

PROJECT: PROPOSED CHILDCARE DEVELOPMENT

PLANSET: CONCEPT DRAINAGE AND EARTHWORKS PLANS

CLIENT: BLUE SOX DEVELOPMENTS

DRAWING LIST		
DWG NO.	REV	DWG TITLE
GENERAL		
PS02-A000	B	COVER SHEET
CONSTRUCTION MANAGEMENT WORKS		
PS02-B300	B	SEDIMENT AND EROSION CONTROL PLAN
PS02-B310	A	SEDIMENT AND EROSION CONTROL DETAILS
EARTHWORKS		
PS02-C100	B	EARTHWORKS GRADING PLAN
PS02-C500	B	EARTHWORKS CUT-FILL PLAN
PS02-C600	A	EARTHWORKS SITE SECTIONS
ROADWORKS		
PS02-DZ00	A	TYPICAL DRIVEWAY DETAILS
DRAINAGE		
PS02-E100	B	DRAINAGE PLAN
PS02-E200	A	DRAINAGE DETAILS
PS02-E600	B	OSD CATCHMENT PLAN, MODEL AND RESULTS



LOCALITY PLAN
NOT TO SCALE


LGA: UPPER LACHLAN SHIRE COUNCIL

3 MEMORY AVE CROOKWELL NSW 2583
LOT 2/DP702788

NOTES

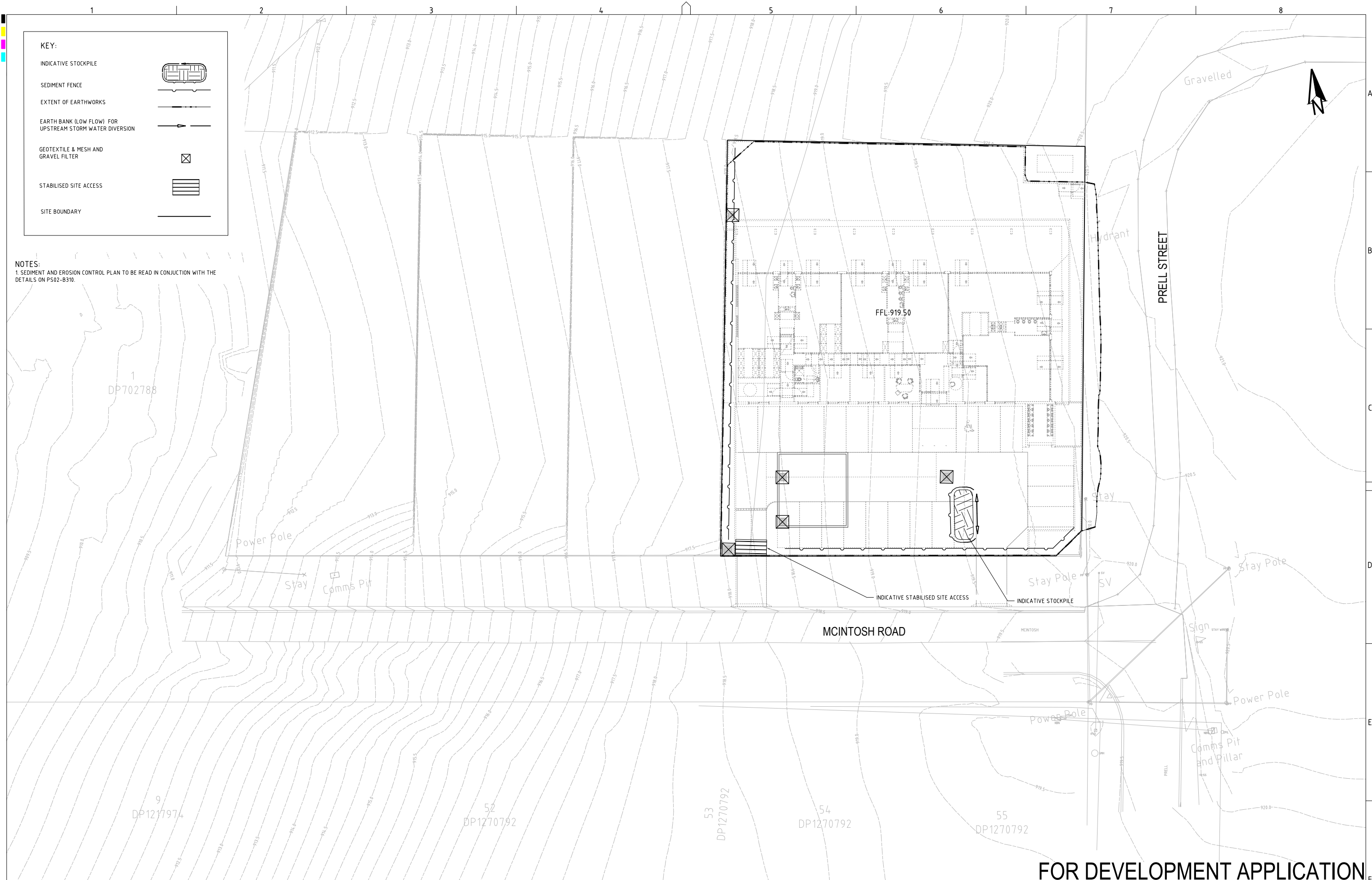
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- INTERNAL AND EXTERNAL SURVEY INFORMATION SHOWN BASED ON SURVEY INFORMATION PROVIDED BY SDG PTY LTD.
- PROPOSED ARCHITECT LAYOUT BASED ON INFORMATION PROVIDED BY ARCHITECTS FAUBOURG24.

FOR DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD	SCALE	GRID	DATUM	PROJECT MANAGER	CLIENT	<div><div>Consulting Engineers Environment Water Geotechnical Civil</div></div> <div>Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767 Email: mail@martens.com.au Internet: www.martens.com.au</div>	DRAWING TITLE				
B	DESIGN AMENDMENT	30/04/2025	NH	RL/PC	AVG	GT		----	----	GT	BLUE SOX DEVELOPMENTS		COVER SHEET				
A	INITIAL RELEASE	16/04/2025	NH	YAI/PC	AVG	GT					PROJECT NAME/PLANSET TITLE		PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
											PROPOSED CHILDCARE DEVELOPMENT		P2410601	PS02	R02	PS02-A000	B
											CONCEPT DRAINAGE AND EARTHWORKS PLANS						
											PROPOSED LOT 4, 3 MEMORY AVE CROOKWELL NSW 2583						
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A1 / A3 LANDSCAPE (A3_LC_v02.010)

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NOTES:
1. SEDIMENT AND EROSION CONTROL PLAN TO BE READ IN CONJUNCTION WITH THE DETAILS ON PS02-B310.

FOR DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD	SCALE 	GRID	DATUM	PROJECT MANAGER	CLIENT	 Consulting Engineers Environment Water Geotechnical Civil Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767 Email: mail@martens.com.au Internet: www.martens.com.au	DRAWING TITLE SEDIMENT AND EROSION CONTROL PLAN					
B	DESIGN AMENDMENT	30/04/2025	NH	NP	AVG	GT		MGA	mAHD	GT	BLUE SOX DEVELOPMENTS							
A	INITIAL RELEASE	16/04/2025	NH	NP	AVG	GT					PROJECT NAME/PLANSET TITLE PROPOSED CHILDCARE DEVELOPMENT CONCEPT DRAINAGE AND EARTHWORKS PLANS PROPOSED LOT 4, 3 MEMORY AVE CROOKWELL NSW 2583							
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CONSTRUCTION SITE

MIN. WIDTH 3 METRES

MIN. LENGTH 15 METRES

200mm MIN.

300mm MIN.

PROPERTY BOUNDARY

RUNOFF DIRECTED TO SEDIMENT TRAP/FENCE

DGB 20 ROADBASE OR 30mm AGGREGATE

EXISTING ROADWAY

GEOTEXTILE FABRIC DESIGNED TO PREVENT INTERMIXING OF SUBGRADE AND BASE MATERIALS AND TO MAINTAIN GOOD PROPERTIES OF THE SUB-BASE LAYERS. GEOTEXTILE MAY BE A WOVEN OR NEEDLE-PUNCHED PRODUCT WITH A MINIMUM CBR BURST STRENGTH (AS3706.4-98) OF 2500 N

CONSTRUCTION NOTES

1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
2. COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
4. ENSURE THE STRUCTURE IS AT LEAST 15 METRES LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3 METRES WIDE
5. WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE

STABILISED SITE ACCESS **SD 6-14**

15 M STAR PICKETS AT MAX. 2.5 M CENTRES

500 MM TO 600 MM

600 MM MIN.

SELF-SUPPORTING GEOTEXTILE

DIRECTION OF FLOW

ON SOIL, 150 MM X 100 MM TRENCH WITH COMPACTED BACKFILL AND ON ROCK, SET INTO SURFACE CONCRETE

SECTION DETAIL

DISTURBED AREA

UNDISTURBED AREA

DIRECTION OF FLOW

15 M STAR PICKETS AT MAX. 2.5 M CENTRES

20 M MAX. (UNLESS STATED OTHERWISE ON SWMP/ESCP)

MIN. 1.5 M

STAR PICKETS AT MAXIMUM 2.5 M SPACINGS

PLAN

CONSTRUCTION NOTES

1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
2. CUT A 150-MM DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
3. DRIVE 15 METRE LONG STAR PICKETS INTO GROUND AT 2.5 METRE INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150-MM OVERLAP.
6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

SEDIMENT FENCE **SD 6-8**

STAR PICKETS

1 METRE MAX.

DROP INLET WITH GRATE

WIRE OR STEEL MESH (14 GAUGE X 150mm OPENINGS) WHERE GEOTEXTILE IS NOT SELF-SUPPORTING

WOVEN GEOTEXTILE

STAR PICKET FITTED WITH SAFETY CAP

WOVEN GEOTEXTILE

RUNOFF WATER WITH SEDIMENT

FILTERED WATER

FOR DROP INLETS AT NON-SAG POINTS, SANDBAGS, EARTH BANK OR EXCAVATION USED TO CREATE ARTIFICIAL SAG POINT

SANDBAGS

WATERWAY

EXCAVATION

EARTH BANK

CONSTRUCTION NOTES

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
2. FOLLOW STANDARD DRAWING 6-7 AND STANDARD DRAWING 6-8 FOR INSTALLATION PROCEDURES FOR THE STRAW BALES OR GEOTEXTILE. REDUCE THE PICKET SPACING TO 1 METRE CENTRES.
3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
4. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

GEOTEXTILE INLET FILTER ☒ **SD 6-12**

EARTH BANK

2:1 SLOPE (MAX.)

2:1 SLOPE (MAX.)

SEDIMENT FENCE

STABILISE STOCKPILE SURFACE

FLOW

CONSTRUCTION NOTES

1. PLACE STOCKPILES MORE THAN 2 (PREFERABLY 5) METRES FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2 METRES IN HEIGHT.
4. WHERE THEY ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED ESCP OR SWMP TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
5. CONSTRUCT EARTH BANKS (STANDARD DRAWING 5-5) ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES (STANDARD DRAWING 6-8) 1 TO 2 METRES DOWNSLOPE.

STOCKPILES **SD 4-1**

GRADIENT OF DRAIN 1% TO 5%

CAN BE CONSTRUCTED WITH OR WITHOUT CHANNEL

ALL BATTER GRADES 2(H):1(V) MAX.

150mm MIN.

300mm MIN.

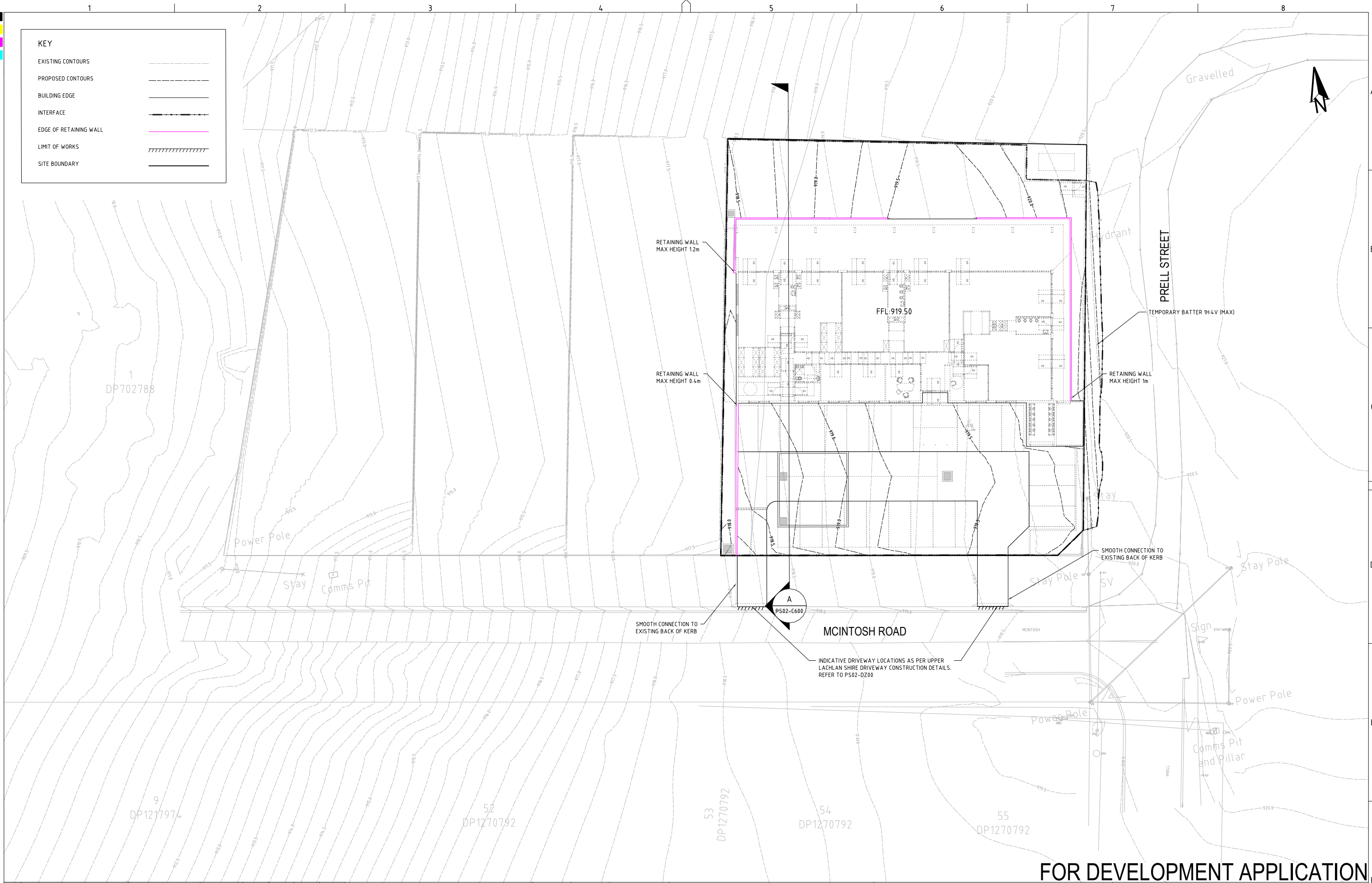
2 METRES MIN.



DIRECTION OF FLOW

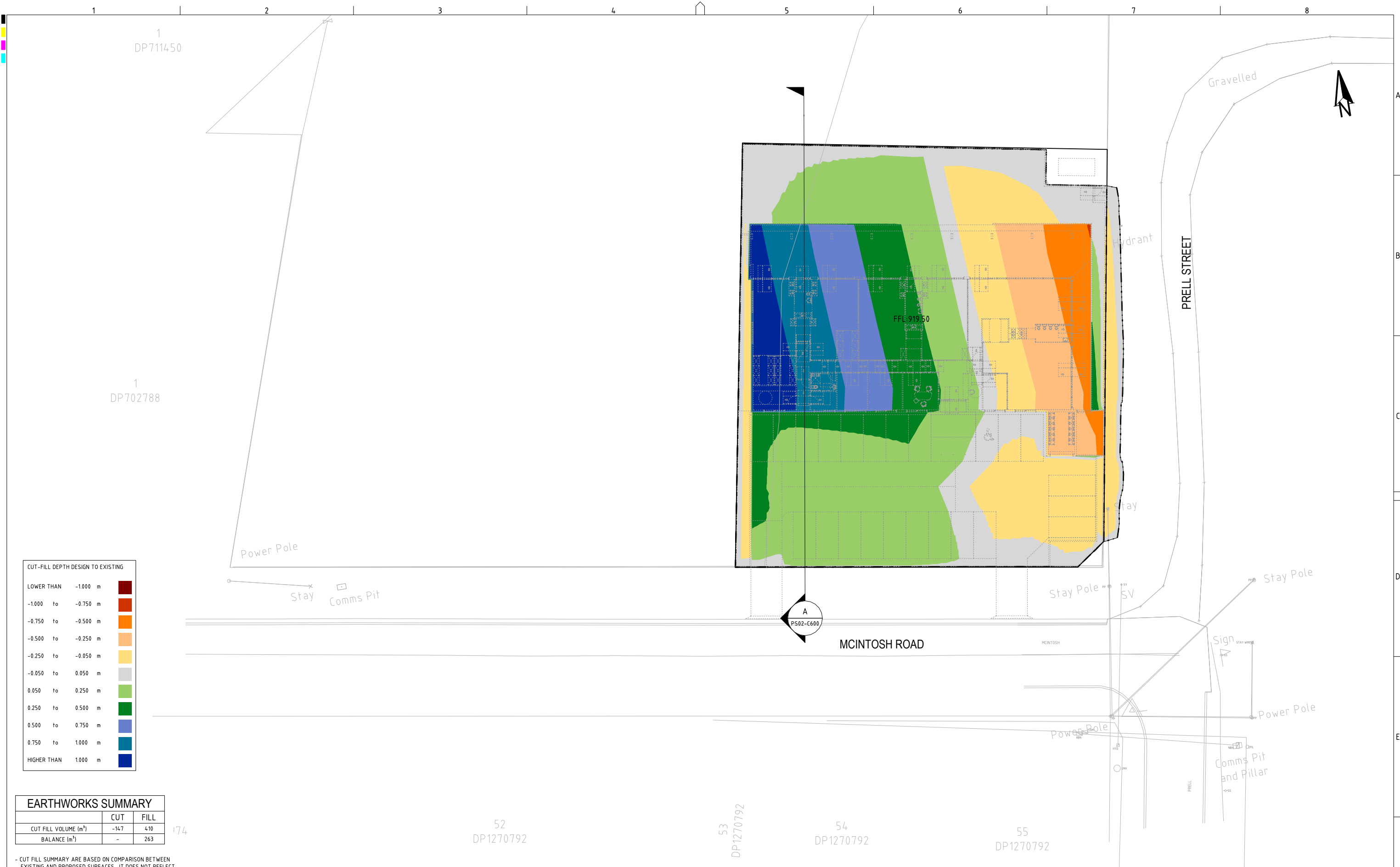
CONSTRUCTION NOTES

1. BUILD WITH GRADIENTS BETWEEN 1 PERCENT AND 5 PERCENT.
2. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE - WORK AROUND THEM.
3. ENSURE THE STRUCTURES ARE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT COULD IMPEDE WATER FLOW.
4. BUILD THE DRAINS WITH CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTIONS, NOT V SHAPED.
5. ENSURE THE BANKS ARE PROPERLY COMPACTED TO PREVENT FAILURE.
6. COMPLETE PERMANENT OR TEMPORARY STABILISATION WITHIN 10 DAYS OF CONSTRUCTION.

EARTH BANK (LOW FLOW) **SD 5-5**



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B	DESIGN AMENDMENT	30/04/2025	NH	RL	AVG	GT		MGA	mAHD	GT	BLUE SOX DEVELOPMENTS		EARTHWORKS GRADING PLAN				
A	INITIAL RELEASE	16/04/2025	NH	YAI	AVG	GT							PROJECT NO. P2410601	PLANSET NO. PS02	RELEASE NO. R02	DRAWING NO. PS02-C100	REVISION B
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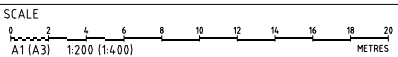


CUT-FILL DEPTH DESIGN TO EXISTING		
LOWER THAN	-1.000 m	
-1.000 to	-0.750 m	
-0.750 to	-0.500 m	
-0.500 to	-0.250 m	
-0.250 to	-0.050 m	
-0.050 to	0.050 m	
0.050 to	0.250 m	
0.250 to	0.500 m	
0.500 to	0.750 m	
0.750 to	1.000 m	
HIGHER THAN	1.000 m	

EARTHWORKS SUMMARY		
	CUT	FILL
CUT FILL VOLUME (m³)	-147	410
BALANCE (m³)	-	263

- CUT FILL SUMMARY ARE BASED ON COMPARISON BETWEEN EXISTING AND PROPOSED SURFACES. IT DOES NOT REFLECT EARTHWORK VOLUME AND BALANCE.

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GRID	DATUM	PROJECT MANAGER
MGA	mAHD	GT
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PROJECT NAME/PLANSET TITLE
BLUE SOX DEVELOPMENTS
PROPOSED CHILDCARE DEVELOPMENT
CONCEPT DRAINAGE AND EARTHWORKS PLANS
PROPOSED LOT 4, 3 MEMORY AVE CROOKWELL NSW 2583

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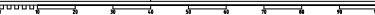
DRAWING TITLE				
EARTHWORKS CUT-FILL PLAN				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2410601	PS02	R02	PS02-C500	B

FOR DEVELOPMENT APPLICATION

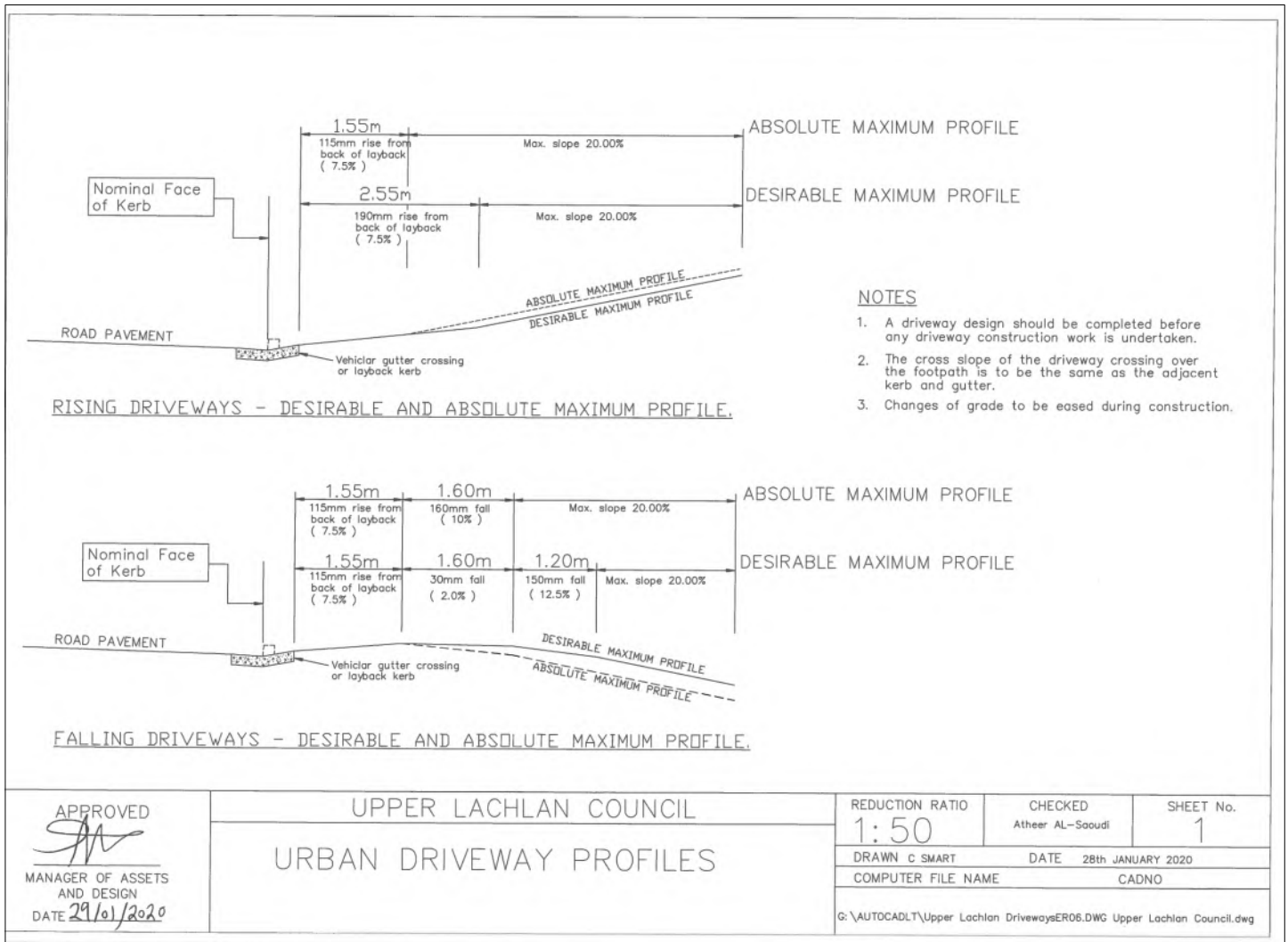
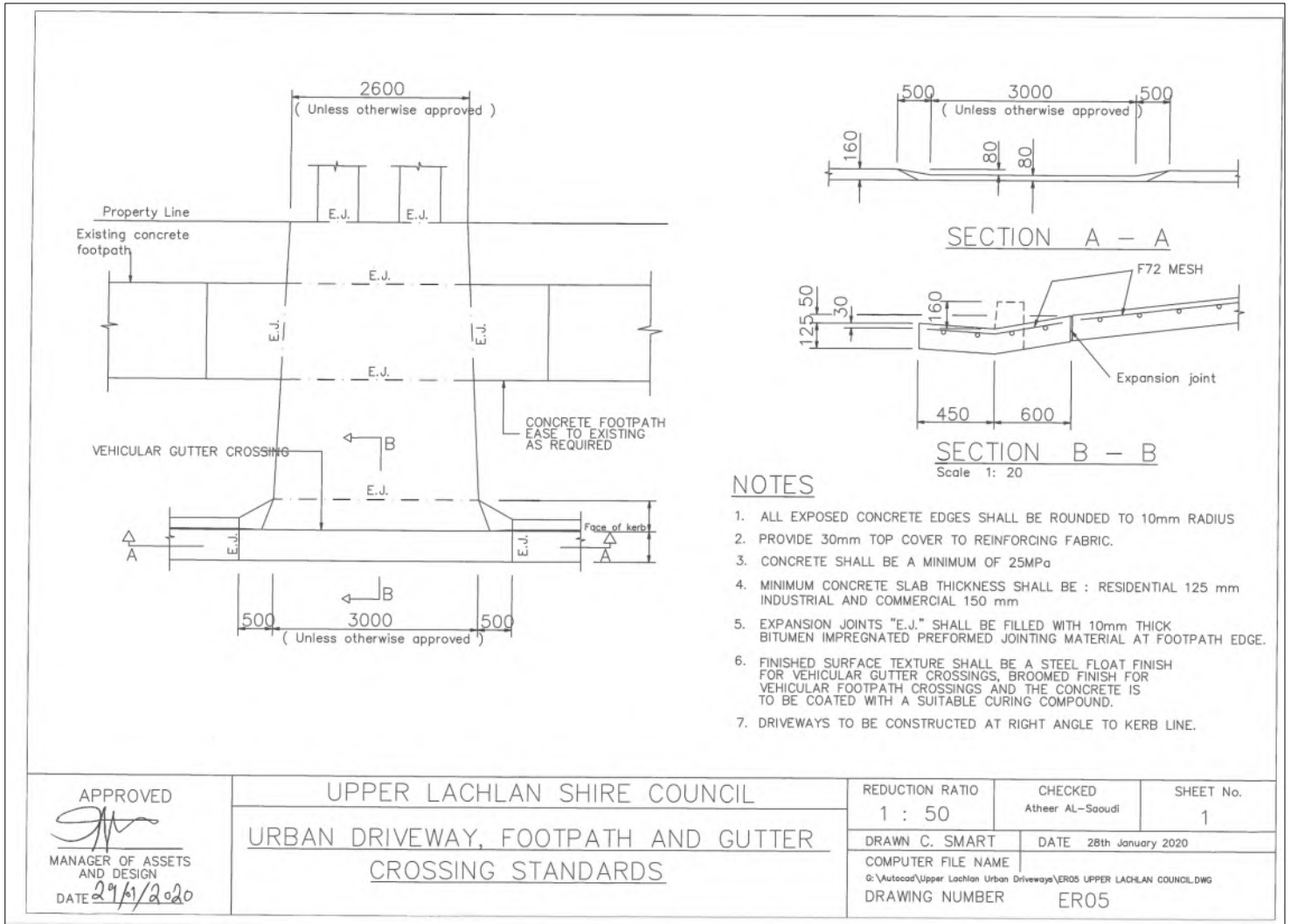
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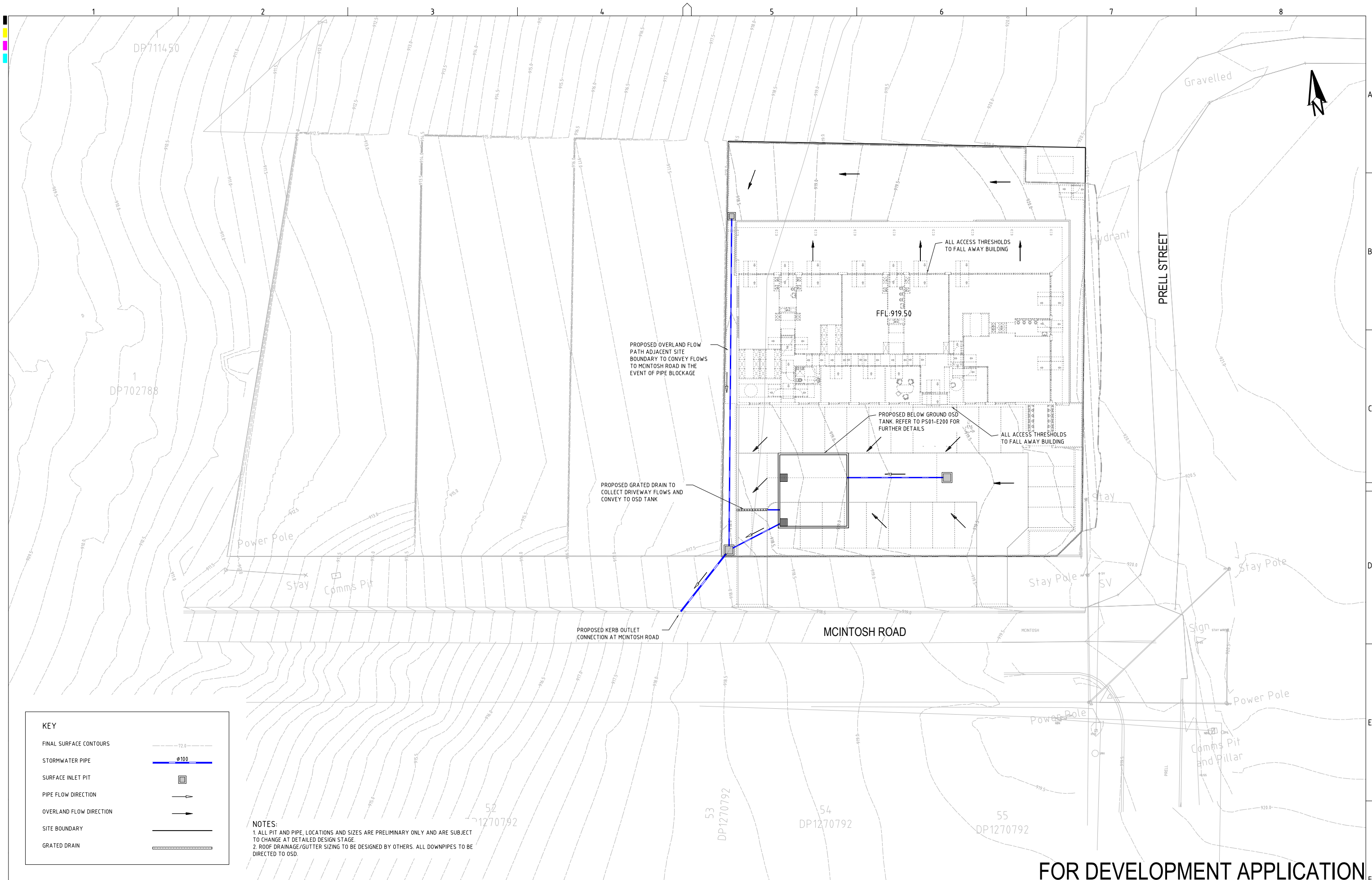
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SCALE

A1 (A3) 1:200 (1:400) METRES

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	GT
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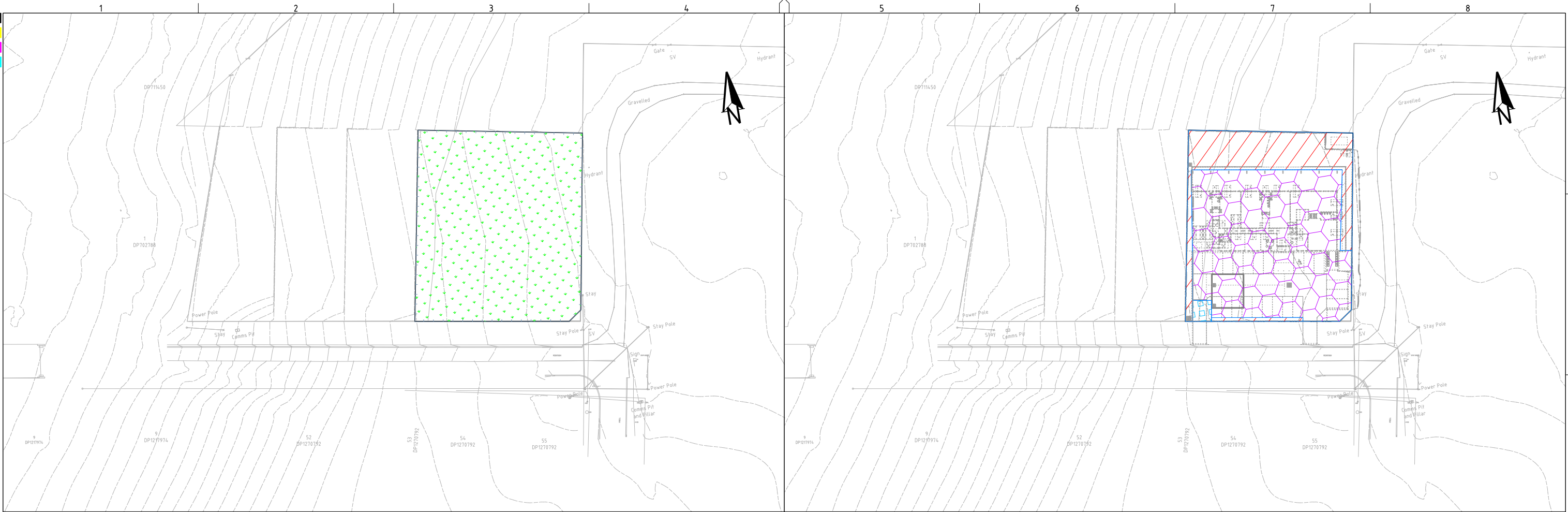
CLIENT	BLUE SOX DEVELOPMENTS
PROJECT NAME/PLANSET TITLE	PROPOSED CHILDCARE DEVELOPMENT CONCEPT DRAINAGE AND EARTHWORKS PLANS
	PROPOSED LOT 4, 3 MEMORY AVE CROOKWELL NSW 2583

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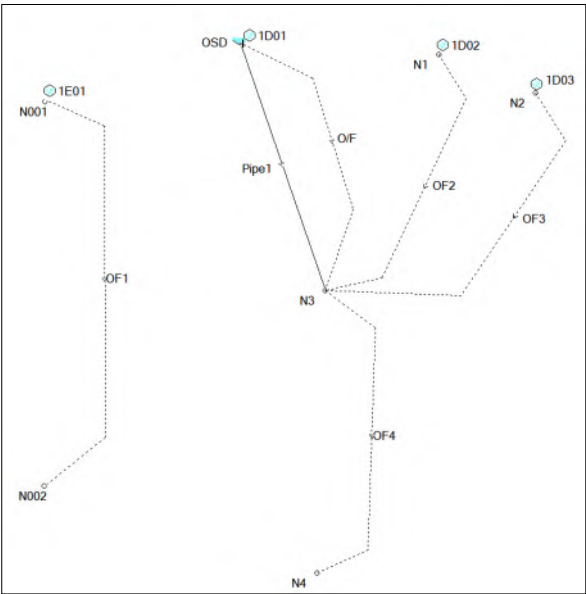
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DRAWING TITLE				
DRAINAGE PLAN				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2410601	PS02	R02	PS02-E100	B



PRE DEVELOPMENT CATCHMENT PLAN
SCALE 1:500

PRE DEVELOPMENT CATCHMENT DETAILS (P2410601DRN03V02)				
KEY	DRAINS NODE	DESCRIPTION	AREA (ha)	% PAVED
	1E01	GRASS	0.205	0%
	TOTAL AREA		0.205	= 100% OF TOTAL AREA
	TOTAL IMPERVIOUS AREA		0.000	= 0% OF TOTAL AREA
	TOTAL PERVIOUS AREA		0.205	= 100% OF TOTAL AREA



DRAINS LAYOUT PRE AND POST DEVELOPMENT (P2410601DRN03V02)

POST DEVELOPMENT CATCHMENT PLAN
SCALE 1:500

POST DEVELOPMENT CATCHMENT DETAILS (P2410601DRN03V02)				
KEY	DRAINS NODE	DESCRIPTION	AREA (ha)	% PAVED
	1D01	CARPARK + ROOF TO OSD	0.147	100%
	1D02	LANDSCAPE + PATIO BYPASS	0.055	11%
	1D03	CAR PARK BYPASS	0.003	100%
	TOTAL AREA		0.205	= 100% OF TOTAL AREA
	TOTAL IMPERVIOUS AREA		0.156	= 76% OF TOTAL AREA
	TOTAL PERVIOUS AREA		0.049	= 24% OF TOTAL AREA

DRAINS MODEL RESULTS (P2410601DRN03V02)				
STORM EVENT	PRE-DEVELOPMENT PEAK FLOW (m ³ /s)	POST-DEVELOPMENT PEAK FLOW (m ³ /s)	POST < PRE (YES/NO)	DIFFERENCE (m3/s)
1% AEP	0.027	0.023	YES	-0.004
2% AEP	0.021	0.019	YES	-0.002
5% AEP	0.016	0.008	YES	-0.008
10% AEP	0.010	0.007	YES	-0.003
0.2EY	0.005	0.005	YES	-0.000

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B	DESIGN AMENDMENT	30/04/2025	NH	PC	AVG	GT	0 5 10 15 20 25 30 35 40 45 50 A1 (A3) 1:500 (1:1,000) METRES	MGA	---	GT	BLUE SOX DEVELOPMENTS						
A	INITIAL RELEASE	16/04/2025	NH	PC	AVG	GT					PROPOSED CHILD CARE DEVELOPMENT CONCEPT DRAINAGE AND EARTHWORKS PLANS PROPOSED LOT 4, 3 MEMORY AVE CROOKWELL NSW 2583	Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767 Email: mail@martens.com.au Internet: www.martens.com.au	PROJECT NO. P2410601	PLANSET NO. PS02	RELEASE NO. R02	DRAWING NO. PS02-E600	REVISION B
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