



Cherry Avenue Raingardens

CONSULTATION PACK
ESSEX COUNTY COUNCIL

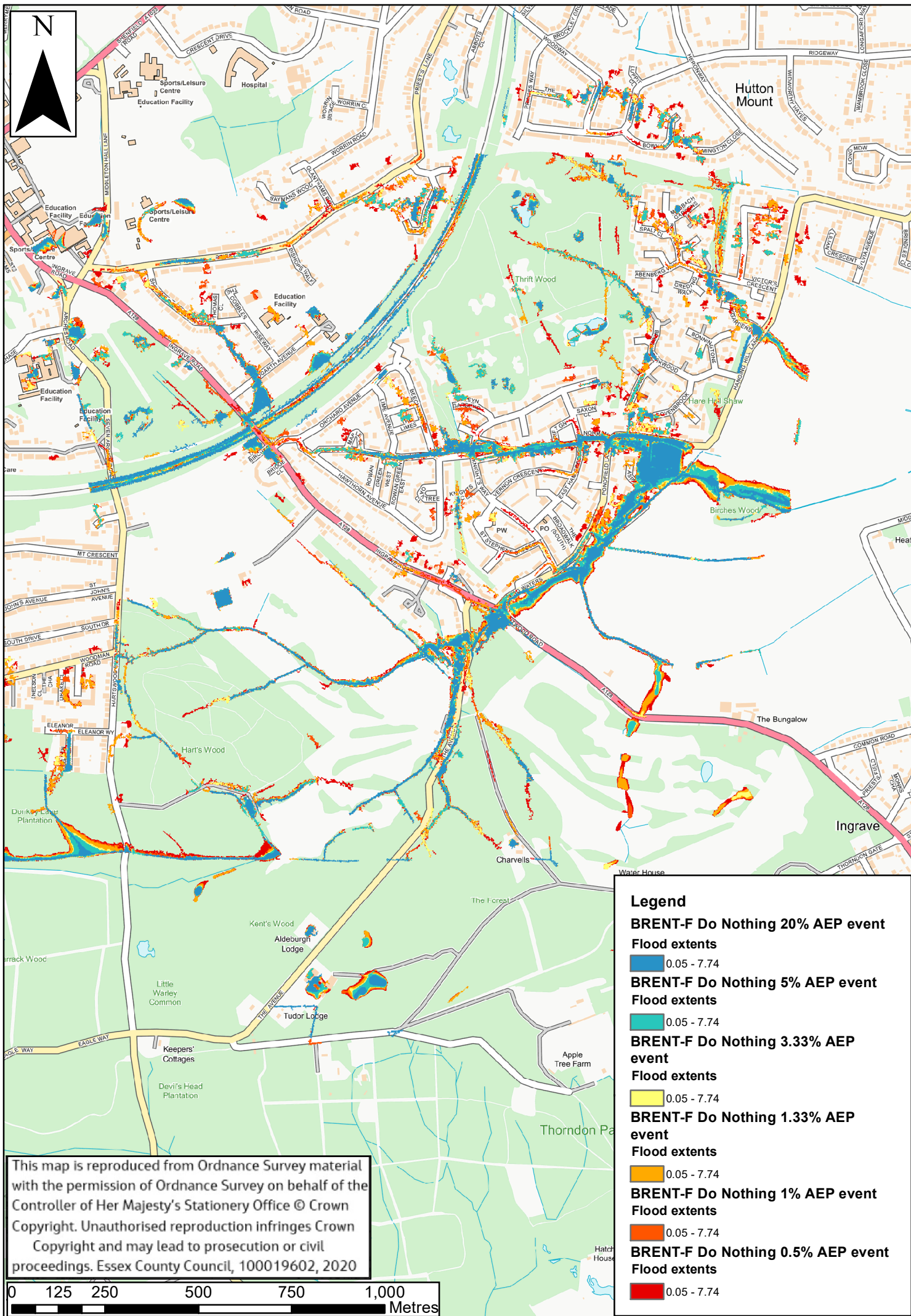
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The Modelled Flood Risk

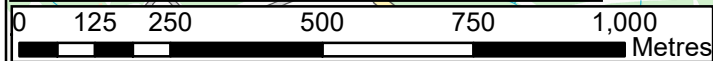
- On the next page you will see the recently modelled surface water flood risk for the Cherry Avenue / Thrift Green / Pondfield Lane area for a 'Do Nothing scenario'.
- Essex County Council has undertaken detailed surface water modelling for a range of different rainfall events to show the effects these extreme storms will have on the local area.
- This modelling shows that due to the fall and topography of Cherry Avenue, many properties further downstream are at risk of surface water flooding. This is exacerbated when the road drainage become full, as there is less interception, and the impermeable road will increase the speed in which the surface water flows downstream.
- This modelling therefore helps us when assessing options to help alleviate this flooding.

Cherry Avenue Raingardens

- A suite of options were modelled and 'Phase 1' of the flood alleviation scheme is to upgrade the Highway verges along the northern extent of Cherry Avenue into biodiverse, multifunctional raingardens.
- These are essentially sunken biodiverse mini gardens which will retain water during times of high rainfall.
- They will alleviate the flooding of roads and houses and reduce pressure on local drains and water sources. This will reduce flood risk in the area as well as helping to protect other properties further down the water catchment area.
- Where there is existing parking, this will also be upgraded whereby the material used is more permeable. This will allow for a greater capture of water.
- The southern verges will additionally be improved by further planting of trees and vegetation.
- The following pages show some visualisations for the rain gardens as well as some indicative plans.



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Legend

BRENT-F Do Nothing 20% AEP event

Flood extents

0.05 - 7.74

BRENT-F Do Nothing 5% AEP event

Flood extents

0.05 - 7.74

BRENT-F Do Nothing 3.33% AEP event

Flood extents

0.05 - 7.74

BRENT-F Do Nothing 1.33% AEP event

Flood extents

0.05 - 7.74

BRENT-F Do Nothing 1% AEP event

Flood extents

0.05 - 7.74

BRENT-F Do Nothing 0.5% AEP event

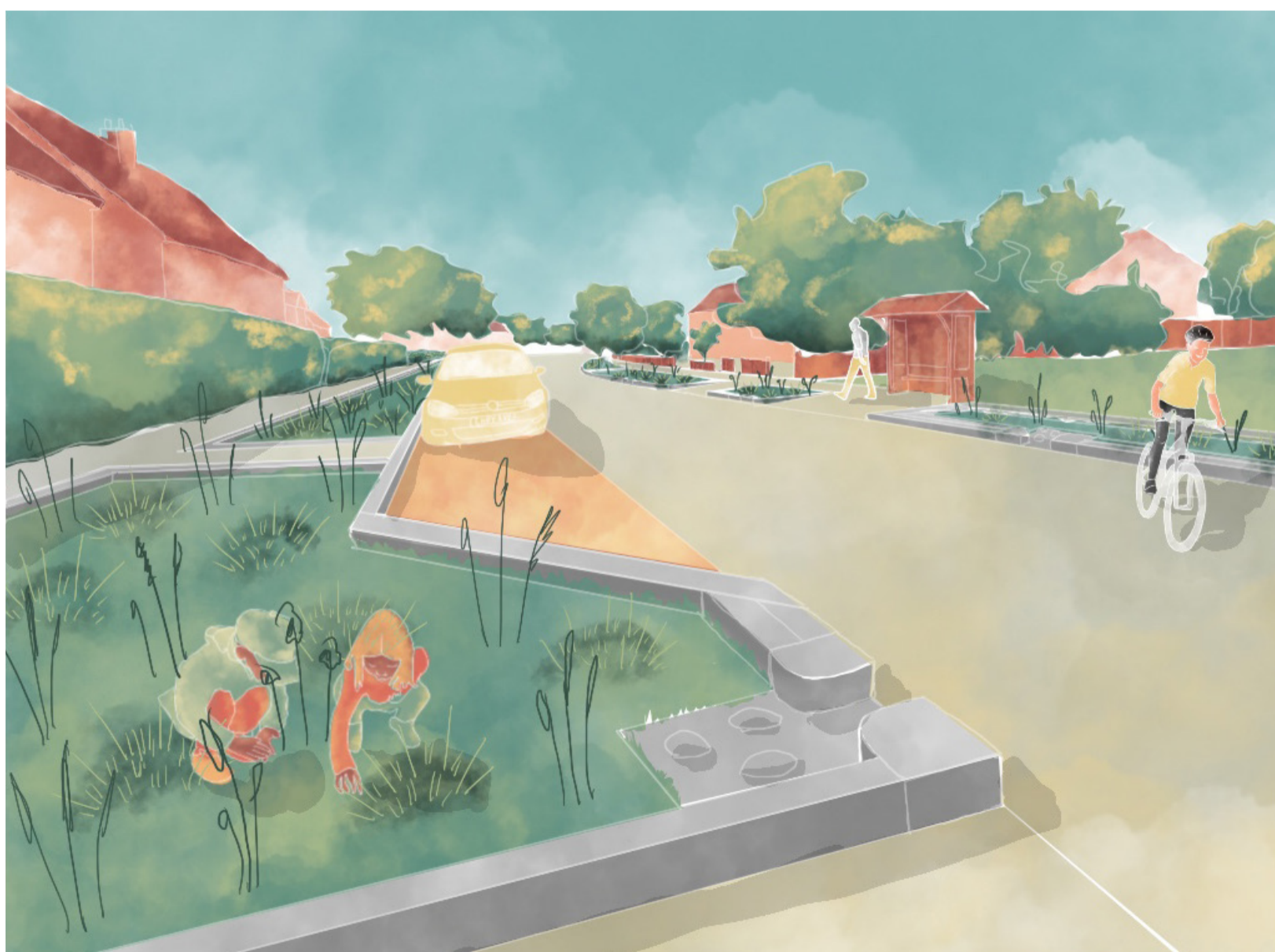
Flood extents

0.05 - 7.74

Thrift Green Rain Gardens



Cherry Avenue Street Layout: Before



Cherry Avenue Street Layout: After With Rain Gardens and Permeable Parking Bays

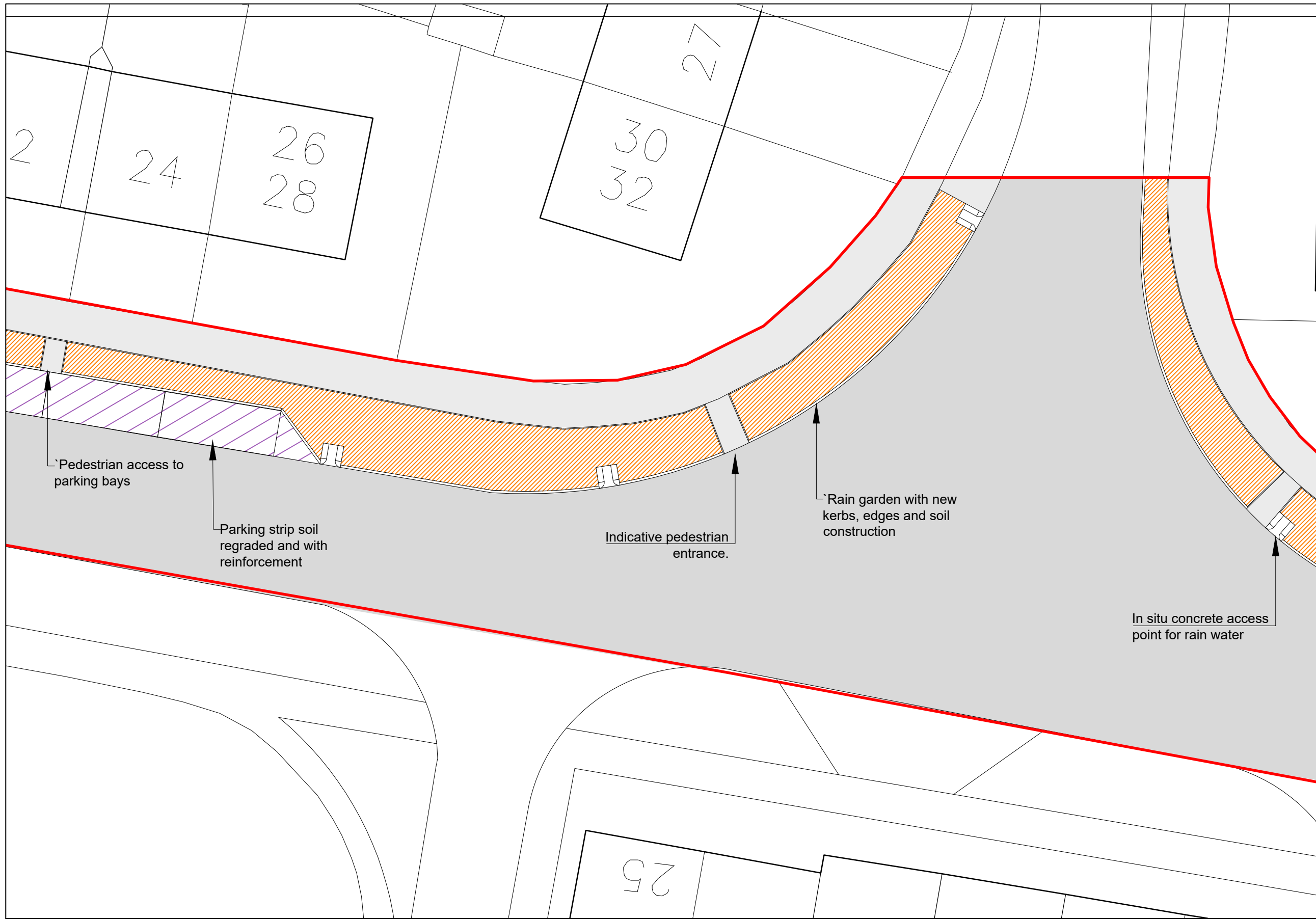
Thrift Green Rain Gardens

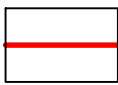






Cherry Avenue Houses: Before



Cherry Avenue Houses: After With Rain Gardens



Legend	
	Indicative Site Boundary
	Rain garden
	Permeable parking
	Pedestrian Path: Tarmac
	Road: Tarmac

NOTES:

No raingarden construction within root protection area of mature trees.

Manhole covers etc must be fully embedded within paths or in positions within rain gardens to be hidden by planting. They must not interrupt the edges of paths, raingardens or parking bays. All edges must be clean and tidy.

Raingarden inlets to correspond with level falls in the road, to collect maximum amount of water.

LEGEND

REVISION NOTES				
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0m 5m 10m
 SCALE 1:200 at A3

PROJECT TITLE Thrift Green Raingardens		
DRAWING NAME Indicative Plan		
DRAWING NUMBER 70069-V01-001		
DATE 10/2022	SCALE 1:200@A3	
DRAWN BY CB	CHECKED JW	REVISION

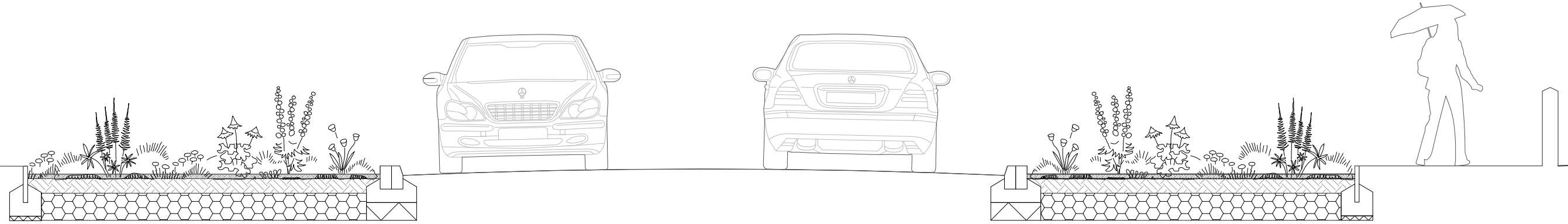
NOTES
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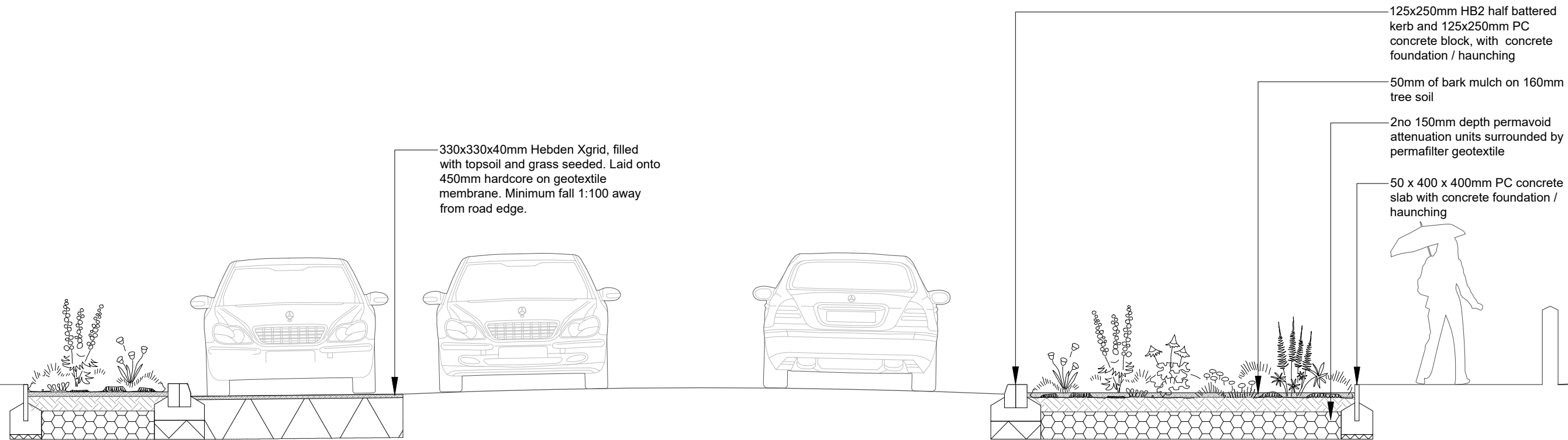
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PROJECT ADDRESS
Cherry Avenue, Brentwood CM13 2EJ

Section 1



Section 2



330x330x40mm Hebden Xgrid, filled with topsoil and grass seeded. Laid onto 450mm hardcore on geotextile membrane. Minimum fall 1:100 away from road edge.

125x250mm HB2 half battered kerb and 125x250mm PC concrete block, with concrete foundation / haunching
 50mm of bark mulch on 160mm tree soil
 2no 150mm depth pervoid attenuation units surrounded by permafilter geotextile
 50 x 400 x 400mm PC concrete slab with concrete foundation / haunching

Footpath

Rain Garden

Permeable Parking

Existing Tarmac Road

Rain Garden

Footpath

LEGEND

REVISION NOTES

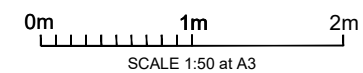
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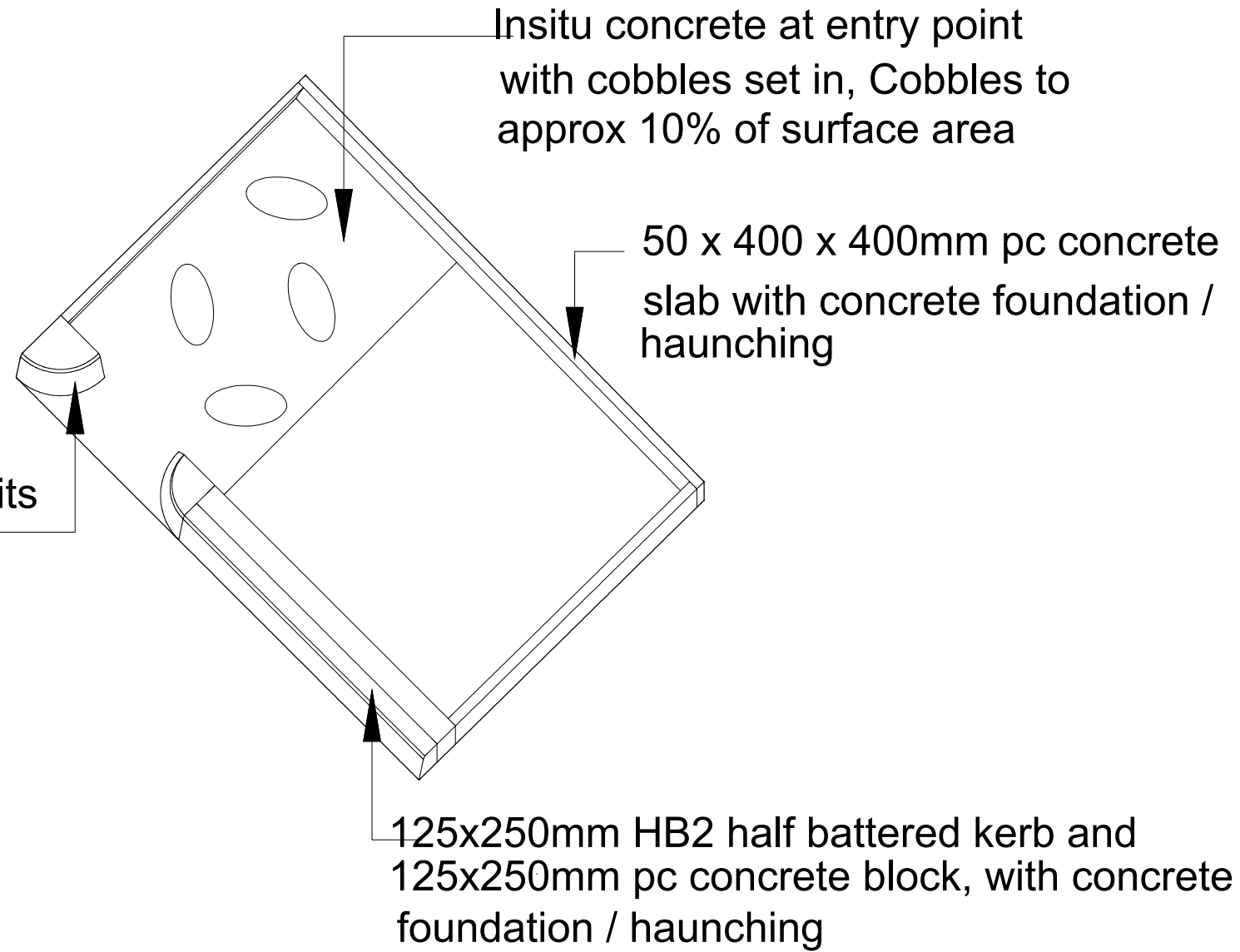
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 PROJECT ADDRESS
 Cherry Avenue, Brentwood CM13 2EJ

PROJECT TITLE Thrift Green Raingardens		
DRAWING NAME Indicative Cross Sections		
DRAWING NUMBER 70069-V01-002		
DATE 08/2022	SCALE 1:200@A3	
DRAWN BY CB	CHECKED JW	REVISION

Cobbles to be Highland
cobbles by CED. 200-400mm
sizes



LEGEND

REVISION NOTES

NOTES

**MEASUREMENTS IN METRES UNLESS
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PROJECT ADDRESS
Cherry Avenue, Brentwood CM13 2EJ

PROJECT TITLE Thrift Green Raingardens		
DRAWING NAME Axonometric Detail		
DRAWING NUMBER 70069-V01-001		
DATE 08/2022	SCALE 1:200@A3	
DRAWN BY CB	CHECKED JW	REVISION

Case Study - Park Avenue





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