



URBAN TREE CANOPY TARGETS & DEVELOPMENT  
CONTROLS REPORT  
**APPENDIX B:**  
**PRIVATE LAND TESTING**

Prepared for  
NSW DEPARTMENT OF PLANNING, INDUSTRY AND ENVIRONMENT

by

**GALLAGHERSTUDIO**

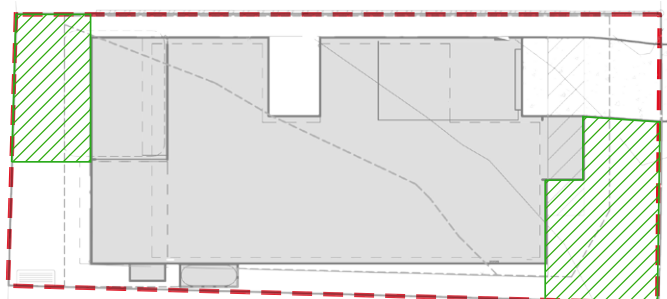
& **STUDIO  
ZANARDO**

4th November 2021

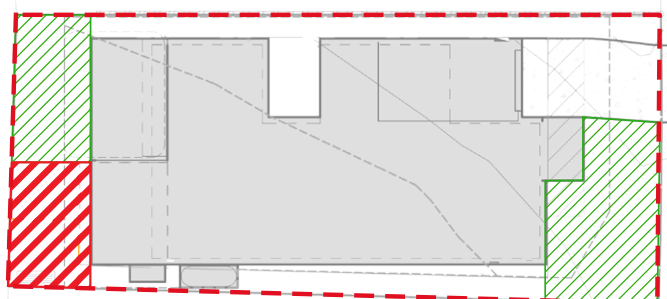
# DETACHED DWELLINGS

# PRIVATE LAND TESTING

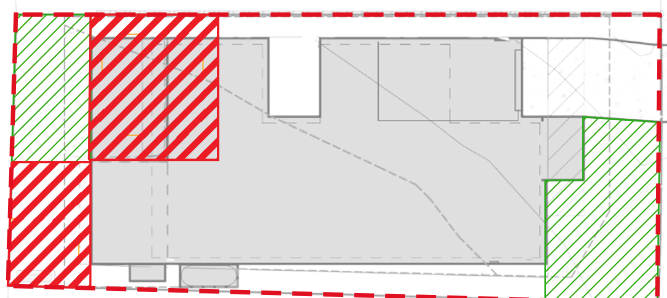
## DETACHED DWELLINGS



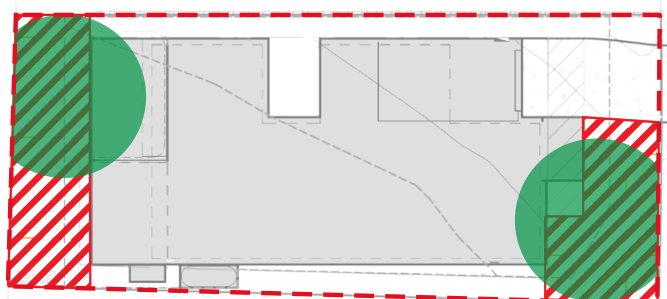
Existing: Analysis of deep soil and tree canopy



Option 1: Expanded deep soil - minor modification



Option 2: Expanded deep soil - modifications



Recommended deep soil and canopy

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:300@A4

### DENHAM COURT

Campbelltown City Council

Lot area: 0.0287 ha / 287 m<sup>2</sup>

Building footprint: 60%

Existing deep soil: 16%

Existing tree canopy in deep soil: 0%

#### OPTION 1:

Deep soil: 22% site area

- Remove south facing eave and paved area.

#### OPTION 2:

Deep soil: 32% site area

- Remove south facing eave and paved area.
- Remove internal courtyard and reconfigure ground floor.
- Permeable surface to alfresco dining.
- Remove roof above alfresco dining.

#### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil: 20% site area

Canopy: 20% site area

# PRIVATE LAND TESTING

## DETACHED DWELLINGS



Existing: Analysis of deep soil and tree canopy



Option 1: Expanded deep soil - minor modification



Option 2: Expanded deep soil - modifications



Recommended deep soil and canopy

- Property boundary
- Existing deep soil
- Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:300 @ A4

### NIRIMBA FIELD

Blacktown City Council

<b>Lot area:</b>	0.03 ha / 300 m <sup>2</sup>
<b>Building footprint:</b>	64%
<b>Existing deep soil:</b>	20%
<b>Existing tree canopy in deep soil:</b>	0%

### OPTION 1:

<b>Deep soil:</b>	26% site area
<ul style="list-style-type: none"> <li>• Permeable surface to alfresco dining.</li> <li>• Remove roof above alfresco dining.</li> <li>• Driveway narrow to 3m.</li> </ul>	

### OPTION 2:

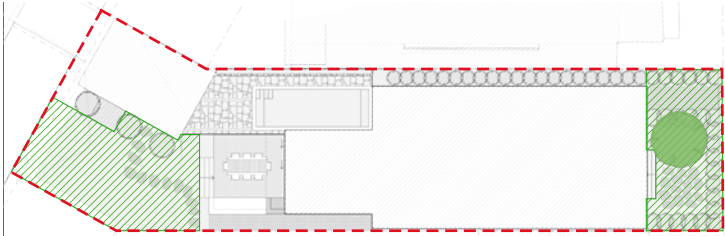
<b>Deep soil:</b>	30% site area
<ul style="list-style-type: none"> <li>• Permeable surface to alfresco dining.</li> <li>• Remove roof above alfresco dining.</li> <li>• Driveway narrow to 3m.</li> <li>• Family room reduced by 1.5m width.</li> </ul>	

### RECOMMENDED DEEP SOIL AND CANOPY:

<b>Deep soil:</b>	25% site area
<b>Canopy:</b>	25% site area

# PRIVATE LAND TESTING

## DETACHED DWELLINGS

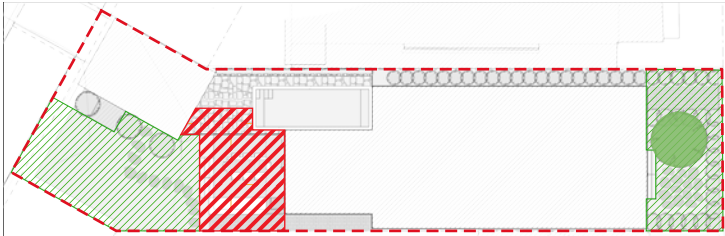


Existing: Analysis of deep soil and tree canopy

**DOUBLE BAY**

Woollahra Municipal Council

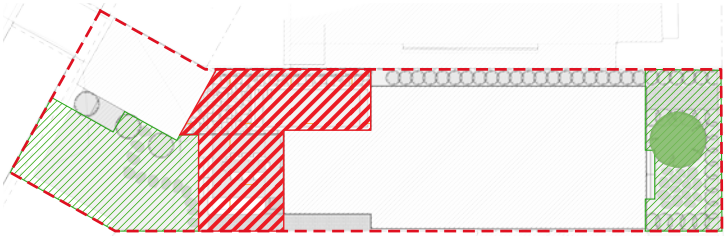
<b>Lot area:</b>	0.0315 ha / 315 m <sup>2</sup>
<b>Building footprint:</b>	55% pool: 9%
<b>Existing deep soil:</b>	25%
<b>Existing tree canopy in deep soil:</b>	0%



Option 1: Expanded deep soil - minor modification

**OPTION 1:**

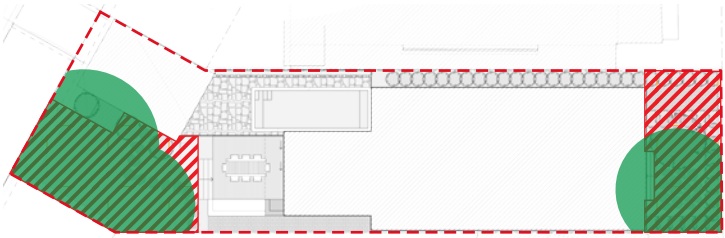
<b>Deep soil:</b>	34% site area
•	Permeable surface to alfresco dining + paving area.



Option 2: Expanded deep soil - modifications

**OPTION 2:**

<b>Deep soil:</b>	42% site area
•	Permeable surface to alfresco dining + paving area.
•	Remove pool and replace with permeable surface.

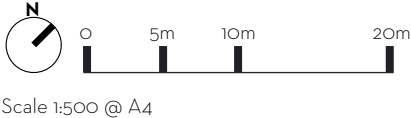


Recommended deep soil and canopy

**RECOMMENDED DEEP SOIL AND CANOPY:**

<b>Deep soil:</b>	25% site area
<b>Canopy:</b>	25% site area

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



# PRIVATE LAND TESTING

## DETACHED DWELLINGS



Existing: Analysis of deep soil and tree canopy



Option 1: Expanded deep soil - minor modification



Option 2: Expanded deep soil - modifications



Recommended deep soil and canopy

- Property boundary
- Existing deep soil
- Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:500 @ A4

### KINGSCLIFF

Tweed Shire Council

Lot area: 0.0394 ha / 394 m<sup>2</sup>

Building footprint: 70%

Existing deep soil: 12%

Existing tree canopy in deep soil: 0%

### OPTION 1:

Deep soil: 29% site area

- Relocate water tank.
- Reconfigure rear terrace.
- Narrow driveway to 3m.
- Replace verandah adjacent to garage with path + deep soil.

### OPTION 2:

Deep soil: 31% site area

- Relocate water tank.
- Reconfigure rear terrace.
- Narrow driveway to 3m.
- Replace verandah adjacent to Garage with path + deep soil.
- Reduce triple garage to double garage.

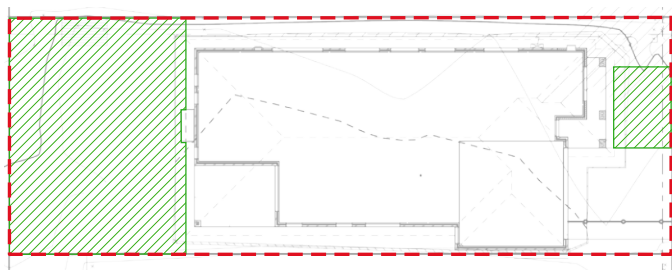
### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil: 25% site area

Canopy: 25% site area

# PRIVATE LAND TESTING

## DETACHED DWELLINGS



Existing: Analysis of deep soil and tree canopy

### COORANBONG

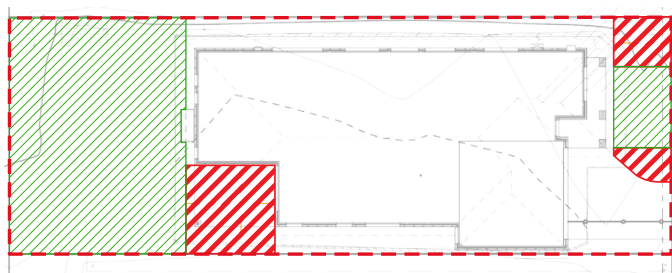
Lake Macquarie

Lot area: 0.0437 ha / 437 m<sup>2</sup>

Building footprint: 58%

Existing deep soil: 30%

Existing tree canopy in deep soil: 0%

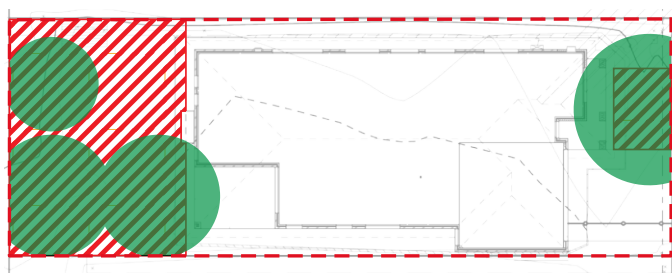


Option 1: Expanded deep soil - minor modification

### OPTION 1:

Deep soil: 37% site area

- Permeable surface to alfresco dining.
- Remove roof above alfresco dining.
- Driveway narrowed to 3m.
- Relocate septic tank to rear.



Recommended deep soil and canopy

### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil: 30% site area

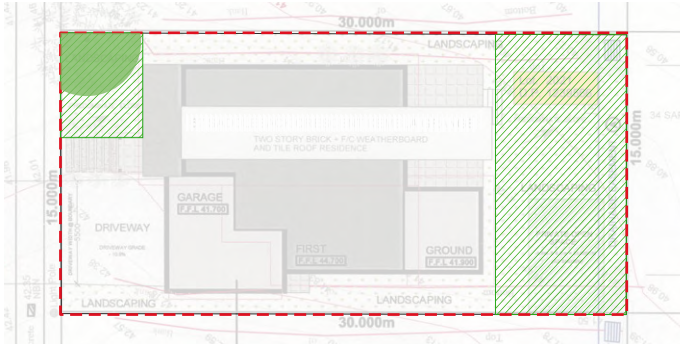
Canopy: 25% site area

- Property boundary
- Existing deep soil
- Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:500 @ A4

# PRIVATE LAND TESTING DETACHED DWELLINGS

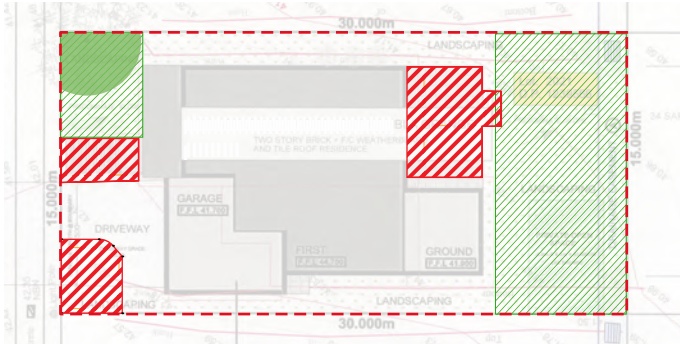


Existing: Analysis of deep soil and tree canopy

**KEMBLA GRANGE**

Wollongong City Council

<b>Lot area:</b>	0.045 ha / 450 m <sup>2</sup>
<b>Building footprint:</b>	57%
<b>Existing deep soil:</b>	29%
<b>Existing tree canopy in deep soil:</b>	3%



Option 1: Expanded deep soil - minor modification

**OPTION 1:**

<b>Deep soil:</b>	39% site area
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- Entry path narrowed to 1.2m.
- Driveway narrowed to 3m.
- Permeable surface to covered area.



Recommended deep soil and canopy

**RECOMMENDED DEEP SOIL AND CANOPY:**

<b>Deep soil:</b>	25% site area
<b>Canopy:</b>	25% site area

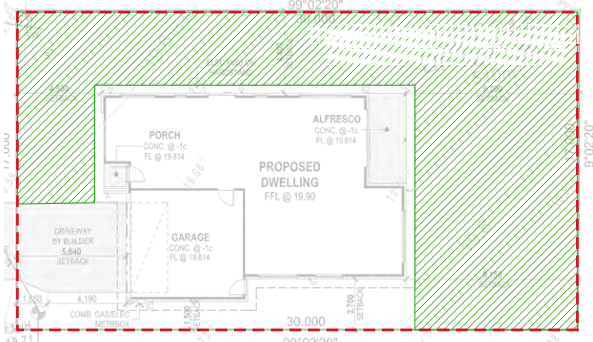
- Property boundary
- ▨ Existing deep soil
- ▨ Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:400 @ A4



# PRIVATE LAND TESTING DETACHED DWELLINGS

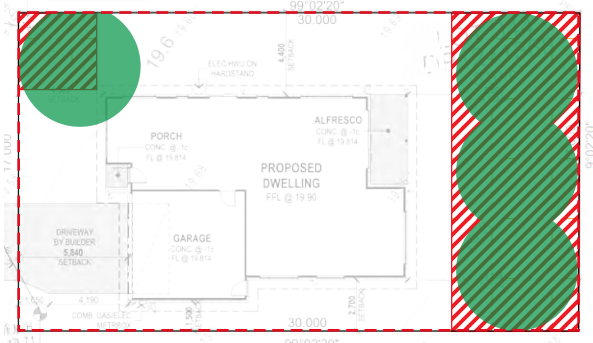


Existing: Analysis of deep soil and tree canopy

**THRUMSTER**

Port Macquarie - Hastings Council

Lot area:	.051 ha / 510 m <sup>2</sup>
Building footprint:	42%
Existing deep soil:	51%
Existing tree canopy in deep soil:	0%



Recommended deep soil and canopy

**RECOMMENDED DEEP SOIL AND CANOPY:**

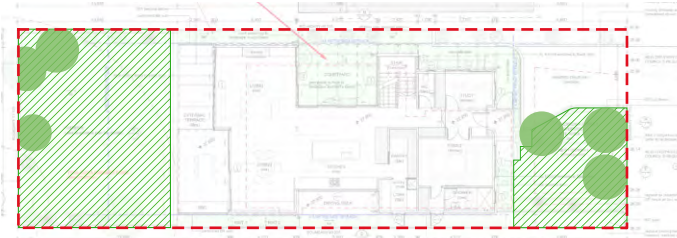
Deep soil:	25% site area
Canopy:	25% site area

- Property boundary
- ▨ Existing deep soil
- ▨ Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



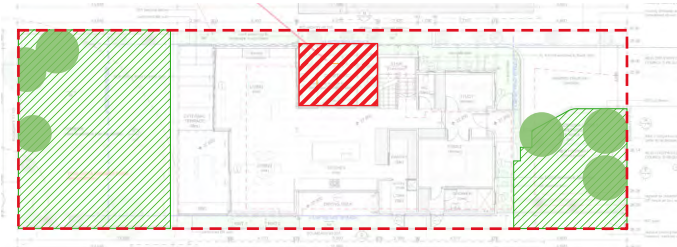
Scale 1:400 @ A4

PRIVATE LAND TESTING  
APPENDIX 1A: DETACHED DWELLINGS



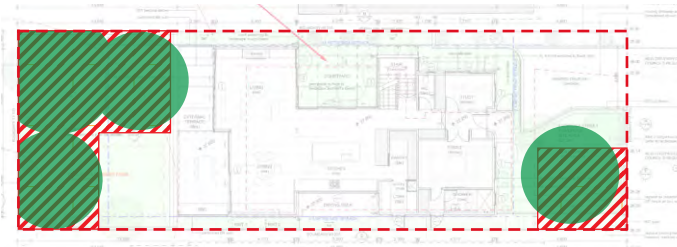
Existing: Analysis of deep soil and tree canopy

**CRONULLA**  
Sutherland Shire Council  
Lot area: 0.0527 ha / 527 m<sup>2</sup>  
Building footprint: 45%  
Existing deep soil: 35%  
Existing tree canopy in deep soil: 7%



Option 1: Expanded deep soil - minor modification

**OPTION 1:**  
Deep soil: 39% site area  
• Remove pergola over alfresco.



Recommended deep soil and canopy

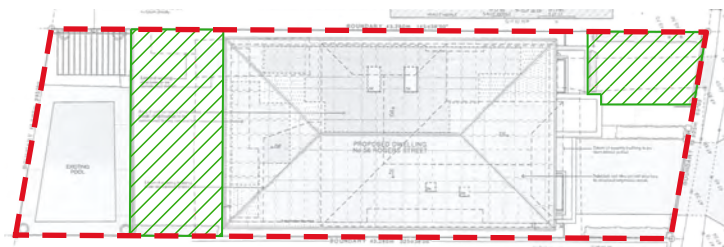
**RECOMMENDED DEEP SOIL AND CANOPY:**  
Deep soil: 25% site area  
Canopy: 25% site area

- Property boundary
- ▨ Existing deep soil
- ▨ Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil

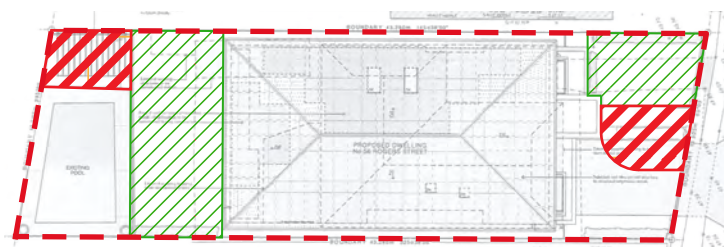


# PRIVATE LAND TESTING

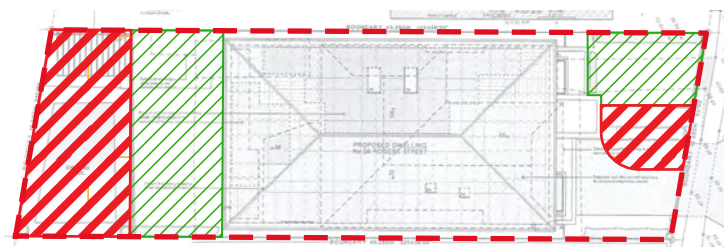
## DETACHED DWELLINGS



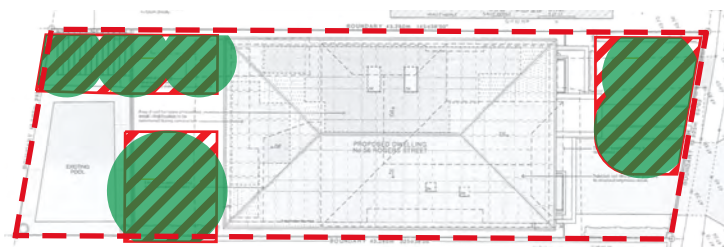
Existing: Analysis of deep soil and tree canopy



Option 1: Expanded deep soil - minor modification



Option 2: Expanded deep soil - modifications



Recommended deep soil and canopy

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:500 @ A4

### ROSELANDS

City of Canterbury Bankstown

<b>Lot area:</b>	0.0594 ha / 594 m <sup>2</sup>
<b>Building footprint:</b>	56%
<b>Pool footprint:</b>	11%
<b>Existing deep soil:</b>	20%
<b>Existing tree canopy in deep soil:</b>	0%

### OPTION 1:

<b>Deep soil:</b>	27% site area
•	Remove pergola.
•	Permeable surface to paved area.
•	Narrow entry path to 1.2m.
•	Driveway narrowed to 3m.

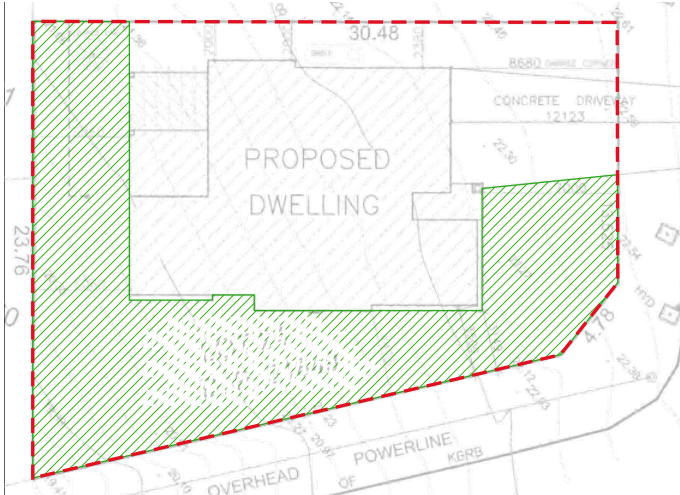
### OPTION 2:

<b>Deep soil:</b>	39% site area
•	Remove pergola.
•	Permeable surface to paved area.
•	Narrow entry path to 1.2m.
•	Driveway narrowed to 3m.
•	Remove pool.

### RECOMMENDED DEEP SOIL AND CANOPY:

<b>Deep soil:</b>	25% site area
<b>Canopy:</b>	25% site area

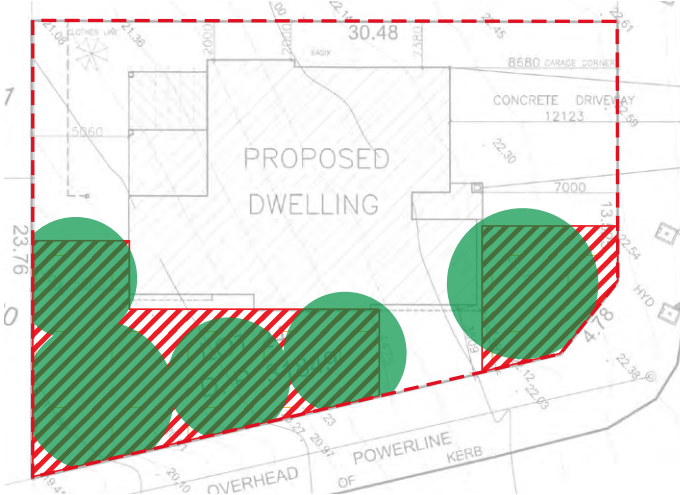
PRIVATE LAND TESTING  
DETACHED DWELLINGS



Existing: Analysis of deep soil and tree canopy

**FORSTER**  
Mid Coast Council

<b>Lot area:</b>	0.0616 ha / 616 m <sup>2</sup>
<b>Building footprint:</b>	45%
<b>Existing deep soil:</b>	47%
<b>Existing tree canopy in deep soil:</b>	0%




Recommended deep soil and canopy

**RECOMMENDED DEEP SOIL AND CANOPY:**

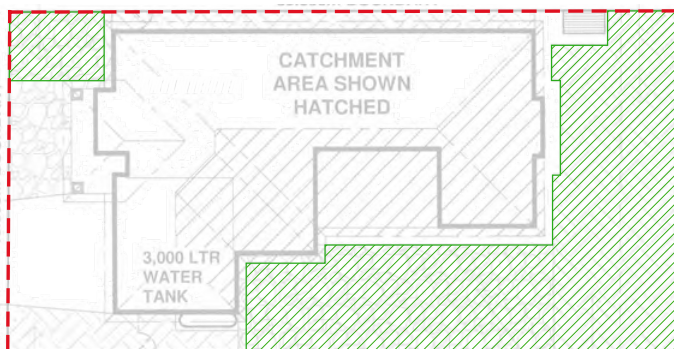
<b>Deep soil:</b>	30% site area
<b>Canopy:</b>	30% site area

- Property boundary
- ▨ Existing deep soil
- ▨ Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil


  
 Scale 1:400 @ A4

# PRIVATE LAND TESTING

## DETACHED DWELLINGS



Existing: Analysis of deep soil and tree canopy

### THURGOONA

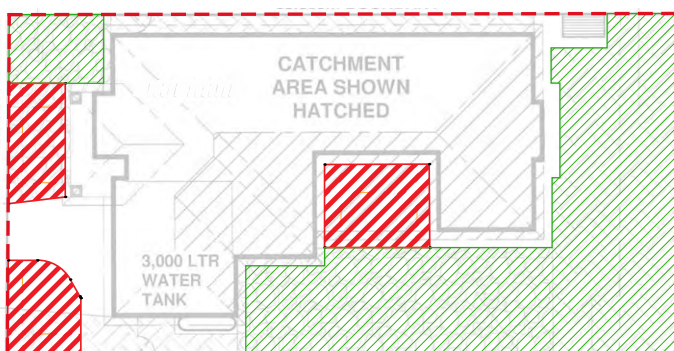
Albury City Council

Lot area: 0.0636 ha / 636 m<sup>2</sup>

Building footprint: 55%

Existing deep soil: 34%

Existing tree canopy in deep soil: 0%

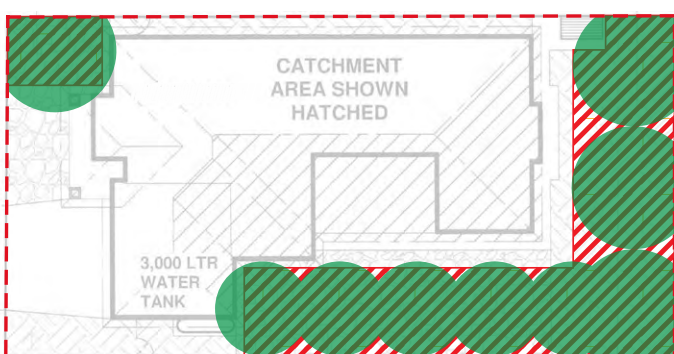


Option 1: Expanded deep soil - minor modification

### OPTION 1:

Deep soil: 44% site area

- Driveway to 3m.
- Remove roof over alfresco area.



Recommended deep soil and canopy

### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil: 30% site area

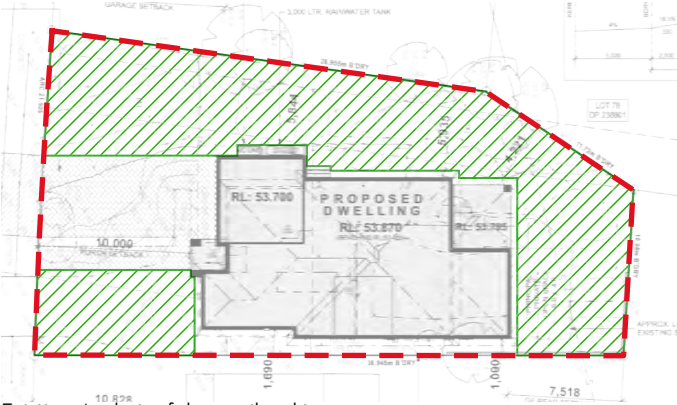
Canopy: 30% site area

- - Property boundary
- Existing deep soil
- Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:400 @ A4

# PRIVATE LAND TESTING DETACHED DWELLINGS



Existing: Analysis of deep soil and tree canopy

### BAULKHAM HILLS

The Hills Shire Council

Lot area:	0.0702 ha / 702 m <sup>2</sup>
Building footprint:	47%
Existing deep soil:	51%
Existing tree canopy in deep soil:	0%



Recommended deep soil and canopy

### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil:	30% site area
Canopy:	30% site area

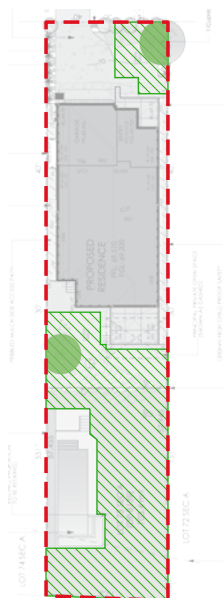
- - - Property boundary
- ▨ Existing deep soil
- ▨ Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:500 @ A4

# PRIVATE LAND TESTING

## DETACHED DWELLINGS



Existing: Analysis of deep soil and tree canopy

### DEE WHY

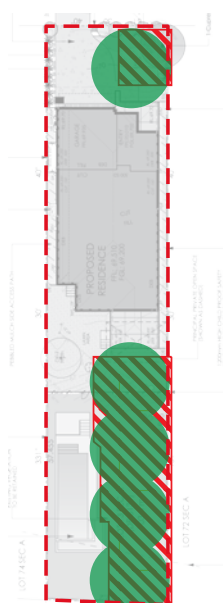
Northern Beaches Council

Lot area: 0.0703 ha / 703 m<sup>2</sup>

Building footprint: 42%

Existing deep soil: 41%

Existing tree canopy in deep soil: 3%



Recommended deep soil and canopy

### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil: 30% site area

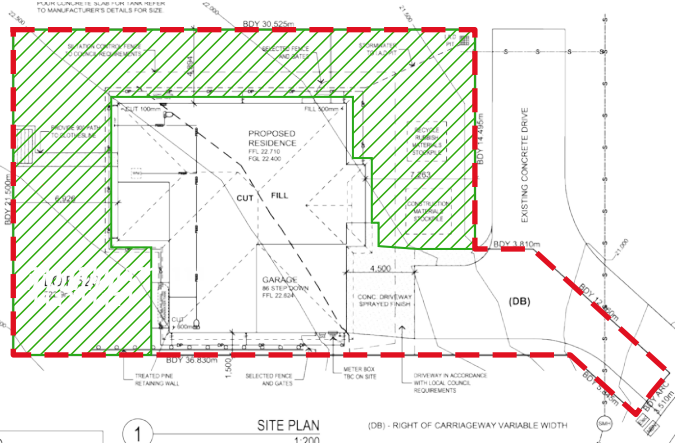
Canopy: 30% site area

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:750 @ A4

# PRIVATE LAND TESTING DETACHED DWELLINGS

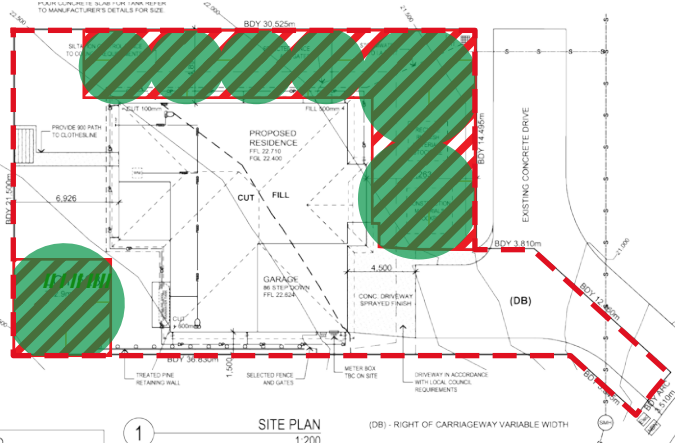


Existing: Analysis of deep soil and tree canopy

## GILLIESTON HEIGHTS

Maitland

Lot area:	0.0723 ha / 723 m <sup>2</sup>
Building footprint:	48%
Existing deep soil:	47%
Existing tree canopy in deep soil:	0%

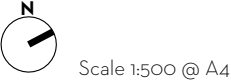


Recommended deep soil and canopy

## RECOMMENDED DEEP SOIL AND CANOPY:

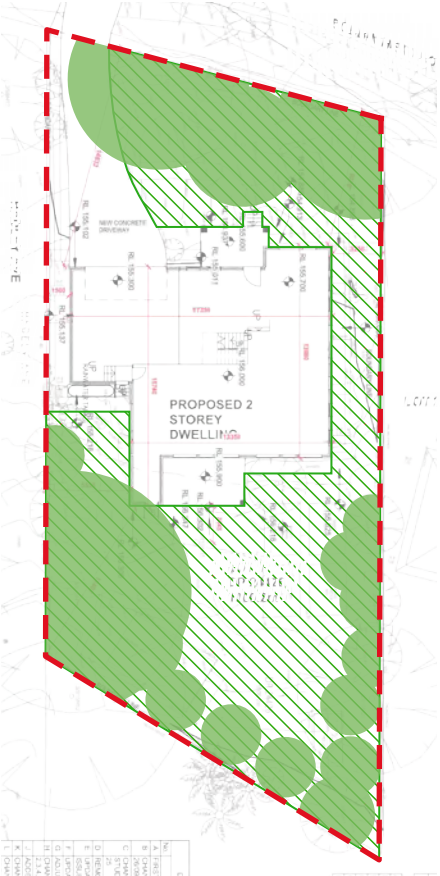
Deep soil:	30% site area
Canopy:	30% site area

- Property boundary
- / / / / Existing deep soil
- / / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil





# PRIVATE LAND TESTING DETACHED DWELLINGS



Existing: Analysis of deep soil and tree canopy

## TURRAMURRA

Ku-ring-gai

Lot area:	0.1 ha / 1000 m <sup>2</sup>
Building footprint:	34%
Existing deep soil:	64%
Existing tree canopy in deep soil:	39%

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)



Scale 1:500 @ A4

# ATTACHED DWELLINGS

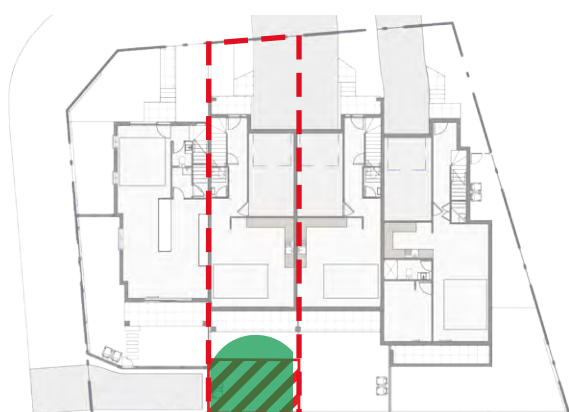
# PRIVATE LAND TESTING : ATTACHED DWELLINGS



Existing: Analysis of deep soil and tree canopy



Option 1: Expanded deep soil - minor modification



Recommended deep soil and canopy

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:500 @ A4

## BUSBY

Liverpool City Council

Lot area: 0.0145 ha / 145 m<sup>2</sup>

Building footprint: 64%

Existing deep soil: 20%

Existing tree canopy in deep soil: 5%

## OPTION 1:

Deep soil: 34%

- Decrease area of paving in front garden.
- Permeable surface in alfresco dining area.

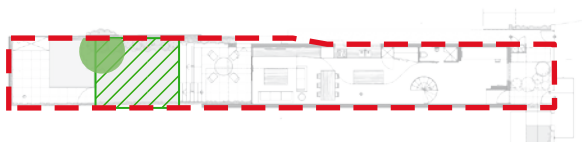
## RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil: 15% site area

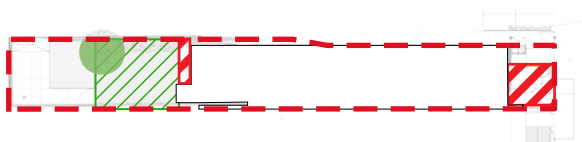
Canopy: 15% site area

# PRIVATE LAND TESTING

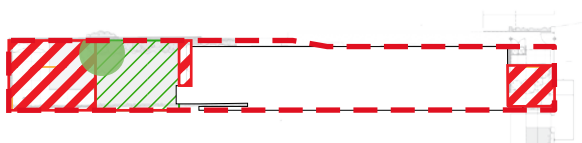
## ATTACHED DWELLINGS



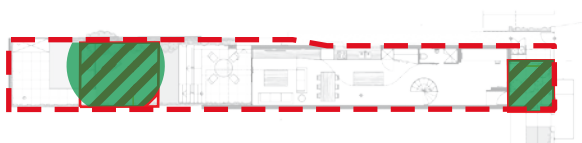
Existing: Analysis of deep soil and tree canopy



Option 1: Expanded deep soil - minor modification



Option 2: Expanded deep soil - modifications



Recommended deep soil and canopy

- - - Property boundary
- Existing deep soil
- Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:500 @ A4

### TEMPE

Inner West Council

Lot area: 0.0159 ha / 159 m<sup>2</sup>

Building footprint: 51%

Existing deep soil: 16%

Existing tree canopy in deep soil: 4%

### OPTION 1:

Deep soil: 23%

- Shift building 250mm to the west.
- Relocate underground water tank at the front to under the pedestrian path.
- Reduce path width, change stair to permeable surface.

### OPTION 2:

Deep soil: 39%

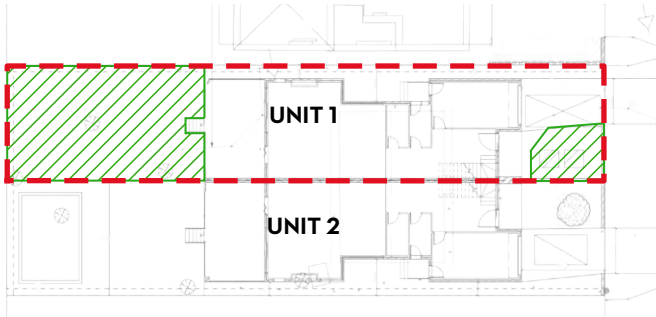
- Shift building 250mm to the west.
- Relocate underground water tank at the front to under the pedestrian path. Reduce path width, change stair to permeable surface.
- Removed pool & paving.

### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil: 20% site area

Canopy: 20% site area

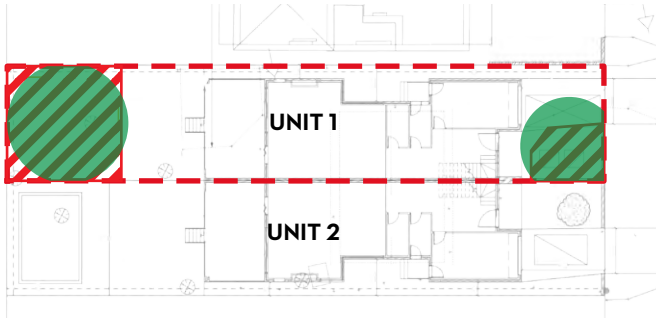
PRIVATE LAND TESTING  
ATTACHED DWELLINGS



Existing: Analysis of deep soil and tree canopy

YAGOONA - UNIT 1

City of Canterbury Bankstown	
Lot area:	0.03 ha / 300 m <sup>2</sup>
Building footprint:	43%
Existing deep soil:	38%
Existing tree canopy in deep soil:	9%



Recommended deep soil and canopy

RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil:	25% site area
Canopy:	25% site area

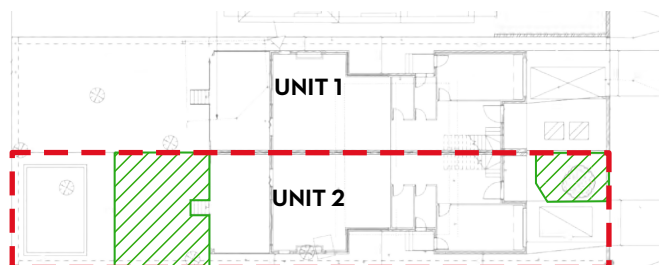
- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:500 @ A4

# PRIVATE LAND TESTING

## : ATTACHED DWELLINGS



Existing: Analysis of deep soil and tree canopy

### YAGOONA - UNIT 2

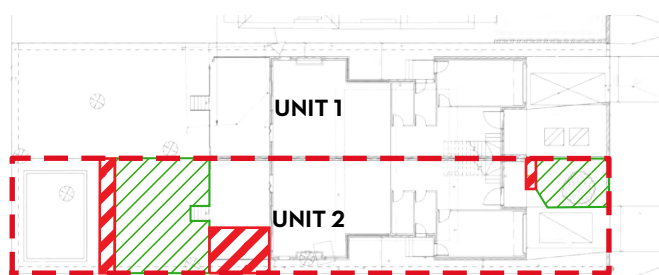
City of Canterbury Bankstown

Lot area: 0.03 ha / 300 m<sup>2</sup>

Building footprint: 43%

Existing deep soil: 20%

Existing tree canopy in deep soil: 4%

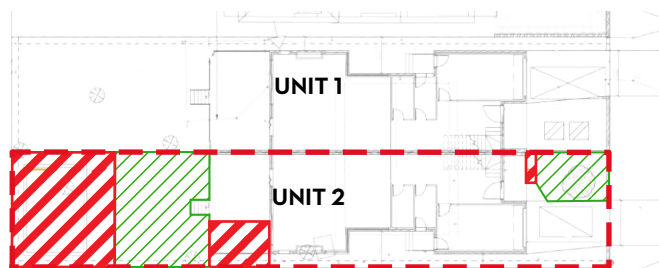


Option 1: Expanded deep soil - minor modification

### OPTION 1:

Deep soil: 27%

- Reduce alfresco area by 3m.
- Reduce pool paving area by 1m.

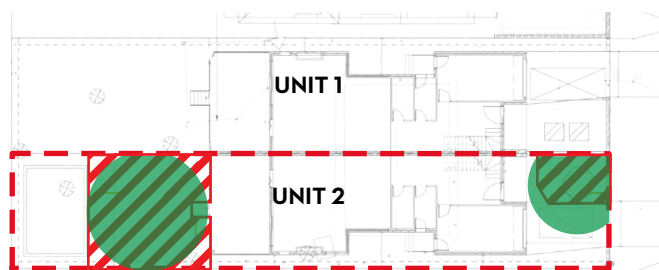


Option 2: Expanded deep soil - modifications

### OPTION 2:

Deep soil: 42%

- Reduce alfresco area by 3m.
- Remove pool and paving.



Recommended deep soil and canopy

### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil: 25% site area

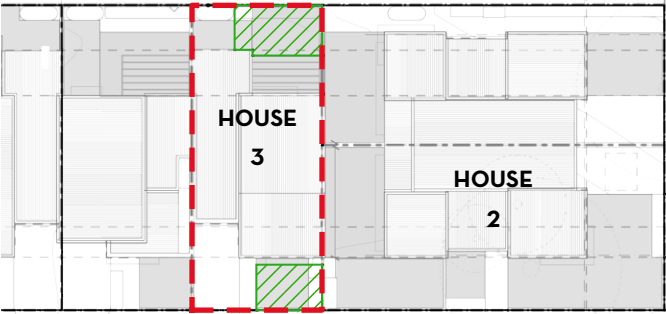
Canopy: 25% site area

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:500 @ A4

PRIVATE LAND TESTING  
ATTACHED DWELLINGS



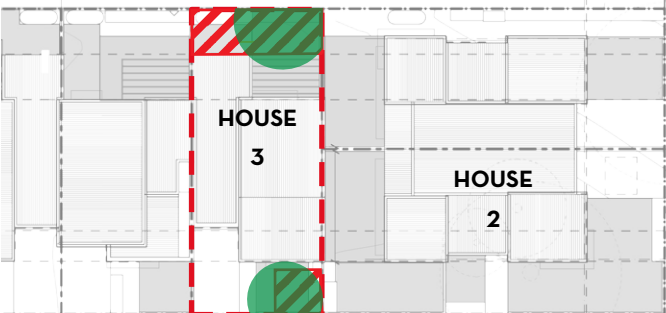
Existing: Analysis of deep soil and tree canopy



Option 1: Expanded deep soil - minor modification

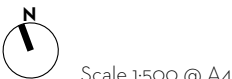


Option 2: Expanded deep soil - modifications



Recommended deep soil and canopy

- Property boundary
- ▨ Existing deep soil
- ▨ Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



**WARNERS BAY - HOUSE 3**

Lake Macquarie

Lot area:	0.0173 ha / 173 m <sup>2</sup>
Building footprint:	64%
Existing deep soil:	18%
Existing tree canopy in deep soil:	0%

**OPTION 1:**

Deep soil:	21%
• Rotate RWT vertically.	

**OPTION 2:**

Deep soil:	30%
• Rotate RWT vertically.	
• Remove deck and paving	

**RECOMMENDED DEEP SOIL AND CANOPY:**

Deep soil:	20% site area
Canopy:	20% site area

PRIVATE LAND TESTING  
ATTACHED DWELLINGS

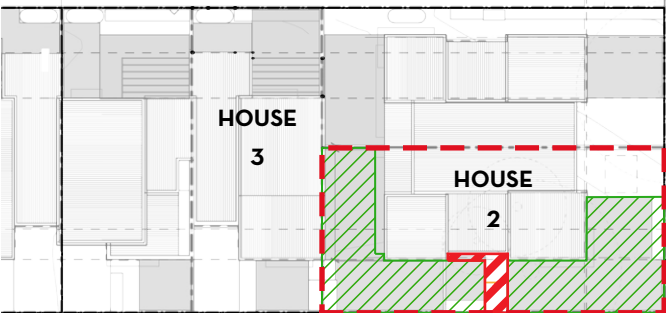


Existing: Analysis of deep soil and tree canopy

**WARNERS BAY - HOUSE 2**

Lake Macquarie

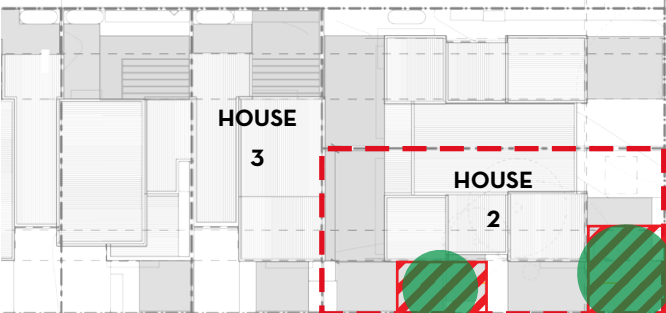
Lot area:	0.0246 ha / 246 m <sup>2</sup>
Building footprint:	50%
Existing deep soil:	49%
Existing tree canopy in deep soil:	0%



Option 1: Expanded deep soil - minor modification

**OPTION 1:**

Deep soil:	52% site area
• Entry path narrow to 1.2m.	



Recommended deep soil and canopy

**RECOMMENDED DEEP SOIL AND CANOPY:**

Deep soil:	20% site area
Canopy:	20% site area

- Property boundary
- /// Existing deep soil
- /// Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil

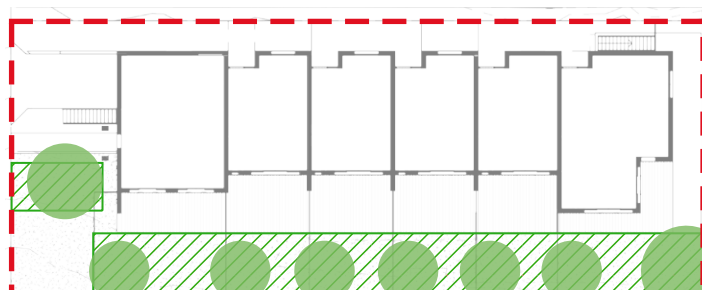




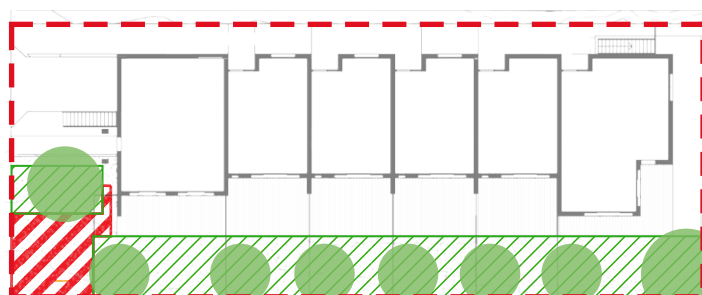
# MULTI DWELLING HOUSING

# PRIVATE LAND TESTING

## MULTI-DWELLING HOUSING



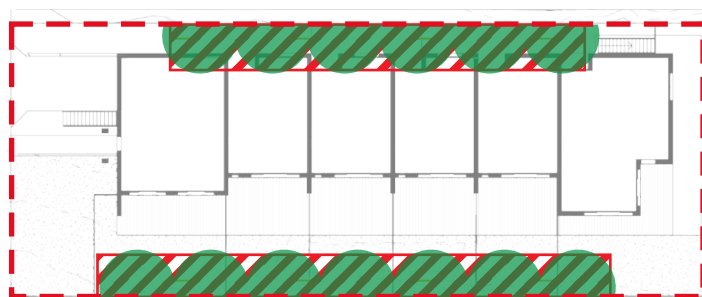
Existing: Analysis of deep soil and tree canopy



Option 1: Expanded deep soil - minor modification



Option 2: Expanded deep soil - modifications



Recommended deep soil and canopy

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:500 @ A4

### MOOREBANK

Liverpool City Council

Lot area: 0.0822 ha / 822 m<sup>2</sup>

Building footprint: 57%

Existing deep soil: 22%

Existing tree canopy in deep soil: 13%

### OPTION 1:

Deep soil: 26% site area

- Relocate on-site detention tank.

### OPTION 2:

Deep soil: 34% site area

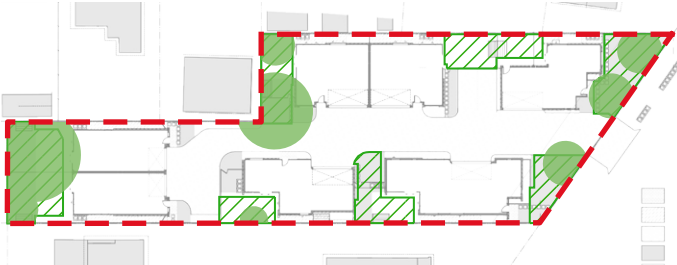
- Shift building south to achieve 3m setback to both sides.

### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil: 20% site area

Canopy: 20% site area

PRIVATE LAND TESTING  
MULTI-DWELLING HOUSING

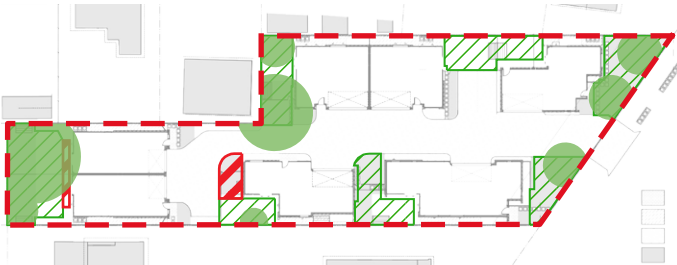


Existing: Analysis of deep soil and tree canopy

**CHARLESTOWN**

Lake Macquarie Council

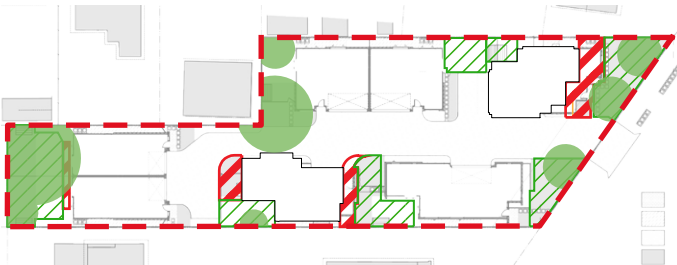
Lot area:	0.1585 ha / 1585 m <sup>2</sup>
Building footprint:	47%
Existing deep soil:	23%
Existing tree canopy in deep soil:	17%



Option 1: Expanded deep soil - minor modification

**OPTION 1:**

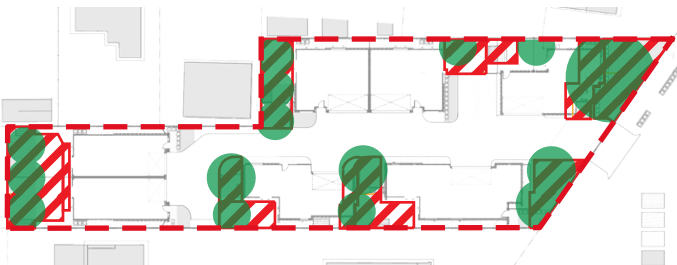
Deep soil:	24% site area
• Amend roof lines.	



Option 2: Expanded deep soil - modifications

**OPTION 2:**

Deep soil:	28% site area
• Amend roof lines, amend garages to single (2x units only).	



Recommended deep soil and canopy

**RECOMMENDED DEEP SOIL AND CANOPY:**

Deep soil:	25% site area
Canopy:	25% site area

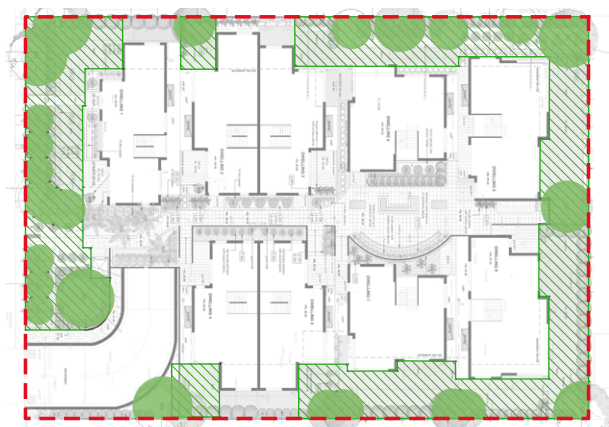
- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:500 @ A4

# PRIVATE LAND TESTING

## MULTI-DWELLING HOUSING



Existing: Analysis of deep soil and tree canopy

### CARINGBAH

Sutherland Shire Council

Lot area:	0.2269ha / 2269 m <sup>2</sup>
Building footprint:	41%
Existing deep soil:	30%
Existing tree canopy in deep soil:	12%



Recommended deep soil and canopy

### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil:	25% site area
Canopy:	25% site area

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:750 @ A4

# PRIVATE LAND TESTING

## MULTI-DWELLING HOUSING



Existing: Analysis of deep soil and tree canopy

### CASTLE HILL

Hills Shire Council

Lot area: 0.3193ha / 3193 m<sup>2</sup>

Building footprint: 40%

Existing deep soil: 30%

Existing tree canopy in deep soil: 11%



Recommended deep soil and canopy

### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil: 30% site area

Canopy: 25% site area

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:900 @ A4

# PRIVATE LAND TESTING MULTI-DWELLING HOUSING



Existing: Analysis of deep soil and tree canopy



Option 1: Expanded deep soil - minor modification



Option 2: Expanded deep soil - modifications



Recommended deep soil and canopy

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:1200 @ A4

## ABERGLASSLYN

Maitland

Lot area: 0.3683ha / 3683 m<sup>2</sup>

Building footprint: 47%

Existing deep soil: 16%

Existing tree canopy in deep soil: 5%

### OPTION 1:

Deep soil: 27% site area

- Alfresco changed to timber deck with increase planting.
- Paths to unit 1 rationalised and narrowed.

### OPTION 2:

Deep soil: 33% site area

- Alfresco changed to timber deck with increase planting.
- Paths to unit 1 rationalised and narrowed.
- Units 5-7 pushed together, units 8-10 pushed together resulting in new deep soil zones along wester boundary and to the east of units 5 and 8.
- Driveway passing area reconfigured.
- Visitor parking relocated along north - south roadway.

### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil: 30% site area

Canopy: 25% site area

# PRIVATE LAND TESTING

## MULTI-DWELLING HOUSING



Existing: Analysis of deep soil and tree canopy

### WOY WOY

Central Coast

Lot area: 0.3721ha / 3721.5 m<sup>2</sup>

Building footprint: 57%

Existing deep soil: 29%

Existing tree canopy in deep soil: 5%



Option 1: Expanded deep soil - minor modification

### OPTION 1:

Deep soil: 30% site area

- Permeable surface to communal area.



Recommended deep soil and canopy

### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil: 30% site area

Canopy: 30% site area

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil

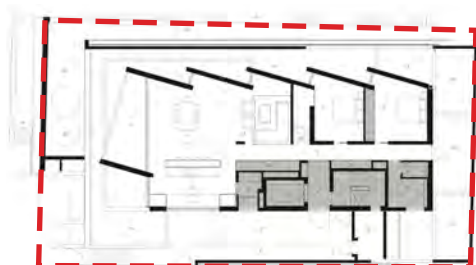


Scale 1:1000 @ A4

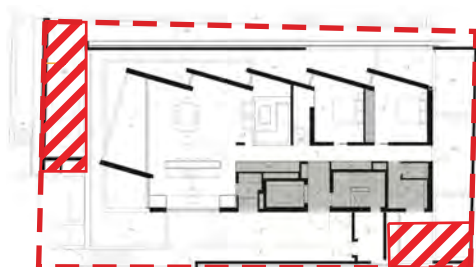
# APARTMENTS



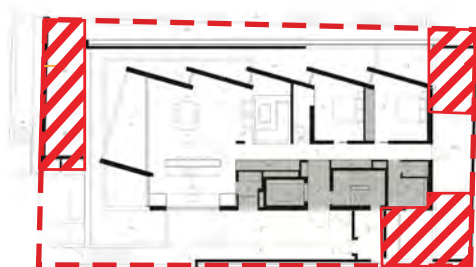
# PRIVATE LAND TESTING APARTMENTS



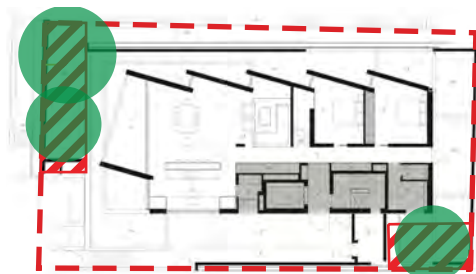
Existing: Analysis of deep soil and tree canopy



Option 1: Expanded deep soil - minor modification



Option 2: Expanded deep soil - modifications



Recommended deep soil and canopy

- Property boundary
- Existing deep soil
- Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:500 @ A4

## BRONTE

Waverly Council

Lot area: 0.043ha / 430 m<sup>2</sup>

Building footprint: 63%

Existing deep soil: 0%

Existing tree canopy in deep soil: 0%

### OPTION 1:

Deep soil: 6% site area

- Redesign to front garden, including relocation of water tanks.
- Removal of terrace at ground level and section of upper level planter to rear corner.

### OPTION 2:

Deep soil: 16% site area

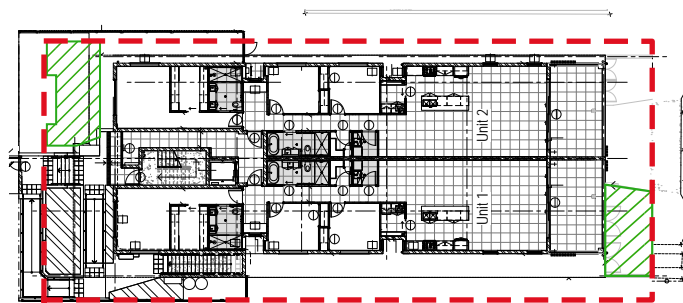
- Removal of terrace at ground level and 2 larger sections of upper level planters to rear corners.

### RECOMMENDED DEEP SOIL AND CANOPY:

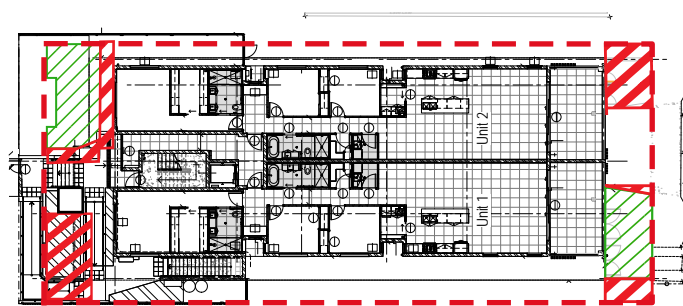
Deep soil: 10% site area

Canopy: 20% site area

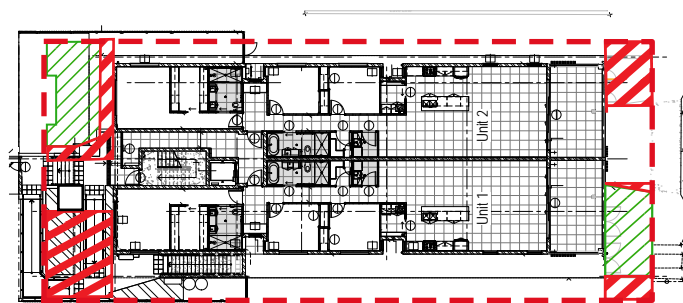
# PRIVATE LAND TESTING APARTMENTS



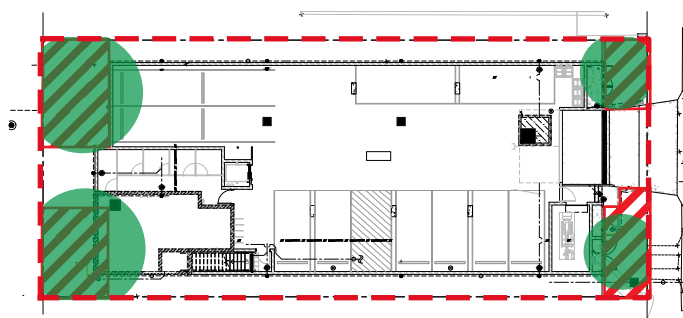
Existing: Analysis of deep soil and tree canopy



Option 1: Expanded deep soil - minor modification



Option 2: Expanded deep soil - modifications



Recommended deep soil and canopy

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:500 @ A4

## KINGSCLIFF

Tweed Shire

Lot area: 0.0688ha / 688 m<sup>2</sup>

Building footprint: 57%

Existing deep soil: 6%

Existing tree canopy in deep soil: 0%

### OPTION 1:

Deep soil: 13% site area

- Redesign to front garden, including removal of ramp and installation of platform lift.
- Remove flare to driveway.
- Adjust surface finishes to landscape areas as permeable.

### OPTION 2:

Deep soil: 16% site area

- Redesign to front garden, including removal of ramp and installation of platform lift.
- Remove flare to driveway.
- Adjust surface finishes to landscape areas as permeable.
- Reduction of retention tank (basement level) to allow an increase to front garden bed size.

### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil: 15% site area

Canopy: 20% site area

# PRIVATE LAND TESTING APARTMENTS



Existing: Analysis of deep soil and tree canopy



Option 1: Expanded deep soil - minor modification



Option 2: Expanded deep soil - modifications



Recommended deep soil and canopy

- Property boundary
- Existing deep soil
- Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:600 @ A4

## ALEXANDRIA

City of Sydney

Lot area: 0.0976ha / 976 m<sup>2</sup>

Building footprint: 56%

Existing deep soil: 2%

Existing tree canopy in deep soil: 0%

### OPTION 1:

Deep soil: 7% site area

- Stair width reduced to 1.2m
- Basement parking unchanged, car bays: 20, disabled parking bays: 3

### OPTION 2:

Deep soil: 21% site area

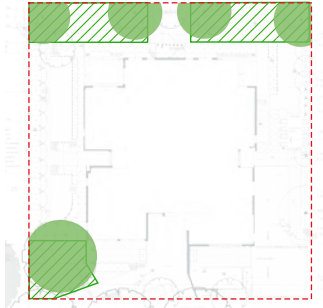
- Reduce basement footprint, car bays: 17 disabled parking bays: 2 (upgrade all residential bays to car stackers).
- Private open space for units 1.3 and 1.4 to be a soft landscape finish. Potentially to become communal open space.

### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil: 15% site area

Canopy: 20% site area

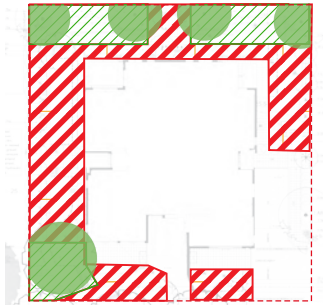
PRIVATE LAND TESTING  
APARTMENTS



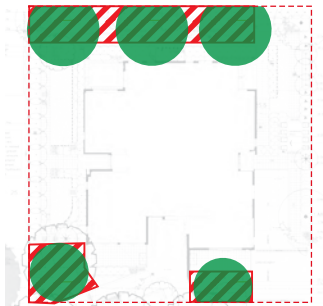
Existing: Analysis of deep soil and tree canopy



Option 1: Expanded deep soil - minor modification



Option 2: Expanded deep soil - modifications



Recommended deep soil and canopy

- Property boundary
- Existing deep soil
- Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:300 @ A4

**NORTH PARRAMATTA**

City of Parramatta

<b>Lot area:</b>	0.1014ha / 1014 m <sup>2</sup>
<b>Building footprint:</b>	34%
<b>Existing deep soil:</b>	15%
<b>Existing tree canopy in deep soil:</b>	12%

**OPTION 1:**

<b>Deep soil:</b>	36% site area
<ul style="list-style-type: none"> <li>• Amendments to surface finishes and relocation of fire hydrants.</li> </ul>	

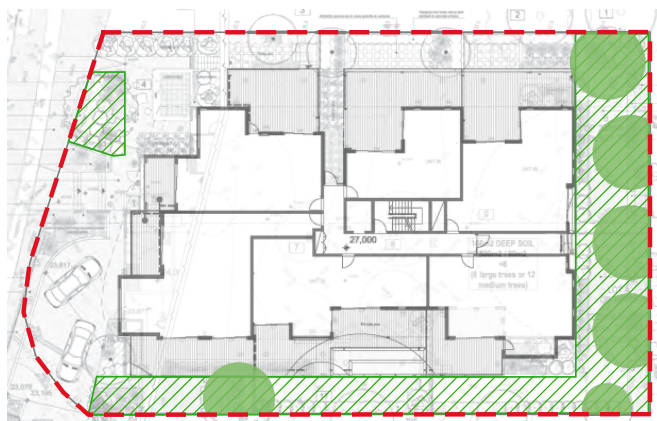
**OPTION 2:**

<b>Deep soil:</b>	44% site area
<ul style="list-style-type: none"> <li>• Amendments to surface finishes and relocation of fire hydrants</li> <li>• Relocation of bin service area to basement and redesign of entry area.</li> </ul>	

**RECOMMENDED DEEP SOIL AND CANOPY:**

<b>Deep soil:</b>	15% site area
<b>Canopy:</b>	20% site area

# PRIVATE LAND TESTING APARTMENTS



Existing: Analysis of deep soil and tree canopy

## DUNDAS

City of Parramatta

Lot area: 0.1416ha / 1416 m<sup>2</sup>

Building footprint: 57%

Existing deep soil: 22%

Existing tree canopy in deep soil: 9%

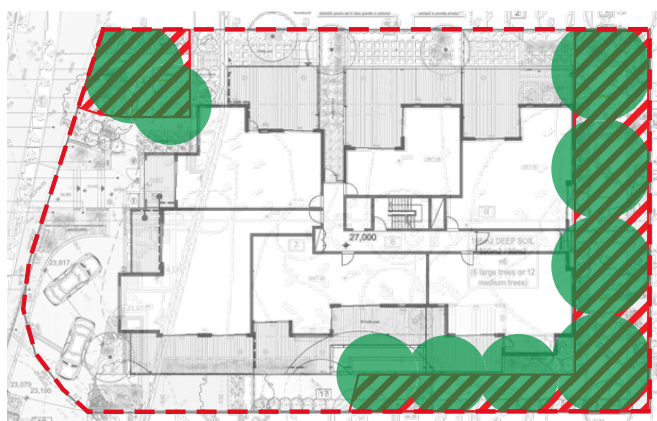


Option 1: Expanded deep soil - minor modification

## OPTION 1:

Deep soil: 31% site area

- Permeable surface finish to side setback.
- Area of private open space to become communal.
- Access path to be no wider than 1.2m.



Recommended deep soil and canopy

## RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil: 15% site area

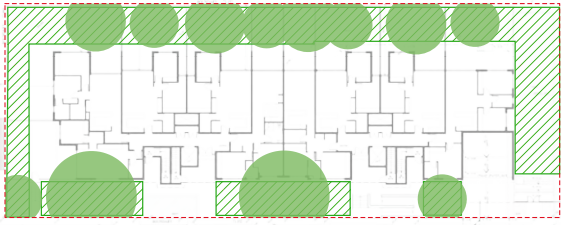
Canopy: 20% site area

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil

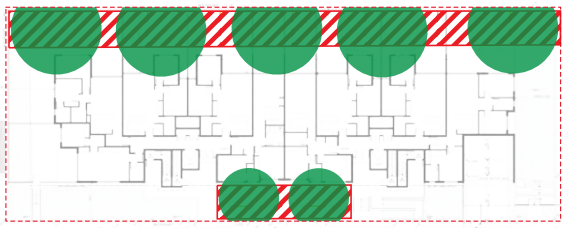


Scale 1:600 @ A4

# PRIVATE LAND TESTING APARTMENTS



Existing: Analysis of deep soil and tree canopy



Recommended deep soil and canopy

### CARLTON

Georges River Council

Lot area:	0.2054ha / 2054 m <sup>2</sup>
Building footprint:	46%
Existing deep soil:	30%
Existing tree canopy in deep soil:	25%

### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil:	20% site area
Canopy:	25% site area

- - - Property boundary
- Existing deep soil
- Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:1000 @ A4

PRIVATE LAND TESTING  
APARTMENTS



Existing: Analysis of deep soil and tree canopy

**ST IVES**  
Ku ring gai Council

<b>Lot area:</b>	0.23255 ha / 2325.5 m <sup>2</sup>
<b>Building footprint:</b>	36%
<b>Existing deep soil:</b>	50%
<b>Existing tree canopy in deep soil:</b>	50%



Recommended deep soil and canopy

**RECOMMENDED DEEP SOIL AND CANOPY:**

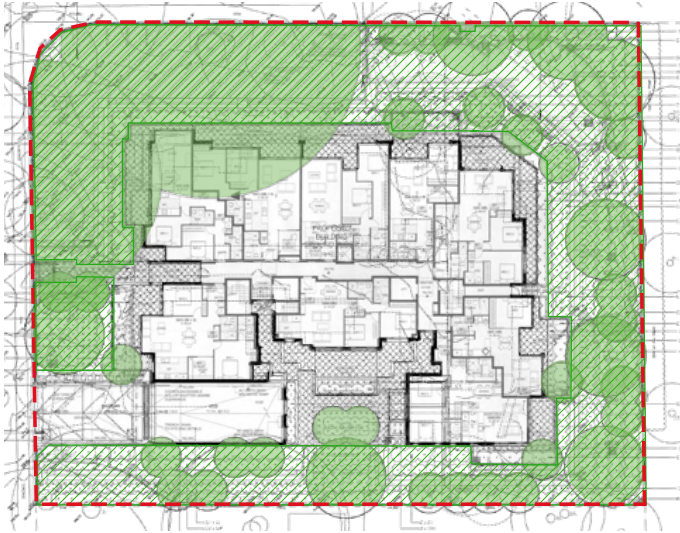
<b>Deep soil:</b>	20% site area
<b>Canopy:</b>	25% site area

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil

N

Scale 1:1000 @ A4

# PRIVATE LAND TESTING APARTMENTS



### TURRAMURRA

Ku-ring-gai Council

Lot area:	0.2931ha / 2931 m <sup>2</sup>
Building footprint:	35%
Existing deep soil:	48%
Existing tree canopy in deep soil:	40%

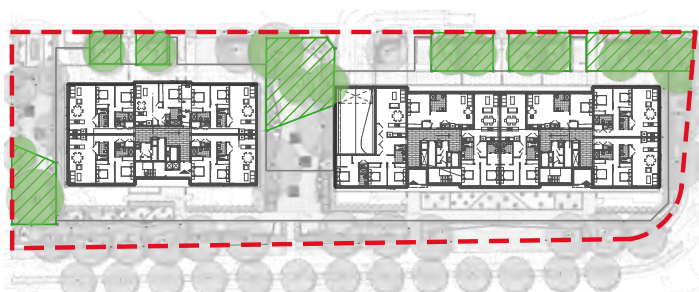
- Property boundary
- /// Existing deep soil
- /// Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



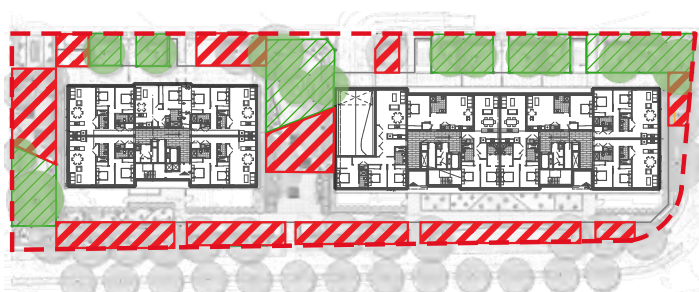
Scale 1:750 @ A4



# PRIVATE LAND TESTING APARTMENTS



Existing: Analysis of deep soil and tree canopy



Option 1: Expanded deep soil - minor modification



Option 2: Expanded deep soil - modifications



Recommended deep soil and canopy

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:1200 @ A4

## EDMONDSON PARK

Liverpool City Council

Lot area: 0.3599ha / 3599 m<sup>2</sup>

Building footprint: 36%

Existing deep soil: 13%

Existing tree canopy in deep soil: 14%

### OPTION 1:

Deep soil: 31% site area

- Replace paving in communal open space to turf or planting.
- Redesign to private open space surface finishes.
- Reduce width of any paths to 1.2m and separate entries.
- Remove paving intrusions along southern garden beds to street.

### OPTION 2:

Deep soil: 34% site area

- Removal of basement stairs along northern boundary.

### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil: 30% site area

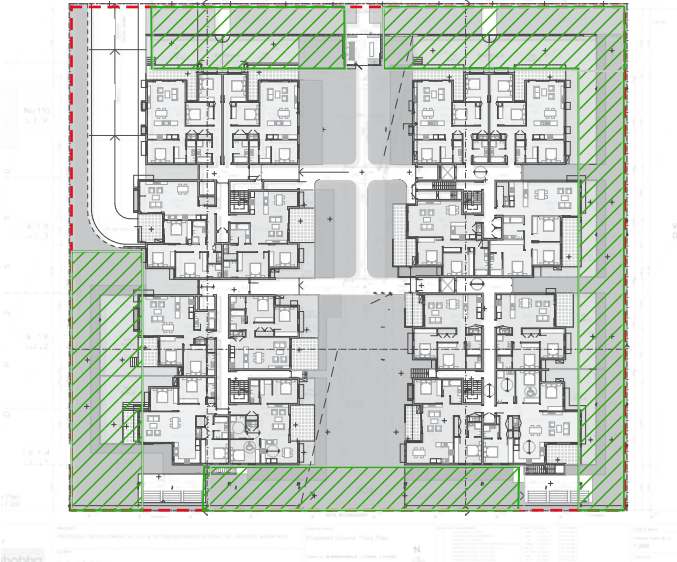
Canopy: 35% site area

PRIVATE LAND TESTING  
APARTMENTS

**ST GEORGES BASIN**

Shoalhaven City Council

<b>Lot area:</b>	0.482 ha / 4820 m <sup>2</sup>
<b>Building footprint:</b>	46%
<b>Existing deep soil:</b>	28%
<b>Existing tree canopy in deep soil:</b>	unknown



Existing: Analysis of deep soil and tree canopy

**RECOMMENDED DEEP SOIL AND CANOPY:**

<b>Deep soil:</b>	30% site area
<b>Canopy:</b>	35% site area



Recommended deep soil and canopy

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:1000 @ A4

# BUSINESS PARKS

PRIVATE LAND TESTING  
BUSINESS PARK



Existing: Analysis of deep soil and tree canopy

The Hills Shire Council

Lot area:	1.685ha / 16850 m <sup>2</sup>
Building footprint:	62%
Existing deep soil:	35%
Existing tree canopy in deep soil:	8%



Recommended deep soil and canopy

RECOMMENDED DEEP SOIL AND CANOPY:

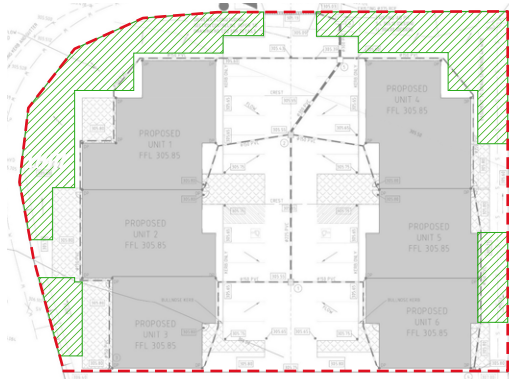
Deep soil:	25% site area
Canopy:	35% site area

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



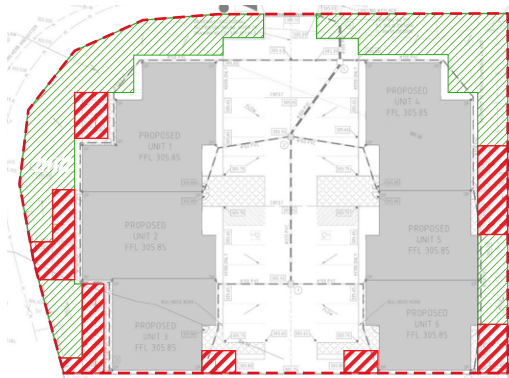
Scale 1:2000 @ A4

# PRIVATE LAND TESTING BUSINESS PARK



Existing: Analysis of deep soil and tree canopy

<b>Dubbo Regional Council</b>	
<b>Lot area:</b>	0.2953ha / 2953 m <sup>2</sup>
<b>Building footprint:</b>	42%
<b>Existing deep soil:</b>	19%
<b>Existing tree canopy in deep soil:</b>	0%



Option 1: Expanded deep soil - minor modification

<b>OPTION 1:</b>	
<b>Deep soil:</b>	25% site area
• Patio areas to be permeable.	



Recommended deep soil and canopy

<b>RECOMMENDED DEEP SOIL AND CANOPY:</b>	
<b>Deep soil:</b>	25% site area
<b>Canopy:</b>	35% site area

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:1000 @ A4

# PRIVATE LAND TESTING : BUSINESS PARK



Existing: Analysis of deep soil and tree canopy



Option 1: Expanded deep soil - minor modification



Recommended deep soil and canopy

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:2000 @ A4

**MACQUARIE PARK**

City of Ryde

<b>Lot area:</b>	0.7953ha / 7953 m <sup>2</sup>
<b>Building footprint:</b>	43%
<b>Existing deep soil:</b>	20%
<b>Existing tree canopy in deep soil:</b>	9%

**OPTION 1:**

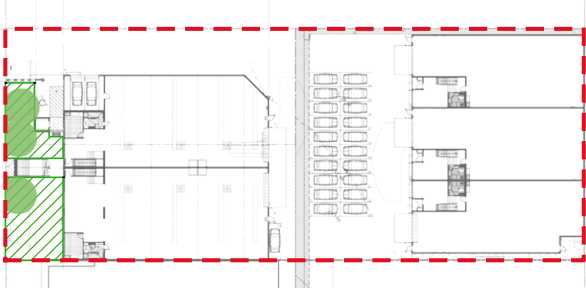
- Deep soil:** 25% site area
- Reconfigure pedestrian entry.
  - Reduce width of through site link to 3m.

**RECOMMENDED DEEP SOIL AND CANOPY:**

<b>Deep soil:</b>	25% site area
<b>Canopy:</b>	35% site area

# INDUSTRIAL

# PRIVATE LAND TESTING INDUSTRIAL

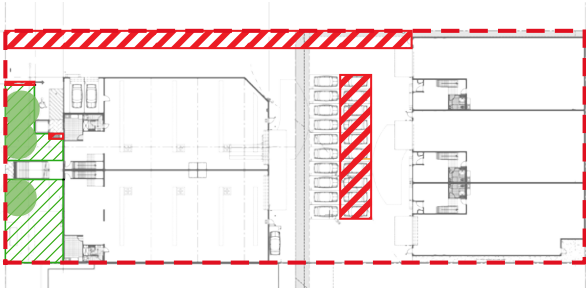


Existing: Analysis of deep soil and tree canopy

### GREENACRE

City of Canterbury Bankstown

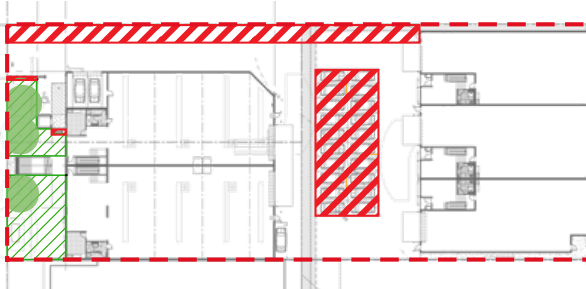
<b>Lot area:</b>	0.4046ha / 4046 m <sup>2</sup>
<b>Building footprint:</b>	59%
<b>Existing deep soil:</b>	6%
<b>Existing tree canopy in deep soil:</b>	2%



Option 1: Expanded deep soil - minor modification

### OPTION 1:

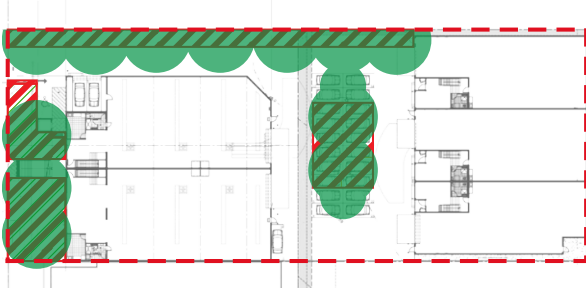
- Deep soil:** 15% site area
- Portion of parking bay becomes deep soil.
  - Deep soil along site boundary



Option 2: Expanded deep soil

### OPTION 2:

- Deep soil:** 18% site area
- Parking bays becomes deep soil.
  - Deep soil along site boundary



Recommended deep soil and canopy

### RECOMMENDED DEEP SOIL AND CANOPY:

<b>Deep soil:</b>	15% site area
<b>Canopy:</b>	25% site area

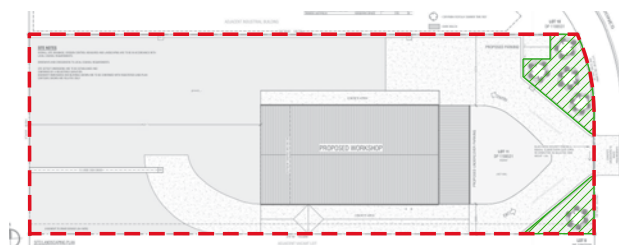
- Property boundary
- ▨ Existing deep soil
- ▨ Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



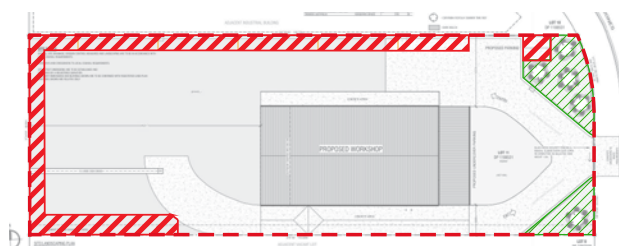
Scale 1:2000 @ A4



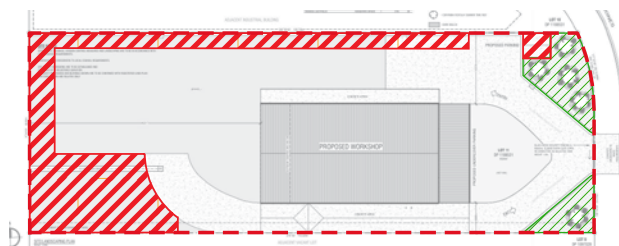
# PRIVATE LAND TESTING INDUSTRIAL



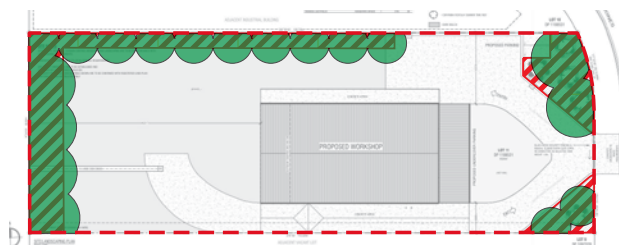
Existing: Analysis of deep soil and tree canopy



Option 1: Expanded deep soil - minor modification



Option 2: Expanded deep soil - modifications



Recommended deep soil and canopy

- Property boundary
- /// Existing deep soil
- /// Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:1500 @ A4

## EAST WAGGA WAGGA

City of Wagga Wagga

<b>Lot area:</b>	0.4504ha / 4504 m <sup>2</sup>
<b>Building footprint:</b>	18%
<b>Existing deep soil:</b>	5%
<b>Existing tree canopy in deep soil:</b>	0%

### OPTION 1:

<b>Deep soil:</b>	16% site area
• 3M Deep soil setback.	

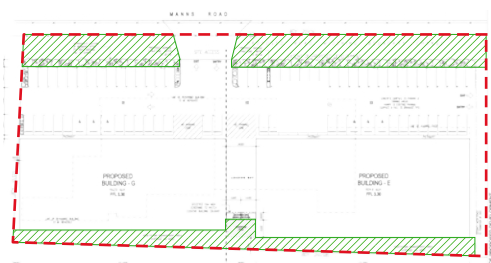
### OPTION 2:

<b>Deep soil:</b>	23% site area
• Deep soil to two proposed car spaces.	

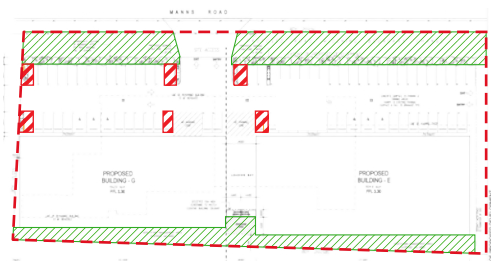
### RECOMMENDED DEEP SOIL AND CANOPY:

<b>Deep soil:</b>	15% site area
<b>Canopy:</b>	25% site area

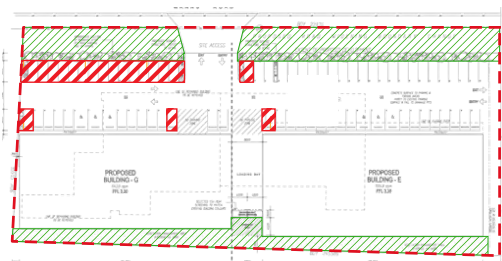
# PRIVATE LAND TESTING INDUSTRIAL



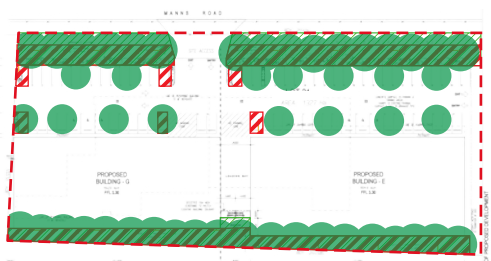
Existing: Analysis of deep soil and tree canopy



Option 1: Expanded deep soil - minor modification



Option 2: Expanded deep soil



Recommended deep soil and canopy

- - - Property boundary
- ▨ Existing deep soil
- ▨ Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:2000 @ A4

## WEST GOSFORD Central Coast Council

<b>Lot area:</b>	0.2167ha / 7167 m <sup>2</sup>
<b>Building footprint:</b>	42%
<b>Existing deep soil:</b>	21%
<b>Existing tree canopy in deep soil:</b>	0%

### OPTION 1:

<b>Deep soil:</b>	22% site area
•	Minor changes to hardstand areas
•	No change to parking

### OPTION 2:

<b>Deep soil:</b>	25% site area
•	Requires partial removal of on grade parking

### RECOMMENDED DEEP SOIL AND CANOPY:

<b>Deep soil:</b>	15% site area
<b>Canopy:</b>	25% site area
<b>Supplementary car park trees:</b>	12%

PRIVATE LAND TESTING  
INDUSTRIAL

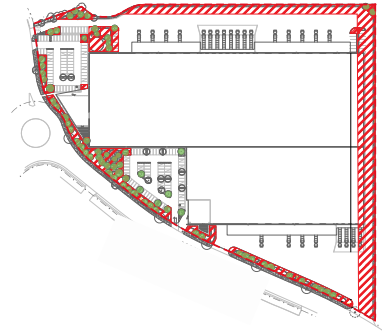


Existing: Analysis of deep soil and tree canopy

**CASULA**

Liverpool City Council

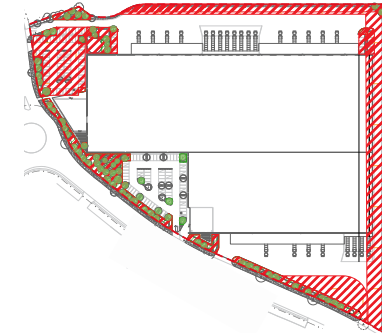
<b>Lot area:</b>	5.1418ha / 51418 m <sup>2</sup>
<b>Building footprint:</b>	57%
<b>Existing deep soil:</b>	5%
<b>Existing tree canopy in deep soil:</b>	3%



Option 1: Expanded deep soil - minor modification

**OPTION 1:**

<b>Deep soil:</b>	15% site area
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Option 2: Expanded deep soil

**OPTION 2:**

<b>Deep soil:</b>	20% site area
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Recommended deep soil and canopy

**RECOMMENDED DEEP SOIL AND CANOPY:**

<b>Deep soil:</b>	15% site area
<b>Canopy:</b>	25% site area
<b>Supplementary car park trees:</b>	3%

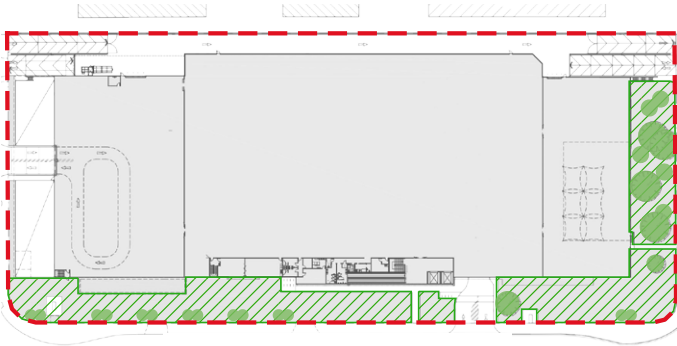
- Property boundary
- ▨ Existing deep soil
- ▨ Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:6000 @ A4

# BULKY GOODS

# PRIVATE LAND TESTING : BULKY GOODS

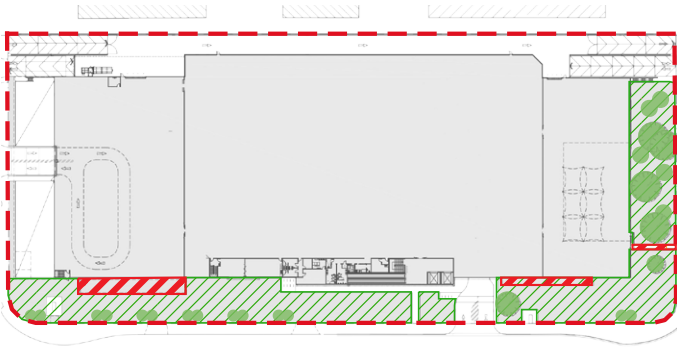


Existing: Analysis of deep soil and tree canopy

**CASTLE HILL**

The Hills Shire Council

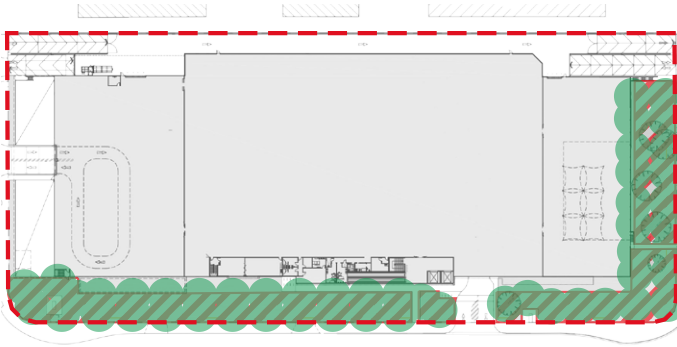
<b>Lot area:</b>	2.1049 ha / 21049 m <sup>2</sup>
<b>Building footprint:</b>	67%
<b>Existing deep soil:</b>	17%
<b>Existing tree canopy in deep soil:</b>	3%



Option 1: Expanded deep soil - minor modification

**OPTION 1:**

<b>Deep soil:</b>	18% site area
• Relocate sprinkler tanks below.	
• Remove awning outline	
• Reduce path to 1.2m.	



Recommended deep soil and canopy

**RECOMMENDED DEEP SOIL AND CANOPY:**

<b>Deep soil:</b>	15% site area
<b>Canopy:</b>	25% site area

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:2500 @ A4

PRIVATE LAND TESTING  
BULKY GOODS

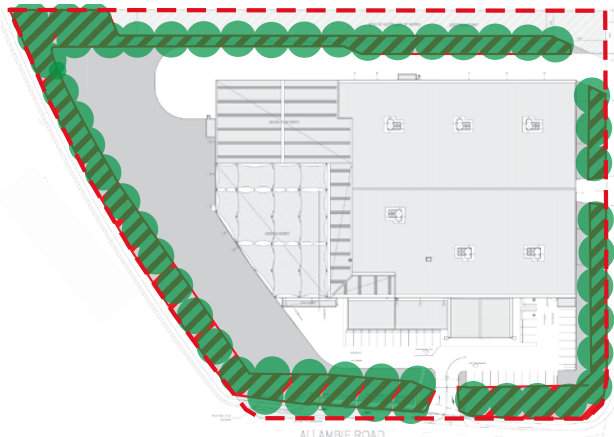


Existing: Analysis of deep soil and tree canopy

**FRENCHS FOREST**

Northern Beaches Council

<b>Lot area:</b>	2.175 ha / 21750 m <sup>2</sup>
<b>Building footprint:</b>	41%
<b>Existing deep soil:</b>	34%
<b>Existing tree canopy in deep soil:</b>	27%



Recommended deep soil and canopy

**RECOMMENDED DEEP SOIL AND CANOPY:**

<b>Deep soil:</b>	15% site area
<b>Canopy:</b>	25% site area

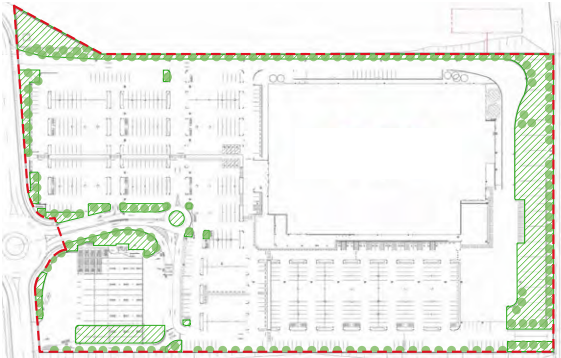
- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:2500 @ A4

# PRIVATE LAND TESTING

## BULKY GOODS



Existing: Analysis of deep soil and tree canopy

**BOOLAROO**

Lake Macquarie

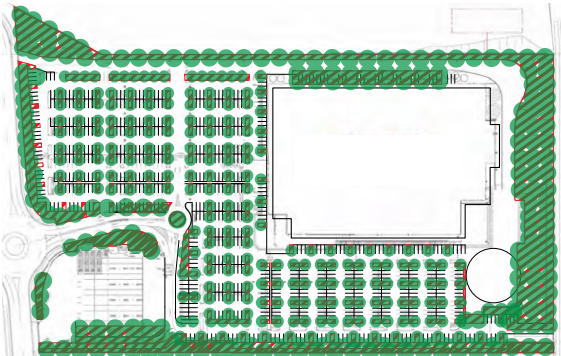
Lot area:	6.8512 ha / 68512 m <sup>2</sup>
Building footprint:	22%
Existing deep soil:	13%
Existing tree canopy in deep soil:	6%



Option 1: Expanded deep soil - minor modification

**OPTION 1:**

Deep soil:	20%
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Recommended deep soil and canopy

**RECOMMENDED DEEP SOIL AND CANOPY:**

Deep soil:	15% site area
Canopy:	25% site area
Supplementary trees in car park:	17% site area
Car spaces:	742 - 10% loss in car spaces

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil

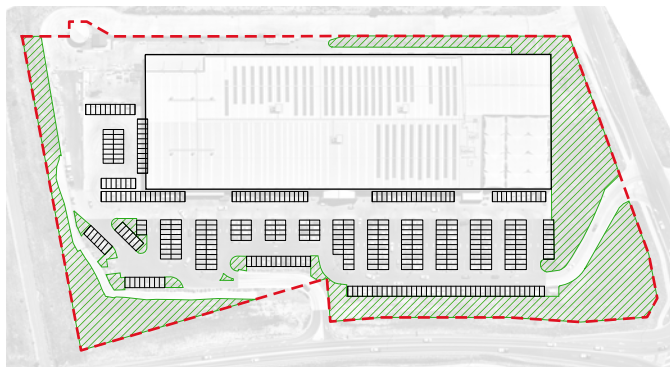


Scale 1:5000 @ A4

Note: This site has been included as a sample DA for on grade car parks and bulky goods.

# PRIVATE LAND TESTING

## BULKY GOODS

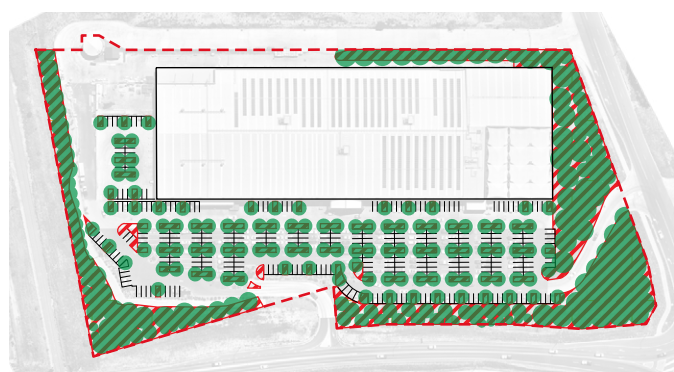


Existing: Analysis of deep soil and tree canopy

### ORANGE

Orange City Council

Lot area:	4.490 ha / 44902m <sup>2</sup>
Building footprint:	34%
Existing deep soil:	22%
Existing tree canopy in deep soil:	0%
Car spaces:	360



### OPTION 1

Deep soil:	22%
Tree canopy:	20%
Supplementary trees in car park:	11%
Car spaces:	332 - 8% loss in car spaces



Recommended deep soil and canopy

### RECOMMENDED DEEP SOIL AND CANOPY:

Deep soil:	15% site area
Canopy:	25% site area
Supplementary trees in car park:	14% site area

- - - Property boundary
- / / / Existing deep soil
- / / / Proposed deep soil
- Existing tree in deep soil (>3m dia)
- Proposed tree in deep soil



Scale 1:5000 @ A4

Note: This site has been included as a sample DA for on grade car parks.