



# JAMES BELL

## PROPOSED DEVELOPMENT AT


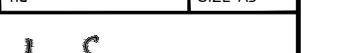
40 PINE STREET,  
MANLY, NSW

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## LAND AND ENVIRONMENT COURT ISSUE

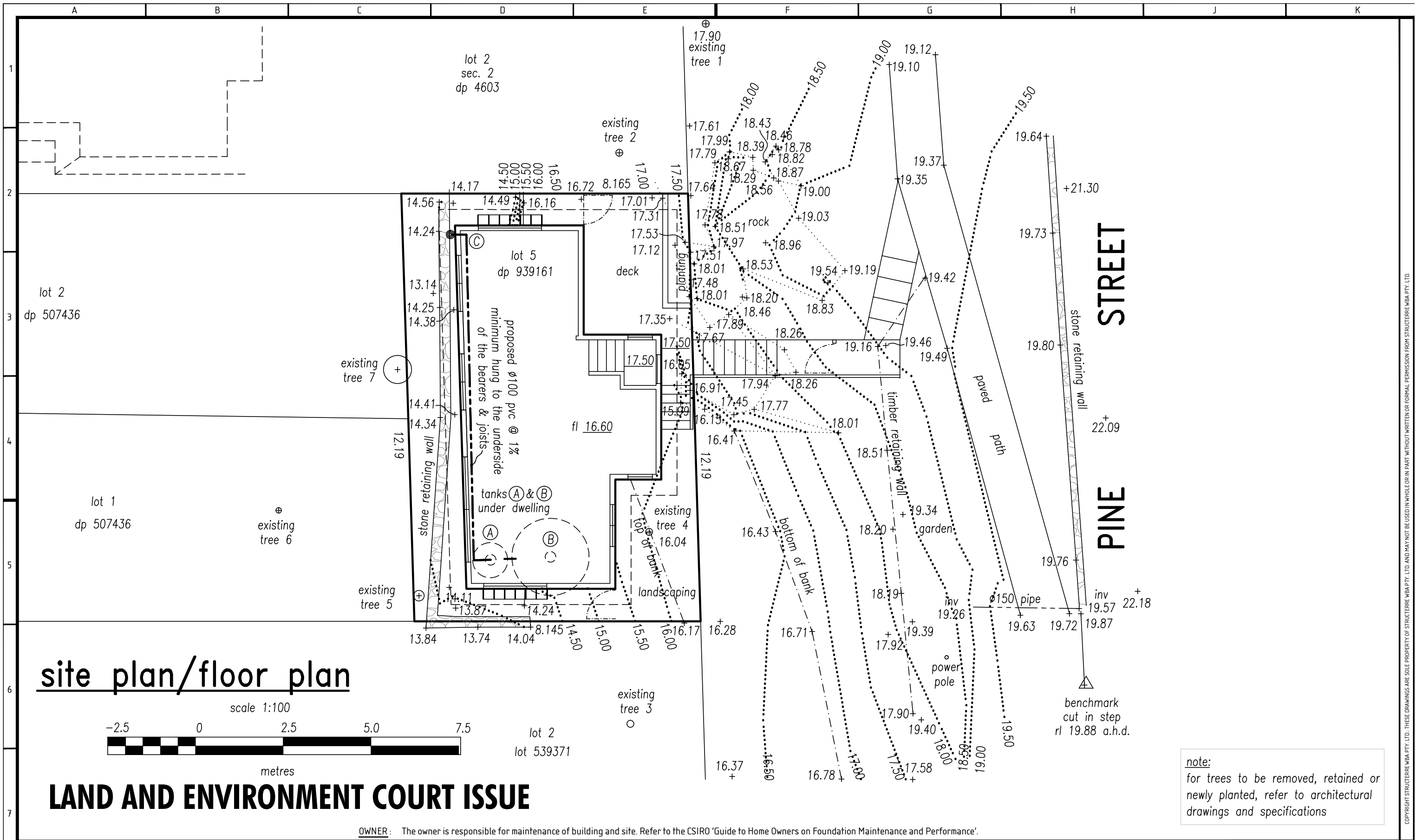
OWNER : The owner is responsible for maintenance of building and site. Refer to the CSIRO 'Guide to Home Owners on Foundation Maintenance and Performance'.

REV	BY	DATE	ISSUE / REVISION DESCRIPTION	CHK	APP	TITLE	NAME	DATE	PROJECT	STRUCterre consulting			CLIENT REFERENCE: No.
O	TM	22/06/2021	ISSUED FOR DA	TM	GP	DRAFTER	K. DANG	NOV 2022	PROPOSED DEVELOPMENT AT 40 PINE STREET, MANLY, NSW <b>STORMWATER DRAINAGE, RAINWATER REUSE &amp; ON SITE DETENTION COVER SHEET &amp; DRAWING LIST</b>		Structerre Consulting Engineers (NSW) Pty Ltd (ACN 131 748 260) SUITE 1, LEVEL 2, 42 BIRNIE AVENUE, LIDCOMBE NSW 2141 TEL (02) 9475 3000 FAX (02) 9646 2311 EMAIL: sydney@structerre.com.au	I	
A	TM	02/07/2021	MINOR AMENDMENTS	TM	GP	DESIGNER	L. SAVAGE	NOV 2022					
B	TM	20/07/2021	MINOR AMENDMENTS	TM	GP	ENG. CHECK	G. PURICH	NOV 2022					
C	TM	07/06/2022	DISCHARGE TO EXISTING PIPE	TM	GP	SCALE	na	SIZE A3					
D	TM	21/06/2022	LEVEL SPREADER LENGTH INCREASED	TM	GP	APPROVED BY:							
E	LS	NOV 2022	LAND AND ENVIRONMENT COURT ISSUE	LS	GP	per 							
						GERVASE PURICH FIEAust CPEng NER BPB RBP RPEQ			CLIENT	JAMES BELL	STRUTERRE JOB No. 3.21.3215.7	DRAWING REF. No. 3.21.3215.7-C-000	REV E

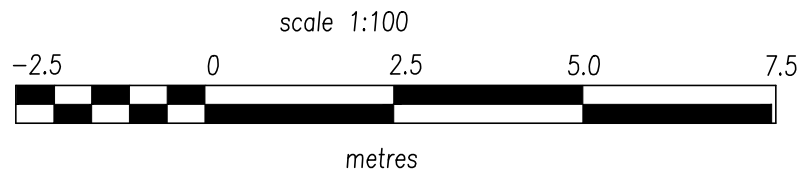


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site plan/floor plan



LAND AND ENVIRONMENT COURT ISSUE

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note:  
for trees to be removed, retained or newly planted, refer to architectural drawings and specifications

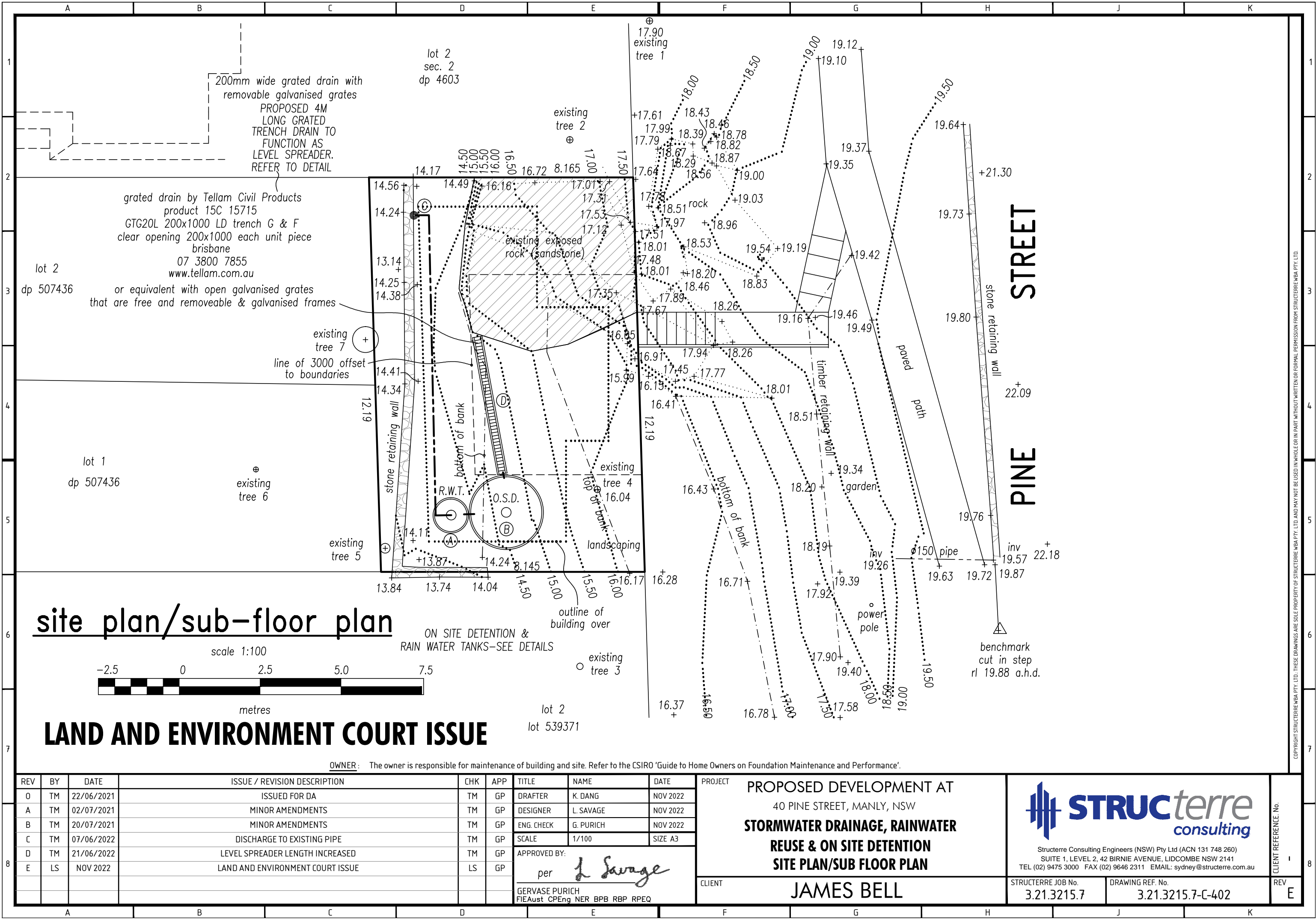
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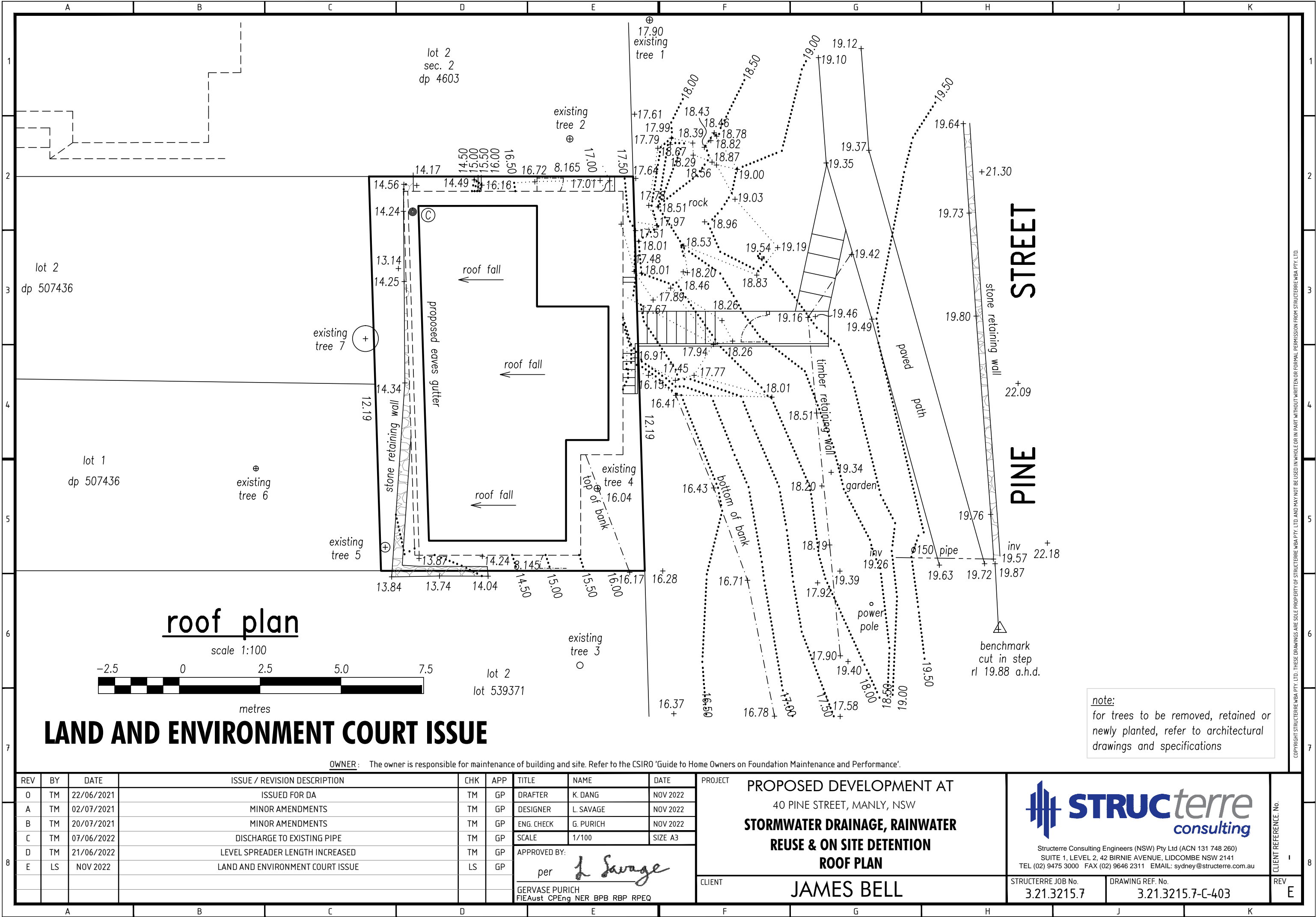


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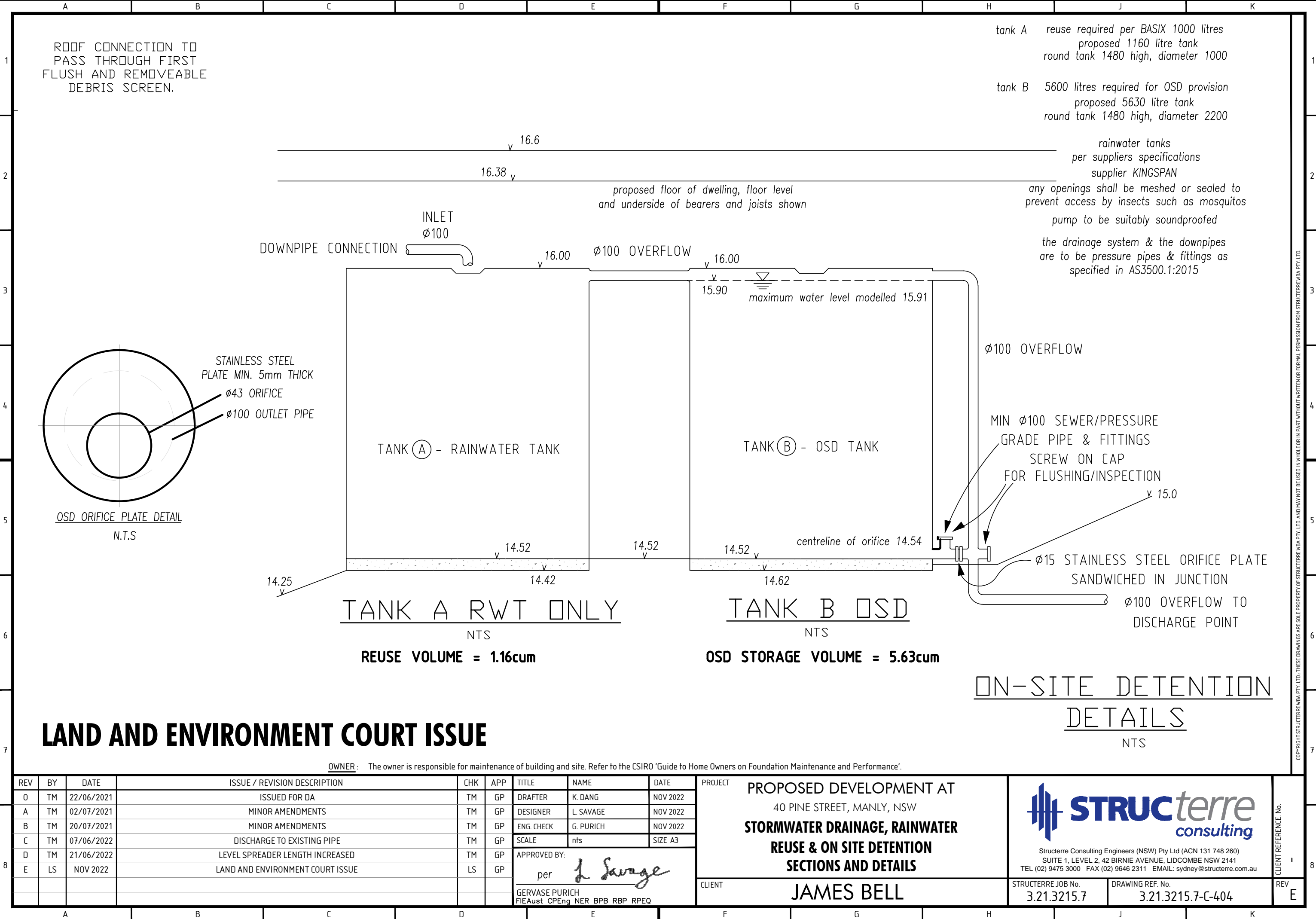
CLIENT REFERENCE: No.

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general notes:

1. all work shall be carried out in accordance with northern beaches council's stormwater, detention & sediment code
2. the contractor shall locate and level all existing services prior to the commencement of construction and make arrangements with the relevant authority to relocate or adjust if necessary.
3. the contractor shall not enter upon nor do any work within adjoining lands without the permission of the superintendent.
4. all new works shall make smooth connection to existing conditions.
5. all imported fill shall be approved by the council. the fill shall be placed in not more than 300mm layers and shall be compacted to at least 98% standard compaction to council's specification.
6. provide vehicular crossing to council's specification in kerb where shown (if applicable).
7. the contractor shall maintain services and all weather access at all times to adjoining properties.
8. all imported fill to be used to support ground slabs shall be compacted to a minimum level of compaction of 98% of maximum dry density at a moisture content within +- 2% of optimum (as1289.5.1.1)
9. step irons at 300mm centres & to council's specifications shall be provided where pits are deeper than 1000mm
10. all downpipes are shown diagrammatically position of downpipes shall be confirmed on site
11. existing levels and service depth and location to be checked prior to construction.
12. these drawings are to be read in conjunction with other consultants documentation which include but is not limited to architectural and survey drawings

stormwater drainage notes:

the stormwater drainage design has been carried out in accordance with as/nzs 3500.3:2018 "stormwater drainage" & as/nzs 3500.3.2:1998 "stormwater drainage-acceptable solutions".

any variations to the nominated levels shall be referred to engineer immediately.

any variations to specified products or details shall be referred to the engineer for approval.

box colorbond or zincalume steel gutters shall be a minimum of 450 wide x 150 deep

eaves gutters shall be a minimum of 125 wide x 100 deep (or of equivalent area) colorbond or zincalume steel uno.

minimum effective eaves gutter slope = 1:200.

all drainage lines shall be sewer grade upvc pipes uno.

all drainage lines shall be laid @ 1% fall min, uno.

first flush rainwater devices to be fitted to drainage lines to builder's detail.



EXTREME CARE SHALL BE TAKEN WHEN DOING WORK NEAR EXISTING PIT/STRUCTURES AND UNDERGROUND CABLES.

LOCATION & DEPTH OF ALL UNDERGROUND CABLES & SERVICES TO BE CONFIRMED PRIOR TO CONSTRUCTION. CONTACT 'DIAL BEFORE YOU DIG' ON 1100



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NOTES

1.

all work to be done to the satisfaction of Northern Beaches (Manly) Council.
2.

legend:

tw

top of wall

tk

top of kerb

⊙

down pipe

fw

floor waste

gfl

garage floor level

fl

floor level

56.89

existing level

53.81

design level

gip

grated inlet pit

bfl

basement floor level

jp

junction pit

ie

upvc sewer grade inspection eye

dps

– downpipe with spreader

D.E.B

– dropped edge beam

rgd

– round grated drain

eof

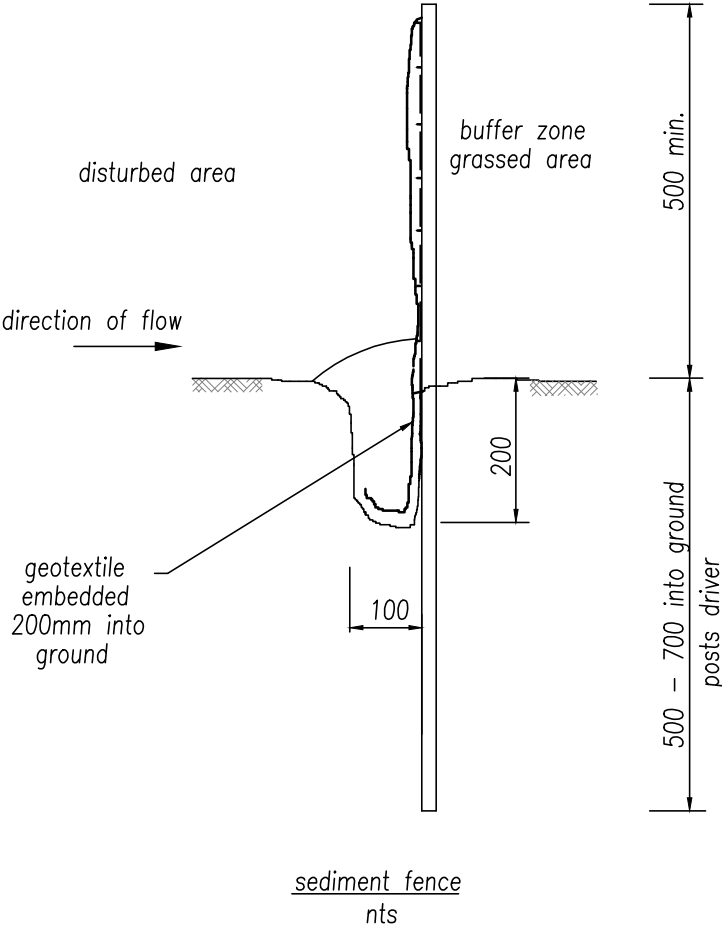
– emergency over flow

ie

– inspection eye
3.

all pipes to be min. 100mm dia unless noted otherwise (uno).
4.

all pipes to be grade upvc at min 1% uno.



sediment & erosion control

1.

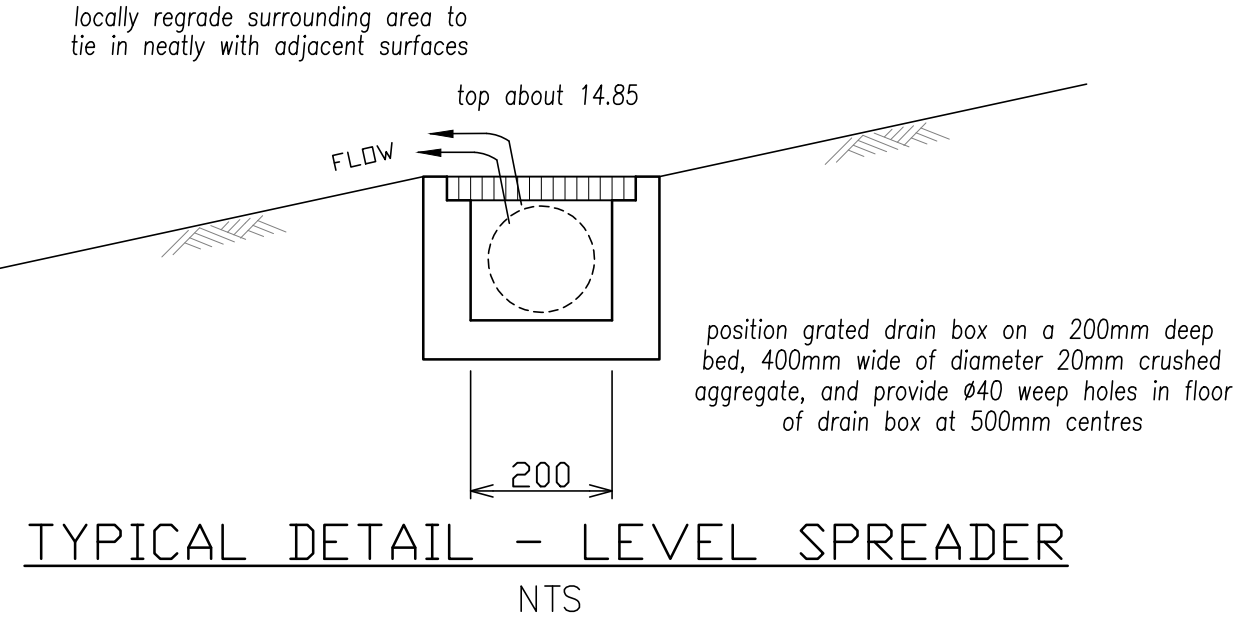
the contractor shall implement erosion and sediment control measures to the council's specification prior to the commencement of construction and during construction.
2.

all erosion and sediment control devices shall be maintained in a satisfactory working order during the construction period. inspections of these devices shall be carried out after each storm. repairs and/or de-clogging shall be shall be carried out to ensure proper operation of the device.

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OSD – HYDROLOGY CALCULATIONS

TOTAL SITE AREA = 99m<sup>2</sup>

PRE DEVELOPMENT:

IMPERVIOUS AREA

EXISTING ROOF = 0m<sup>2</sup>  
EXISTING PAVEMENT = 28m<sup>2</sup>  
(EXPOSED ROCK & RETAINING WALLS)  
TOTAL IMPERVIOUS AREA = 28m<sup>2</sup>  
FRACTION IMPERVIOUS = 28%

POST – DEVELOPMENT

IMPERVIOUS AREA

PROPOSED ROOF = 70m<sup>2</sup>  
exposed rock & wall=6m<sup>2</sup>

TOTAL IMP. AREA = 76m<sup>2</sup>  
FRACTION IMP. = 76%

soft AREA = 23m<sup>2</sup>  
TOTAL AREA = 99m<sup>2</sup>

IN OSD :

= 70m<sup>2</sup>  
= 6m<sup>2</sup>  
= 70m<sup>2</sup> (94%)  
= 0m<sup>2</sup> (0%)  
= 70m<sup>2</sup>

BYPASS:

= 0m<sup>2</sup>  
= 6m<sup>2</sup>  
= 6m<sup>2</sup> (6%)  
= 23m<sup>2</sup> (100%)  
= 29m<sup>2</sup>



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REUSE & ON SITE DETENTION  
NOTES AND DETAILS

JAMES BELL

STRUCTERRE JOB No.  
3.21.3215.7

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3.21.3215.7-C-406

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