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Urban Forest Tree Planting
Penruddock 2 Drainage Reserve

PROJECT NUMBER: **BM240711**

Concept Design

PROJECT ADDRESS: Penruddock Rise,
Westmorland,
Christchurch 8025

CLIENT: Christchurch City Council

CLIENT ADDRESS: 53 Hereford Street
Christchurch Central
Christchurch 8013
New Zealand

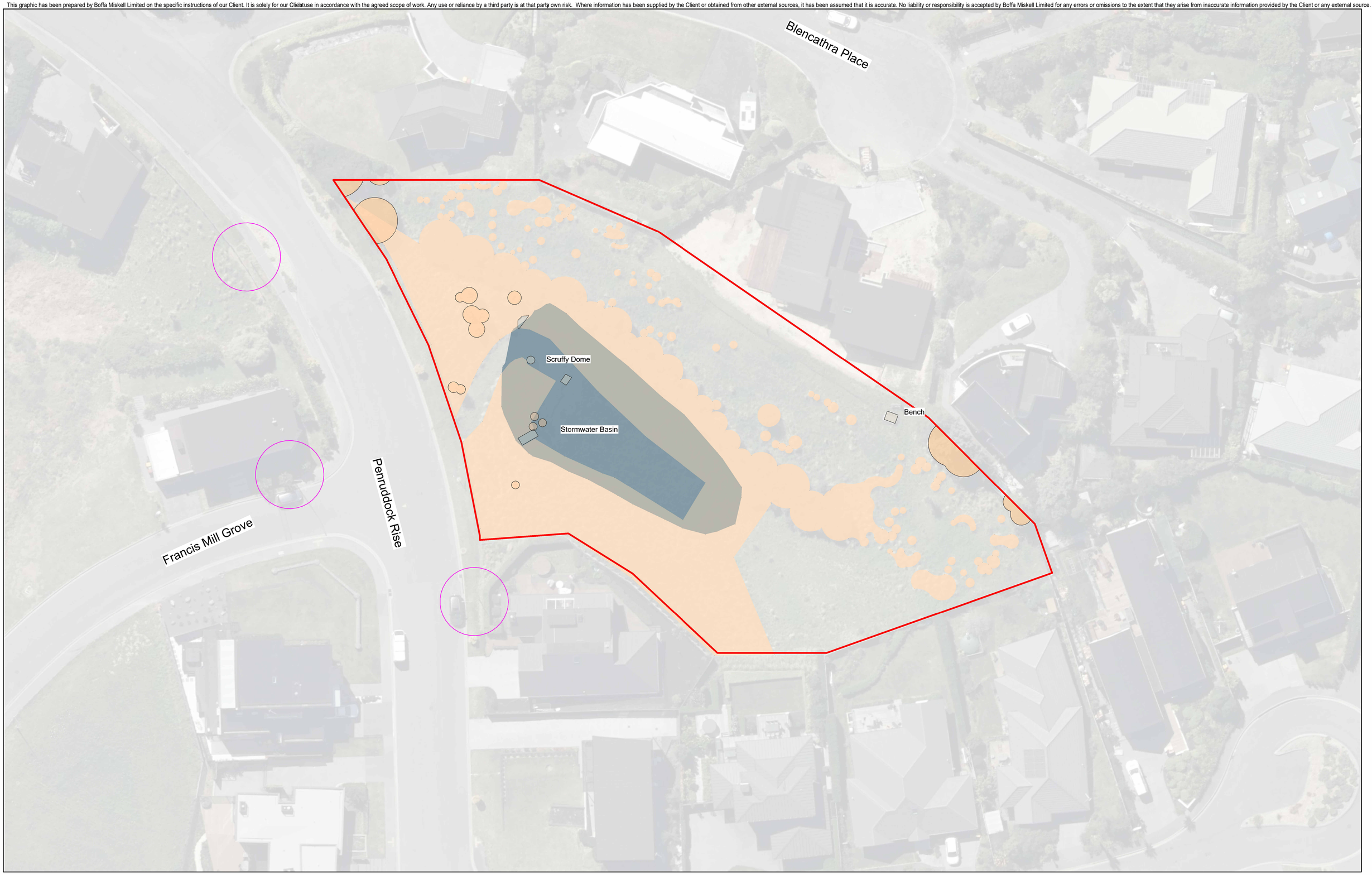
Boffa Miskell Limited
Level 1
141 Cambridge Terrace
Christchurch 8013
New Zealand
Tel: +64 3 366 8891
www.boffamiskell.co.nz

REV	DATE	DESCRIPTION
A	04.09.2026	Concept Design Draft
B	03.11.26	Cncept Design

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

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ORIGINAL IN COLOUR

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LEGEND

- Existing Canopy Cover
- Existing Lower Vegetation
- Lightpole Clearance
- Existing Stormwater Basin

Vegetation cover mapped based on LINZ aerial photography dated September 2025, with site visit to verify existing conditions.

Note, immature existing trees on site are shown at approximate 10-15 year spread.

Existing Specimen Trees - 22

Existing Canopy Cover - 100.77 m² 2.6% Canopy coverage to existing site

0 m 2.5 m 5 m 10 m

REV	DATE	DESCRIPTION	APr HCo
A	04.09.2026	Concept Design Draft	

Urban Forest Tree Planting Penruddock 2 Drainage Reserve

Existing Site

Design	API	Scale	Date
Drawn	API	1:250 @ A1	04.09.2026
Check	HCo	1:500 @ A3	

Concept Design

DRAWING NO. BM240711_200

REVISION A

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ORIGINAL IN COLOUR

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LEGEND

- 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

0m 2.5m 5m 10m

REV	DATE	DESCRIPTION	APr
A	04.09.2026	Concept Design Draft	HCo

Urban Forest Tree Planting Penruddock 2 Drainage Reserve

Tree Height Capacities

Design	API	Scale	Date
Drawn	API	1:250 @ A1	04.09.2026
Check	HCo	1:500 @ A3	

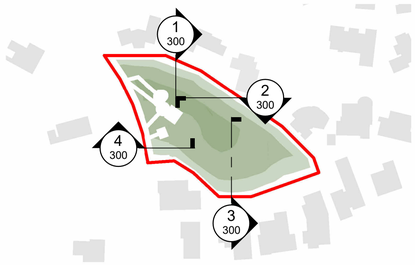
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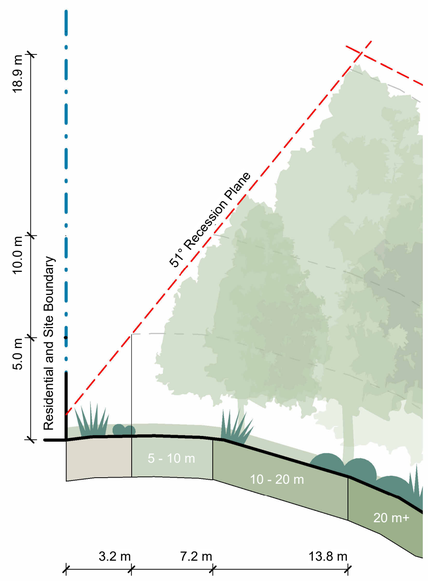
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REVISION A

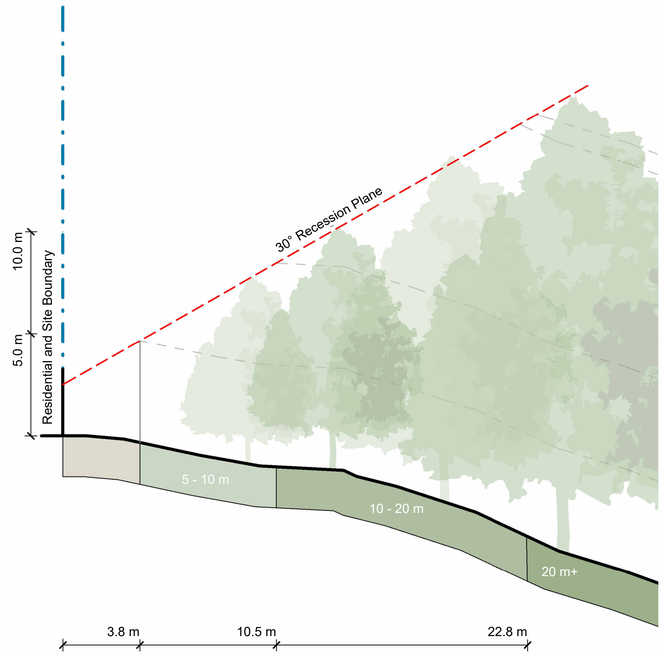
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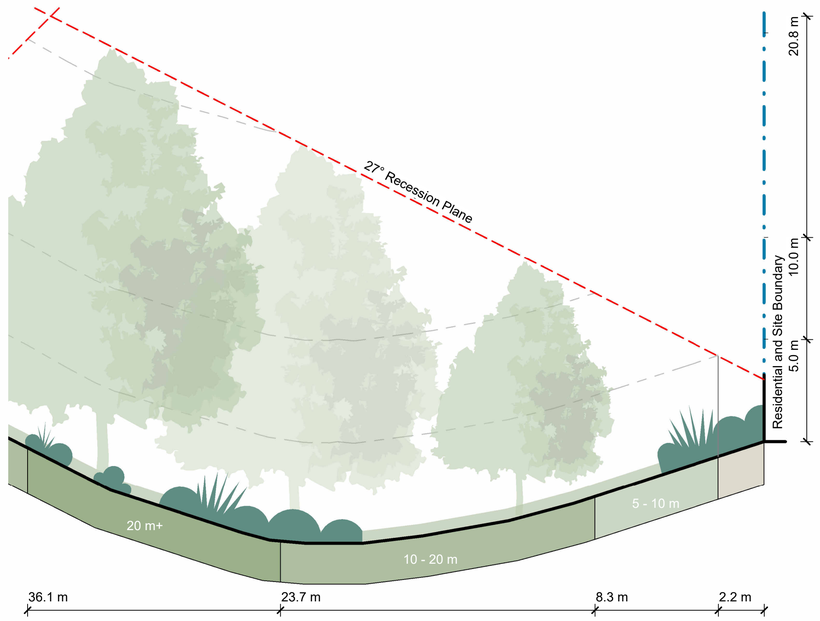




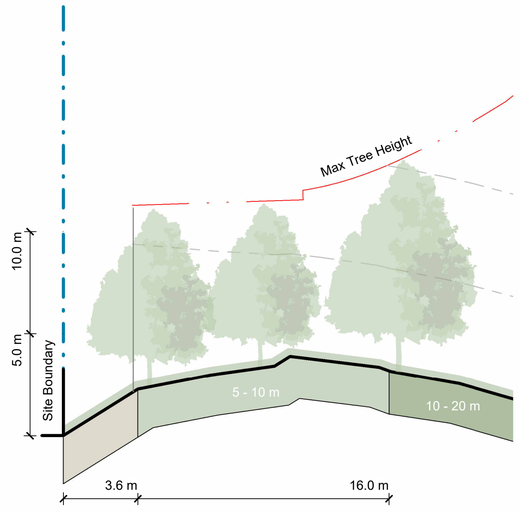
1/300 North Boundary Section
Scale: 1 : 150



2/300 East Boundary Section
Scale: 1 : 150



3/300 South Boundary Section
Scale: 1 : 150



4/300 West Boundary Section
Scale: 1 : 150

ORIGINAL IN COLOUR

Boffa Miskell

Printed 4/09/2026 3:26:42 pm

Note:

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

REV	DATE	DESCRIPTION	APr HCo
A	04.09.2026	Concept Design Draft	

Urban Forest Tree Planting Penruddock 2 Drainage Reserve

Cross Section Studies of Potential Tree Heights

Design	API	Scale	Date
Drawn	API	As Shown	04.09.2026
Check	HCo		

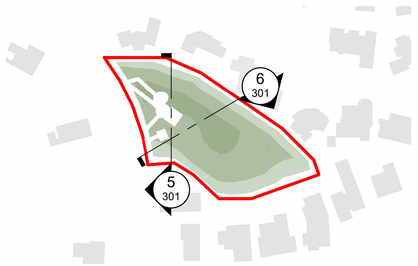
Concept Design

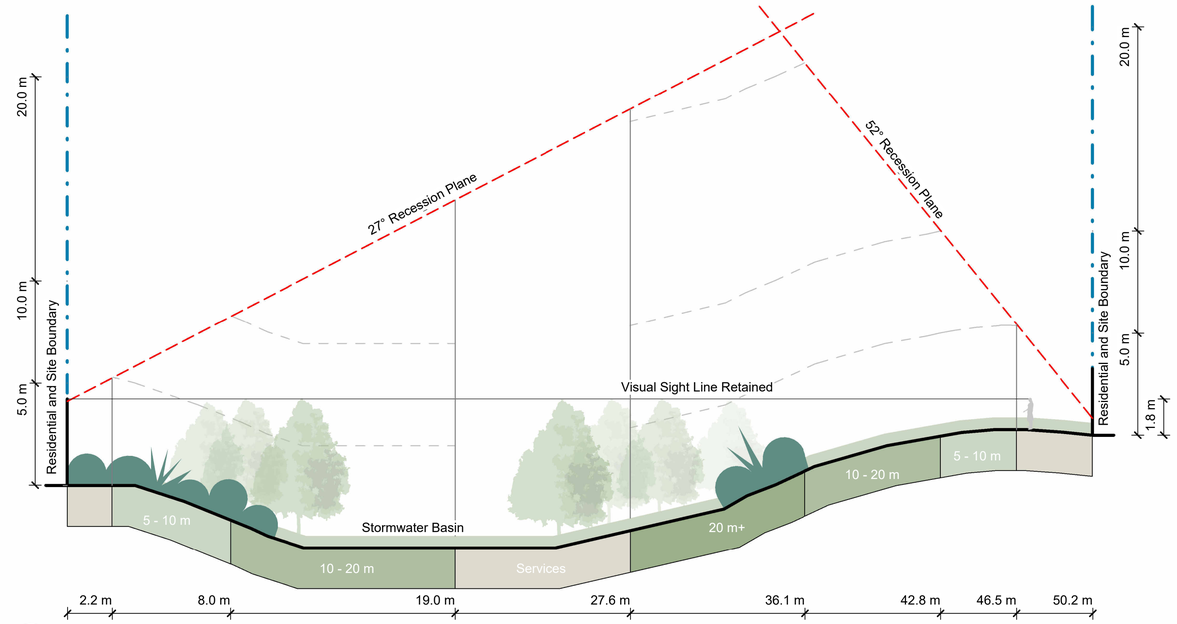
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REVISION A

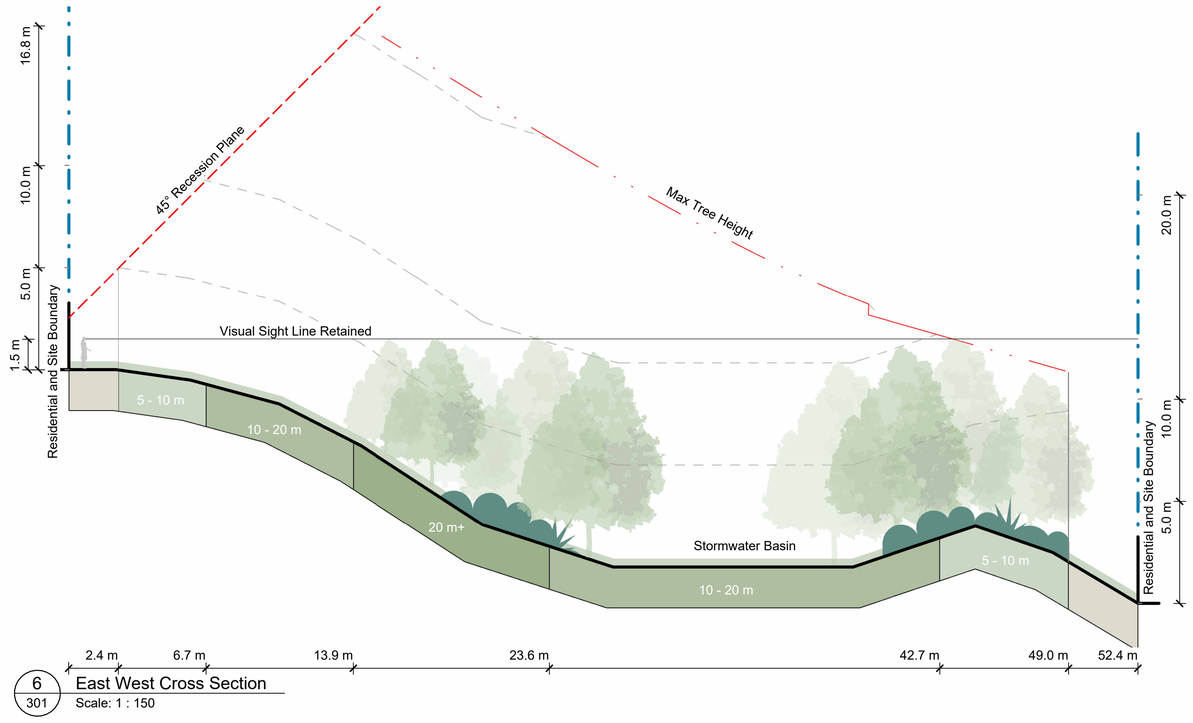
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5/301 North South Cross Section
Scale: 1 : 150



6/301 East West Cross Section
Scale: 1 : 150

ORIGINAL IN COLOUR

Boffa Miskell

Note:

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

REV	DATE	DESCRIPTION	APr
A	04.09.2026	Concept Design Draft	HCo

Urban Forest Tree Planting Penruddock 2 Drainage Reserve

Cross Section Studies of Potential Tree Heights

Design	API	Scale	Date
Drawn	API	As Shown	04.09.2026
Check	HCo		

Concept Design

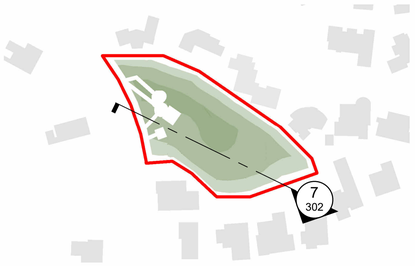
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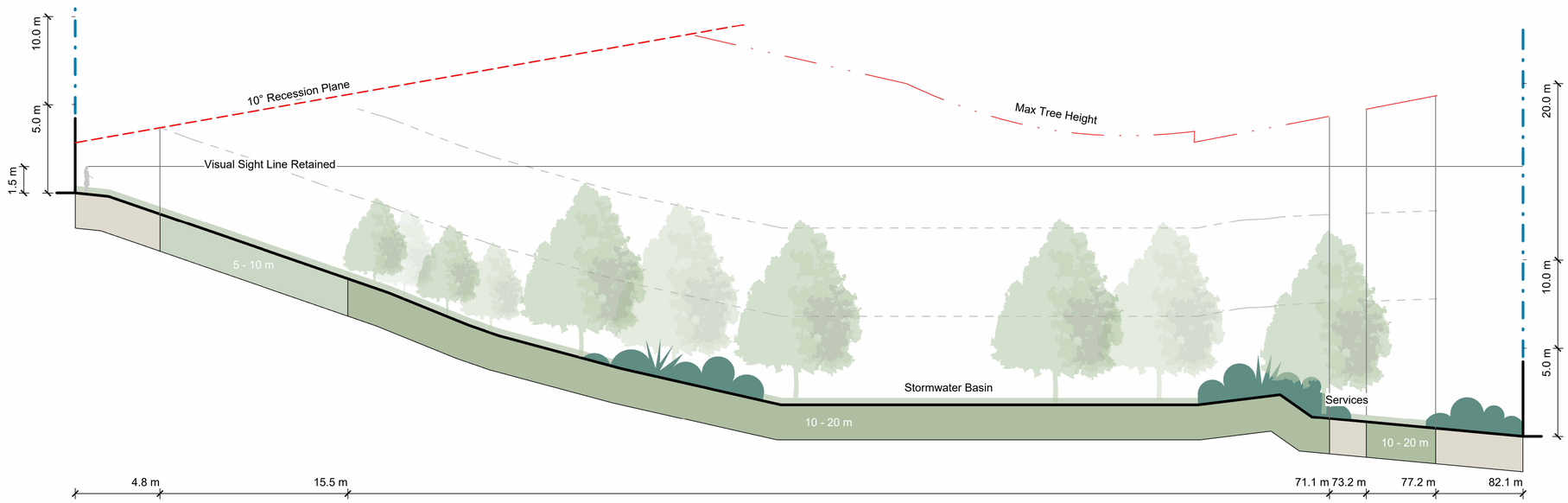
REVISION A

Printed 4/09/2026 3:26:49 pm

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7
302 East-South West-North Cross Section
Scale: 1 : 150

ORIGINAL IN COLOUR

Boffa Miskell

Printed 4/09/2026 3:26:55 pm

Note:

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

REV	DATE	DESCRIPTION	APr
A	04.09.2026	Concept Design Draft	HCo

Urban Forest Tree Planting Penruddock 2 Drainage Reserve

Cross Section Studies of Potential Tree Heights

Design	API	Scale	Date
Drawn	API	As Shown	04.09.2026
Check	HCo		

Concept Design

DRAWING NO. BM240711_302

REVISION A

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ORIGINAL IN COLOUR

Boffa Miskell

Printed 3/11/2026 2:52:59 pm

Existing Canopy Cover	-	100.77 m²	2.6%	Canopy coverage to existing site
Proposed Canopy Coverage	-	907.92 m²	23.3%	Proposed canopy coverage
Total Canopy Coverage	**-**	**1159.49m²**	**29.7%**	**Total canopy coverage**

PLANTING SCHEDULE

Qty	Type	Tree Height
1	Medium Tree	Tree Height 10-15m
15	Small Tree	Tree Height 5-10m
22	Existing Trees	

0 m 2.5 m 5 m 10 m

REV	DATE	DESCRIPTION	
			APr
A	04.09.2026	Concept Design Draft	HCo
B	03.11.26	Cncept Design	HCo

Urban Forest Tree Planting Penruddock 2 Drainage Reserve

Planting Plan

Design	API	Scale	Date
Drawn	API	1:250 @ A1	04.09.2026
Check	HCo	1:500 @ A3	

Concept Design

DRAWING NO. BM240711_500

REVISION B

C:\Users\hamishc\RevitDocs\BM240711_Penruddock_2_Drainage_Reserve_Hamish_Cochrane.rvt

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ORIGINAL IN COLOUR

Boffa Miskell

Printed 3/11/2026 2:53:12 pm

Existing Canopy Cover	-	100.77 m²	2.6%	Canopy coverage to existing site
Proposed Canopy Coverage	-	907.92 m²	23.3%	Proposed canopy coverage
Total Canopy Coverage	**-**	**1159.49m²**	**29.7%**	**Total canopy coverage**

PLANTING SCHEDULE

Qty	Type	Tree Height
1	Medium Tree	Tree Height 10-15m
15	Small Tree	Tree Height 5-10m
22	Existing Trees	

0 m 2.5 m 5 m 10 m

REV	DATE	DESCRIPTION	APr
A	04.09.2026	Concept Design Draft	HCo
B	03.11.26	Cncept Design	HCo

Urban Forest Tree Planting Penruddock 2 Drainage Reserve

Planting Plan

Design	API	Scale	Date
Drawn	API	1:250 @ A1	04.09.2026
Check	HCo	1:500 @ A3	

Concept Design

DRAWING NO. BM240711_510

REVISION B

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