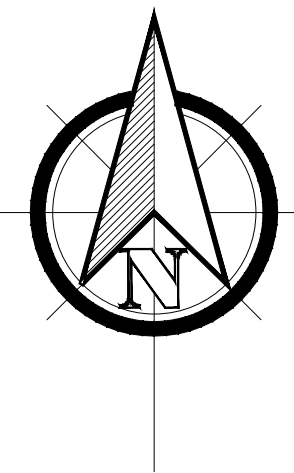


CONCEPT ENGINEERING PLANS  
PROPOSED TWO LOT SUBDIVISION  
BOUNDARY ADJUSTMENT



DRAWING INDEX	
DRAWING NO.	DRAWING TITLE
DA101-01	COVER SHEET, LOCALITY PLAN & DRAWING INDEX
DA102-01	GENERAL LAYOUT PLAN
DA102-02	PLAN & SECTION ALONG PIPE
DA102-03	SEDIMENT AND EROSION CONTROL PLAN & DETAILS



LOCALITY PLAN  
N.T.S



FOR DA APPROVAL

B	RE-ISSUE FOR DEVELOPMENT APPROVAL	30/03/20	AS	LW
A	FINAL DESIGN	17/01/20	AS	SN
Issue	Description	Date	Drawn	Approved



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**Internet**  
mepstead@mepstead.com.au  
www.mepstead.com.au

**Client:**  
DAVID ROYLE  
7 BUSHRANGERS HILL  
NEWPORT, NSW 2106

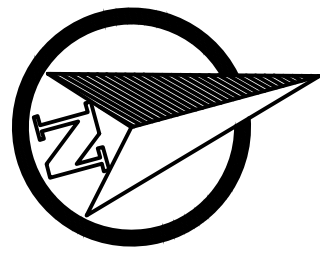
**Project:**  
PROPOSED SUBDIVISION  
LOT 92 IN DP 1052243 & LOT 1 IN DP 634714  
NEWPORT

Designed: AS	Scale: N.T.S.	A1
Drawn: AS	Datum: A.H.D	
Checked: LW	Date: JANUARY 2020	
L.G.A:	NORTHERN BEACHES	

Drawing Title:  
COVER SHEET, LOCALITY PLAN &  
DRAWING INDEX

Issue: B  
Drg. No.  
DA101-01  
Our Ref:  
5800 1/4





BUNGAN  
HEAD  
ROAD

91  
D.P.1052243

7  
D.P.263921

Lot 1

DA102-02

POOL

Lot 2

1  
D.P.539285

GENERAL SITE LAYOUT  
SCALE 1:100

SCALE 1:100 @ A1  
SCALE 1:200 @ A3



FOR DA APPROVAL

Issue	Description	Date	Drawn	Approved
B	RE-ISSUE FOR DEVELOPMENT APPROVAL	30/03/20	AS	LW
A	FINAL DESIGN	17/01/20	AS	SN



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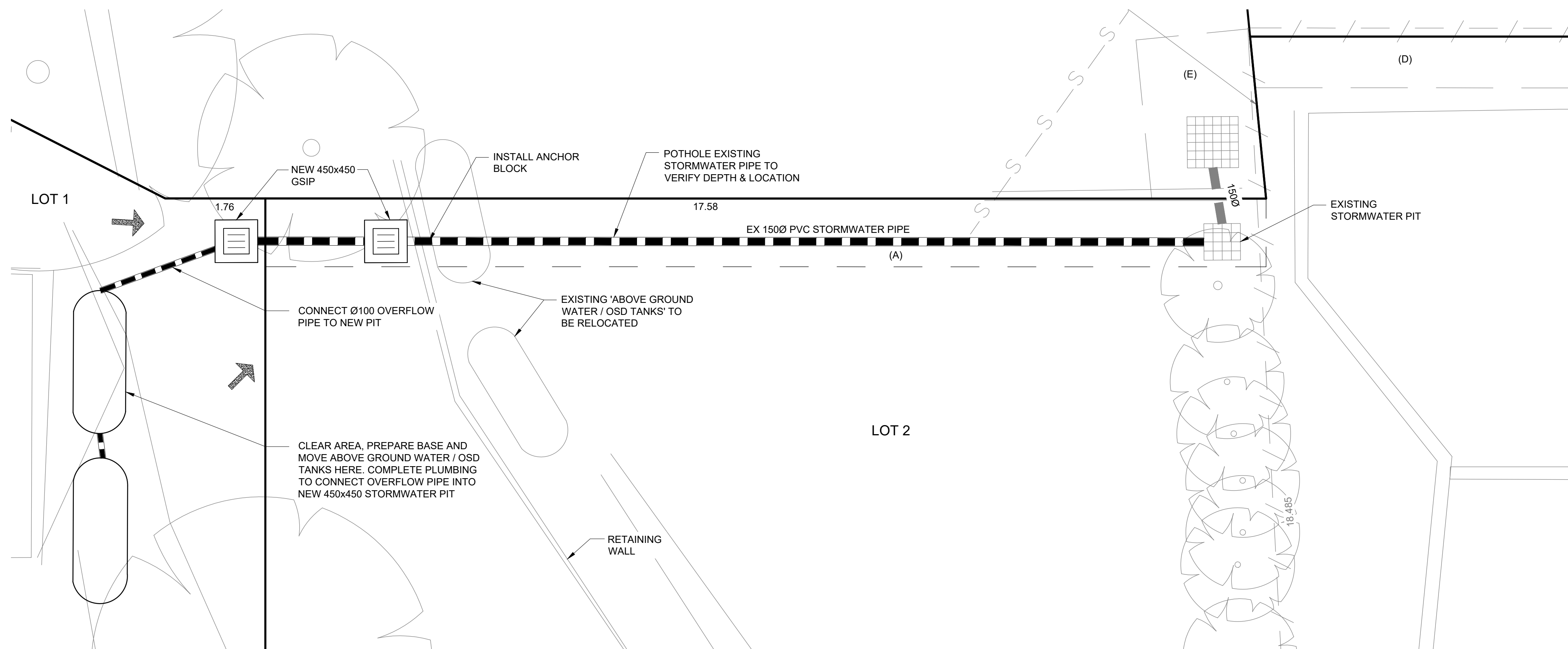
Client:  
**DAVID ROYLE**  
7 BUSHRANGERS HILL  
NEWPORT, NSW 2106

Project:  
**PROPOSED SUBDIVISION**  
LOT 92 IN DP 1052243 & LOT 1 IN DP 634714  
NEWPORT

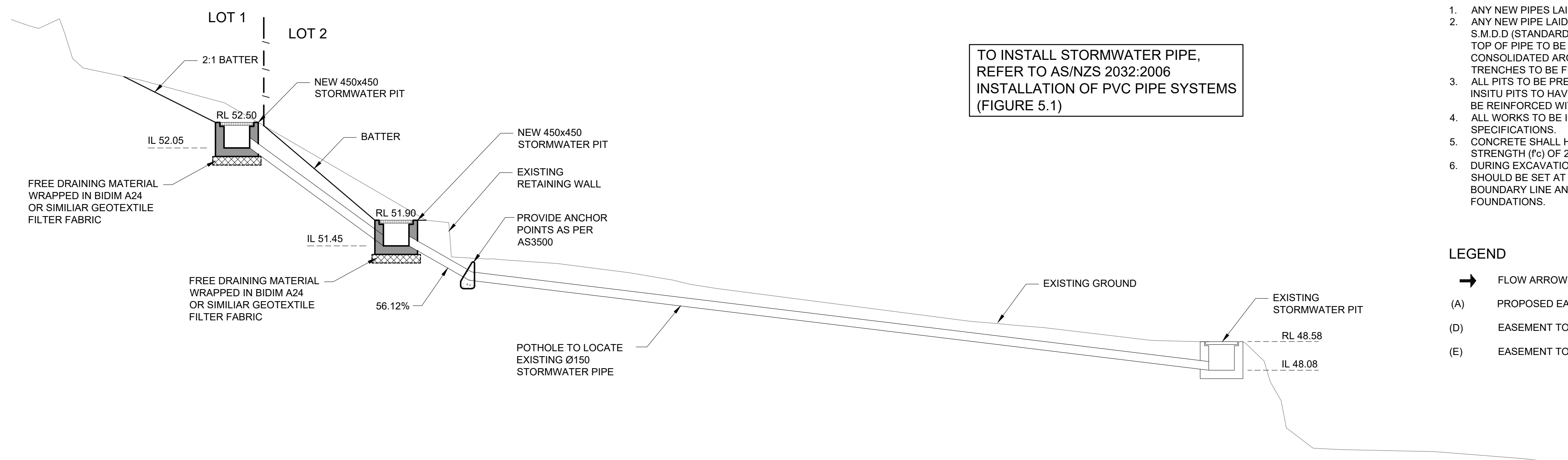
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Drawn: AS	Datum: A.H.D	
Checked: LW	Date: JANUARY 2020	
L.G.A:	NORTHERN BEACHES	

Drawing Title:  
GENERAL LAYOUT & SITE PLAN

Issue: B
Drg. No. DA102-01
Our Ref: 5800 2/4



SCALE 1: 50



SCALE 1: 50

1. ANY NEW PIPE LAID TO BE 1% MINIMUM GRADE UNLESS NOTED OTHERWISE.
2. ANY NEW PIPE Laid SHALL BE ON A 75mm SAND BED, COMPACTED TO 100% S.M.D.D (STANDARD MAXIMUM DRY DENSITY). COVER TO SURFACE FROM TOP OF PIPE TO BE 300mm MINIMUM. BACK FILL TO BE ADEQUATELY CONSOLIDATED AROUND PIPES BY METHOD OF RAMMING AND WATERING IN TRENCHES TO BE FILLED WITH GRANULAR MATERIAL AS SPECIFIED.
3. ALL PITS TO BE PRECAST OR CAST INSITU UNLESS NOTED OTHERWISE. CAST INSITU PITS TO HAVE 150mm THICK CONCRETE WALLS AND BASE. WALLS TO BE REINFORCED WITH 1/Y12 TOP TIE UNLESS NOTED OTHERWISE.
4. ALL WORKS TO BE IN ACCORDANCE WITH LOCAL COUNCIL STANDARDS AND SPECIFICATIONS.
5. CONCRETE SHALL HAVE A MINIMUM 28 DAY CHARACTERISTIC COMPRESSIVE STRENGTH ( $f_{ck}$ ) OF 25MPa.
6. DURING EXCAVATION USING HYDRAULIC ROCK BREAKER, VIBRATION LIMITS SHOULD BE SET AT LESS THAN 20mm per second ON THE PROPERTY BOUNDARY LINE AND LIMITED TO 5mm per second ON NEIGHBORING BUILDING FOUNDATIONS.


➔ FLOW ARROW

(A) PROPOSED EASEMENT TO DRAIN WATER 1.2 WIDE

(D) EASEMENT TO DRAIN WATER 0.9 WIDE (DP 263921

(E) EASEMENT TO DRAIN WATER 2 WIDE (DP 1052243)



						 <div><b>mepstead</b> <b>&amp; ASSOCIATES</b> REGISTERED SURVEYORS AND DEVELOPMENT CONSULTANTS <a href="mailto:mepstead@mepstead.com.au">mepstead@mepstead.com.au</a> <a href="http://www.mepstead.com.au">www.mepstead.com.au</a></div> <div><b>Sydney</b> 10/4 Central Avenue, Thornleigh N.S.W. 2120 <b>Phone</b> 02 9875 4500 <b>Fax</b> 02 9875 4833</div> <div><b>Postal</b> PO BOX 208, Pennant Hills N.S.W. 1715</div> <div><b>Internet</b> <a href="mailto:mepstead@mepstead.com.au">mepstead@mepstead.com.au</a> <a href="http://www.mepstead.com.au">www.mepstead.com.au</a></div> <div>Client: DAVID ROYLE 7 BUSHRANGERS HILL NEWPORT, NSW 2106</div> <div>Project: PROPOSED SUBDIVISION LOT 92 IN DP 1052243 &amp; LOT 1 IN DP 634714 NEWPORT</div> <table><tr><td>Designed: AS</td><td>Scale: AS SHOWN</td><td>A1</td></tr><tr><td>Drawn: AS</td><td colspan="2">Datum: A.H.D</td></tr><tr><td>Checked: LW</td><td>Date: JANUARY 2020</td><td></td></tr><tr><td colspan="3">I.G.A: NORTHERN BEACHES</td></tr></table> <div>Drawing Title: PLAN &amp; SECTION ALONG PIPE</div> <div>Issue: B Drg. No. DA102-02 Our Ref. 5800 3/4</div>	Designed: AS	Scale: AS SHOWN	A1	Drawn: AS	Datum: A.H.D		Checked: LW	Date: JANUARY 2020		I.G.A: NORTHERN BEACHES		
Designed: AS	Scale: AS SHOWN	A1																
Drawn: AS	Datum: A.H.D																	
Checked: LW	Date: JANUARY 2020																	
I.G.A: NORTHERN BEACHES																		
B	RE-ISSUE FOR DEVELOPMENT APPROVAL	30/03/20	AS	LW														
A	FINAL DESIGN	17/01/20	AS	SN														
Issue	Description	Date	Drawn	Approved														



## GENERAL NOTES:

- ALL EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING REVEGETATION AND STORAGE OF SOIL AND TOPSOIL, SHALL BE IMPLEMENTED TO THE REQUIREMENTS OF THE "ENVIRONMENT PROTECTION AUTHORITY" AND "DEPT OF LAND AND WATER CONSERVATION". MEASURES OUTLINED IN THE SEDIMENT & EROSION CONTROL PLAN MUST BE IMPLEMENTED PRIOR TO AND MAINTAINED DURING AND AFTER THE CONSTRUCTION WORKS.
- TOPSOIL FROM ALL AREAS TO BE DISTURBED SHALL BE STOCKPILED AND LATER RESPREAD TO AID REVEGETATION IN THOSE AREAS.
- ALL DRAINAGE WORKS SHALL BE CONSTRUCTED AND STABILIZED AS EARLY AS POSSIBLE DURING DEVELOPMENT.
- ALL TAIL-OUT DRAINS SHALL BE GRASSED AND TRAPEZOIDAL IN SECTION. STRAW BALES SHALL BE PLACED AS A SEDIMENT CONTROL DEVICE WHERE REQUIRED.
- VEHICULAR TRAFFIC SHALL BE CONTROLLED DURING DEVELOPMENT CONFINING ACCESS WHERE POSSIBLE TO PROPOSED OR EXISTING ROAD ALIGNMENTS. AREAS TO BE LEFT UNDISTURBED SHALL BE MARKED OFF.
- DISTURBANCE OF VEGETATION SHALL BE LIMITED TO FILL AREAS, ROADWAYS AND DRAINAGE LINES. NO LOT GRADING SHALL BE CARRIED OUT IN UNDISTURBED AREAS WITHOUT CONSULTATION WITH COUNCIL'S ENGINEER.
- ALL DISTURBED AREAS SHALL BE REVEGETATED WITHIN 14 WORKING DAYS FROM THE CONCLUSION OF LAND SHAPING.
- MINIMISE DUST BY WATERING WHEN REQUIRED.

## STOCKPILE NOTES:

- SPOIL AND TOPSOIL STOCKPILES SHALL BE LOCATED AWAY FROM DRAINAGE LINES AND AREAS WHERE WATER MAY CONCENTRATE.
- IF STOCKPILES ARE TO BE IN PLACE FOR LONGER THAN 14 DAYS THEN THEY SHALL BE STABILIZED BY COVERING WITH A MULCH OR WITH TEMPORARY VEGETATION.
- FOLLOWING CONSTRUCTION, TOPSOIL SHALL BE RESPREAD TO A MINIMUM DEPTH OF 100MM ON THE BARE SOIL SURFACES

AND REVEGETATE.

- ALL STOCKPILES TO BE (MAX) 2M HIGH AND PROTECTED WITH SILT FENCE.

## SPECIAL NOTES:

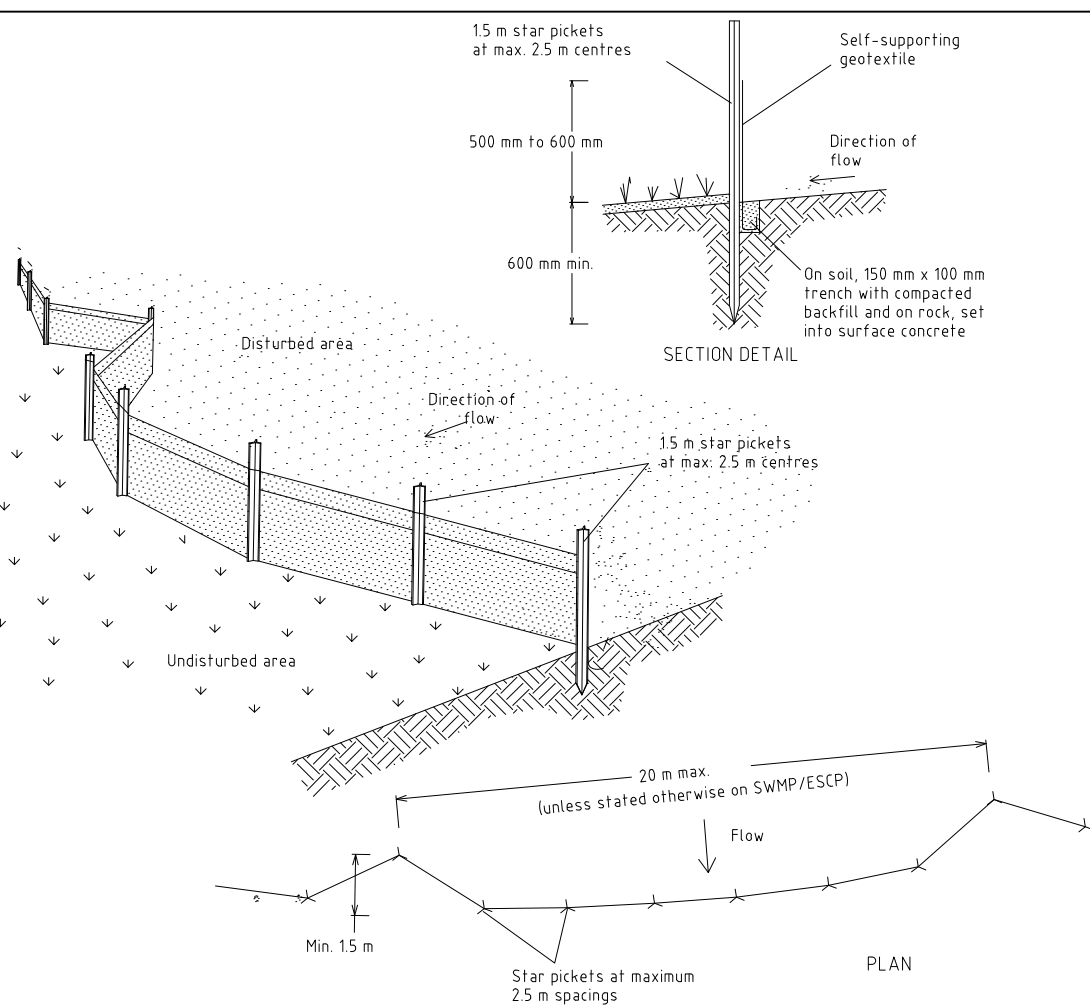
- LOCATION AND EXTENT OF SOIL AND WATER MANAGEMENT DEVICES IS DIAGRAMMATIC ONLY AND THE ACTUAL REQUIREMENTS SHALL BE CONFIRMED ON SITE.
- THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE GUIDELINES SET OUT IN "MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION " -4TH EDITION AND THE ACCOMPANYING ROAD AND DRAINAGE PLANS.
- CONFORMITY WITH THIS PLAN SHALL IN NO WAY REDUCE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT AGAINST WATER DAMAGE DURING THE COURSE OF THE CONTRACT.
- MANAGEMENT DEVICES SHALL BE MAINTAINED ON A REGULAR BASIS. WHERE CLEANING IS REQUIRED, THE SEDIMENT SHALL BE REMOVED TO A POINT NOMINATED BY THE ENGINEER.
- PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS, AND AFTER THE ROAD CENTERLINES HAVE BEEN PEGGED AND/OR PERMANENTLY MARKED, THE SITE MUST BE INSPECTED BY COUNCIL'S REPRESENTATIVE AND THE APPLICANT'S REPRESENTATIVE TO IDENTIFY AND APPROPRIATELY MARK:-  
A) THE TREES TO BE RETAINED. B) ALL TREES TO BE LEFT UNDISTURBED AND TO BE CORDONED OFF.
- NO TREES SHALL BE REMOVED WITHOUT COUNCIL'S CLEARANCE.
- MANAGEMENT DEVICES TO REMAIN UNTIL THE END OF THE MAINTENANCE PERIOD

## SEDIMENT CONTROL DEVICES:

- ALL STRAW BALES SHALL BE BOUND WITH WIRE. STRAW BALES SHALL BE PLACED END TO END IN A SINGLE ROW AND EMBEDDED INTO THE SOIL TO A DEPTH OF 100MM. EACH BALE SHALL BE SECURELY ANCHORED WITH TWO STEEL STAKES DRIVEN 450MM INTO THE GROUND AND LOCATED ON THE BALE CENTRE LINE.
- SILT FENCES SHALL BE CONSTRUCTED BY STRETCHING A FILTER FABRIC (PROPEX OR SIMILAR) BETWEEN POSTS AT 2M (3M MAX) CENTRES. FABRIC SHALL BE BURIED 150MM ALONG ITS LOWER EDGE.

## ADDITIONAL NOTES:

- MINIMUM 300mm WIDE STRIP OF TURF IS REQUIRED BEHIND KERB
- TURF AROUND ALL SURFACE INLET PITS AT 1m WIDE

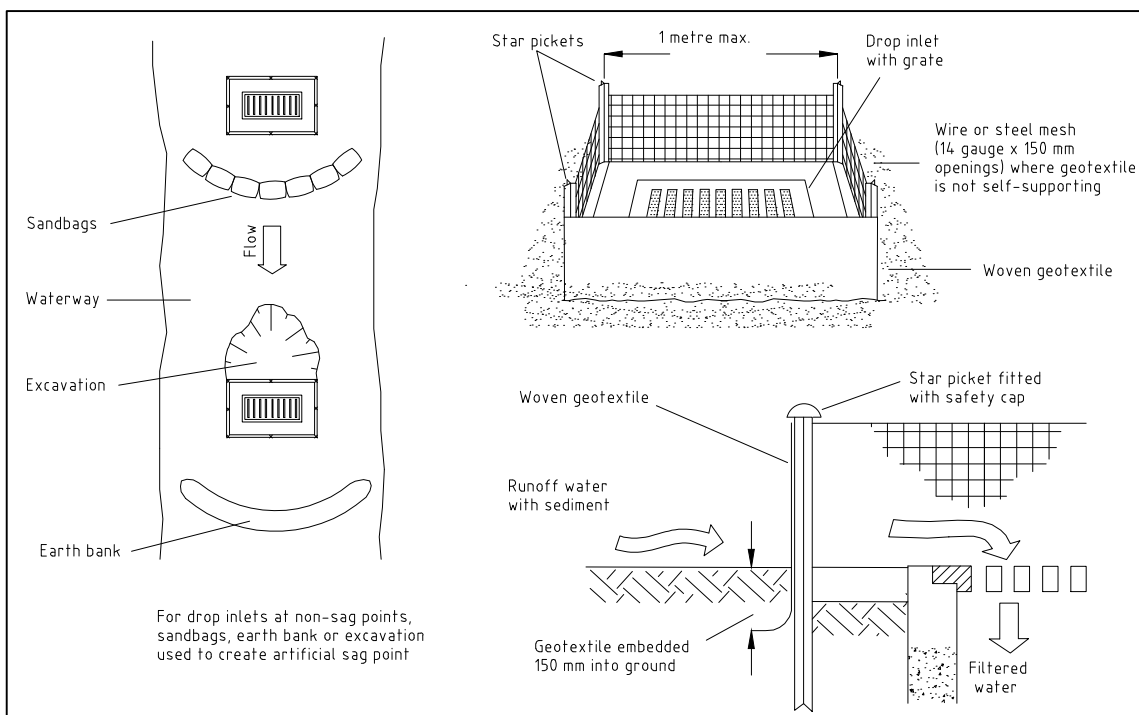


### Construction Notes

- 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.
- Cut a 150-mm deep trench along the upslope line of the fence for the bottom of the fabric to be entrenched.
- Drive 15 metre long star pickets into ground at 25 metre intervals (max) at the downslope edge of the trench. Ensure any star pickets are fitted with safety caps.
- 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.
- Join sections of fabric at a support post with a 150-mm overlap.
- Backfill the trench over the base of the fabric and compact it thoroughly over the geotextile.

SEDIMENT FENCE

SD 6-8

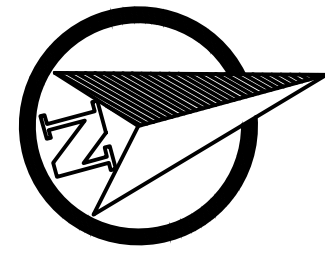


### Construction Notes

- Fabricate a sediment barrier made from geotextile or straw bales.
- Follow Standard Drawing 6-8 for installation procedures for geofabric. Reduce the picket spacing to 1 metre centres.
- In waterways, artificial sag points can be created with sandbags or earth banks as shown in the drawing.
- 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



## EROSION AND SEDIMENT CONTROL LEGEND

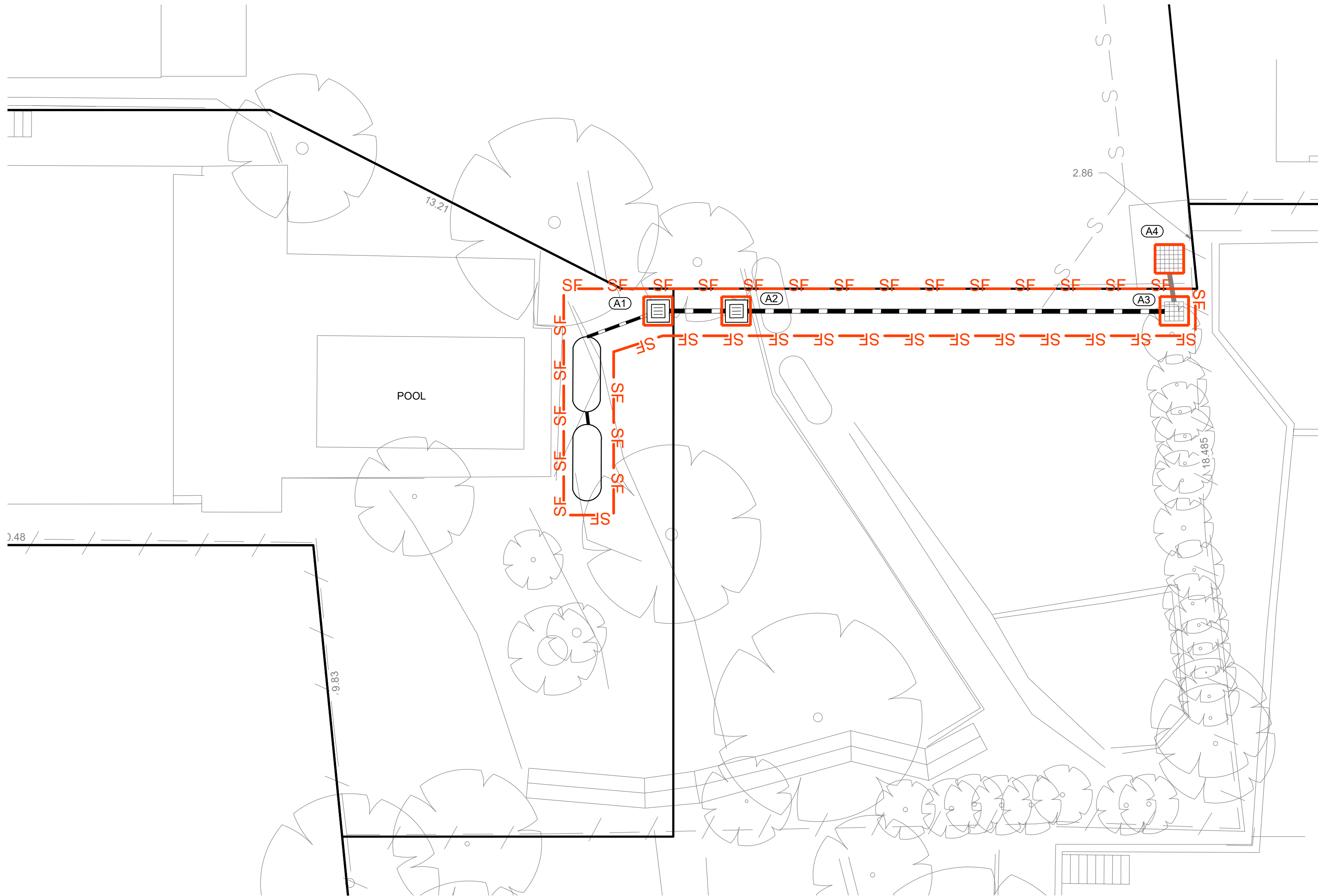
ACCORDING TO: LANDCOM SOILS AND CONSTRUCTION Vol 1, 4th EDITION, MARCH 2004

— SF — SF —

SEDIMENT FENCE TO SD 6-8



MESH AND GRAVEL INLET FILTER TO SD 6-11



## STORMWATER DRAINAGE STRUCTURES SCHEDULE

STRUCTURE TYPE	STRUCTURE DESCRIPTION	STRUCTURE NUMBER
SURFACE INLET PIT	600x600 CONCRETE PIT WITH LIGHT DUTY GRATE TO NORTHERN BEACHES CITY COUNCIL STANDARDS	(A1) (A2)
EXISTING SURFACE INLET PIT	EXISTING GSIP	(A3) (A4)



FOR DA APPROVAL

SCALE 1:100 @ A1  
SCALE 1:200 @ A3

Issue	Description	Date	Drawn	Approved
B	RE-ISSUE FOR DEVELOPMENT APPROVAL	30/03/20	AS	LW
A	FINAL DESIGN	17/01/20	AS	SN



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**Client:**  
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NEWPORT, NSW 2106

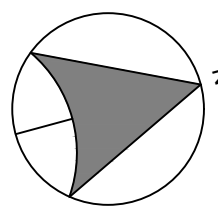
**Project:**  
PROPOSED SUBDIVISION  
LOT 92 IN DP 1052243 & LOT 1 IN DP 634714  
NEWPORT

**Designed:** AS **Scale:** AS SHOWN **A1**  
**Drawn:** AS **Datum:** A.H.D.  
**Checked:** LW **Date:** JANUARY 2020  
**L.G.A:** NORTHERN BEACHES

**Drawing Title:**  
SEDIMENT AND EROSION CONTROL PLAN & DETAILS

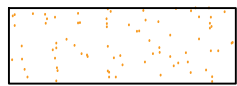
**Issue:** B  
**Drq. No:** DA102-03  
**Our Ref:** 5800 **4 / 4**



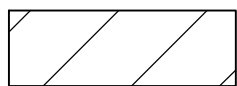


IMPORTANT NOTE  
THIS PLAN WAS PREPARED FOR A PROPOSED SUBDIVISION TO ACCOMPANY A SUBDIVISION APPLICATION TO COUNCIL AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE. THE DIMENSIONS, AREAS AND TOTAL NUMBER OF LOTS SHOWN HEREON ARE SUBJECT TO FIELD SURVEY AND ALSO TO THE REQUIREMENTS UNDER ANY RELEVANT LEGISLATION. IN PARTICULAR, NO RELIANCE SHOULD BE PLACED ON THE INFORMATION ON THIS PLAN FOR ANY FINANCIAL DEALINGS INVOLVING THE LAND. ANY UTILITY INFORMATION SHOWN HEREON SHOULD NOT BE RELIED UPON FOR ANY PURPOSE. A FULL DIAL BEFORE YOU DIG SEARCH MUST BE MADE BY CONTACTING DBYD ON PH.1100 OR WWW.1100.COM.AU.  
THIS NOTE IS AN INTEGRAL PART OF THIS PLAN.

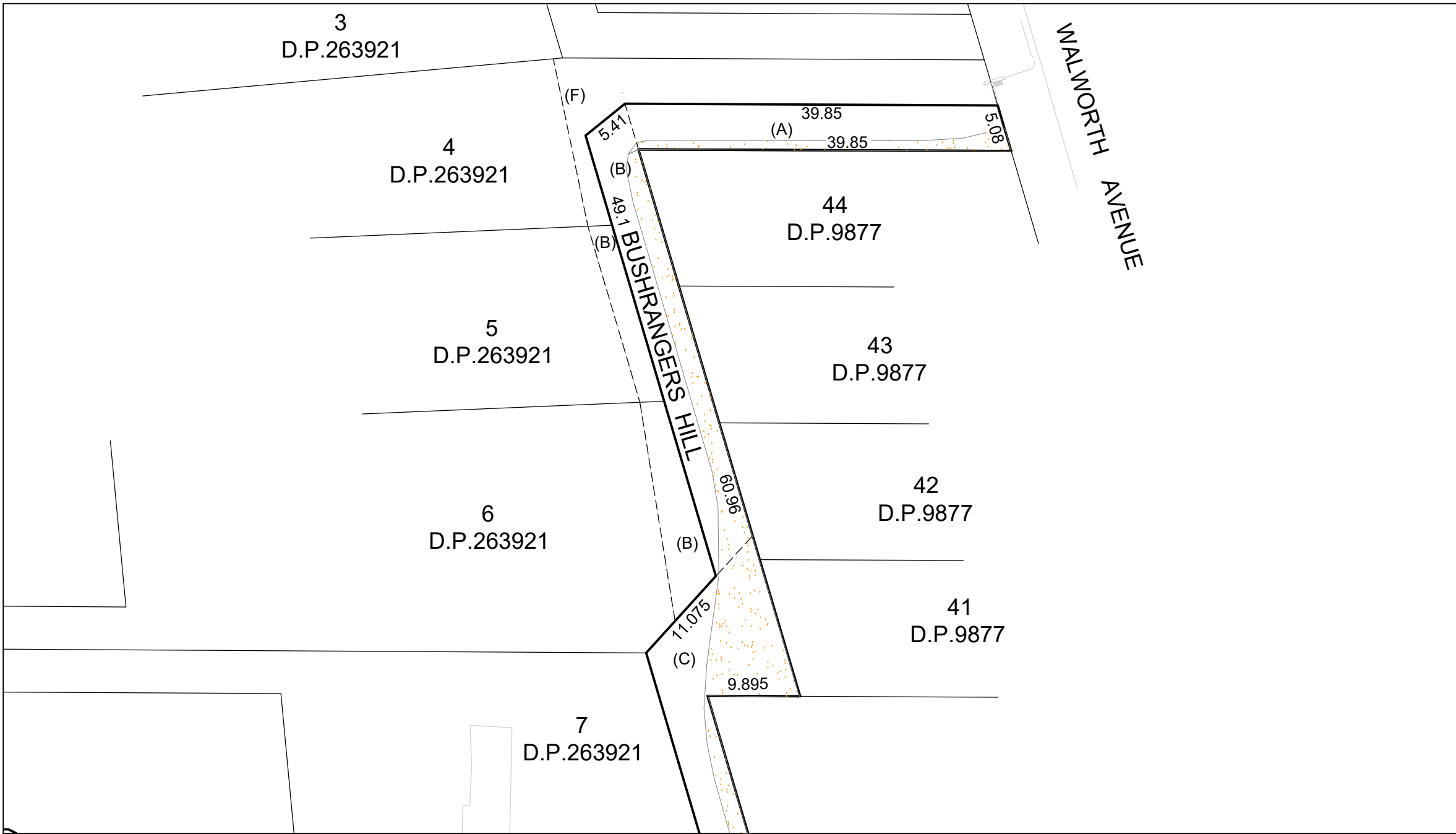
- (A) RIGHT OF CARRIAGEWAY & EASEMENT TO DRAIN WATER 4.865 WIDE (D.P.263921)  
(B) RIGHT OF CARRIAGEWAY, EASEMENT TO DRAIN WATER & EASEMENT FOR SERVICES 5 WIDE (D.P.263921)  
(C) EASEMENT OF CARRIAGEWAY, EASEMENT TO DRAIN WATER & EASEMENT FOR SERVICE 5 WIDE AND VARIABLE WIDTH (D.P.263921)  
(D) EASEMENT TO DRAIN WATER 0.9 WIDE (D.P.263921)  
(E) EASEMENT TO DRAIN WATER 2 WIDE (D.P.105243)  
(F) RIGHT OF CARRIAGEWAY & EASEMENT TO DRAIN WATER AND EASEMENT FOR SERVICES VARIABLE WIDTH (D.P.263921)



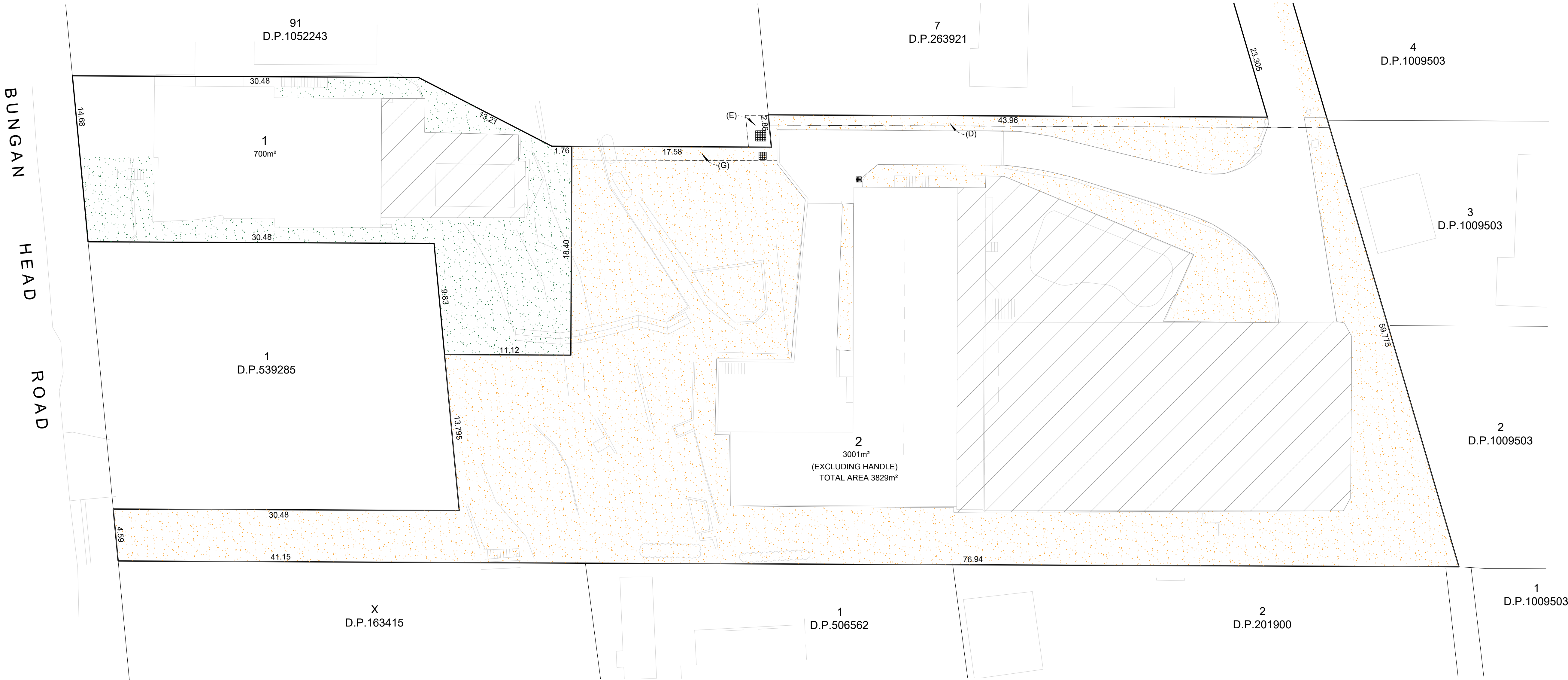
DENOTES LANDSCAPE AREA



DENOTES PRIVATE OPEN SPACE AREA

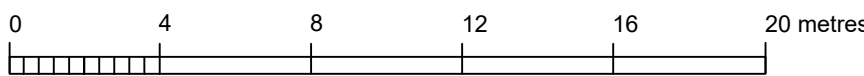


SCALE 1:500



B	GENERAL AMENDMENTS	LW	7.05.20
A	FIRST ISSUE	SN	18.12.19
No.	AMENDMENT DESCRIPTION	BY	DATE

Scale 1:200 (A1)



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www.mepstead.com.au

Designed: SN	Scale: 1:200
Drawn: SN	Datum: N/A
Checked: SW	Date: DEC 2019
L.G.A.: NORTHERN BEACHES	A1

Principal:	ROYLE
Project:	PLAN OF PROPOSED SUBDIVISION OVER LOT 1 IN D.P.634714 & LOT92 IN D.P.1052243 KNOWN AS No 7 BUSHRANGERS HILL & 24 BUNGAN HEAD RD, NEWPORT

Drg. Name	5800 SUB1_B
Sheet No. 1	of 1 sheets
Our Ref:	5800