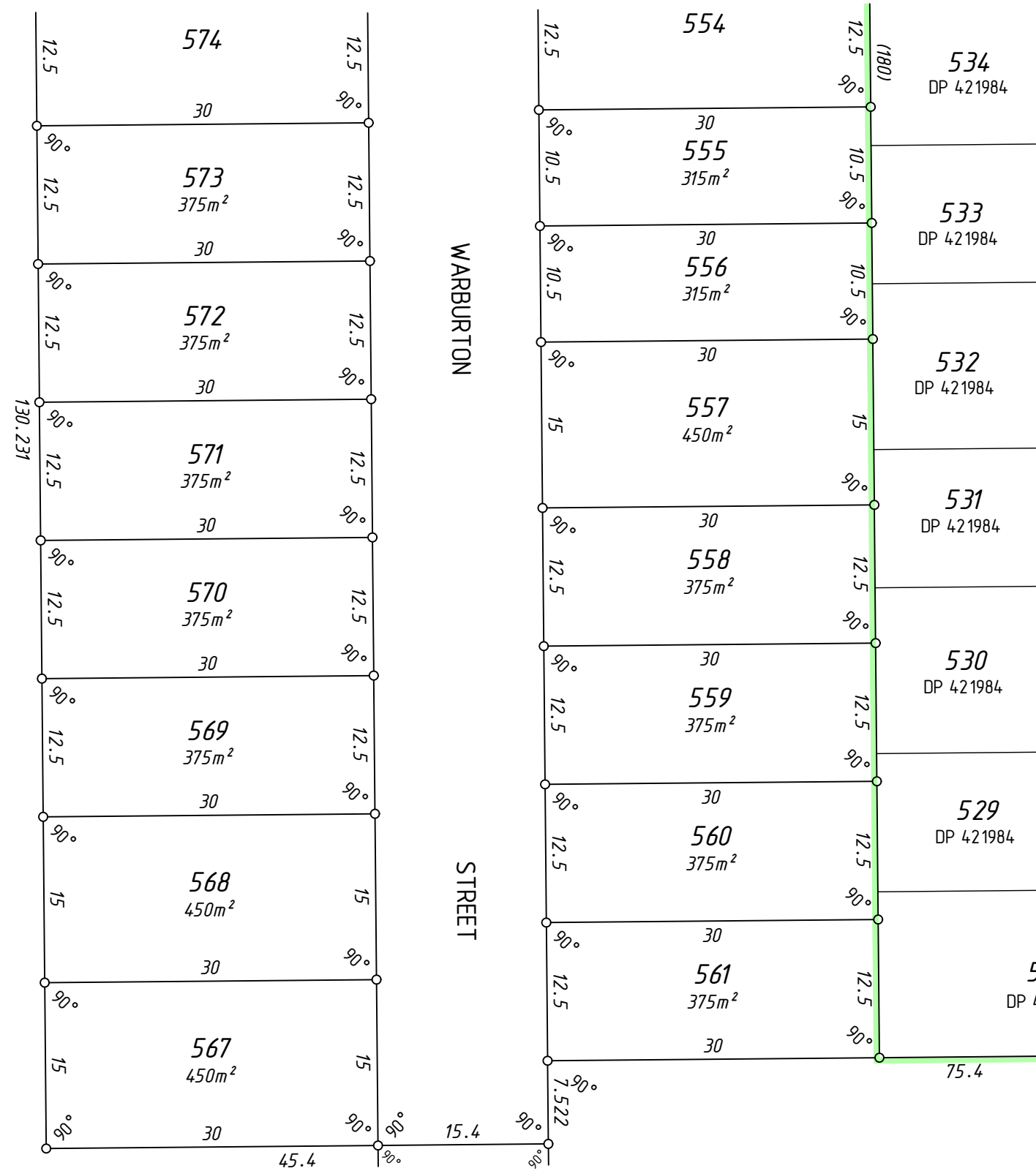
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SEE

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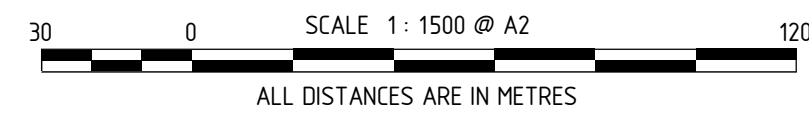
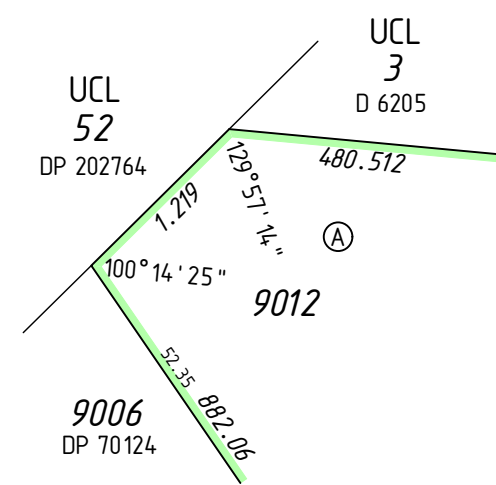
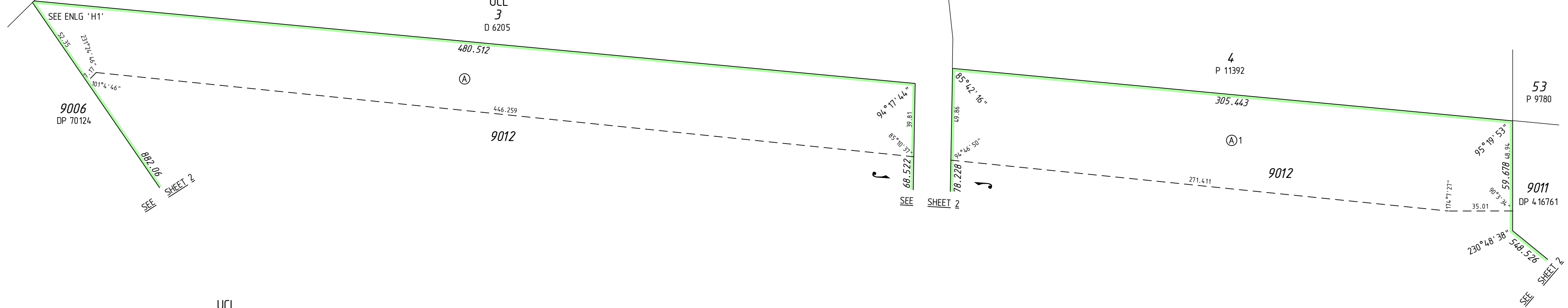


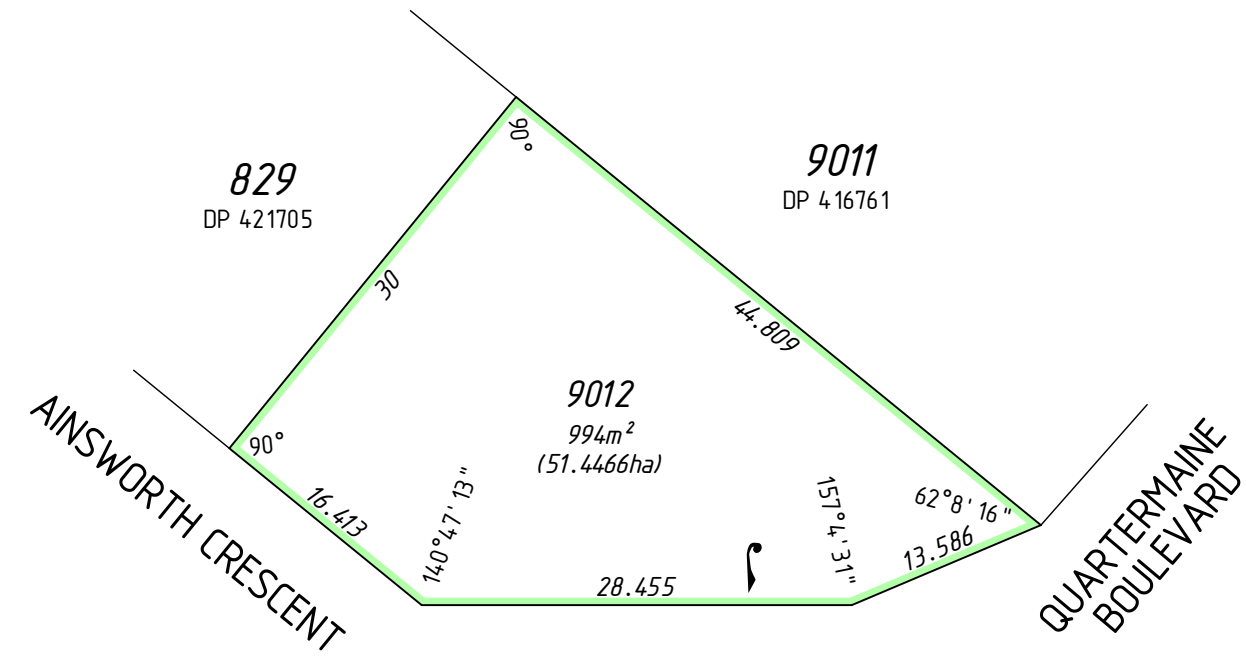
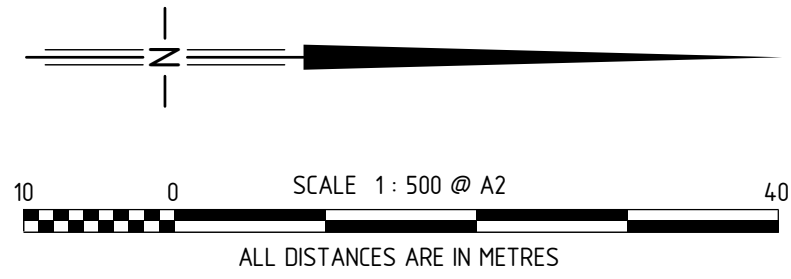
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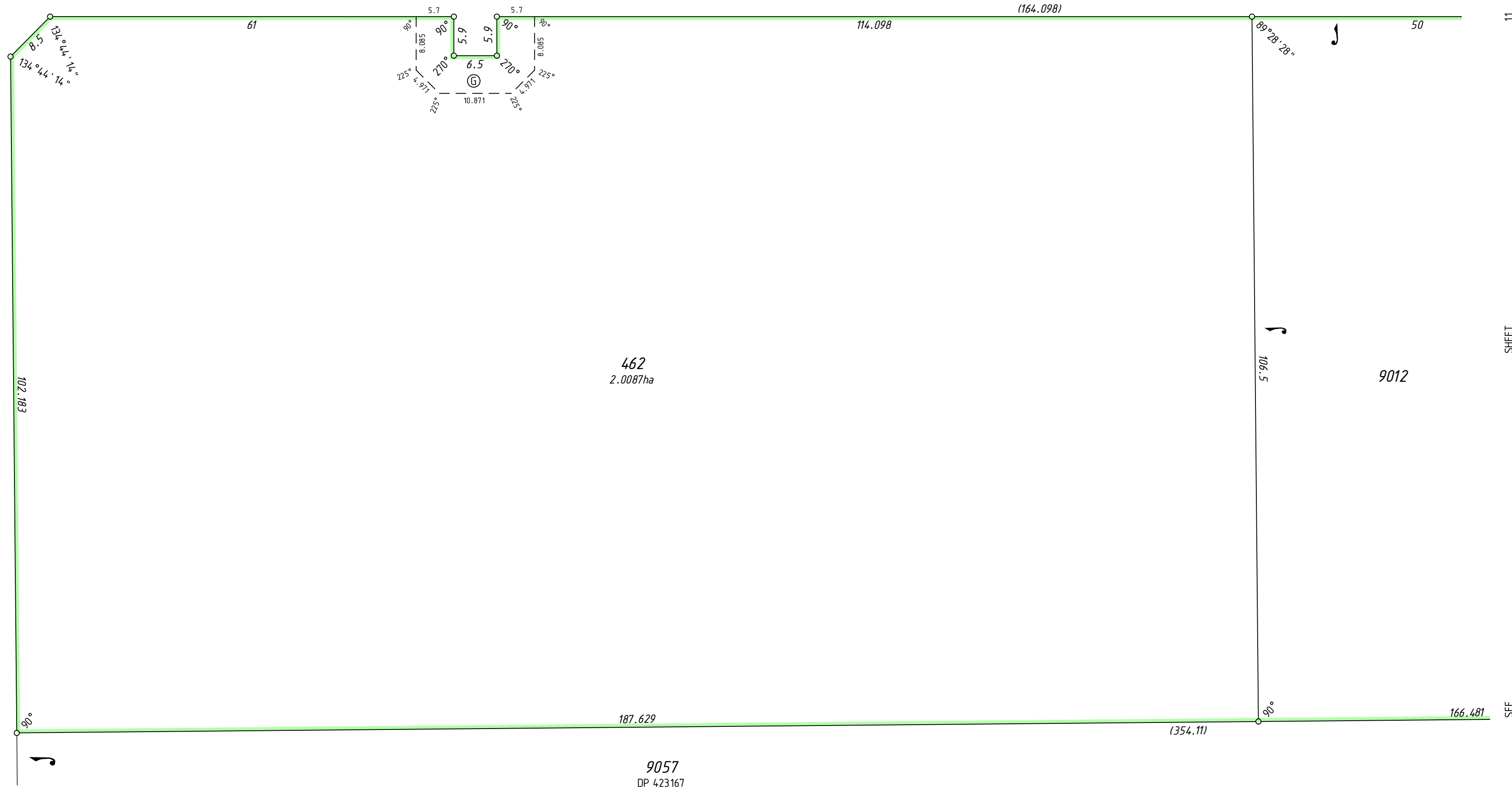


QUARTERMAINE

BOULEVARD

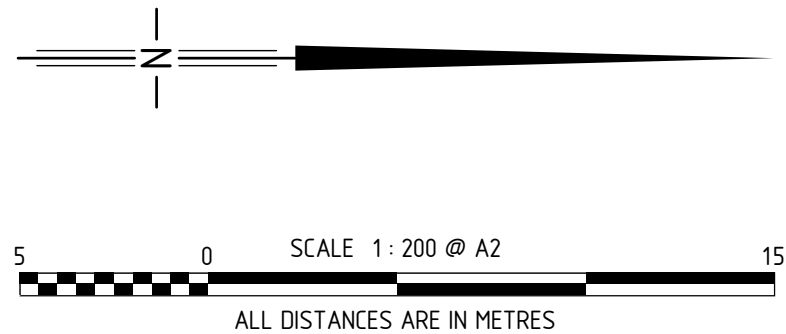
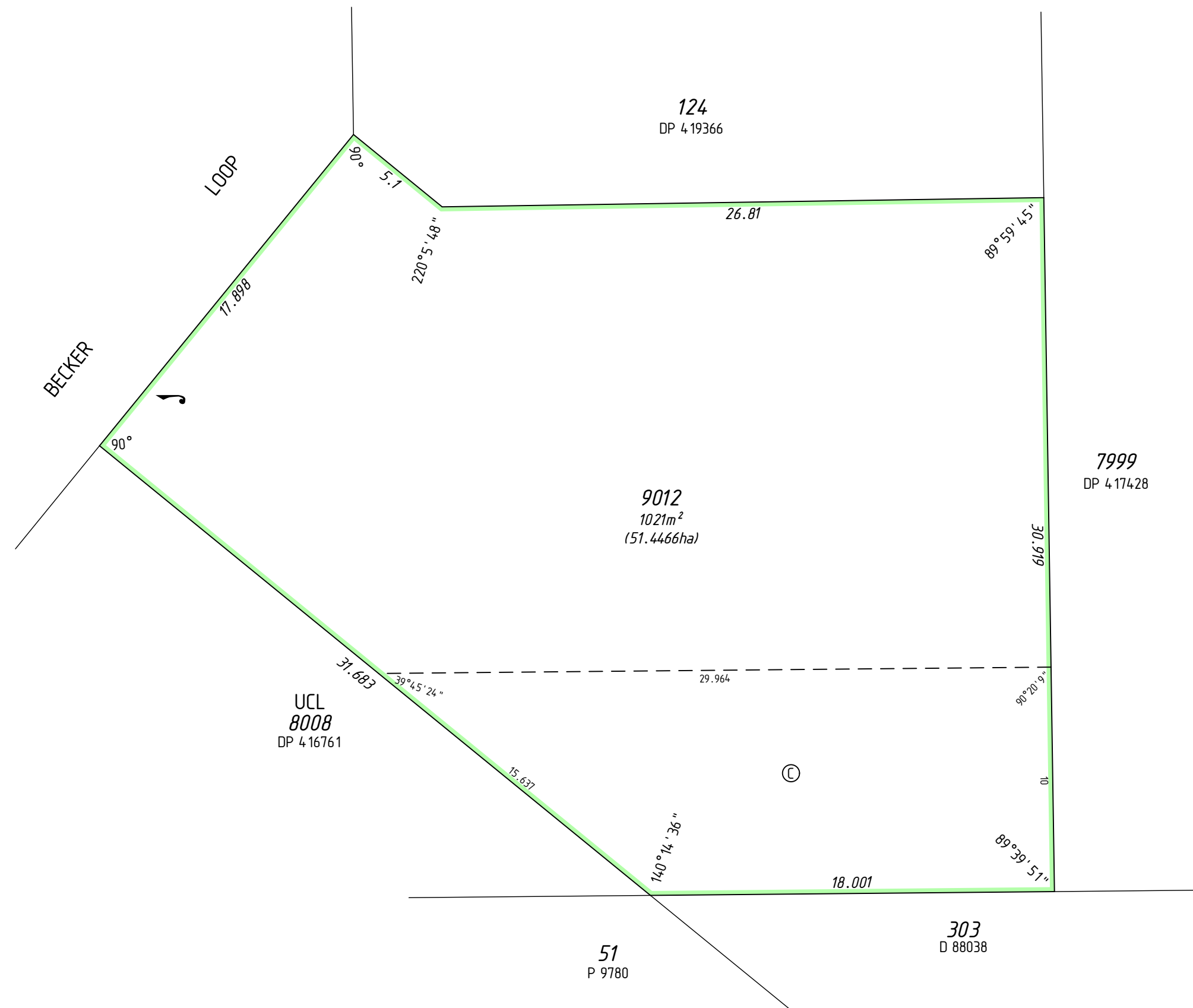
MUELLER

GROVE



SEE SHEET 11

SEE SHEET 11



THIS SURVEY SHEET WILL BE
REPLACED BY THE SURVEY DATA



MC MULLEN NOLAN GROUP
PO Box 3526, Success W.A. 6964
Tel: (08) 6436 1500
Fax: (08) 6436 1500
Email: info@mngsurvey.com.au

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