



Urban Forest Tree Planting Waterford Reserve

PROJECT NUMBER: **BM240711**

Concept Design Draft

PROJECT ADDRESS: Northwood,
Christchurch 8051

CLIENT: Christchurch City Council

CLIENT ADDRESS: 53 Hereford Street
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REV	DATE	DESCRIPTION
A	29.08.2025	Concept Design Draft

SHEET INDEX

- 100 Preliminary & General**
 - 100 Cover Sheet
- 200 Plans**
 - 200 Existing Site
 - 210 Tree Height Capacities
- 300 Sections**
 - 300 Cross Section Studies of Potential Tree Heights
 - 301 Cross Section Studies of Potential Tree Heights
 - 302 Cross Section Studies of Potential Tree Heights
- 500 Planting**
 - 500 Planting Plan
 - 510 Planting Plan



ORIGINAL IN COLOUR

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LEGEND

Existing Canopy Cover

Existing Lower Vegetation

Existing Pathways and Features

Existing Water Body

Existing Attenuation Zone

Existing Playground

Lightpole Clearance

Vegetation cover mapped based on CCC aerial photography dated August 2024, with site visit to verify existing conditions.

Existing Specimen Trees - 246

Existing Canopy Cover - 3250.29 m²

17.5%

Canopy coverage to existing site

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DESCRIPTION

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APR

HCO

Urban Forest Tree Planting

Waterford Reserve

Existing Site

Design

Drawn

Check

ARo

ARo

HCO

Scale

1:500 @ A1

1:1000 @ A3

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ORIGINAL IN COLOUR

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20m+ Tree Height Area

10 - 20m Tree Height Area

5 - 10m Tree Height Area

LEGEND

20m+ Tree Height Area

10 - 20m Tree Height Area

5 - 10m Tree Height Area

20m+ Tree Height Area

10 - 20m Tree Height Area

5 - 10m Tree Height Area

The Tree Height Capacity model is derived from the following rules, supplied by CCC:

No tree shall intrude through the recession plane at maturity

No tree shall be planted closer than 3.0m from a pathway

No tree shall be planted closer than 5.0m from a sports field and no tree canopy drip line shall extend above a sports field

Tree spacings shall be a minimum of 5.0m apart to allow for easy lawn mowing

Min. 2m offset for low voltage power

Min. 3m offset for 11kv power

Min. 5m offset for 33-66kv

Min. of 1m offset for all other services and hard paving not mentioned above

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Tree Height Capacities

Design ARO

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Scale 1:500 @ A1

1:1000 @ A3

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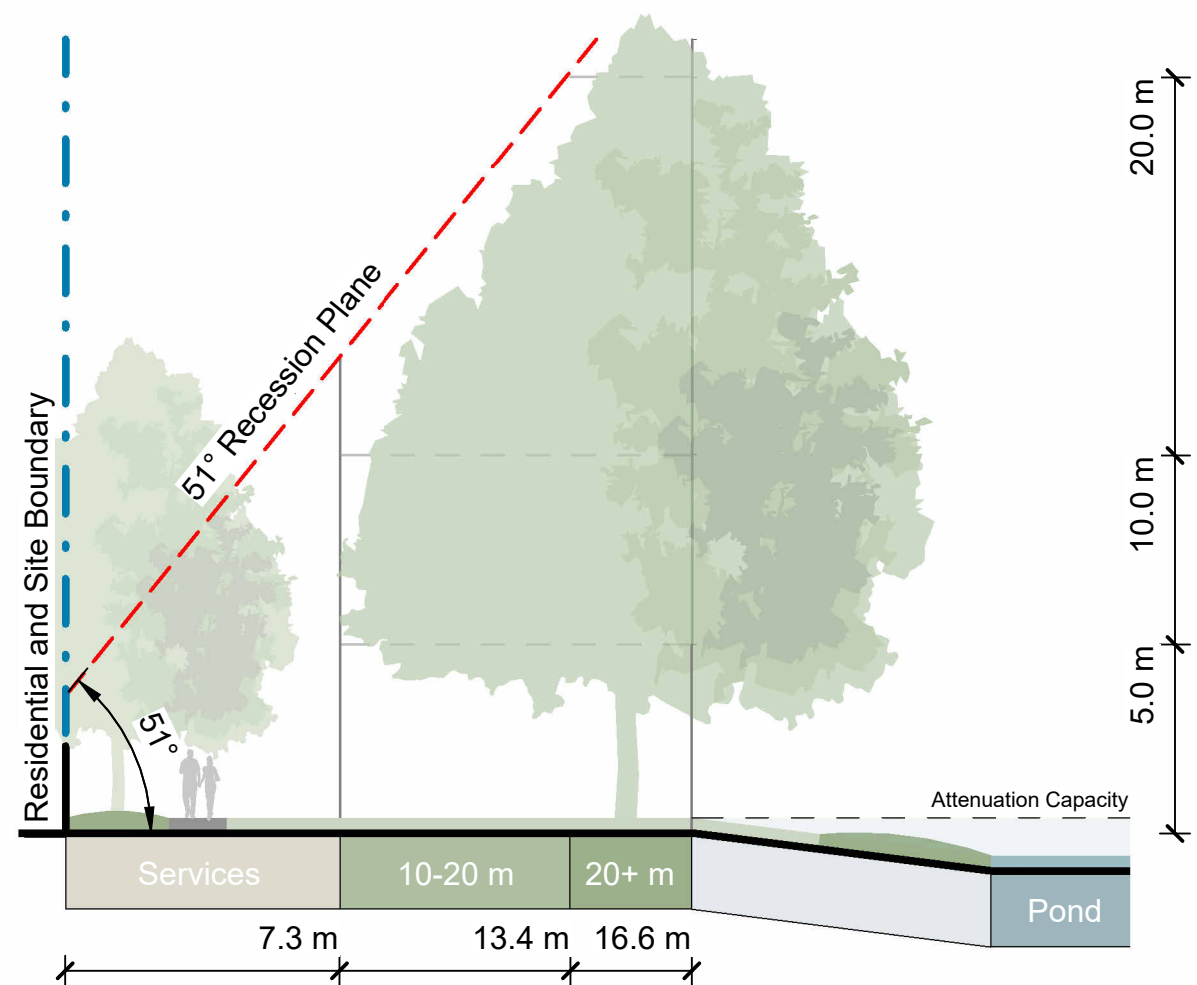
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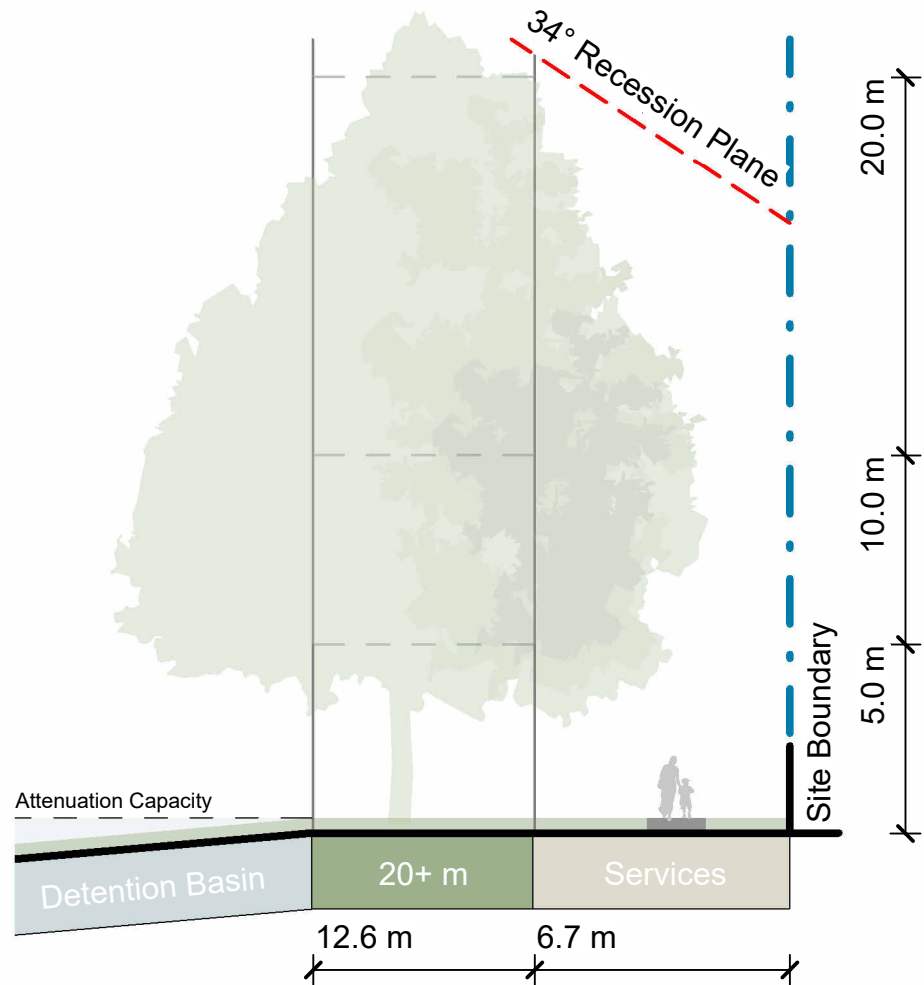
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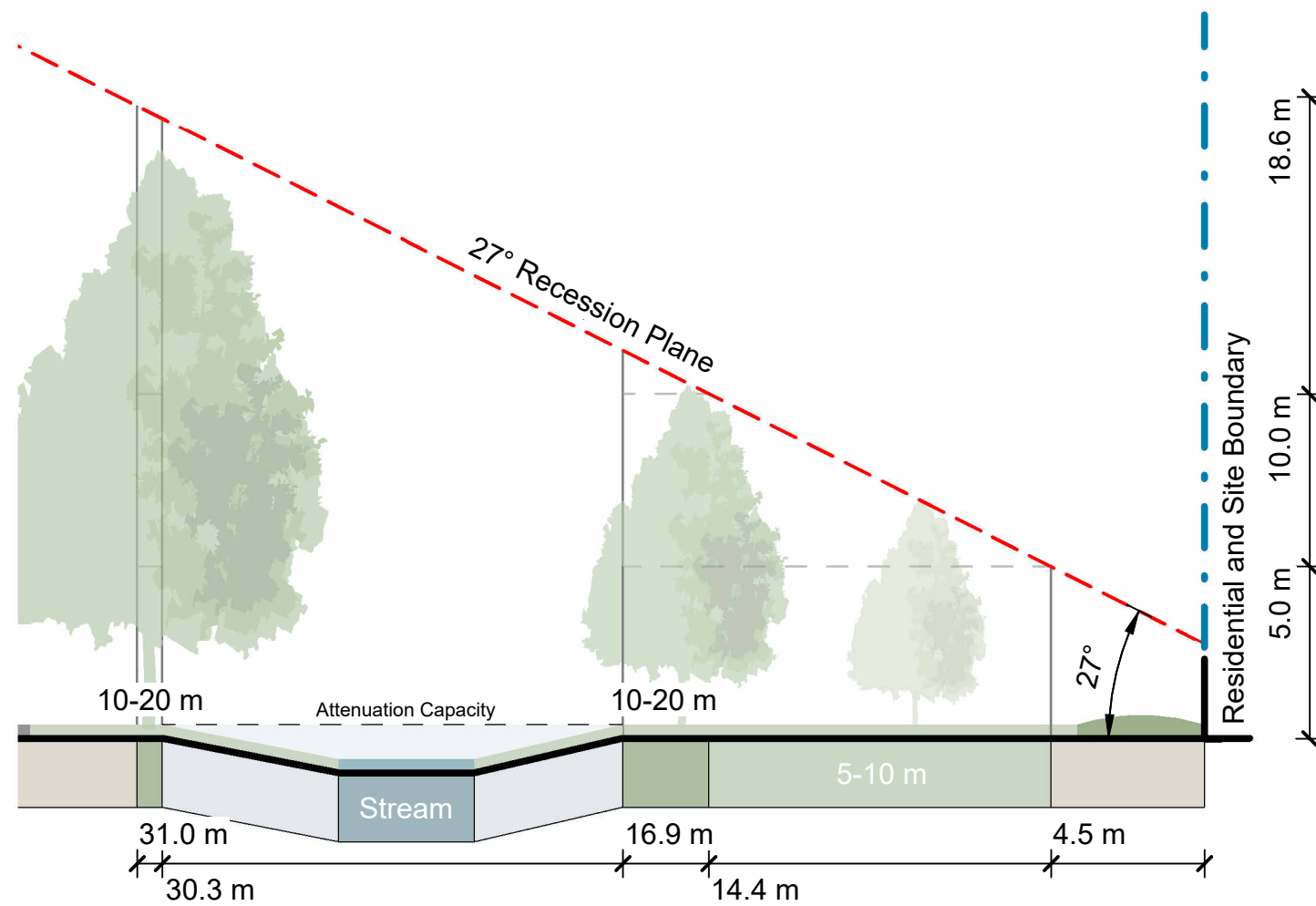
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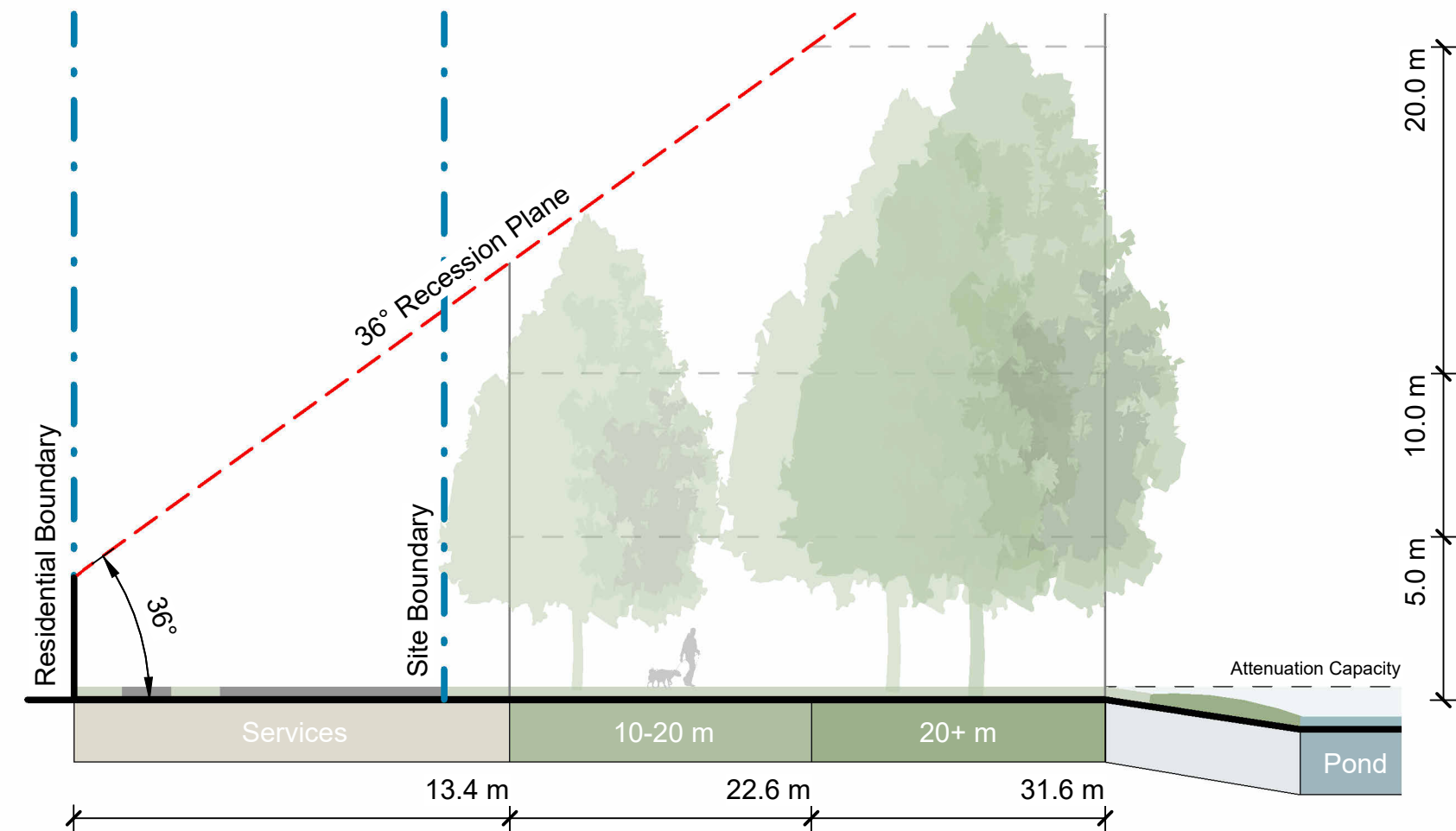
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Scale: 1 : 200



2 East Boundary Section
Scale: 1 : 200



3 South Boundary Section
Scale: 1 : 200



4 West Boundary Section
Scale: 1 : 200

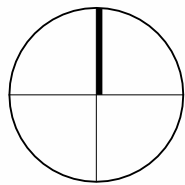
ORIGINAL IN COLOUR



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Note:

Sections identify maximum acceptable proposed tree height and density.
Existing vegetation not shown.
Refer Planting Plans for proposed tree locations.



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Waterford Reserve

Cross Section Studies of Potential Tree
Heights

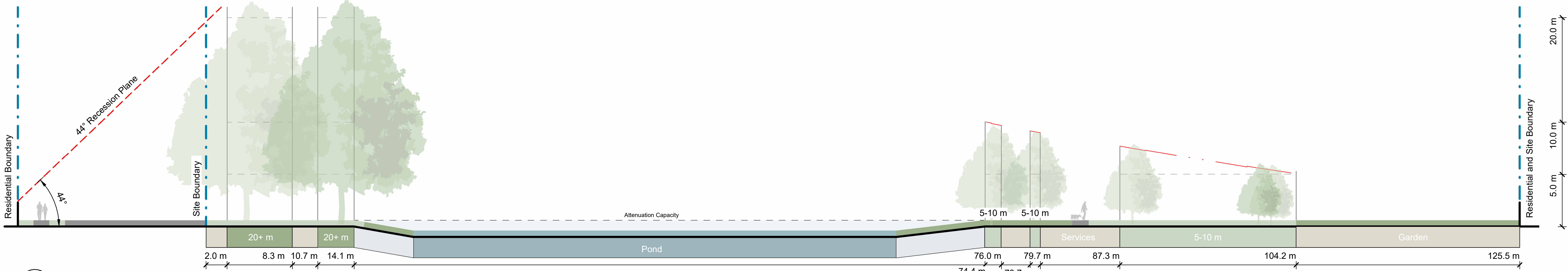
Design ARo Scale As Shown Date 29.08.2025
Drawn ARo
Check HCo

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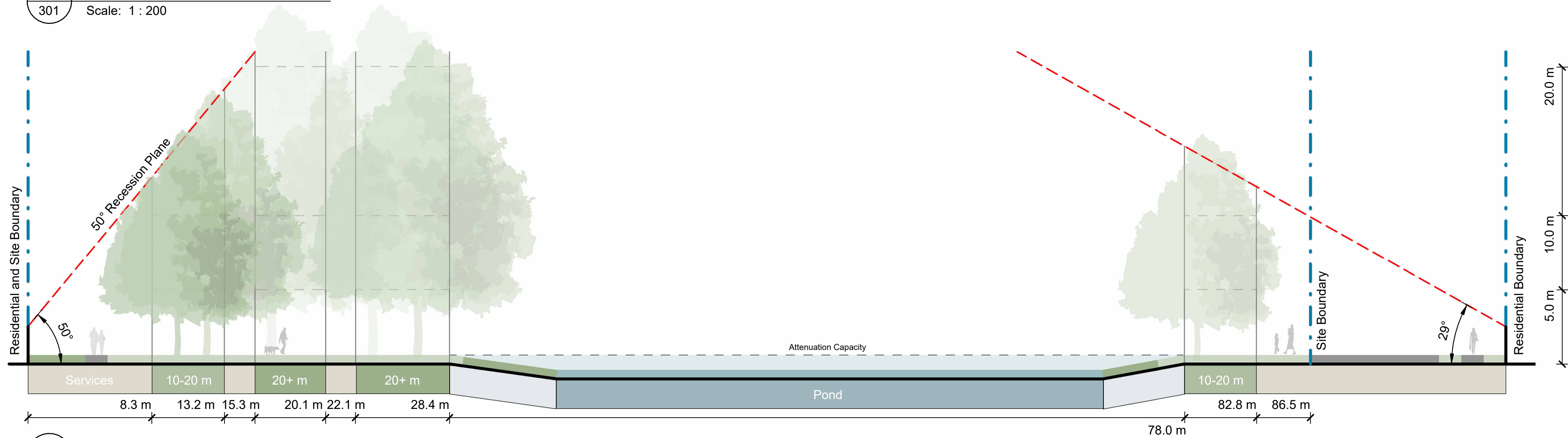
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5 North-South Cross Section 1
Scale: 1 : 200



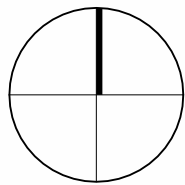
6 North-South Cross Section 2
Scale: 1 : 200

ORIGINAL IN COLOUR



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Note:
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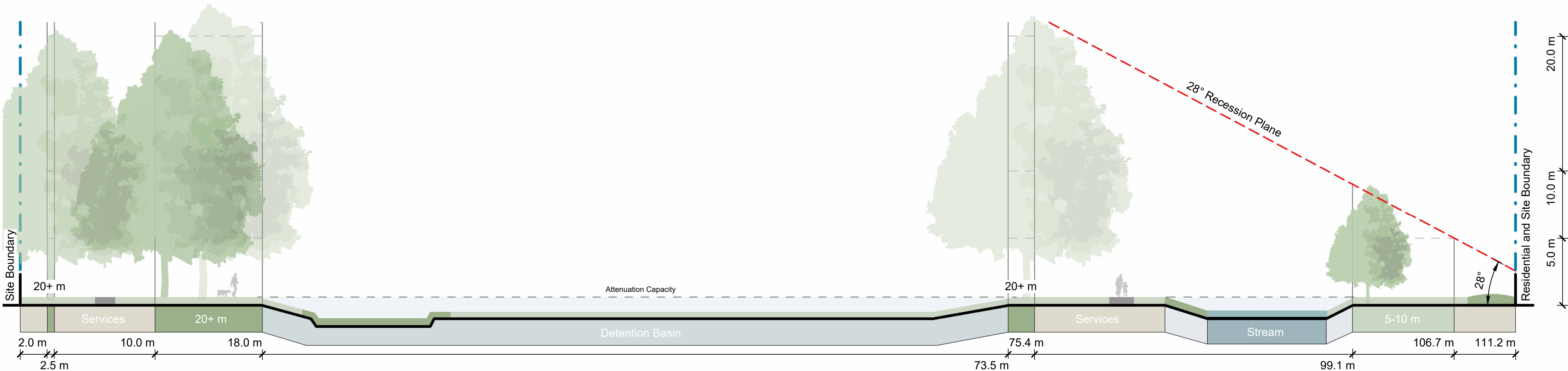
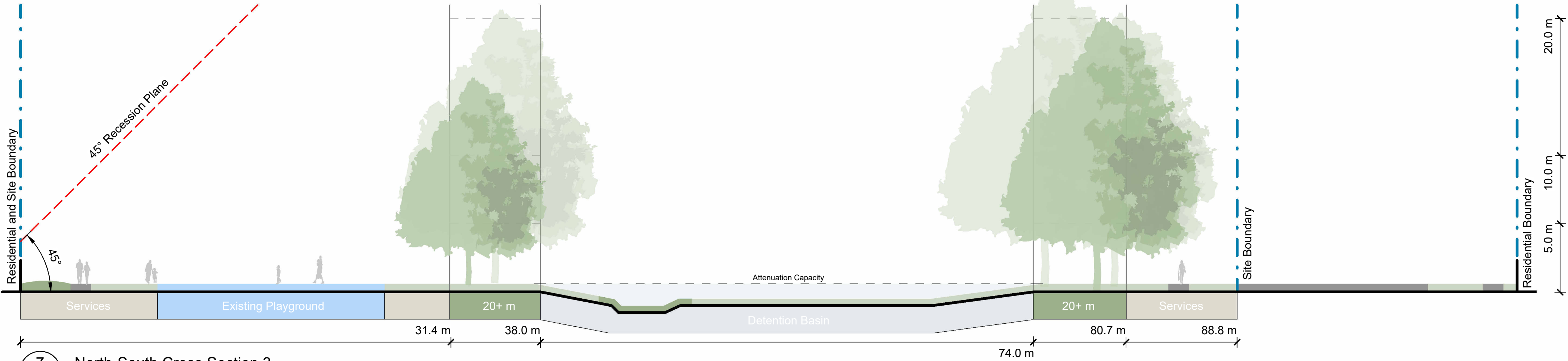
Cross Section Studies of Potential Tree
Heights

Design	ARo	Scale	Date
Drawn	ARo	As Shown	29.08.2025
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BM240711_301	A

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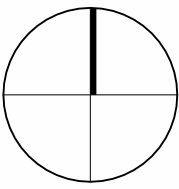


ORIGINAL IN COLOUR



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Cross Section Studies of Potential Tree
Heights

Design	ARo	Scale	Date
Drawn	ARo	As Shown	29.08.2025
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ORIGINAL IN COLOUR

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Existing Canopy Cover - 3250.29 m² 17.5% Canopy coverage to existing site

Proposed Canopy Coverage - 2441.02 m² 13.2% Proposed canopy coverage

Total Canopy Coverage - 5691.31m² 30.7% Total canopy coverage

PLANTING SCHEDULE		
Qty	Type	Tree Height
9	Medium Tree	Tree Height 10-15m
21	Small Tree	Tree Height 5-10m
246	Existing Trees	

0m

5m

10m

20m

0

5

10

20

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Concept Design Draft

DRAWING NO.

BM240711_500

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ORIGINAL IN COLOUR

Boffa Miskell

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Existing Canopy Cover - 3250.29 m² 17.5% Canopy coverage to existing site

Proposed Canopy Coverage - 2441.02 m² 13.2% Proposed canopy coverage

Total Canopy Coverage - 5691.31m² 30.7% Total canopy coverage

PLANTING SCHEDULE

Qty	Type	Tree Height
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Drawn

ARo

1:1000 @ A3

Check

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