

**Land at Broom Hill / Brislington Meadows,  
Broom Hill, Bristol**

**Proof of Evidence of  
Charles Crawford MA (Cantab), Dip LA, CMLI  
on behalf of the Appellant**

**Landscape and Urban Design Matters**

**Appeal Ref: APP/Z0116/W/22/3308537**

**Volume 2: Appendices**

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## **Appendix 1: Amended Parameter Plans and Regulating Plan**

## **Amendments to submitted OPA documents and drawings:**

- All parameter plan references changed from Rev PL1 to Rev PL2.

### **Land Use Parameter Plan**

- Colour for 'residential development' in Legend added.

### **Heights Parameter Plan**

- Legend amended to state 'Up to' for all storey heights.

### **Access and Movement Parameter Plan**

- Colour of residential development area darkened on plan and legend and annotation in legend amended to match Land Use Parameter Plan.

### **Landscape Parameter Plan**

- Legend wording amended to "Minimum existing trees / hedgerows / wooded areas to be retained".
- Minor amendment to vegetation for retention on northern boundary (tree groups G30 and G32).
- Annotation added to veteran tree TPO tree TEP Ref T6 on plan and in legend.
- TPO tree TEP Ref T5 annotated on plan and expanded RPA shown. Item added to legend.

### **Regulating Plan (as contained in the Design Code pages 16 and 17)**

- Reference to TPO tree TEP Ref T6 moved to correct location along southern boundary.
- Legend for heights amended to 'up to' for all storey heights.

Z:\7456\_BRISLINGTON\_MEADOWS\CAD\DRAWINGS\7456\_0175\_CAPACITY\_TESTING.DWG

LEGEND

- Application boundary  
(9.6ha / 23.7acres)
- Residential development  
(C3 class) - c 5.12 ha
- Pedestrian and cycle link
- Indicative Primary Street
- Open space (includes SuDS,  
public rights of way, ramp area  
play areas, new and existing  
trees and hedgerows)  
- c 4.48 ha
- Underground sewer  
connection
- Indicative location of pumping  
station

REV.	DESCRIPTION	APP.	DATE
PL1			08 Apr 22
PL2			Jan 23

LDA DESIGN

PROJECT TITLE  
7456 Brislington Meadows

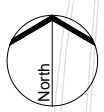
DRAWING TITLE  
Land-use Parameter Plan

ISSUED BY	Bristol	T: 0117 203 3628
DATE	08 Apr 2022	DRAWN RH
SCALE	1:1,000	CHECKED RF
STATUS	For Approval	APPROVED PC

DWG. NO 7456\_103

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Sources Ordnance Survey





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LEGEND

- Application boundary (9.6ha / 23.7acres)
- Up to 4 storey
- Up to 3 storey
- Up to 2.5 storey
- Up to 2 storey
- Indicative Primary Street

REV.	DESCRIPTION	APP.	DATE
PL1			08 Apr 22
PL2			Jan 23

LDĀDESIGN

PROJECT TITLE  
7456 Brislington Meadows

DRAWING TITLE  
Heights Parameter Plan

ISSUED BY	Bristol	T: 0117 203 3628
DATE	08 Apr 2022	DRAWN RH
SCALE	1:1,000	CHECKED RF
STATUS	For Approval	APPROVED PC

DWG. NO 7456\_104

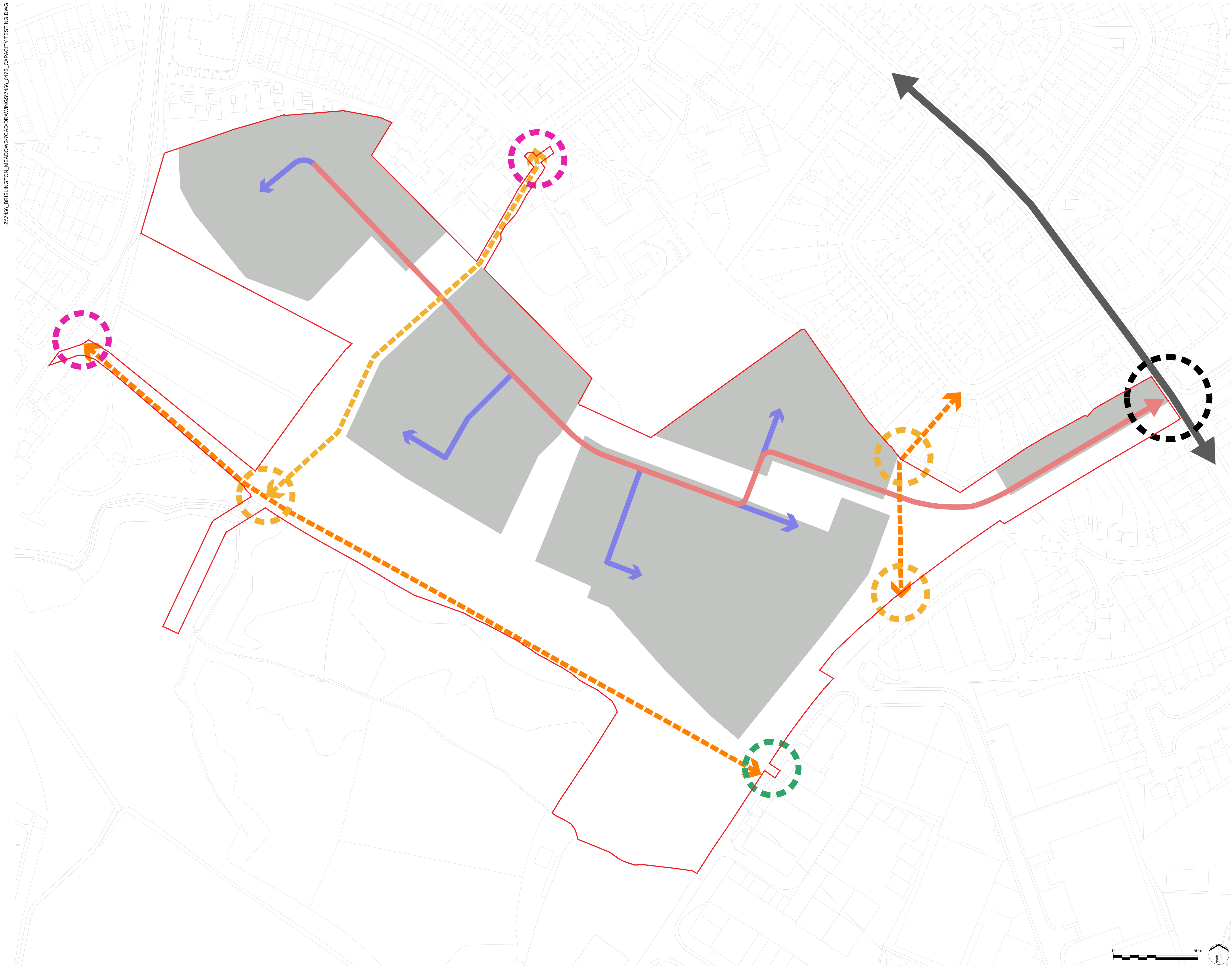
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- LEGEND
- Application boundary (9.6ha / 23.7acres)
  - Broomhill Road
  - Indicative Primary Street
  - Indicative Secondary Streets
  - Public right of way (PROW)
  - Pedestrian link
  - All user access
  - Pedestrian/cycle access
  - Pedestrian access
  - Emergency vehicles, pedestrian and cycle access
  - Residential development

REV.	DESCRIPTION	APP.	DATE
PL1		08 Apr 22	
PL2		Jan 23	

**LDA DESIGN**

PROJECT TITLE  
7456 Brislington Meadows

DRAWING TITLE  
Access and Movement Parameter Plan

ISSUED BY	Bristol	T: 0117 203 3628
DATE	08 Apr 2022	DRAWN RH
SCALE@A1	1:1,000	CHECKED RF
STATUS	For Approval	APPROVED PC

DWG. NO 7456\_101

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Z:\7456 Brislington Meadows\7456\_0175 Capacity Testing.dwg



- Application boundary (9.6ha / 23.7acres)
- Minimum existing trees / hedgerows / wooded areas to be retained
- Root protection areas
- Indicative Primary Street
- Indicative location of Local Equipped Area for Play (LEAP)
- Indicative location of Local Area for Play (LAP)
- Open space (includes SuDS, public rights of way, ramp area, play areas, new and existing trees and hedgerows)
- T6 - (TEP Reference) Veteran Tree
- T5 - (TEP Reference) with expanded RPA

REV.	DESCRIPTION	APP.	DATE
PL1			08 Apr 22
PL2			Jan 23

LDĀDESIGN

PROJECT TITLE  
7456 Brislington Meadows

DRAWING TITLE  
Landscape Parameter Plan

ISSUED BY	Bristol	T: 0117 203 3628
DATE	08 Apr 2022	DRAWN RH
SCALE	1:1,000	CHECKED RF
STATUS	For Approval	APPROVED PC

DWG. NO 7456\_102

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## 4.3 Regulating Plan

### Space Codes

	Brislington Green	p. 22
	Bonville Glade	p.26
	The Gate	p.30
	Brislington Heights	p.33
	Wetland Meadow	p.37
	The Greenway	p.41
	The Wild Edge	p.45
	Incidental space - location indicative only	p.46
	Key buildings	p.48
	Focal point	p.49

### Street Codes

	Primary street - General requirements	p.52
	Primary - Double-sided frontage	p.56
	Primary - Single-sided frontage	p.58
	Primary - Through green space	p.59
	Secondary & tertiary streets	p.60

All street alignments shown are indicative

### Landscape parameters

	Open Space
	Existing trees & hedgerows to be retained
	T6 Veteran Tree
	Local Equipped Area for Play (LEAP) - location indicative only
	Local Area for Play (LAP) - location indicative only

### Access parameters

	All users access
	Pedestrian/cycle access
	Pedestrian access
	Pedestrian/cycle/emergency vehicle access
	Pedestrian & cycle path - alignment indicative only

### Height & land use parameters

	Up to 2 storey
	Up to 2.5 storey
	Up to 3 storey
	Up to 4 storey
	Pumping station - location indicative only

	Application boundary
	Broomhill Road





**Appendix 2: Design Evolution Document**



# Brislington Meadows

Design Evolution Document

Appendix to Landscape and Design Proof of Evidence

January 2023

Appeal ref. 3308537

Document Ref: AP02



Homes  
England

# Contents

<b>Introduction</b>	<b>2</b>
<b>Design Evolution Timeline</b>	<b>7</b>
<b>Summary timeline from DAS</b>	<b>68</b>

Version: PL1

Version date: 10<sup>th</sup> January 2023

Reference: AP02

This document has been prepared and checked in accordance with ISO 9001:2015

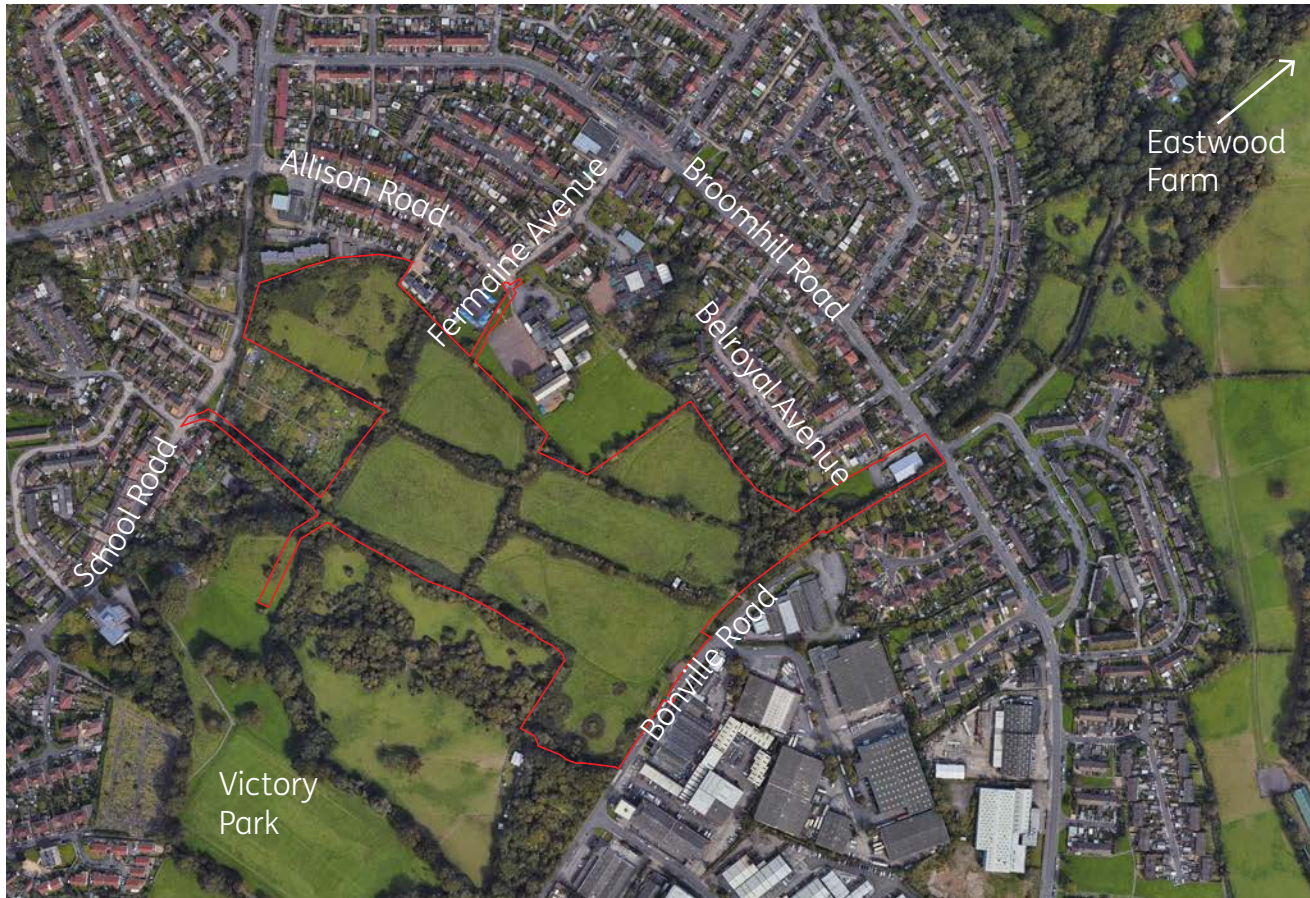
## Introduction

The Appeal Site comprises an irregular shaped parcel of land extending to 9.6 hectares and is known as Brislington Meadows, shown on Site Location Plan (CD1.1).

To the northeast, the Appeal Site is bound by Broomhill Road and residential properties on Condoval Road. To the north the Appeal Site is bound by residential dwellings on Belroyal Avenue and an associated rear access lane, Broomhill Junior School and Mama Bear's Day Nursery and residences accessed off Allison Road. To the east the Appeal Site is bound by Bonville Road and the protected employment area comprising the Brislington Trading Estate. To the west is School Road and existing allotments. To the south of the Appeal Site lies Victory Park and paddocks which comprise protected open space and a Site of Nature Conservation Interest.

The Appeal Site currently comprises open fields crossed by two public rights of way and a number of informal trodden paths, as well as an area of woodland and fenced paddock.

The Appeal Site is characterised by a steeply sloping topography from the northern boundary down to the southern boundary, with the gradient reducing towards the east. There are overhead electricity cables and a pylon on the lower slopes towards the southern boundary of the Site. A telecommunications mast towards the northeast of the Appeal Site will be relocated following the grant of planning consent for the proposed development.



Location Plan

— Application Boundary



This document sets out in chronological order, the design iteration process for Brislington Meadows. Each 'event' in this document the following have been set out:

- Month and year,
- Type of event (Presentation, Homes England Team design testing, Consultation event, Pre-Application Meeting);
- Theme (Hedgerows and trees, topography, earthworks, placemaking, landscape, ecology, planning policy).

Key baseline information has been referenced where relevant, the purpose of the design iteration, what was tested and how this has influenced the drawings or documentation that has been submitted as part of the Outline Planning Application, focusing on the aspects that are to be fixed if the scheme is consented.



## Introduction

### Timeframe:

The document focuses on the period of End 2019 - April 2022, however this should be viewed in the context of the Appeal site's allocation through the Local Plan process that proceeded this, as described in Paul Connelly's Planning Proof of Evidence.

2008	SHLAA including assessment of larger allocation
2014	Adoption of Local Plan including allocation for Brislington Meadows site
2014 - 2018	Efforts by the Council to deliver housing development on the allocated site
2019	Homes England invited by the Council to help deliver housing on the site. Due diligence and preparation of indicative Barton Willmore Masterplan for pre-application
2020	Homes England purchase the site
2020 - 2022	Baseline evidence gathering for OPA and design iteration and testing in response to inform OPA documentation

Apr 2022 Outline Planning Application submitted

### What would be fixed by consent?

The application was submitted with all matters reserved save for access. The matters that would be fixed if the scheme is consented are set out on the site location drawing, the parameters plans, the site access drawings and in the Design Code, as well as the description of development: Outline planning application for up to 260 new residential dwellings (Class C3 use) together with pedestrian, cycle and vehicular access, cycle and car parking, public open space and associated infrastructure. Approval sought for access with all other matters reserved.

The drawings / documents that would be fixed are:

- Application form
- CD1.1 Drawing no. 7456\_016 Site Location
- CD1.6 Broomhill Road Preliminary Access Layout Plan (Key Transport Consultant No. 1066-007.D)
- CD1.7 Bonville Road Emergency Vehicle Access (Key Transport Consultant Drawing No. 1066-014)

- CD1.8 School Road Pedestrian and Cycle Link (Key Transport Consultant Drawing No. 1066-016)
- CD1.9 Allison Road Pedestrian and Cycle Link (Key Transport Consultant Drawing No. 1066003.H)
- CD1.14 Design Code\*

Some minor amends have been made to the submitted Parameter Plans, therefore the updated drawing numbers are as follows

- CD1.2 Drawing no. 7456\_103 Land Use Parameter Plan\_RevPL2
- CD1.3 Drawing no. 7456\_104 Heights Parameter Plan\_RevPL2
- CD1.4 Drawing no. 7456\_101 Access and Movement Parameter Plan\_RevPL2
- CD1.5 Drawing no. 7456\_102 Landscape Parameter Plan\_RevPL2




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\*It should be noted that this is a voluntary inclusion within the outline planning application material and if the Inspector decides that a new / alternative Design Code should be produced this can be required as part of a planning condition as demonstrated in the Basildon Town Square North (CD6.4) recent appeal decision.



This report refers to the Hedgerow reference numbers and tree references. Tree references are from the tree survey, they are not the TPO references. The following drawings are included as a reference point for readers while reviewing this document. Full scale version of these plans can be found appended to Francis Hesketh Proof of Evidence.

## KEY

[This drawing must be reproduced in colour]

-  Trees, Groups and Woodlands
-  Site Boundary
-  Approximate location  
(Feature not shown on supplied topographical survey)
-  Tree Preservation Order  
(Ref: TPO1404 Land at Broom Hill (Brislington Meadows))

### Trees to be retained

-  Tree cover to be retained
-  Veteran tree buffer zone

### Proposed tree works

-  Trees to be removed
-  Trees to be pruned
-  Trees in conflict with Masterplan



TEP Drawing 1 Tree Removal and Retention Overview Drawing No TEP/D7507.43.001

Hedgerow and Historic Field Boundary Impacts (lengths (metres,m) are estimates)

Hedge Ref	Historic Hedgerow ID	Length	Lost	Indicative Loss	Retention	% Retention
<b>Existing Hedgerow</b>						
H1a	HH4	71m	4m	0m	67m	94%
H1b	HH4	34m	2m	0m	32m	94%
H1c	HH4	30m	19m	0m	11m	37%
H2a	HH3	62m	47m	0m	15m	24%
H2b	HH3	68m	68m	0m	0m	0%
H3a	HH5	108m	13m	35m	60m	56%
H3b	HH5	37m	37m	0m	0m	0%
H4a	HH6	116m	116m	0m	0m	0%
H4b	HH6	74m	74m	0m	0m	0%
H5	HH2 (part)	95m	36m	59m	0m	0%
H6	-	15m	15m	0m	0m	0%
<b>Additional Historic Field Boundaries</b>						
	HH1	136m	0m	136m	0m	0%
	HH2 (part)	99m	0m	0m	99m	100%
	HH7	420m	0m	0m	420m	100%
	HH8	78m	0m	47m	31m	40%
	HH9	121m	0m	0m	121m	100%
<b>Overall</b>		<b>1564m</b>	<b>430m</b>	<b>277m</b>	<b>856m</b>	<b>55%</b>

**KEY**

Site boundary

**Predicted Habitat Impacts****Area Habitats**

- Temporary & Permanent Loss - 7.8ha (81%)
- Habitats retained - 0.28ha (3%)
- Retained habitats enhanced - 1.53ha (16%)

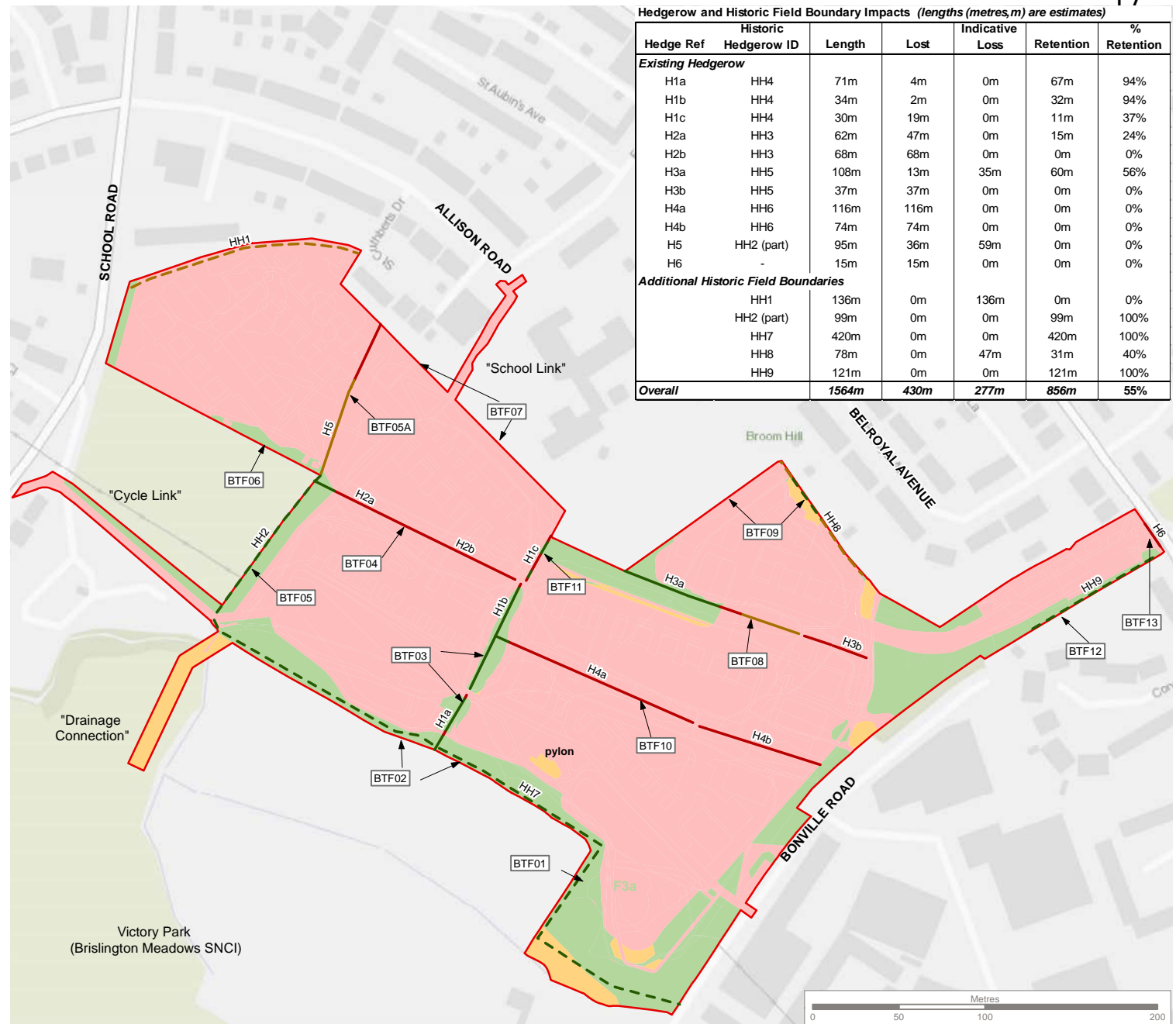
**Existing Hedgerows**

- Lost (loss presumed unavoidable)
- Indicative loss (loss presumed, but detailed design and construction measures may provide opportunities for retention)
- Retained

**Additional Historic Field Boundaries (TEP Dwg Ref G7507.43.00)**

- Indicative loss (loss presumed, but detailed design and construction measures may provide opportunities for retention)
- Retained

BTF# Bristol Tree Forum boundary reference numbers



TEP Drawing 2 Habitat and Hedgerow Impacts Drawing No TEP/G7507.43.001



# Item 1

## Oct 2019

### Capacity testing (inherited masterplan)

#### Placemaking & landscape.

Illustrative sketch layout produced for the site by Barton Willmore in October 2019 as part of due diligence and as a basis for pre-application engagement to inform the site acquisition process.

This scheme was tested at pre-app with the Council in January 2020.

Homes England then acquired the site from the Council, and other landowners, in March 2020.

Brislington Meadows, Bristol			
Housetype	No's	Storeys	Beds
<i>Open market</i>			
<b>Apartments</b>			
1B2P	20	na	1
1 bed apartments	9.5%		
2B3P	22	na	2
2 bed apartments	10.5%		
<b>Houses</b>			
FOG	1	na	2
2B-A	66	2	2
2 bed houses	31.9%		
3B-A	20	2	3
3B-B	5	2	3
3B-C	21	2	3
3B-D	20	2.5	3
3 bed houses	31.4%		
4B-A	8	2	4
4B-B	5	2	4
4B-C	4	2	4
4B-D	18	3	4
4 bed houses	16.7%		
Open market sub total	210		
	70.0%		

<i>Affordable Housing</i>			
<b>Apartments</b>			
1B2P	26	na	1
1 bed apartments	28.9%		
2B3P	24	na	2
2 bed apartments	26.7%		
<b>Houses</b>			
AH-2B	18	2	2
2 bed houses	20.0%		
AH-3B	18	2	3
3 bed houses	20.0%		
4B-B	4	2	4
4 bed houses	4.4%		
Affordable sub total	90		
	30.0%		
<b>TOTAL</b>	<b>300</b>		
GROSS AREA (red line)	10.24 ha		
NET SITE AREA	5.35 ha		



Item 1.1

Barton Willmore Masterplan for Brislington Meadow illustrating 300 homes



# Item 1

## Oct 2019

Schedule for Masterplan Item 1	
<b>Site area</b>	10.24ha
<b>Gross developable area</b> includes all roads and development parcels and excludes public open space	5.35ha
<b>Percentage Apartments</b>	31%
<b>Percentage Houses</b>	69%
<b>Number of homes</b>	300
<b>Density</b> (dwellings per hectare)	56

### What is being tested

In late 2019, an Illustrative Masterplan layout for the Appeal Site was developed by Barton Willmore. This masterplan showed 300 homes at a density of 56 dwellings per hectare (dph).

- Capacity of the site to deliver the allocation for 300 homes.
- Masterplan undertaken prior to detailed surveys including Arboricultural Survey and Topographical Survey.

### What it told us

- 300 homes could be delivered within the allocation, but this iteration would require the removal of all hedgerows internally within the site, with proposals also requiring a high proportion of terraced housing and apartments.
- Subsequent market analysis expressed the clear opinion that more than circa 30% apartments would not match local housing need.

### The impact on the fixes for the OPA

- Pre-application letter from the Council stated that “the current proposal involves a significant loss of hedgerows including species-rich and ancient hedgerows and a number of TPO trees. It is advised that the layout is amended in order to retain and incorporate these features. Further Ecological, Arboricultural and Archaeological surveys will be required in order to inform the layout and design of the scheme.”

## Item 2

# July 2020























### Baseline information

#### Constraints and Opportunities

Production of a Constraints and Opportunities plan to as part of the baseline information review. The purpose of this drawing was to collate the information provided by the various specialisms such as Ecology, Landscape, Transport, TVIA, Arboriculture, Heritage, Urban Design, Drainage and Geotech. As further survey work was undertaken, and fieldwork carried out this drawing was reviewed and updated throughout 2020, 2021 and 2022.

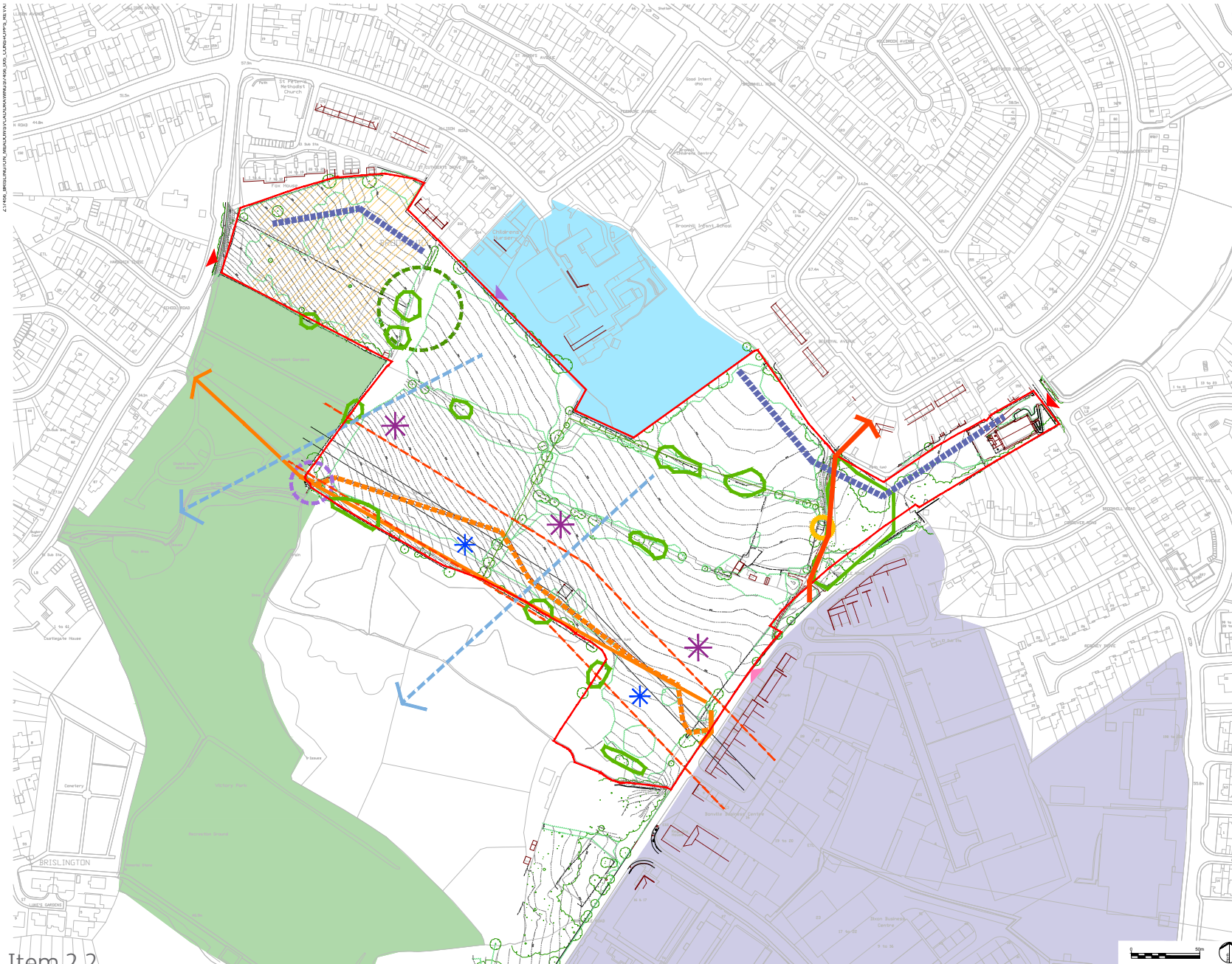
A simplified drawing was included in the Design and Access Statement for ease of reading, but does not attempt to explain all of the details considerations of the site, this is covered in the supporting technical assessments submitted as part of the outline application material.

#### LEGEND

	Site Boundary		Opportunity to provide an open space adjacent to school and nursery
	Potential main vehicular and pedestrian access		Opportunity for SUDS and ecological enhancement within OHL buffer
	Potential emergency/ pedestrian and cycle access		Opportunity to locate taller buildings within lower areas of the site
	Potential pedestrian and cycle access		Potential higher value land within self contained area and long distance views
	Potential to improve connection to Victoria Park, ensuring DDA compliance		Opportunity to take advantage of long distance views from site
	Definitive PRoW routes		Adjacent school and nursery
	Opportunity to designate actual east-west route taken		Adjacent industrial estate
	Approximate location of TPO'd trees and tree groups		Adjacent public open space and allotments
	20m buffer from overhead power lines		
	Existing telecoms mast with expired lease		
	Access will be required over school land to implement connection to school/shops		
	2.5m contours		
	Potential noise constraints from adjacent industrial units		
	Boundaries to residential properties need consideration to avoid overbearing		

#### Item 2.1

#### Constraints and Opportunities Legend



Item 2.2  
Constraints and Opportunities Plan

# Item 3 July 2020

## Capacity testing

### Hedgerows and Trees

Capacity testing by design team (involving geotechnical, highway, ecologist, heritage, arboricultural and landscape advice), to review impact of retaining all trees and hedgerows on the gross developable area

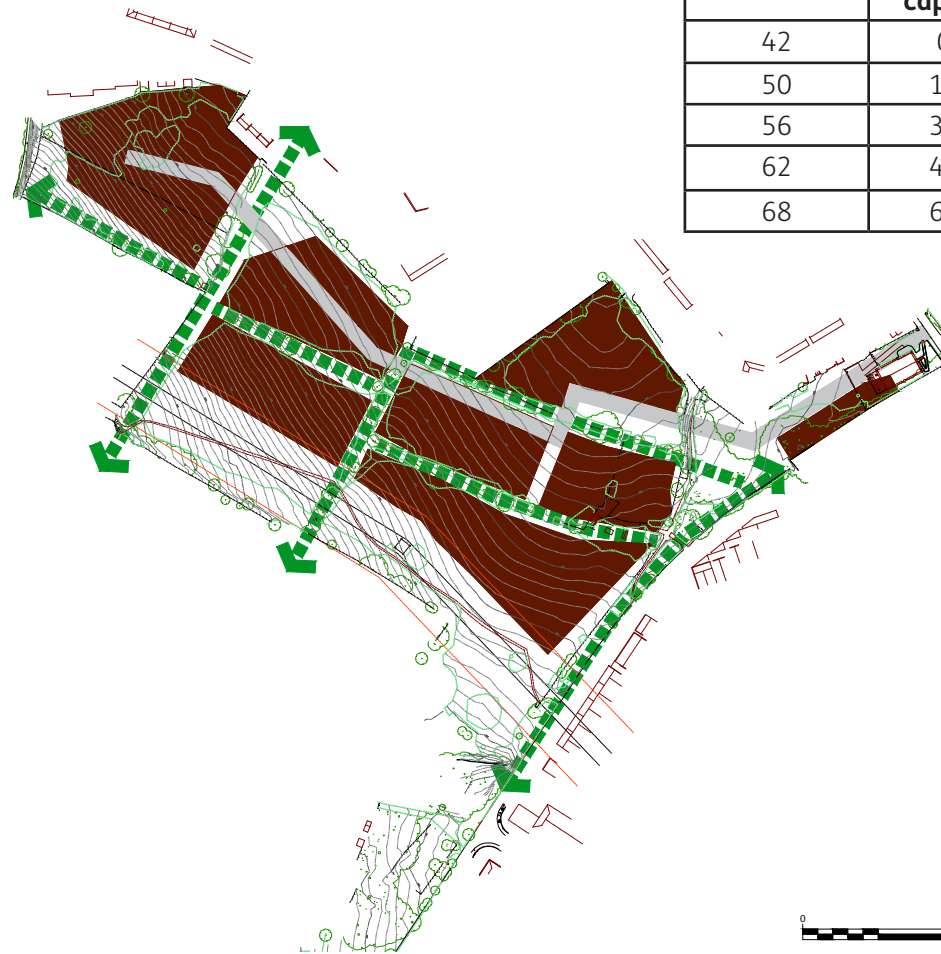
### Option 1 - Retention of all trees and hedgerows central to the site

Would require significant proportion of apartments / taller buildings to achieve 300 units.

Some areas of developable land would be impractical to develop due to limited parcel depth, inefficient parcel shape and steep slopes.

See items 9, 14, 16, 17, 20, 21 and 22 in this document for the further design testing undertaken.

Density (dph)	% of apartments as total capacity	% of houses as total capacity	Total capacity (units)
42	0%	100%	185
50	15%	85%	221
56	30%	70%	247
62	45%	55%	273
68	60%	40%	300



Retained hedgerows  
Residential development

REV. DESCRIPTION APP. DATE

**LD&DESIGN**

PROJECT TITLE  
7456 - Brislington Meadows

DRAWING TITLE  
Capacity Study: Option 3

ISSUED BY	Bristol	T: 0117 203 3628
DATE	14 July 2020	DRAWN RS
SCALE@A3	1:2,500	CHECKED DW
STATUS	Sketch	APPROVED PC

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Item 3.1

Option 1 Retention of all trees and hedgerows central to the site



## Item 3 July 2020

### Option 2 - Retention of trees and hedgerows except for two hedgerows central to the site (references H2 and H4)

- Enables a more regular / orthogonal structure for development area resulting in more efficient use of land.
- Potential for some element of trees or hedgerows not shown to be incorporated into streets or gardens.

See items 9, 14, 16, 17, 20, 21 and 22 in this document for the further design testing undertaken.

Density (dph)	% of apartments as total capacity	% of houses as total capacity	Total capacity (units)
42	0%	100%	203
50	15%	85%	241
56	30%	70%	271
62	45%	55%	300



### Item 3.2

Option 2 Retention of trees and hedgerows except for two hedgerows central to the site

## Item 3 July 2020

### Option 3 - Removal of all trees and hedgerows within the site (references H1, H2, H3, H4 and H5)

Option creates the largest area of developable area out of the three options, however involves substantial hedgerow loss and does not accord with the BNG first principle of avoiding removal of habitats.

This option is similar to the Barton Willmore scheme, delivering 300 at 56dph.

Density (dph)	% of apartments as total capacity	% of houses as total capacity	Total capacity (units)
42	0%	100%	226
50	15%	85%	269
56	30%	70%	300



Removal of hedgerows  
Residential development

REV. DESCRIPTION APP. DATE

**LD&DESIGN**

PROJECT TITLE  
7456 - Brislington Meadows

DRAWING TITLE  
Capacity Study: Option 1

ISSUED BY	Bristol	T: 0117 203 3628
DATE	14 July 2020	DRAWN RS
SCALE@A3	1:2,500	CHECKED DW
STATUS	Sketch	APPROVED PC

DWG. NO 7456\_SK001

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### Item 3.3

#### Option 3 Removal of all trees and hedgerows central to the site

## Item 3 July 2020

### Further design development required

It was evident from this first capacity study that further testing of the left over development areas was required. For example if all hedgerows are retained as in Option 1, are all of the areas shown actually developable? See items 9, 14, 16, 17, 20, 21 and 22 in this document for the further design testing undertaken.

Assessment of ecological performance of hedgerows (see Item 10 and 11).

### Design decision

- Full hedgerow retention would require around 60% of the development to be apartments, which is not appropriate in the context of the adjoining urban form and landscape impacts.
- Design testing shows that at least three hedgerows can be retained at least in part and still achieve practical development options, albeit initial testing shows 45% apartments required compared to market advice that 30% should be the maximum given the local market.
- Decision to work the site as hard as possible to enable retention of hedgerows as far as possible (therefore discounting option 3) whilst aiming for around 70% houses as opposed to apartments.

### The impact on the fixes for the OPA

Landscape Parameter Plan and Land Use Parameter Plan - these Parameter Plans should be set out to give flexibility that allows for innovative design solutions in order to deliver a landscape-led approach. Show hedgerows for retention that do not result in awkward development areas.

### The impact on future RMAs

Potential to retain further hedgerows through detailed design solutions and varied house types.



# Item 4 July 2020

## Building Types and Heights TVIA

Opportunities and Constraints Plan for Landscape and Visual developed following an initial site visit. Plan which only considered landscape and visual matters, produced to inform the development the illustrative masterplan with the following suggestions::

- Areas of elevated land (within parts of the Site's northern extents) would be more suitable for development that reflects the heights of the surrounding buildings.
- Opportunities to create positive views towards Bristol City Centre; and to / from the surrounding context of the Site, from places like Victory Park.
- Opportunity to create a positive frontage along Bonville Road while providing a soft green edge that is reflective of existing vegetation.
- Consideration of placemaking opportunities to create a focal point through use of a slightly taller building. However, it would be important to ensure that any taller buildings are not be overbearing on surrounding residential area.



Item 4.1

Landscape and Visual opportunities and constraints plan



# Item 5 Aug 2020

## Design testing



### Site Access, Placemaking, landscape, earthworks

Assessment of highway access option via School Road including indicative engineering drawings to assess cut and fill required. A series of options were considered, however each resulted in significant cut and fill, loss of hedgerows and trees and/or requires significant additional infrastructure in order to access properties.

### Design Considerations

- Modelling of the various access options were considered including use of retaining walls / gabions / slopes.
- Surface water attenuation was recognised as a challenge for any of the options presented.
- Access would require loss of both a TPO'd Category A tree (TEP ref T29) at the eastern edge of the site and an additional Category A tree on the boundary with School Road as well as several mature Category B trees on the school road embankment and hedgerow within TEP Ref G21, resulting in habitat loss and reduction in habitat connectivity.

### Legend for all drawings

-  Land take of school road access and associated earthworks
-  Developable area

-  Indicative alignment of main access road

### Option 1: Vehicular access 1:12



Item 5.1

- Earthworks and retaining walls required to achieve a 1:12 gradient primary road into the site.
- Level access from the street will not be possible from properties (contrary to Building for a Healthy Life principles).
- Loss of mature trees along School Road.
- The desirable maximum gradient for pedestrians and cyclists is 1:20 so this option at 1:12 would be undesirable and less accessible.

### Option 2: Vehicular access 1:20



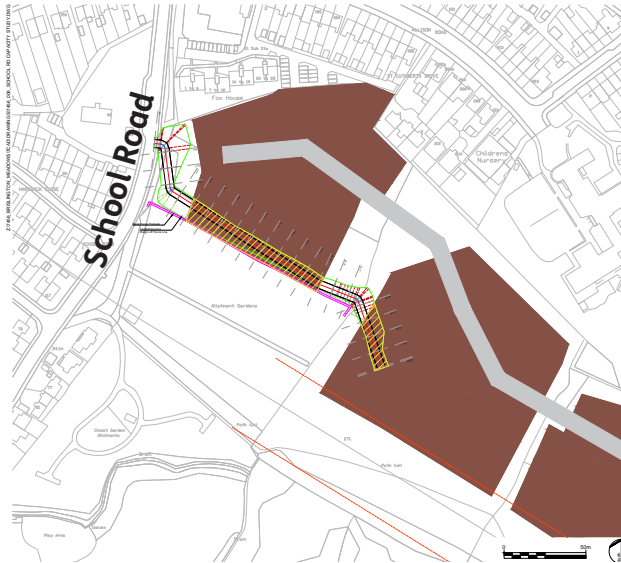
Item 5.2

- Very considerable earthworks and very large retaining walls required to achieve a 1:20 gradient as shown by hatched zone on plan.
- Considerable loss of mature trees along School Road as well as Hedgerow H5.
- Significant impact on the developable area of the site
- Significant impact on placemaking of entrance into the site due to the level of re-profiling required. May result in significant level differences between homes and the street.

## Item 6

# Sept 2020

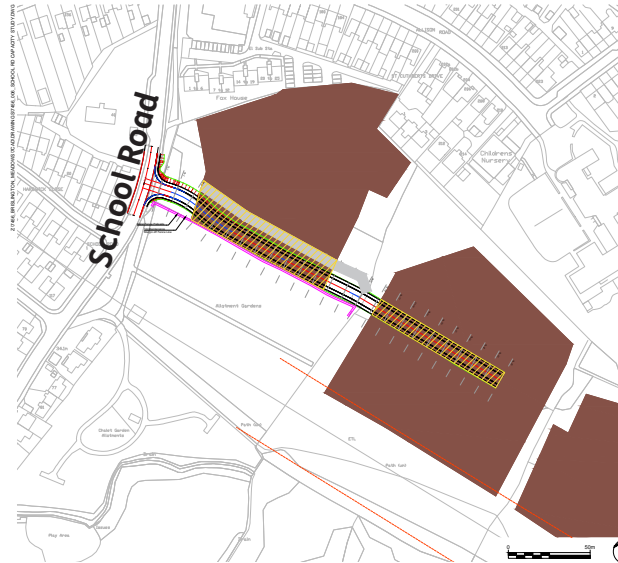
### Option 3: Pedestrian / cycle only



Item 5.3

- Cut and fill required for a pedestrian / cycle only route
- Loss of all trees along School Road frontage would be required to deliver the route
- The desirable maximum gradient for pedestrians and cyclists is 1:20

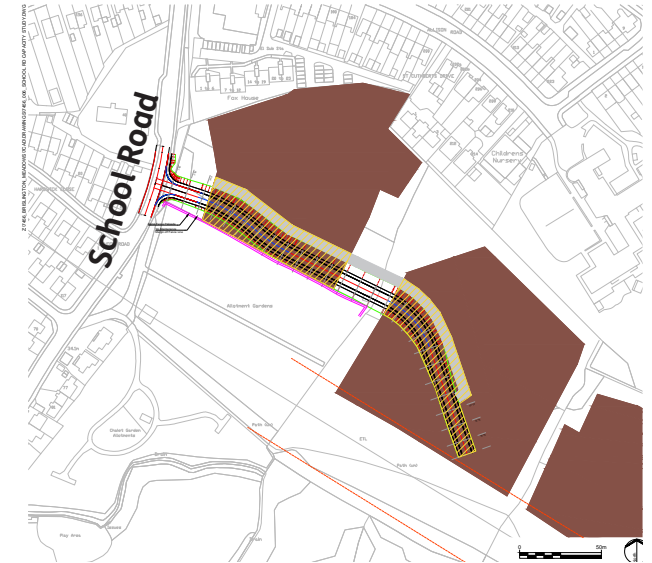
### Option 4: Vehicular access 1:12



Item 6.1

- This option included a vertical retaining wall next to the primary road. A secondary road would therefore be required above the retaining wall to serve homes (shown in grey), as direct access from the street will not be possible. This results in further land take, reducing the area for homes, and increases the cut and fill.

### Option 5: Vehicular access 1:20



Item 6.2

- This option included a vertical retaining wall next to the primary road. A secondary road would therefore be required above the retaining wall to serve homes (shown in grey), as direct access from the street will not be possible. This results in further land take, reducing the area for homes, and impacts negatively on the placemaking experience entering the site and increases the required reprofiling.

## Item 6

# Sept 2020

### Design decision

- Do not progress with School Road as a vehicular access point for the site.

### The impact on the fixes for the OPA

- Access Drawings - permission sought for vehicular access from Broomhill Road not School Road.
- Number of vehicle access points - If an access from School Road was progressed a secondary vehicular access would be required to satisfy the City Design Group's concerns (Pre-app letter Jan 2020). As the School Road access is not desirable or deliverable, primary access can be provided from Broomhill Road, with an emergency access from Bonville Road, as opposed to a full secondary vehicular access.

## Item 7

# Sept 2020

### Design testing

### Movement strategy

Considered a pedestrian/cycle link to Allison Road via the road serving Fox House. However this includes land outside of Homes England's control / ownership and therefore would not be able to control the quality or future maintenance of this route.

Considered stepped access from Paddock to School Road but not accessible and substantial tree loss with very limited benefit over the other access routes.

### Design decision

- Concluded most appropriate foot and cycle connections to School Road via the allotments and Allison Road.

### The impact on the fixes for the OPA

Access Drawings - permission sought for pedestrian and cycle access from existing route through the allotments rather than School Road.



Item 7.1

Application Boundary



## Item 8

# Sept 2020

### Design testing

#### Site Access, Placemaking, landscape and ecology, earthworks.

Vehicular access was considered via Bonville Road (through the Trading Estate). Key considerations included:

- Impact on the green link between Eastwood Farm and Victory Park.
- Role of the access in the wider movement strategy for the site.
- Placemaking impact - accessing the site via the Trading Estate is not desirable and it is preferable to avoid unnecessarily mixing industrial estate traffic and residential traffic.

#### Movement Strategy

- If this access is considered in addition to the access from Broomhill Road it would lead to additional through-traffic using the development as a short cut and could create a rat-run to Broomhill Road if not designed appropriately.

#### Impact on green link

- Due to road width requirements for an all mode access road this would result in 10m break in the ecological corridor.
- The intention is to keep this ecological link as dark as possible. The primary road will require street lighting that would impact negatively on the bat flight corridor.
- The requirement for additional pedestrian / cycle connections into the site from Bonville Road, in addition to a potential primary access point, would result in multiple crossings of the ecological link.

#### Further design development required

- Consider providing an emergency access - this would have a reduced land take compared to a primary access point, reducing the impact on the ecological corridor.
- Combine a potential emergency access with a pedestrian / cycle route to reduce the number of crossings of the ecological corridor.
- Consider lighting strategy for the primary road where it is situated close to the ecological corridor to reduce impact on bat flight path.

See Item 14 in this document for the further design testing undertaken.

#### The impact on the fixes for the OPA

Inclusion of design principles within the Design Code regarding lighting and need for coordination with ecological strategy and highways design (page 77).

## Item 9

# Sept 2020

## Framework Plan

### Movement strategy, earthworks.

Considered scope for internal loops via an east-west road on the lower slopes of the site.

#### Design comments:

- Creates a secondary loop to aid circulation of vehicles.

#### North-south hedgerows Ref H1 and H5

- Results in new breaks through the north-south hedgerows.

#### TPO tree TEP Ref T25, T26, T27

- Earthworks for this secondary loop would negatively impact TPO'd trees located within 'Brislington Heights' space.

#### Further design development

- Test whether secondary route through hedgerow H1 is required - see Item 22.

#### Design decision

- Do not include secondary loop road south of TPO trees TEP Ref T26, T27 because of the negative impact on trees and hedgerow Ref H5.
- Ensure pedestrian and cycle permeability throughout the site to negate the impact of not providing a secondary vehicular link.



Item 9

Sept 2020



- ① TPO (TEP Ref T25)
- ② TPO (TEP Ref T26)
- ③ TPO (TEP Ref T27)
- ④ Hedgerow H5
- ⑤ Hedgerow H1

Item 9.1

Framework Plan exploring movement strategy options including a secondary loop road on the lower slopes

## Item 10

Oct 2020

## Brislington Meadows Advisory Group Presentation

## Constraints, Trees and Hedgerows

Initial Arb Survey (July 2020) was updated (reference BS5837:2012) following further site visits and detailed analysis of trees and hedgerows. This work revealed a range of qualities, characteristics and values, informing decisions on which hedgerows and trees should be prioritised for retention.

## The impact on the fixes for the OPA

Landscape Parameter Plan - show hedgerows for retention that must be retained, and that testing shows is possible through a range of design options. Further hedgerows could be retained through RMA stage.



Item 10.1 Extract from presentation to the Advisory Group, showing the tree categories

# Item 11

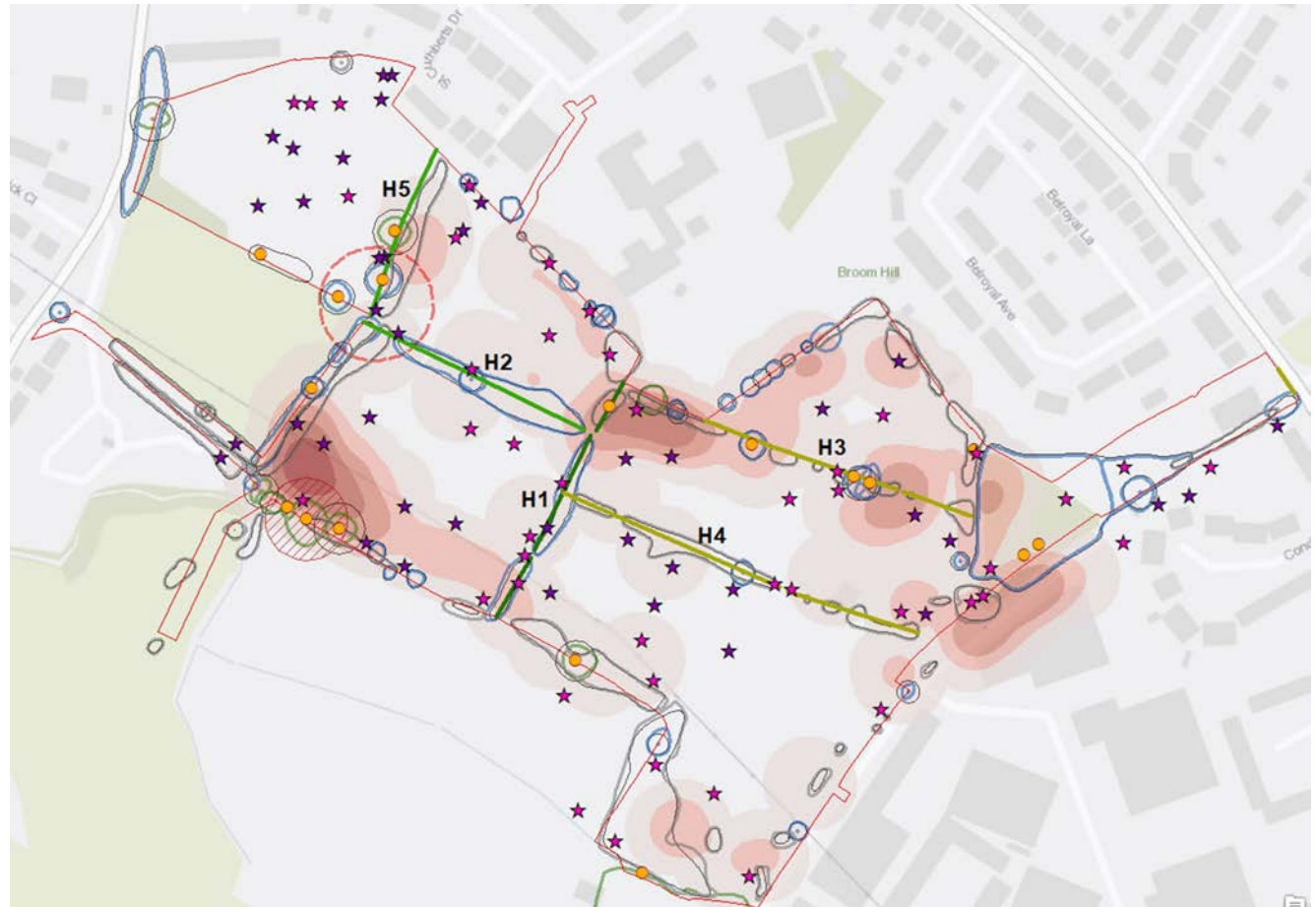
# Oct 2020

## Technical assessment

### Biodiversity

Detailed assessment of biodiversity impact and proposals for mitigation.

The combination of ecology and arboricultural results were reviewed for the five internal hedgerows H1-H5 including woody species (total count and sample average), ground flora (including protected spp), associated features, TPO trees/groups, tree/group categories, habitat condition, birds of conservation concern, bat activity patterns (hotspots, spp diversity, foraging, social calls), trees with bat roost suitability, badger activity, orientation and connectivity function. Overall, H1, H3 and H5 performed highest across the comparison of diversity, condition and function, with H4 performing the lowest.



Item 11.1  
Ecological and arboricultural overlays providing overview for hedgerow evaluation



# Item 12

# Oct 2020

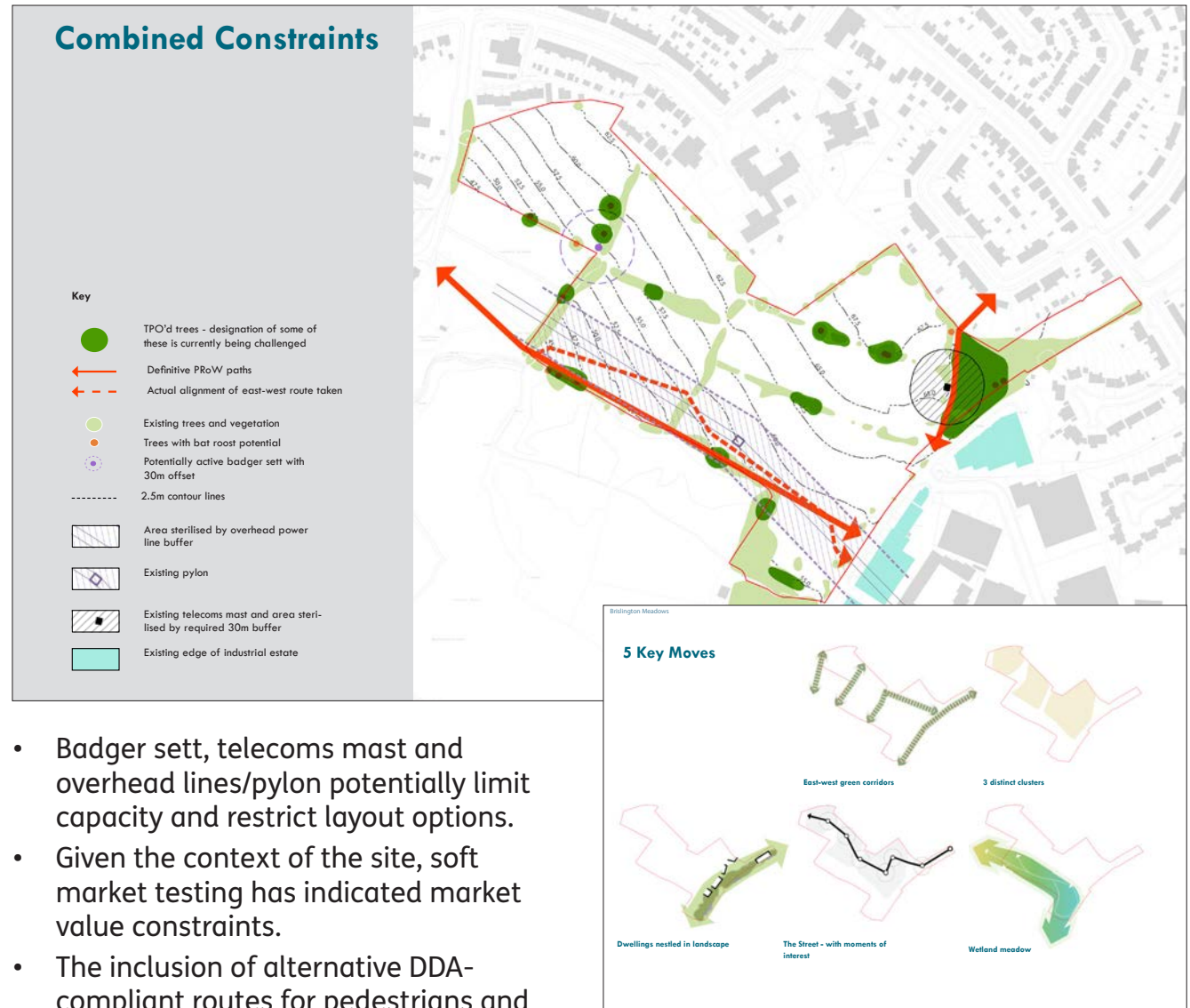
## Informal presentation to BCC

### Opportunities and Constraints and Capacity testing

Presentation showing baseline information to date including constraints and opportunities plan and design principles.

### What was being discussed

- Homes England took the opportunity to bring the Council's Director of Development and Place (since left the Council) up to date with emerging thoughts on the constraints, opportunities and vision for development of the site
- Design principles including east-west green corridors and 'housing nestled in landscape'.
- TPO tree designations
- To deliver a significant number of homes on this site whilst protecting the majority of environmental features.
- Due to the site's surface proximity to bedrock, limit the site's ability to be used efficiently and decrease development potential.



- Badger sett, telecoms mast and overhead lines/pylon potentially limit capacity and restrict layout options.
- Given the context of the site, soft market testing has indicated market value constraints.
- The inclusion of alternative DDA-compliant routes for pedestrians and cyclists reduces efficiency since certain streets will be too steep for DDA-compliant walkways.

Item 12.1  
Extract of presentation to BCC

# Item 13

# Nov 2020

## Design review following technical evidence

### Engineering, Earthworks

Ground investigations undertaken to confirm the ground conditions including depth to bedrock to inform cut and fill efficacy and access gradients.

#### Design comments:

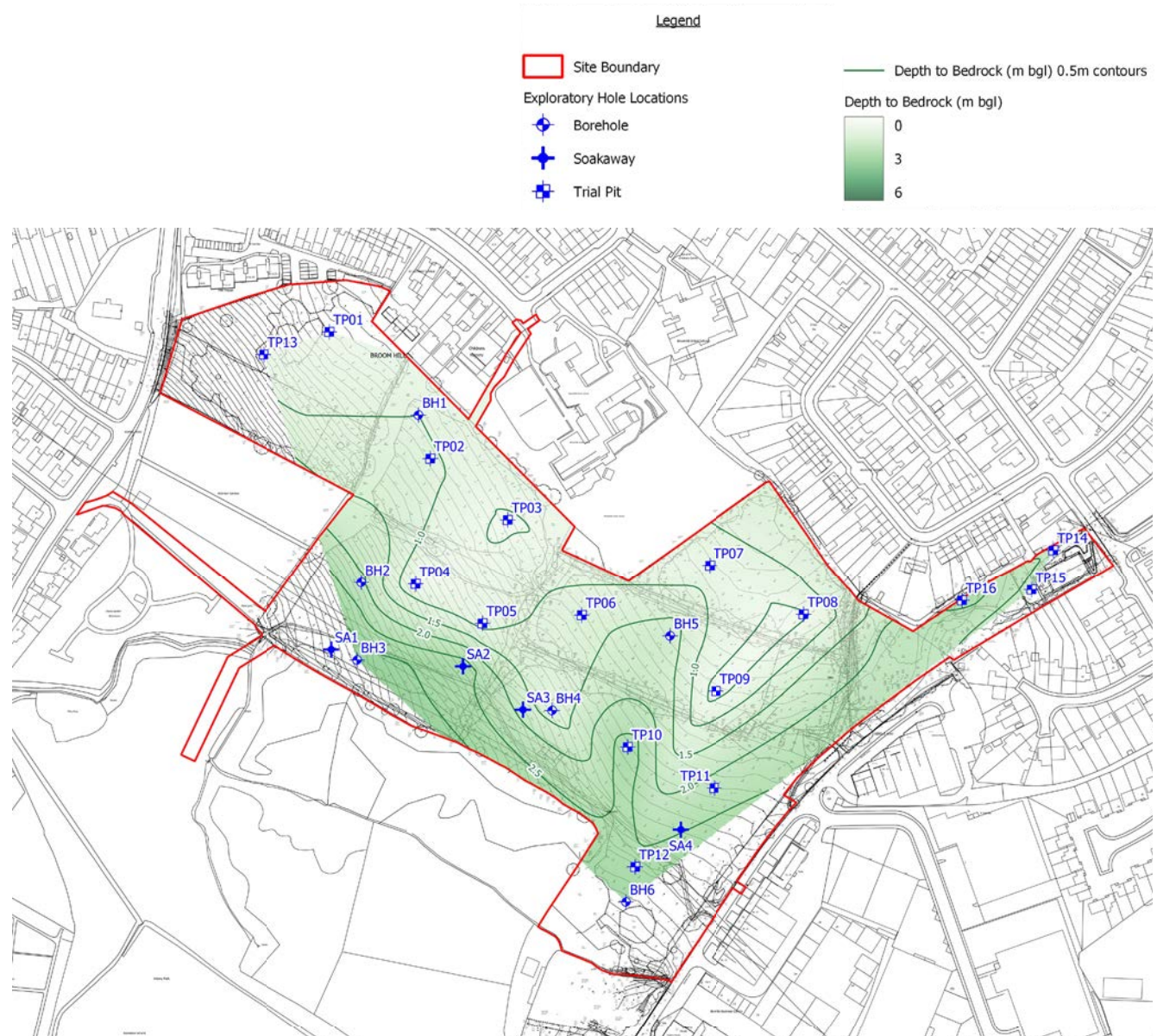
Investigations showed shallow bedrock, which limits the potential to lower site levels in the north of the site resulting in requirement for retaining walls and steeper gradients.

#### Further design development

- Continued development of earthworks strategy as masterplan develops.

#### The impact on the RMAs

- Earthworks strategy is not fixed. RMAs will need to test and explore design iterations in response to ground conditions.



Item 13.1 Image showing depth to bedrock contours at circa 1m below ground level in the north of the site.



# Item 14

## Nov 2020

### Design iteration

#### Capacity testing, earthworks strategy

Iteration of the masterplan for review by the client and consultant team.

#### Design comments:

- Building arrangement follows existing contours to reduce ground re-profiling
- Earthworks strategy for this masterplan to be tested especially road gradients and impacts on development areas.
- Masterplan iteration would require removal of east-west hedgerows Ref H2 and H4 but potential to retain TPO Tree TEP Ref T9.

#### What was being tested

- Position of taller buildings across the site.
- Hedgerow H4 would not be retained in this iteration due to back to back distances required from properties along primary road ①

#### Schedule for Masterplan Item 14

Site area	9.33ha
Gross developable area including incidental green spaces and a proportion of the primary road infrastructure and excluding main public open spaces	5.34ha
Number of homes	240
Percentage Apartments	31.25%
Percentage Houses	68.75%
Density (dwellings per hectare)	44



Item 14.1  
Illustrative Masterplan

## Item 14

### Nov 2020

#### East-west hedgerow Ref H3

- Two vehicular routes through green link

#### North-south hedgerow Ref H1

- New break in hedgerow created for secondary road

#### Ecological link along eastern boundary of site

- Emergency access is separate to pedestrian / cycle route resulting in two breaks of the corridor.
- Housing located south of primary access road from Broomhill Road, gardens form ecological corridor within this iteration.

#### Further Design Testing

- Earthworks strategy for this iteration of the masterplan
- TVIA analysis concluded up to 2.5 storeys appropriate on upper levels. Apartment **2** building (2) is located close to existing properties that are only 2 storeys in height so consider positioning to reduce impact on existing properties while considering placemaking principles.
- Review assumed heights and position of taller buildings across the site. Apartments proposed within the eastern extents of the site, which are located primarily on the lower parts of the site, are able to accommodate taller buildings without a notable increase in landscape and visual impacts on the wider context of the site.
- Review of housing mix and percentage of apartments.

#### Design decision

- Combine emergency access with pedestrian / cycle route to reduce severance impact on ecological corridor.

#### The impact on the fixes for the OPA

Alignment of emergency access in drawing CD1.7 Bonville Road Emergency Vehicle Access (Key Transport Consultant Drawing No. 1066-014)



## Item 15

# Nov 2020

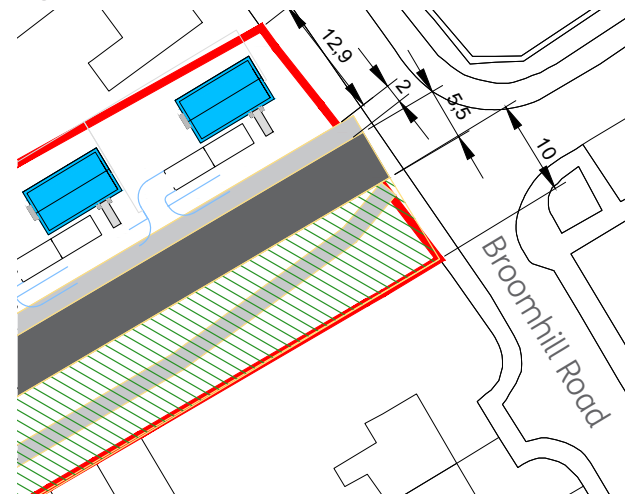
### Design testing

#### Site Access, Placemaking, landscape

Testing of different options for alignment of access point into the site from Broomhill Road. Key considerations:

- Proximity to existing zebra crossing on Broomhill Road;
- Desire lines for pedestrians and cyclists entering and exiting the site;
- Placemaking considerations for access into the site including orientation of dwellings onto Broomhill Road (to reflect character of existing homes on the street), access arrangements for homes - making sure the entrance into the site is not dominated by parking; and
- Location of green link from Eastwood Farm to the north of the Site, linking through the site and southwards towards Victory Park. Suggested minimum of 10m depth by BCC at pre-app meeting on 18th November 2020 and positioned on eastern side of entrance. This is documented in the Annex to the ecological desk study report (CD1.21a).

#### Option 1



Item 15.1

#### Position of the access point

- Centrally located
- Pedestrian cycle route positioned centrally within green link

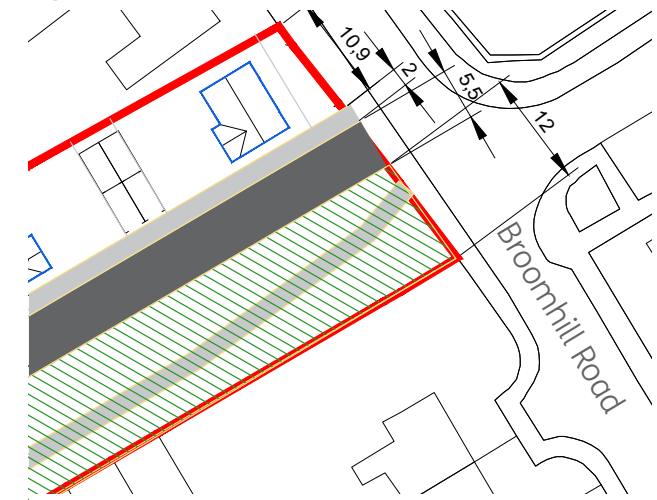
#### Depth of green link

- 10m

#### Depth of development area available

- 12.9m

#### Option 2



Item 15.2

#### Position of the access point

- Shifted further north to allow wider green infrastructure link
- Pedestrian cycle route positioned centrally within green link

#### Depth of green link

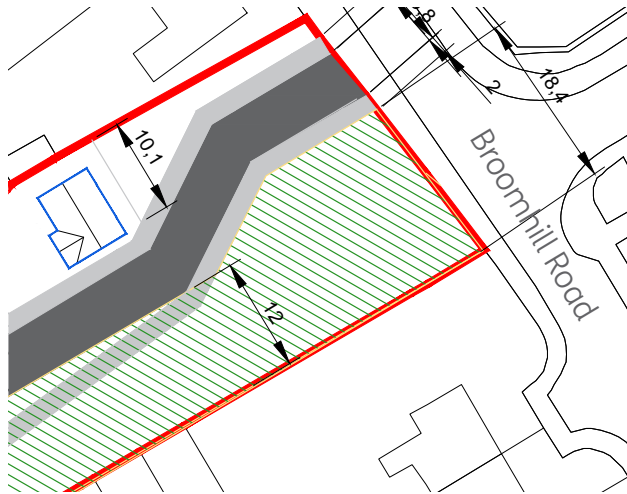
- 12m

#### Depth of development area available

- 10.9m

## Item 15 Nov 2020

### Option 3



Item 15.3

### Position of the access point

- Conflict with existing zebra crossing to be explored further
- Pedestrian / cycle route positioned next to road at entrance to retain wider green link

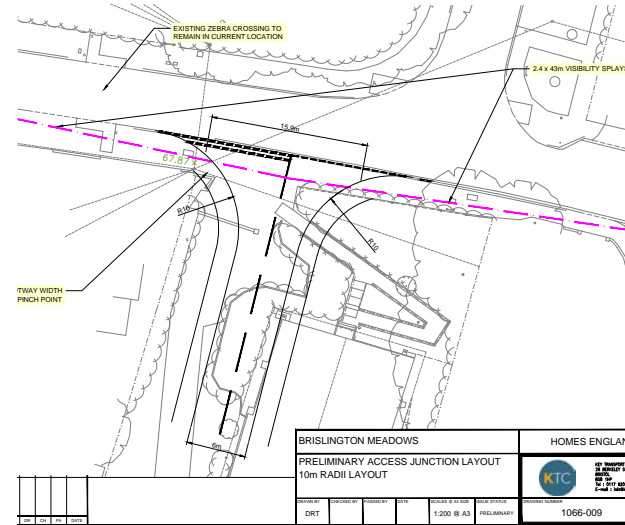
### Depth of green link

- 12m at its narrowest point

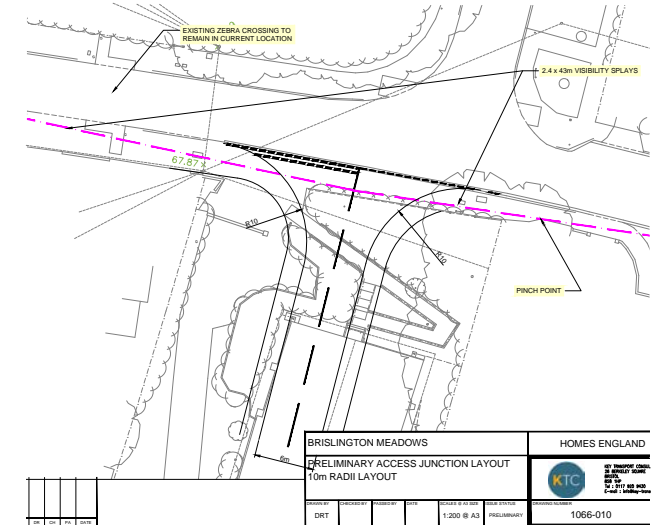
### Depth of development area available

- 10.9m, set back from Broomhill Road

Design options were also tested by Key Transport to assess feasibility of the different access locations.



Item 15.4



Item 15.5

## Item 15

# Nov 2020

### Design decision

- Green link at entrance from Broomhill Road should be public open space to retain existing trees and enable the planting of additional hedgerows /trees. Link should be located on the southern side of the access road to enable a continuous link southwards towards Victory Park.
- Primary access position generally agreed and fixed to be centrally - enabling green corridor on one side and housing on the other.

### Further design development required

- Position of pedestrian route associated with the primary road and its interrelationship with green link

See items 16 and 33 in this document for the further design testing undertaken.

### The impact on the fixes for the OPA

Extent of residential area on Land use Parameter Plan

### The impact on future RMAs

Alignment of primary road shown on the Parameter Plans should be indicative so that RMA's can determine the most appropriate route according to the detailed layout and reviewing the impact on trees. Position of access point will be fixed through Access Drawing CD1.6 Broomhill Road Preliminary Access Layout Plan (Key Transport Consultant No. 1066-007.D).

# Item 16

# Nov 2020

## Design iteration

### Capacity testing, earthworks strategy

Iteration of the masterplan for review by the client and consultant team.

### Design comments:

- Assumes retention of east-west hedgerow Ref H4.
- Long straight roads, especially the primary road results in a lack of character.
- Road widths increased to accord with BCC design requirements.

### East-west hedgerow Ref H3

- Breaks in green link reduced to one (previous iteration Item 15 had two breaks).

### North-south hedgerow Ref H1

- Break in hedgerow widened according to highways requirements.

### Retained east-west hedgerow Ref H4

- Retained within back gardens.



Item 16.1  
Illustrative Masterplan

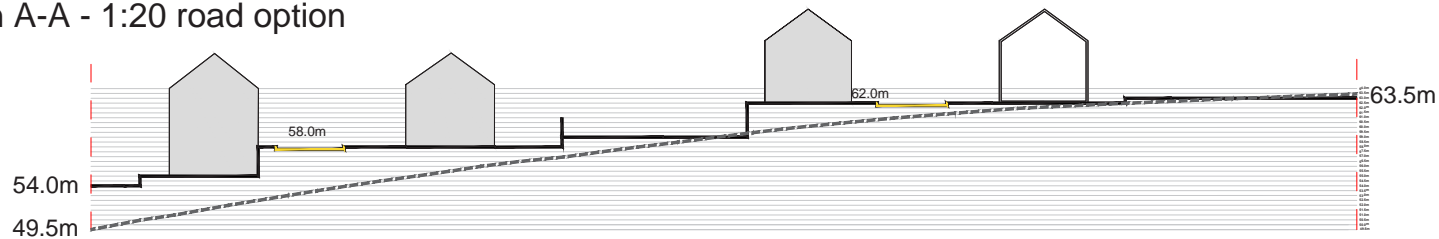


## Item 16

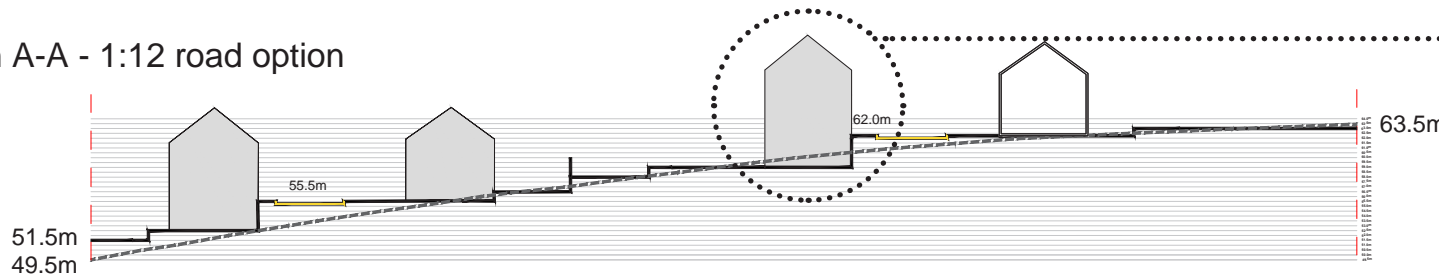
### Nov 2020

Schedule for Masterplan Item 16	
Site area	9.33ha
Gross developable area including incidental green spaces and a proportion of the primary road infrastructure and excluding main public open spaces	5.40ha
Number of homes	243
Percentage Apartments	31%
Percentage Houses	69%
Density (dwellings per hectare)	45

Section A-A - 1:20 road option



Section A-A - 1:12 road option



Split level housing also tested in response to steeper parts of the site.

Item 16.2

Illustrative cross sections illustrating the impact of different road gradients

### Ecological link along eastern boundary of site

- Emergency and pedestrian / cycle route combined
- Housing shown north of primary street at entrance from Broomhill Road following feedback from BCC Ecologist regarding minimum dimension for green link.

### Further design testing

- Review impact of retaining hedgerow H4 on earthworks strategy and consider maintenance and management of the hedgerow and impact on size of garden space available.

### Design decision

- Separate footway from primary road on the southern side at Broomhill Road entrance to create a more attractive pedestrian route. Also provides opportunity for street trees with water tank underneath for drainage purposes.
- Combine pedestrian /cycle and emergency access into one location from Bonville Road to reduce impact on green link.

### The impact on the fixes for the OPA

Extent of residential area on Land use Parameter Plan - showing an area of greenspace on southern side of access road from Broomhill Road.

Parameter Plans and Design Code do not preclude split level housing as a design option.

# Item 17

## Dec 2020

### Design iteration

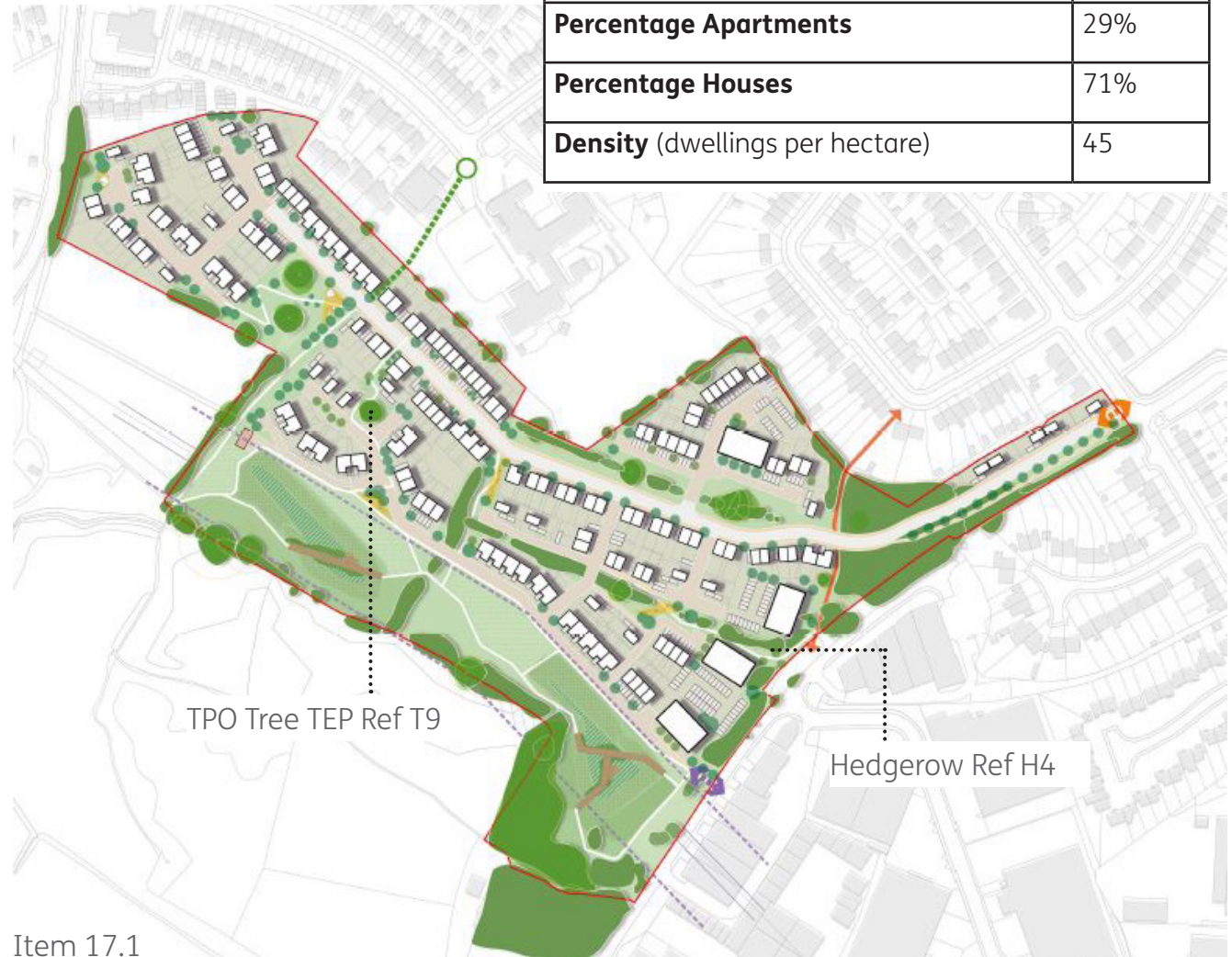
#### Capacity testing, earthworks strategy

Iteration of the masterplan for review by the client and consultant team.

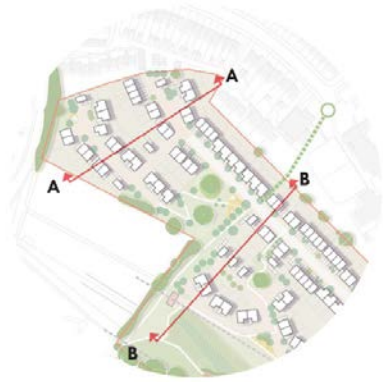
#### What was being tested

- Further development of landscape strategy including character of the spaces being proposed and potential locations for play space (yellow on plan)
- Reduction of development area in north eastern part of the site to retain more trees within TPO wooded area TEP Reference W2.
- Review of gradients of streets and impact on earthworks strategy / cut and fill.
- Impact of retaining hedgerow Ref H4 on the cut and fill.

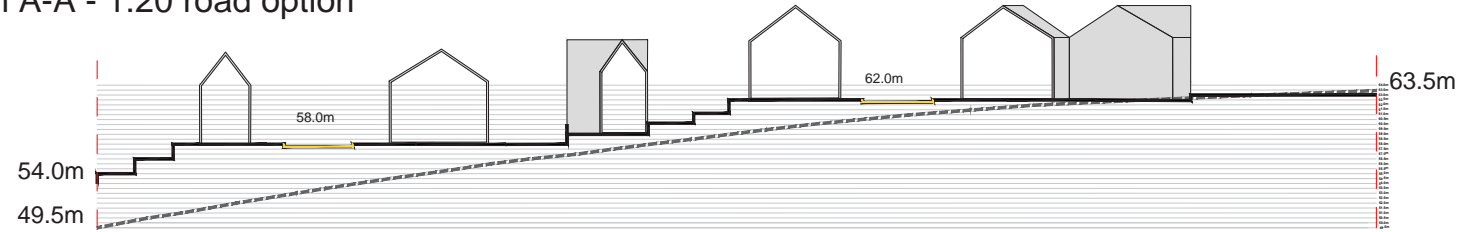
<b>Site area</b>	9.33ha
<b>Gross developable area</b> including incidental green spaces and a proportion of the primary road infrastructure and excluding main public open spaces	5.40ha
<b>Number of homes</b>	245
<b>Percentage Apartments</b>	29%
<b>Percentage Houses</b>	71%
<b>Density</b> (dwellings per hectare)	45



Item 17.1  
Illustrative Masterplan

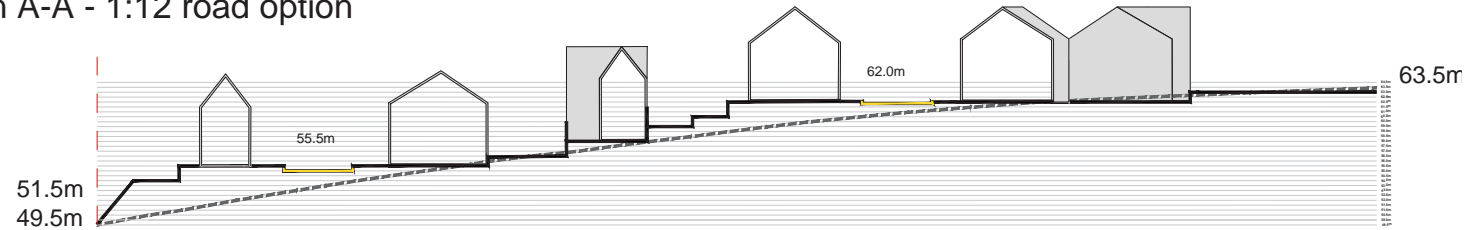


Section A-A - 1:20 road option

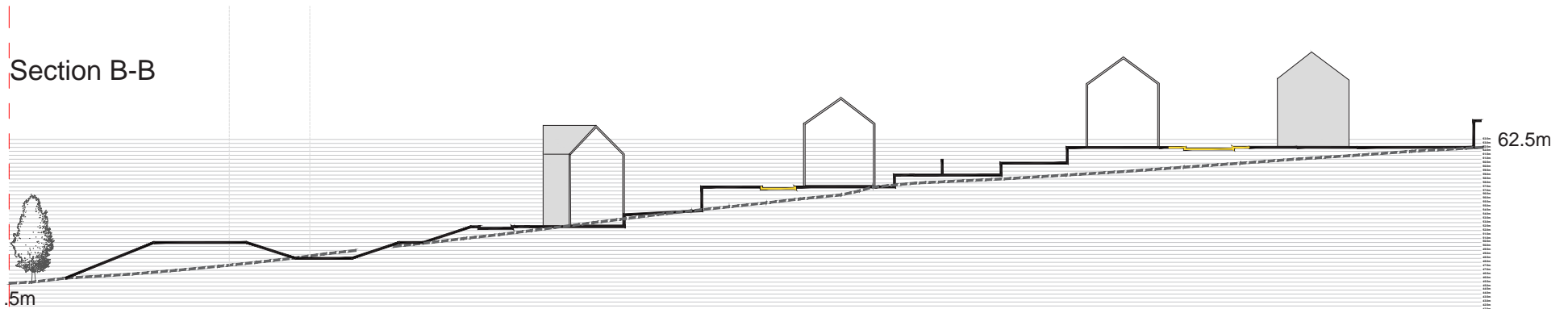


Section A-A (1:20 gradient street) requires a significant amount of fill and would impact on existing trees along northern boundary of the allotments

Section A-A - 1:12 road option



Section B-B



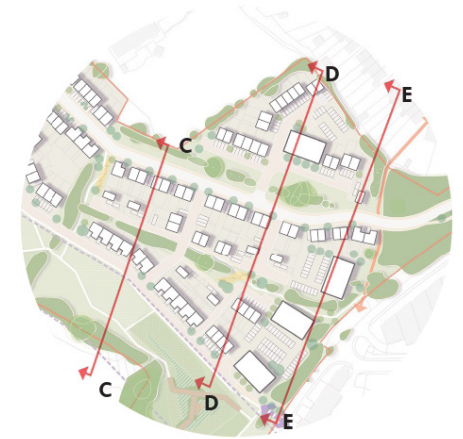
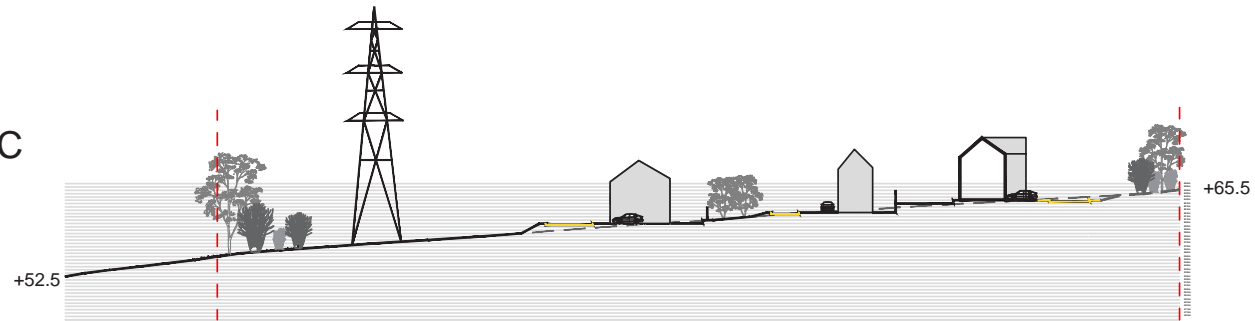
Item 17.4

Illustrative cross sections through masterplan





Section C-C



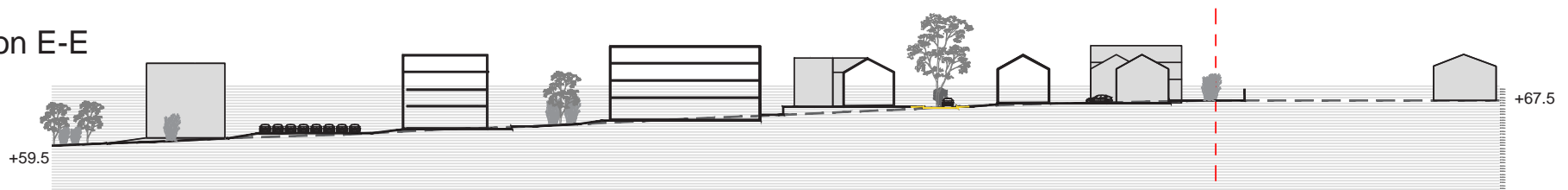
Section D-D



Level difference of 5m  
between properties (i)

Requires a 2m retaining  
wall between properties  
back gardens (ii)

Section E-E



Item 17.2

Illustrative cross sections through masterplan

## Item 17 Dec 2020

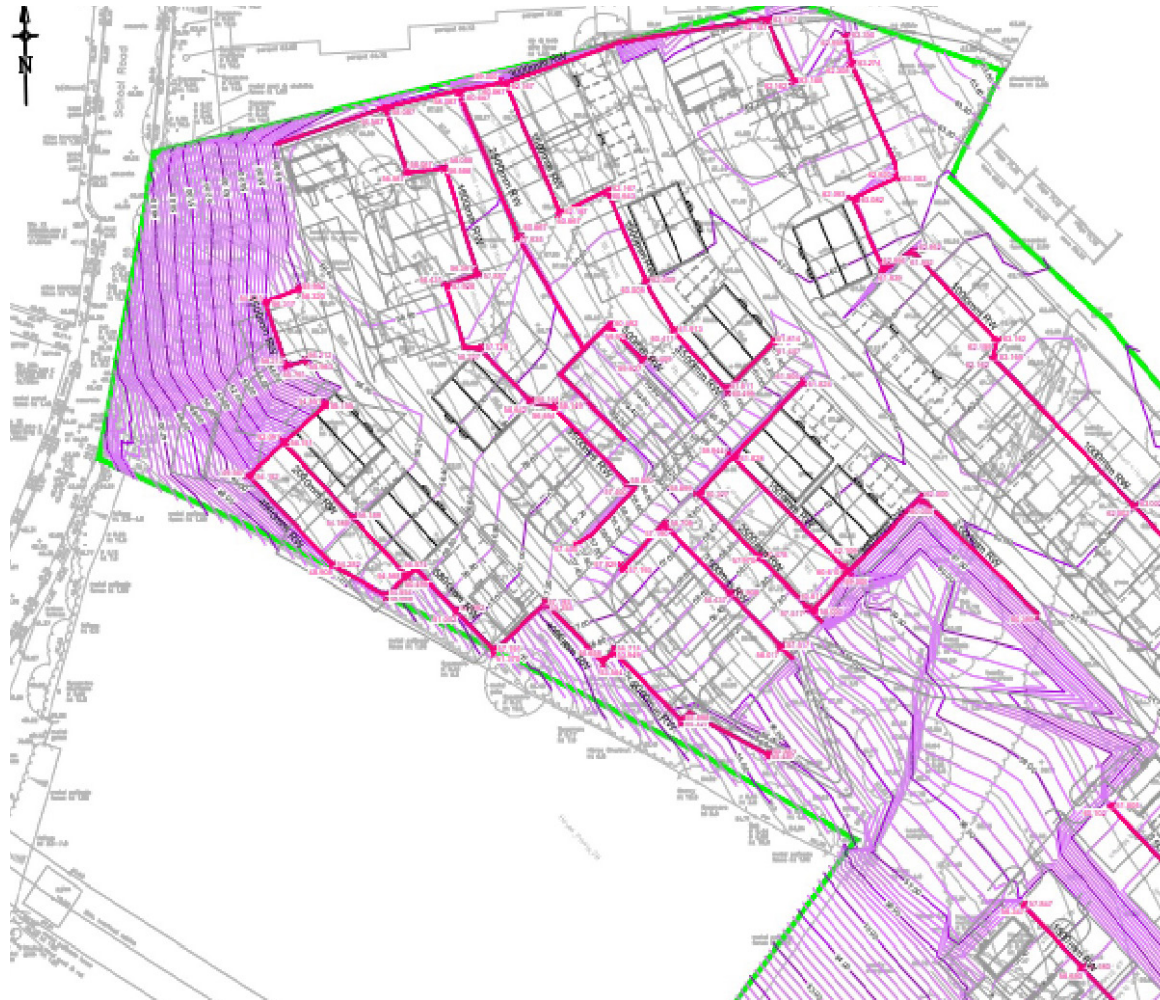
The site is steeply sloping with the topography generally slopes in a south-westerly direction and a level difference of nearly 17m from the north to south.

The associated gradients range between 1:8 in the west to 1:10 in the centre of the site.

In terms of providing level access to dwellings and accessible north-south pedestrian links through the development at 1:20 or 1:12 gradient, it will be necessary to undertake some cut and fill reprofiling along with the construction of retaining walls in order to tie the development levels between the northern and southern boundary.

Other fixes for the levels strategy include the main access into the site and where trees, hedgerows, public open space and other green infrastructure are to be retained.

The shallow bedrock of mudstone in the north of the site resided at a relatively shallow depth (<1m), which could restrict site reprofiling meaning that plot levels further down the slope are informed by the levels to the north



Item 17.3

Initial masterplan levels showing extensive retaining walls and earthworks particularly in Paddock area (the western part of the site)

## Item 17

### Dec 2020

Initial earthworks strategy resulted in too much earthworks and extensive engineered retaining walls.

Design decision was to consider split level housing although there was a concern for the suitability of this typology in relation to disabled access and use.

Decision was taken to look at alternative 'external' design measures such as 1:10 garden slopes (given that this was similar to the natural topography) and smaller retaining walls.

#### Design decision

- 1:12 gradient for streets in north western part of the site to reduce amount of fill required and reduce impact on existing trees and hedgerows along northern boundary of the allotments.

#### The impact on the fixes for the OPA

- Landscape Parameter Plan should show minimum hedgerow / tree / wooded areas to be retained.

#### The impact on RMAs

- Potential to explore at RMA stage the option for use of split level housing to accommodate level changes although it is not considered essential.
- The earthworks strategy submitted as part of the outline application is not fixed. The Parameter Plans give flexibility for innovative design solutions to deliver a landscape-led approach.
- Potential to retain hedgerows and trees not included in Landscape Parameter Plan as the drawing will show minimum required to be retained.

## Item 18

# Dec 2020

### Design testing

**Trees and hedgerows, earthworks strategy, movement network, landscape, secure by design**

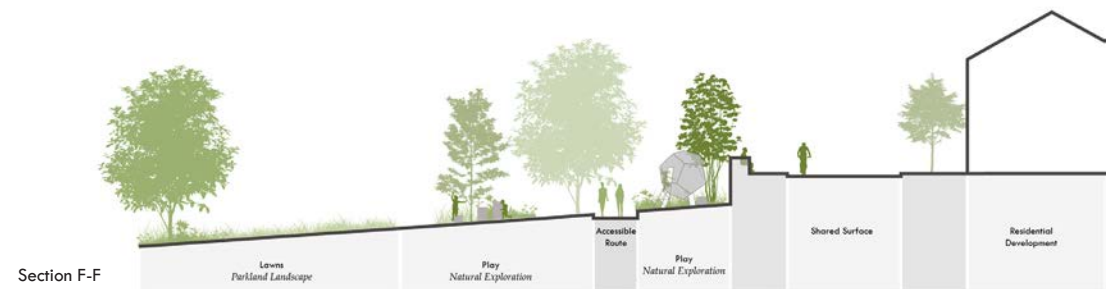
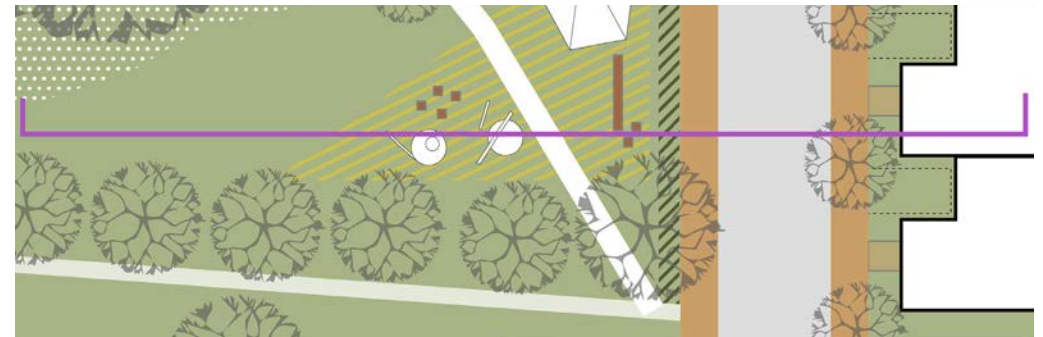
Cross section testing the impact of the earthworks strategy / movement network. Earthworks strategy illustrated that Brislington Heights greenspace would be at a lower level than the primary road. Cross section drawn to understand the implications of this.

Key considerations:

- Ground level next to existing trees and hedgerows
- Activation and overlooking of public open space (Secure by Design principles)
- Accessibility for all users

### Design decision

- Change to earthworks strategy - finished floor level of the road should be at the same level as the existing trees to enable the play space to be at the same level - ensuring overlooking from the street and homes.



Item 18.1

Illustrative cross section through Brislington Heights and primary road



## Item 19

Jan 2021

## Design iteration

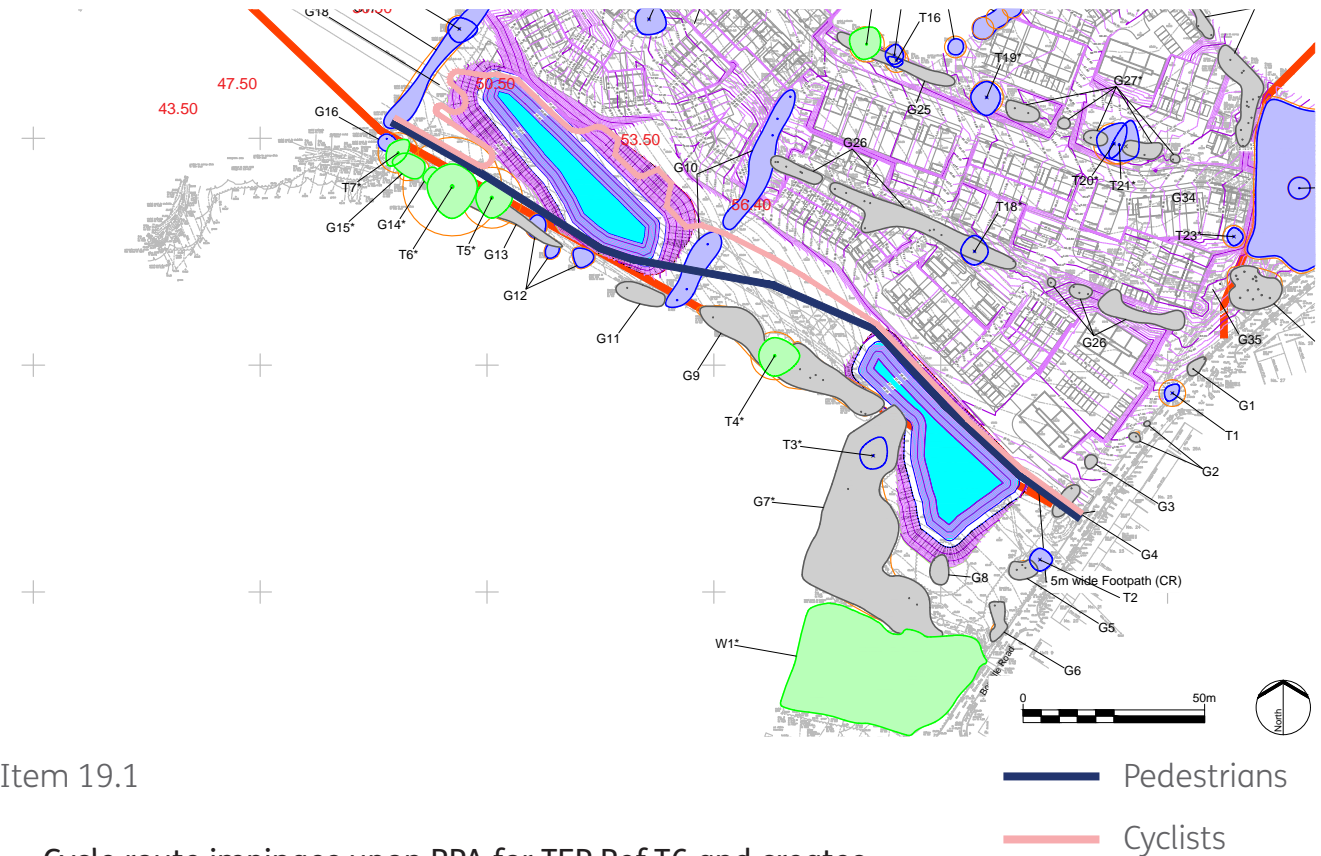
## Movement and earthworks strategy

Testing of options for delivering cycle and pedestrian routes through wetland meadow

## Key considerations:

- Ideally achieve 1:20 gradient for cyclists
- Desire lines for cyclists is likely to be east west from School Road to Bonville Road
- The cycle/pedestrian route was led by ecology/SuDS. There was an option of a separate 1:20 pedestrian route, the pedestrians would most probably walk on the cycle path being the shortest route on the desire line.
- Pedestrians and cyclists are likely to use the existing link between the allotments as being on the desire line to Sandy Park Road, as it saves climbing the hill to the top of the Allison Road/School Road junction, only to lose the elevation again on the route to the west.

## Option 1 Separate routes for pedestrians and cyclists

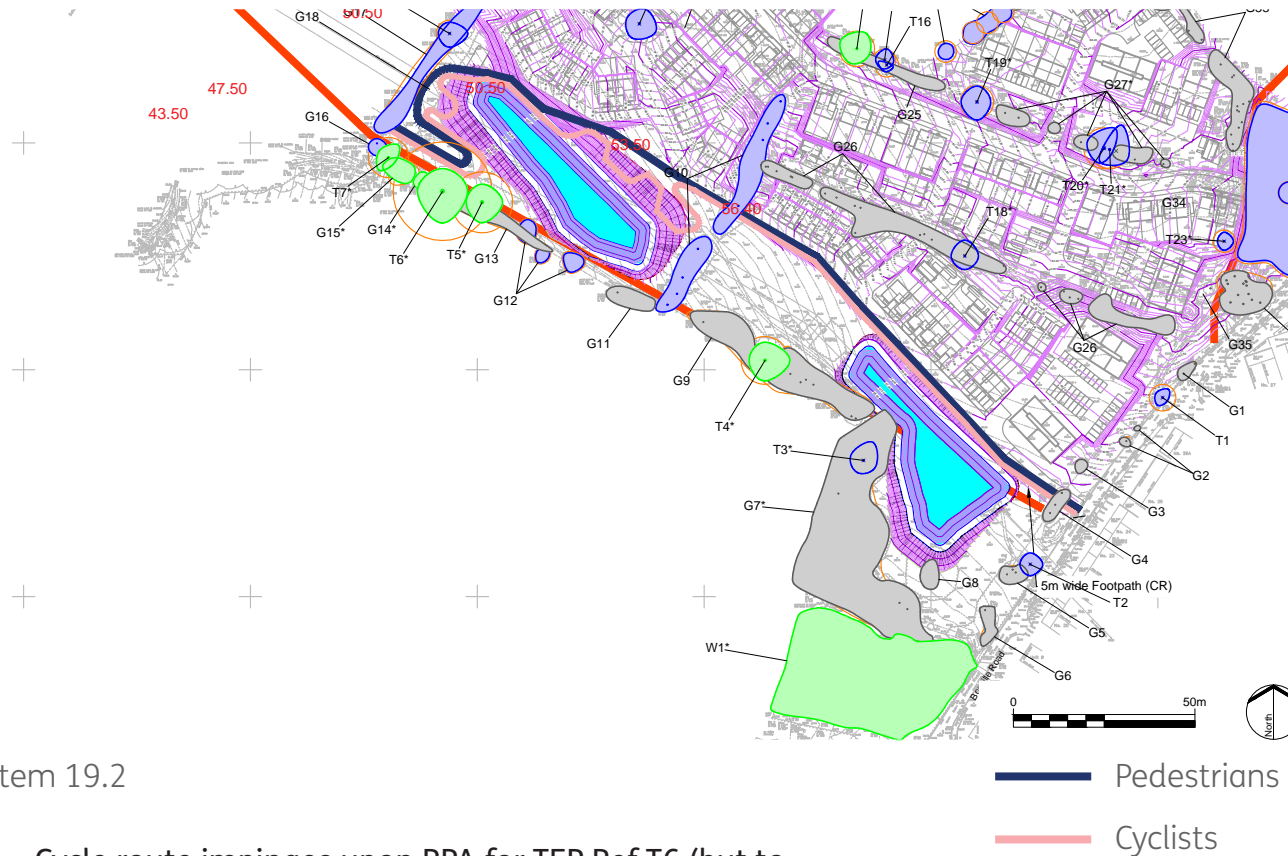


Item 19.1

- Cycle route impinges upon RPA for TEP Ref T6 and creates additional fragmentation of Hedgerow Ref H1.
- Introduces minor barrier between south boundary habitats and west SuDS and introduces risk of habitat/species disturbance, particularly in the west if lighting of the cycle path is an overriding requirement.

## Item 19 Jan 2021

### Option 2 Pedestrians and cyclists accommodated along the road

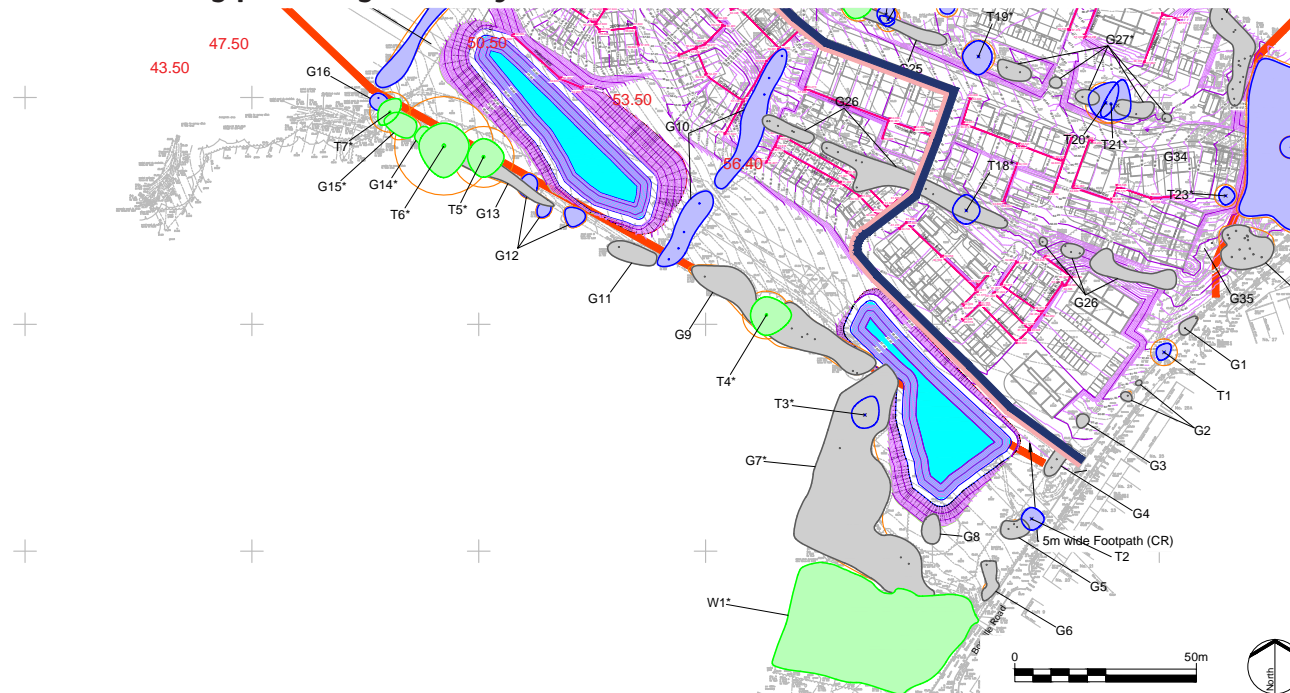


#### Item 19.2

- Cycle route impinges upon RPA for TEP Ref T6 (but to lesser extent than option 1) and creates additional fragmentation of Hedgerow Ref H1.
- Reduced potential for disturbance of habitats/species as cycle route is positioned against development edge rather than between SuDS and southern boundary.

## Item 19 Jan 2021

### Option 3 Cyclists move east west via new School Link and Bonville Road (not via existing public right of way)



Map may contain: Ordnance Survey material by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown Copyright 2019. All rights reserved. Reference number 0100031673. Data / © Natural England / © DEFRA / © DECC / © English Heritage. Aerial Photography - ESRI, DigitalGlobe, GEOEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, the GIS User Community

#### Design decision

- Provide a route that is a combination of Option 1 and 2 i.e. provides different options for pedestrians (north and south of attenuation areas), but narrow the width of the route to avoid RPA of TEP Ref T6.

#### The impact on the fixes for the OPA

- Routes and extent of drainage areas indicative on Illustrative Masterplan.

### Item 19.3

- Option avoids RPA of TEP Ref T6 and further fragmentation of Hedgerow Ref H1 and reduces potential for habitat/species disturbance as path is largely associated with proposed road network.

— Pedestrians  
— Cyclists



## Item 20 Feb 2021

### Design iteration

#### Capacity testing, earthworks strategy

Iteration of the masterplan for review by the client and consultant team.

#### Design Comments

- Layout tested and refined to work with site constraints and technical requirements
- 6 additional units gained
- More variety in character to improve street elevations
- Additional hedgerows and trees retained compared to earlier iterations
- Irregular plots and parcels created whilst complying with gradients and trying to reduce amount of earthworks
- Potential for partial retention of hedgerow Ref H4 within public realm for effective management.

#### Further Design Testing

- Management and maintenance of east-west hedgerow H4



Item 20.1  
Illustrative Masterplan



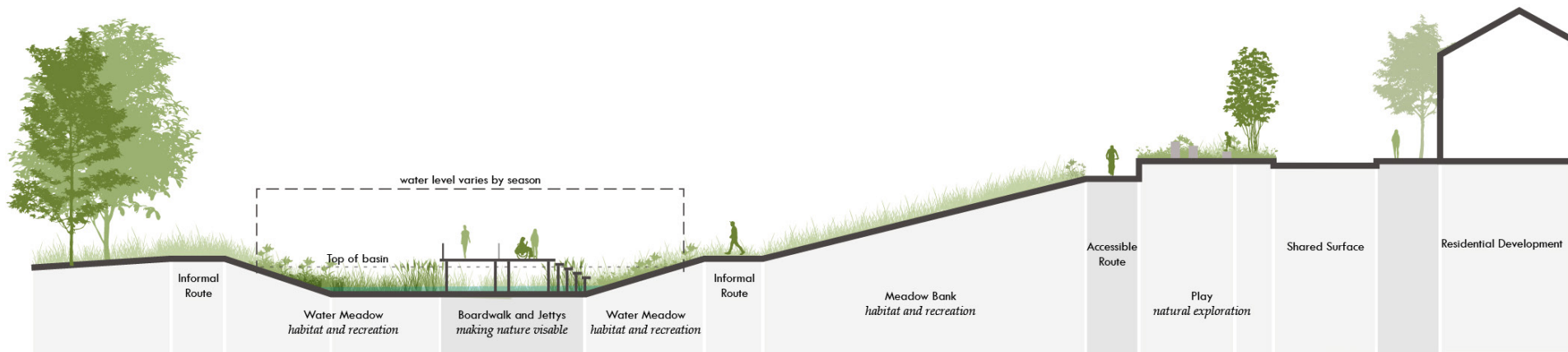
## Item 20

### Feb 2021

Schedule for Masterplan Item 20	
Site area	9.33ha
Gross developable area including incidental green spaces and a proportion of the primary road infrastructure and excluding main public open spaces	5.30ha
Number of homes	250
Percentage Apartments	32%
Percentage Houses	68%
Density (dwellings per hectare)	47



Key plan



Item 20.2

Illustrative cross section through attenuation area

## Item 20

# Feb 2021

### What was being tested

- Impact of the earthworks strategy on the routes through the wetland meadow - and explored the creation of an elevated board walk enabling all year access to these routes.

### Further design testing

- Alignment of pedestrian and cycle routes through the wetland meadow

### The impact on the fixes for the OPA

- Do not include hedgerow H2 within the landscape parameter plan to allow flexibility for future RMA to determine whether or not to retain the hedgerow.

### Design decision

- Concluded that it is not possible to retain hedgerow H2 and TPO Tree TEP Ref T9 due to impact on layout and resulting inefficiencies of layout, impacts on earthworks and urban design and issues with management and maintenance of the hedgerow.

## Item 21

Mar 2021

## Design review following technical evidence

## Engineering, Drainage, Topography

Consideration of topography, infiltration rates and surface water catchment areas to inform drainage strategy based upon ground conditions, topographical survey and utilities mapping.

## What was being tested

- Capacity of the site to accommodate swales and conveyance features

## Design comments

Noted that bioswales would bring additional benefit into the scheme (BNG, amphibians, birds, bats, invertebrates), however earthworks land take required is significant.

Swales could be provided along Hedgerows H1, H2 and H5/allotment boundary corridors however it would require significantly more space than shown on the adjacent mark up, therefore impacting on development area. Furthermore they would need to be designed to avoid

adverse impact upon the hedges/trees (i.e. avoiding excavation of swale within RPAs).

The amount of engineering design required to deliver this and therefore for RMAs to determine the approach to where/how surface water features additional to the basins might be incorporated into the SuDS based on the detailed design.

## The impact on the fixes for the OPA

- SuDS are not shown on parameter plans as they are indicative and to be determined at RMA stage.

## Design decision

- Surface water run-off will be collected, stored on site and discharged at greenfield run-off rate slowly to avoid flooding downstream



Item 21.1  
Swale mark up

# Item 22

## Mar 2021

### Design iteration

#### Placemaking

Full review and update to residential layout to better respond to site opportunities and constraints. A more orthogonal layout of houses adopted to follow the contours of the site, especially on lower, steeper parts of the site.

#### What was being tested

- Placemaking - experience through a series of spaces along the primary road.
- Introduction of apartment block next to Brislington Green to create a placemaking anchor and focal point as you move through the wooded area into the green.
- Refinement and development of illustrative masterplan layout.
- Alternative secondary road layout to reduce impact on existing hedgerows.

#### Design decision

- Remove secondary route through southern part of Hedgerow H1 to reduce breaks in green corridor.

#### Schedule for Masterplan Item 22

Site area	9.33ha
Gross developable area including incidental green spaces and a proportion of the primary road infrastructure and excluding main public open spaces	5.32ha
Number of homes	259
Percentage Apartments	31%
Percentage Houses	69%
Density (dwellings per hectare)	49



Item 22.1  
Illustrative Masterplan



## Item 23

# Mar 2021

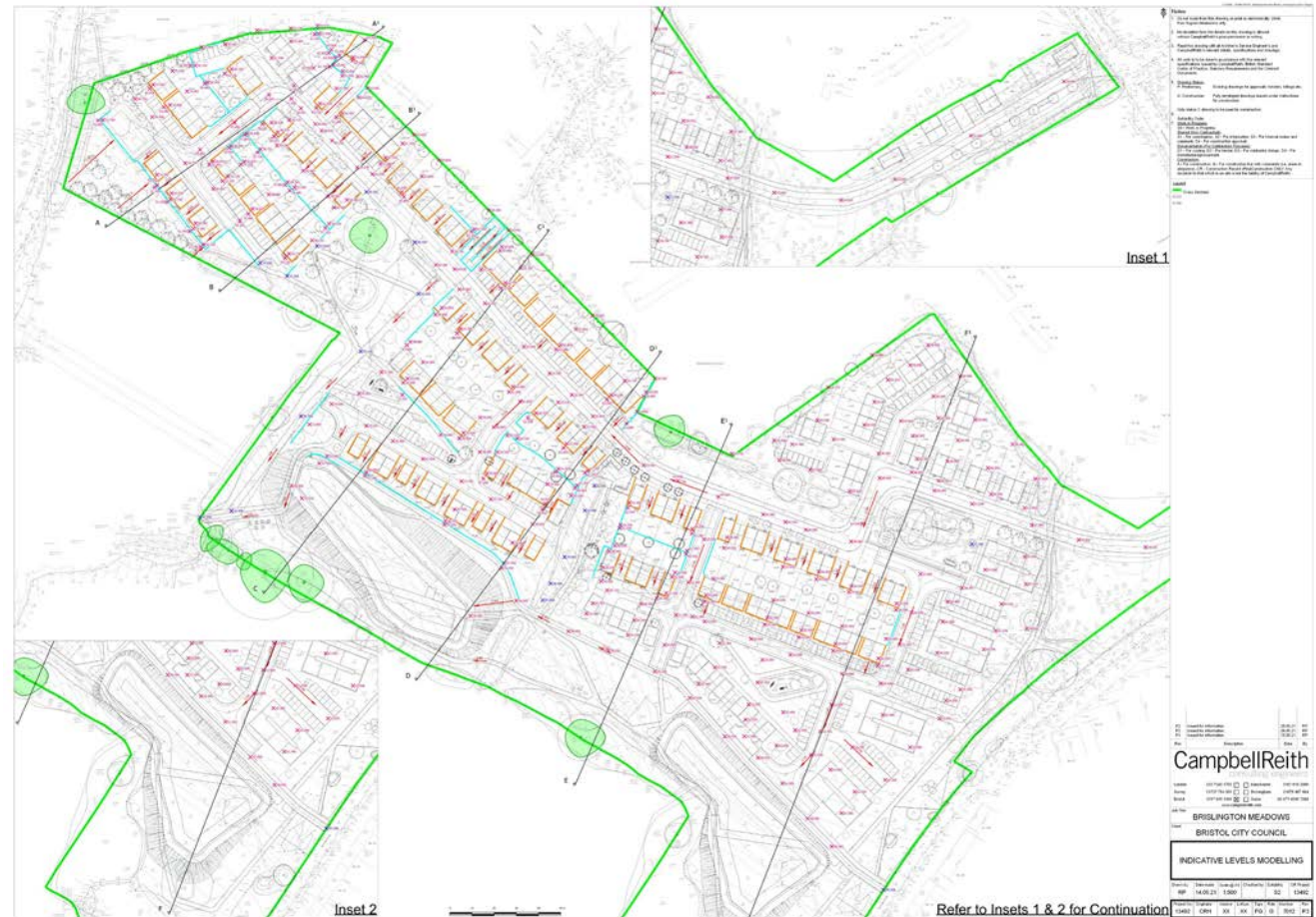
### Design review following technical evidence

#### Engineering, Earthworks

Amendment of earthworks strategy in response to changes to the Masterplan (Item 22). Masterplan was updated to better respond to levels, reducing the need for retaining walls.

Instead of split level housing, the levels were tested by applying underbuild with stepped frontages wherever possible in order to minimise retaining walls. This contravened Building for a Healthy Life principles by creating an uneven street scene along the primary road. 1:10 gardens and 1:12 driveways were also considered.

The underbuild is shown by the orange shading to plot boundaries in the image adjacent.



Item 23.1  
Draft earthworks strategy

# Item 24 Apr 2021

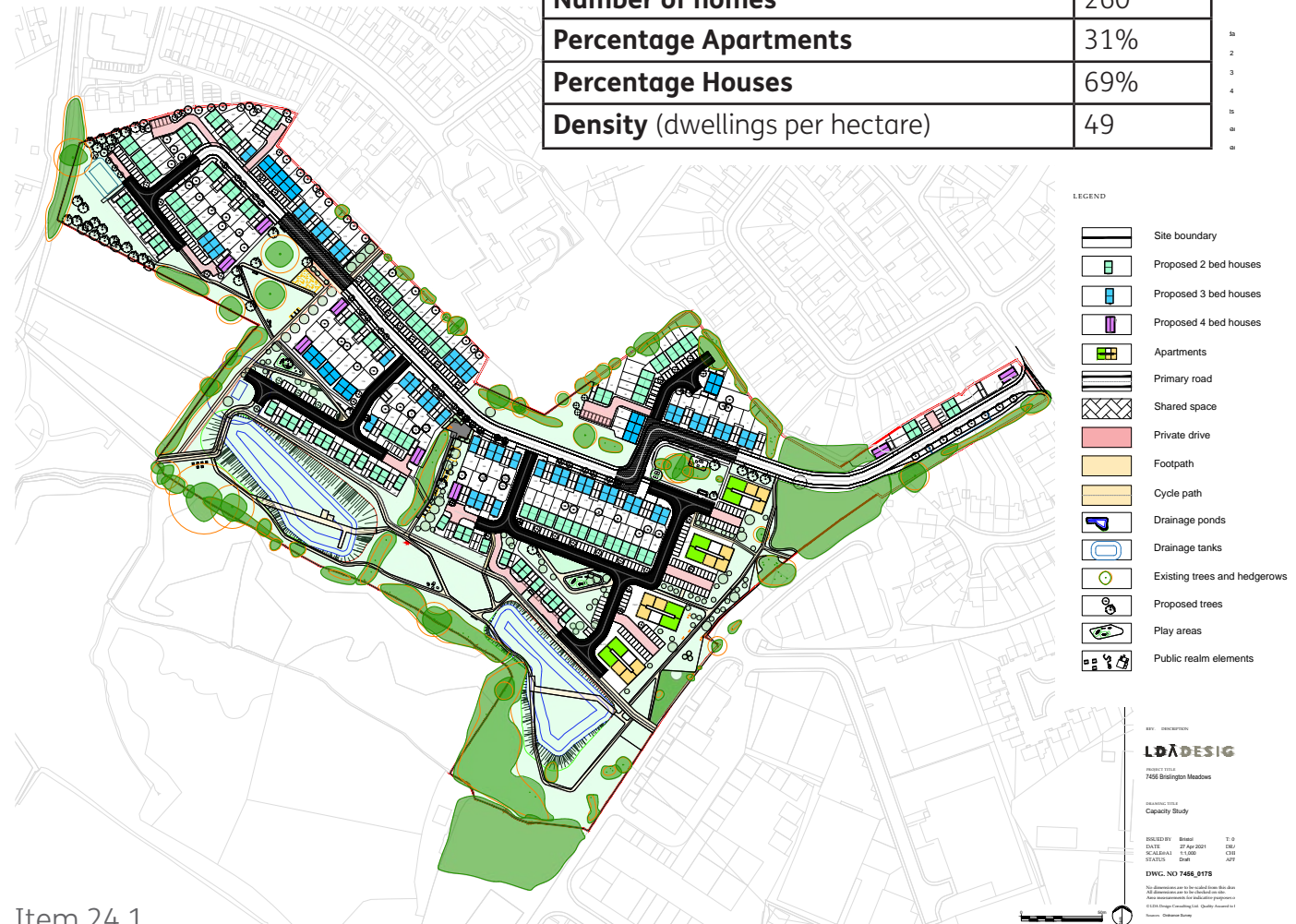
## Design iteration Placemaking

Further refinement of masterplan including internal road layout, assessing turning radii and servicing requirements. Additional amendments included:

- Amendment to layout along entrance road from Broomhill Road to ensure adequate parking and amenity space is provided for dwellings.
- Inclusion of linked units along southern edge of the masterplan, providing a more urban response and creating a strong frontage to the greenspace.
- Widened ecological corridor along Bonville Road
- Widening of green corridor along east-west hedgerow reference H3 compared to Item 20.
- Review of parking provision and location according to highways requirements.

### Schedule for Masterplan Item 24

Site area	9.33ha
Gross developable area including incidental green spaces and a proportion of the primary road infrastructure and excluding main public open spaces	5.32ha
Number of homes	260
Percentage Apartments	31%
Percentage Houses	69%
Density (dwellings per hectare)	49



Item 24.1  
Illustrative Masterplan



# Item 25 May 2021

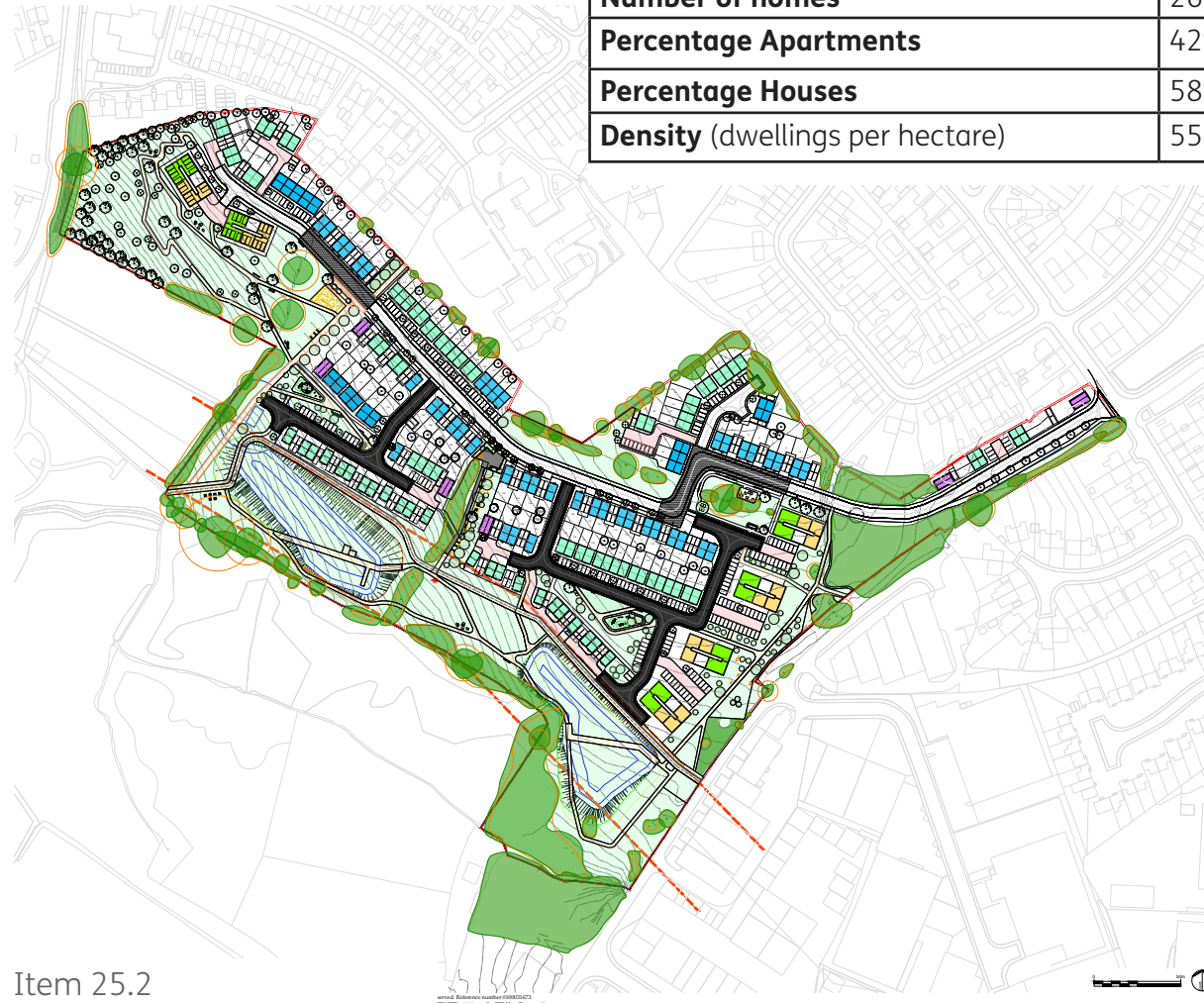
## Design iteration Placemaking

### What was being tested

- Design development of north western part of the site - consideration of taller buildings to reduce amount of developable area and therefore earthworks, while still achieving circa 260 homes. Achieving 260 homes was a driver in terms of achieving an appropriate number of homes according to the allocation and efficient use of land while ensuring a landscaped approach.



Item 25.1  
Earthworks review



Item 25.2  
Illustrative Masterplan

### Schedule for Masterplan Item 25

Site area	9.33ha
Gross developable area including incidental green spaces and a proportion of the primary road infrastructure and excluding main public open spaces	4.74ha
Number of homes	261
Percentage Apartments	42%
Percentage Houses	58%
Density (dwellings per hectare)	55

## Design Comments

Alternative design reduces the area of land required to deliver 260 homes and therefore extent of earthworks. However, it results in a higher proportion of apartments (42%).

Market analysis expressed the clear opinion that more than circa 30% apartments would not match local housing need. Therefore a higher proportion of apartments will be less attractive to the market and thus would undermine Homes England's aim of releasing this site for development quickly.

### Design decision

- Do not progress with design iteration as the number of apartments required to achieve 260 homes does not match local housing need.
- Remove secondary route through southern part of Hedgerow H1 to reduce breaks in green corridor.



## The impact on the fixes for the OPA

- Extent of residential development shown on Parameter Plans sets a maximum extent for development. This design iteration is not precluded by the design fixes.



## Item 26

# Dec 21 /Jan 22

## Public consultation event

### Placemaking

Design development of masterplan following public consultation event including review of building heights along northern boundary of the site from

#### The impact on the fixes for the OPA

- Amendment to draft height parameter plan presented from 2.5 storeys on northern boundary to 2 storeys where adjoins existing properties.

### Brislington Meadows

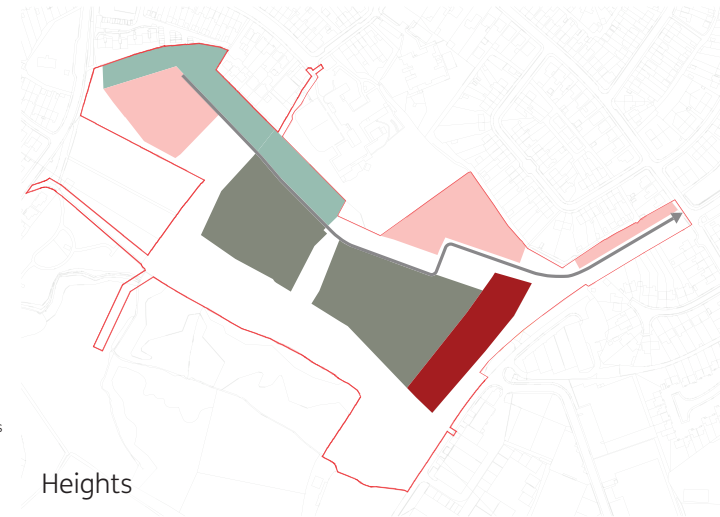
## Development outline

**These four plans set out the key fixes, or parameters, for which Homes England is seeking consent.**

The detail will come forward through more detailed 'reserved matters' applications.

#### Heights Key

- Application boundary (9.6ha/23.7acres)
- 4 storey buildings
- 3 storey buildings
- 2.5 storey buildings
- 2 storey buildings
- Indicative Primary Route



#### Item 26.1

Extract of public exhibition boards showing 2.5 storeys along northern boundary adjoining properties along Belroyal Avenue and Broomhill Road.

## Item 27

# Jan-Mar 2022

## Building for a Healthy Life Placemaking, earthworks strategy

### What was being tested

Review of masterplan against the Building for a Healthy Life guidance document. Requires level access to properties from the street which wasn't currently accommodated in the draft proposals.

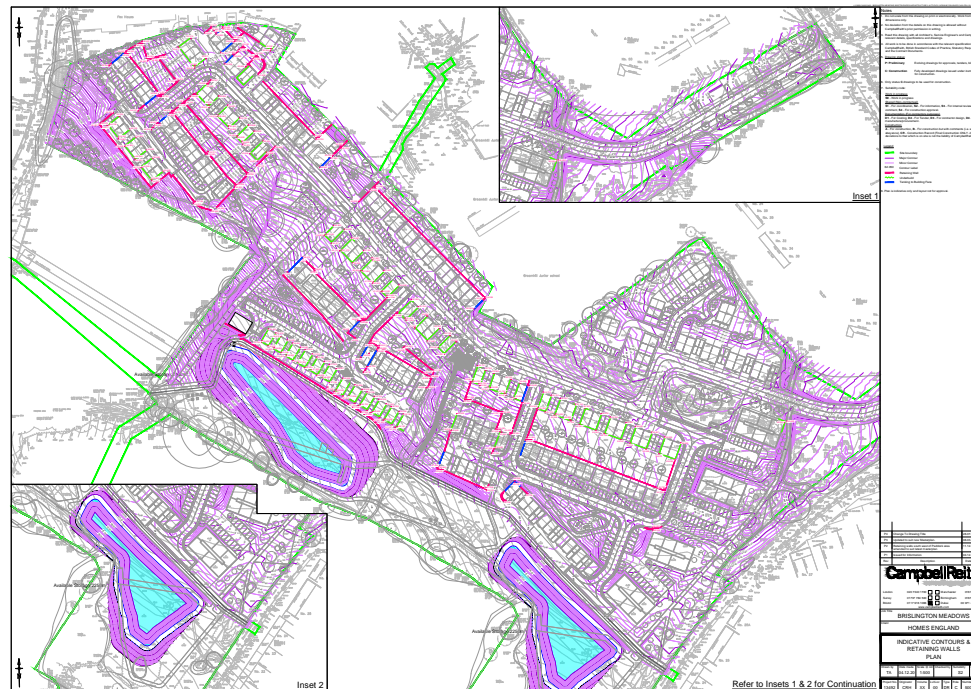
### Design Comments

- Earthworks strategy and masterplan reviewed to ensure level access from the street to all properties. Resulted in level changes being accommodated within gardens (allowing a minimum area of 2m of level ground at the rear of properties before sloping / stepped gardens and retaining walls between gardens where necessary).
- Revised masterplan levels with underbuild only on southern façades of dwellings in rear gardens to avoid stepped frontages and uneven street scenes. South facing gardens would therefore have decked patios and steps down to garden level on southern

façades (downslope). North facing rear gardens (facing up the slope) would have 1m retaining walls between patio and garden interface reintroduced.

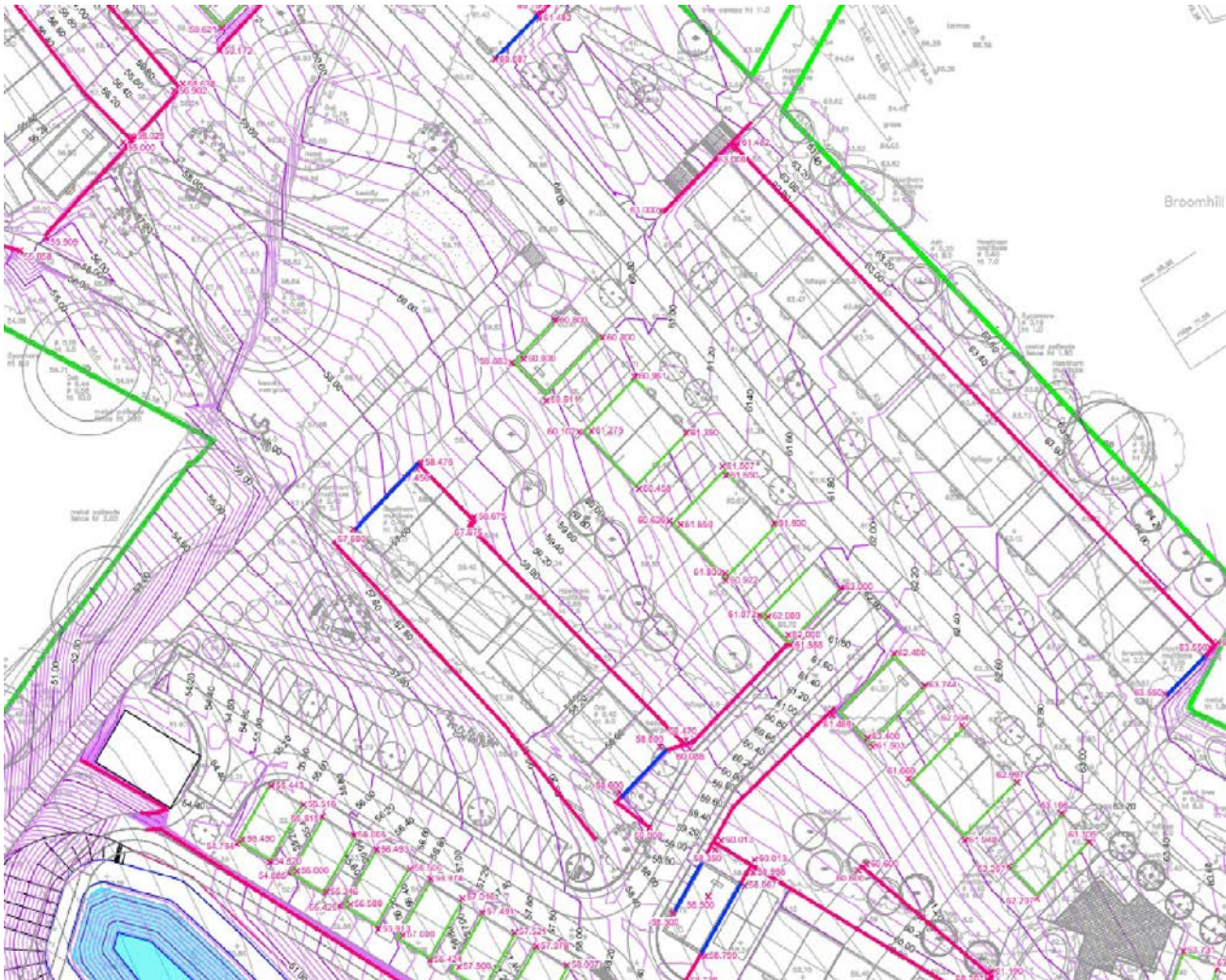
### The impact on RMA

- Earthworks strategy is not fixed. RMAs to consider split level house types, as this is not precluded through design fixes.



Item 27.1  
Finalised earthworks strategy





Item 27.2 (zoom in of 29.1)

Revised masterplan levels with underbuild only on southern façades of plots and retaining walls within gardens to avoid stepped frontages and uneven street scenes.



## Item 28

Jan 2022

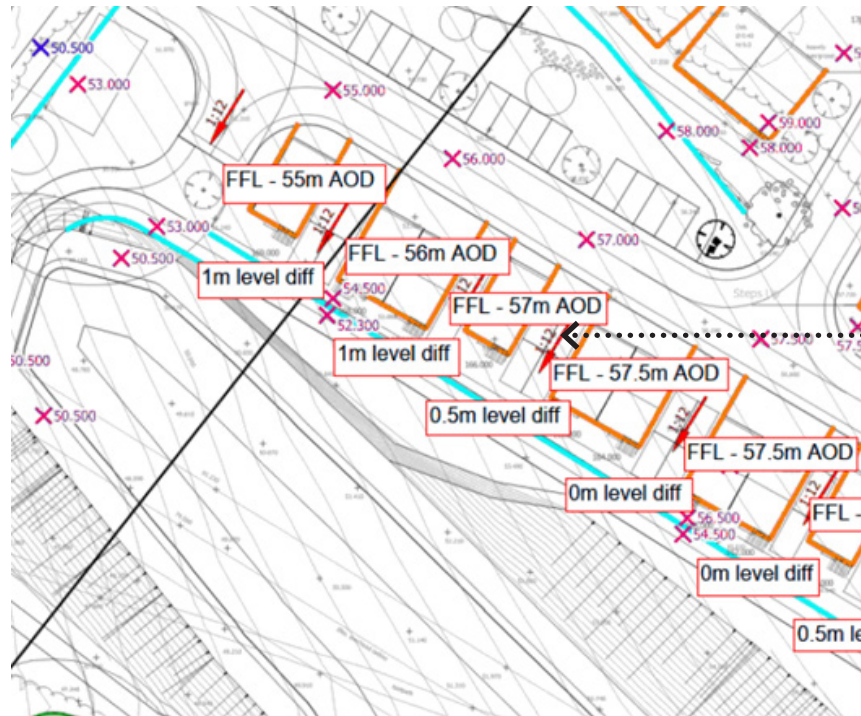
## Design and Earthworks

## Technical assessment

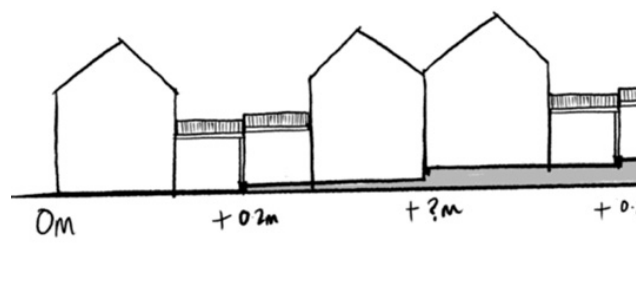
Review of linked units in the south of the masterplan in relation to providing a level development platform and impact on earthworks strategy.

Options considered:

- Increase ground levels in the west of this parcel by 3m but this would have a negative effect on level of the cyclepath and height of retaining wall that runs along the south of this parcel as well as having implications on the footpath/pedestrian connection in the southwest corner of the site. Increase the underbuild of these plots, however, there is already underbuild proposed.
- Parcel up the units into pairs by separating the double units by circa 1-2m so that we are not dealing with a single terrace / platform but this would require too much space for the parcel and be too close to the N-S hedgerow ref H5.
- Stepping units down the slope as per the image of a development at Castle Cary. This option has been adopted in the masterplan.



These units are accessed from the road on their northern elevation



Item 28.1  
Earthworks strategy review



Item 28.2  
Precedent of linked units that step down the slope.

## Item 29

# Jan 2022

## TVIA

### Technical assessment

On-site assessment work for the TVIA was undertaken. This involved fieldwork within the Site and the TVIA's study area. Photography (which captured views during the winter months) was taken from representative viewpoint locations. Visualisations, submitted as part of the outline planning application in support of the TVIA, were produced from selected representative viewpoint locations.

## Item 30

# Jan 2022

## Design West Presentation

### Design Review

Proposals presented to Design West and BCC following a site visit. Key topics discussed include:

- Landscape-led approach to masterplanning
- Ecology and arboricultural considerations
- Density and extent of residential development
- Landscape design strategy

## Item 31

# Jan 2022

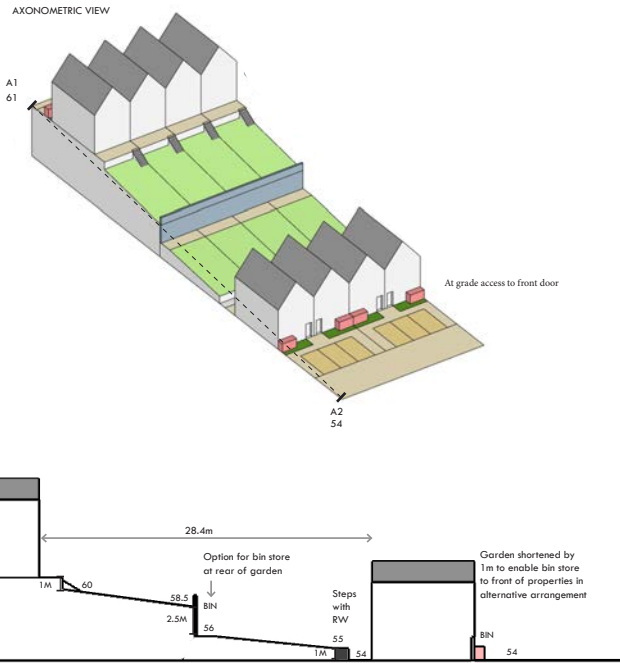
## Bin storage

### Earthworks

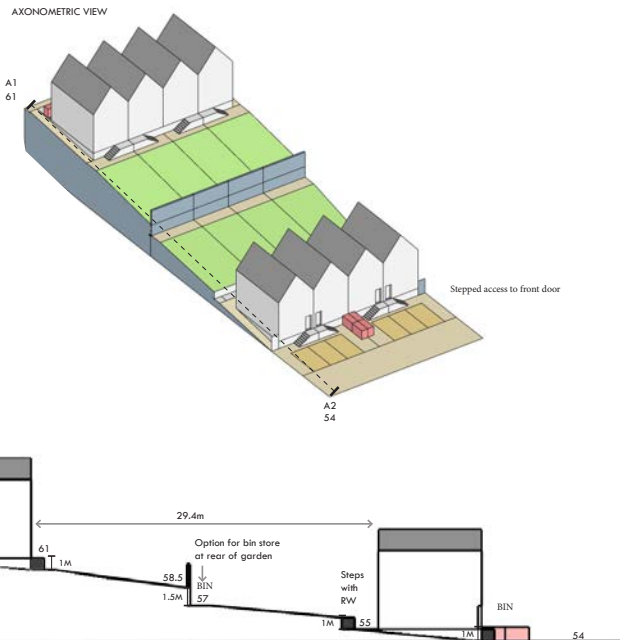
Review of options for bin storage and level access to properties following Item 27 Building for a Healthy Life assessment, focusing on the paddock area in the north west of the site as it is the steepest area.

A study of the bin storage, levels and parking provision for units in the paddock area and a mark up of how bin storage could be accommodated across the site. Option 1 is the preferred option as it enables level access at the front and rear of properties. This does result in a higher retaining wall in the back garden.

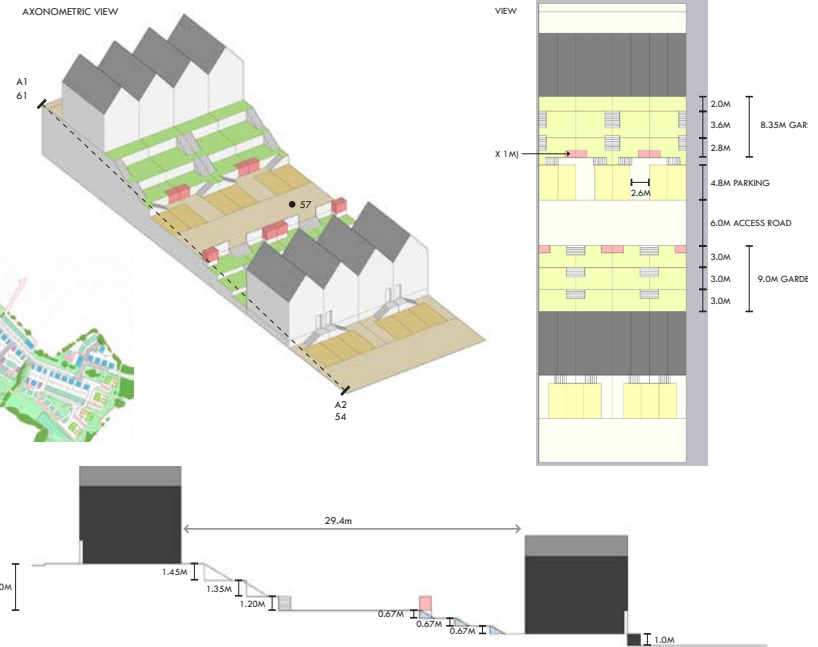
Option 1  
Preferred



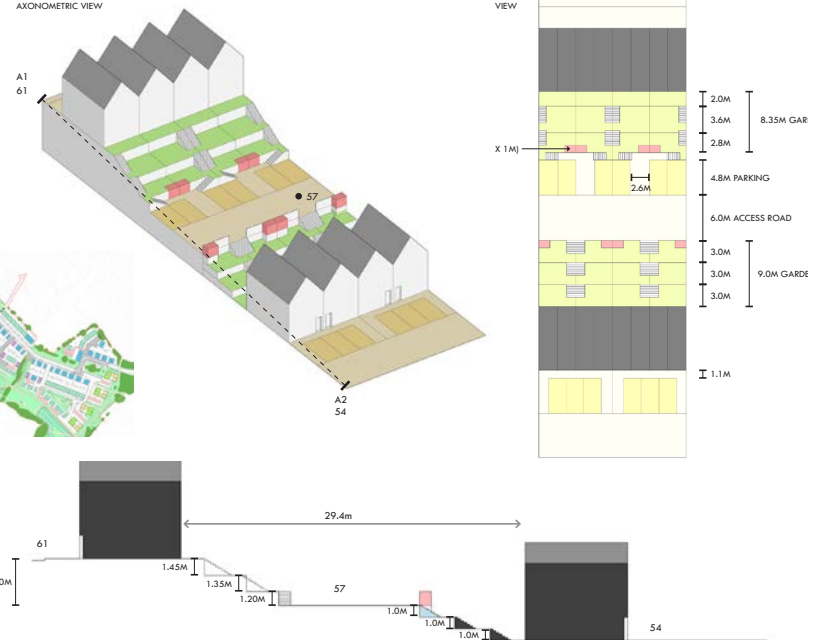
Option 2



Option  
discounted  
due to steep  
sloping  
gardens



Option  
discounted  
due to steep  
sloping  
gardens





## Item 32 Feb 2022

### Masterplan update

Access, Pedestrian,  
Placemaking, Masterplan

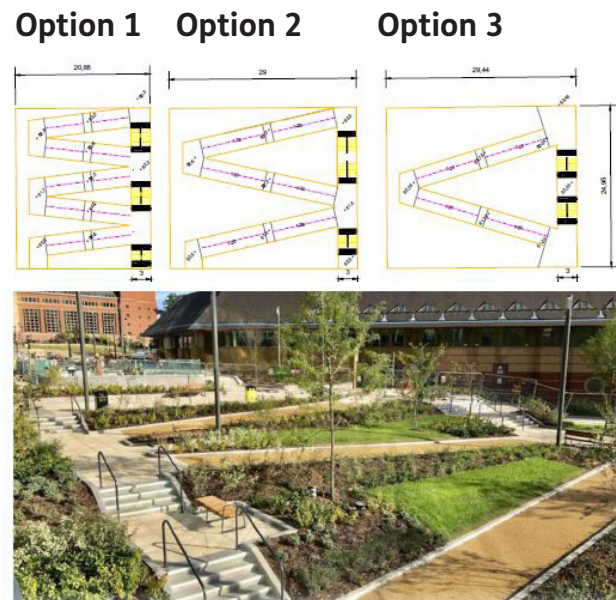
Options developed to deliver a ramp link to Allison Road (the 'School Link') that is accessible for wheelchair users. Different options were tested including the number of returns and gradient of slopes that would be accessible.

#### Design decision

- Option 3 with the least number of returns chosen as the preferred option and masterplan updated accordingly.

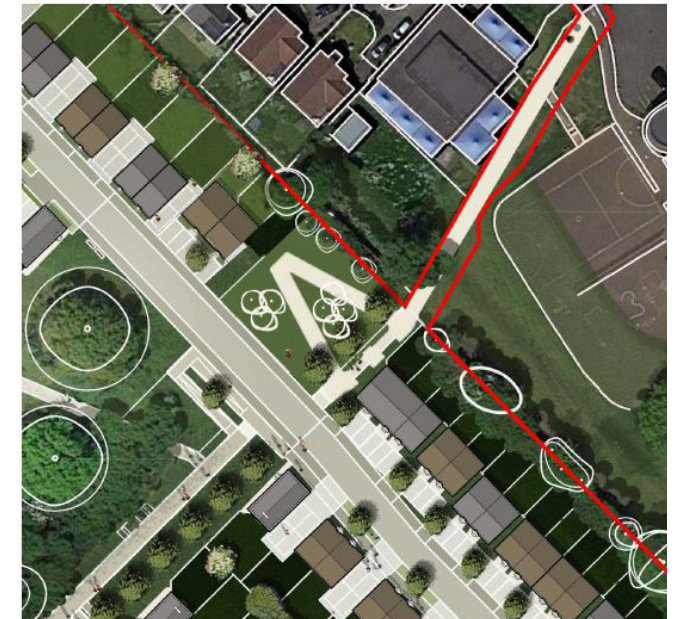
#### The impact on the fixes for the OPA

Extent of residential area on Land use Parameter Plan amended to exclude area for the ramp, instead the area is included within the open space area to ensure the land is reserved for a ramp access.



Item 32.1

Development options for accessible ramp to school link



Item 32.2

Updated Illustrative Masterplan showing Option 3

## Item 33

Feb 2022

Masterplan Update following  
Design West feedback

## Placemaking, access

Review of design response at the entrance from Broomhill Road following Design Review Panel feedback and suggestion to allow the access street to pass through an area of more intense landscape character, as a threshold to the development. Three options were considered to increase the landscape and ecological potential. The position of the vehicular access into the site from Broomhill Road was fixed following previous design testing (see Items 15 and 16 in this document).

Design West suggested removing units in this location however it was decided that frontage and natural surveillance onto this route is important.

## What was being tested

- Position of dwellings at entrance (for RMA to determine)
- Alignment of primary road into the site (determines developable area on parameter plans)
- Impacts on depth of green infrastructure link
- Orientation of dwellings to provide more frontage onto the street (for RMA to determine)
- Roads were kept to 5.5m, with widening on bends to allow a refuse lorry to pass a car in either direction. Turning heads were checked for a BCC design refuse lorry.

Design presented to Design  
West in Jan 2022

Item 33.1

# Item 33 Feb 2022

## Option 1

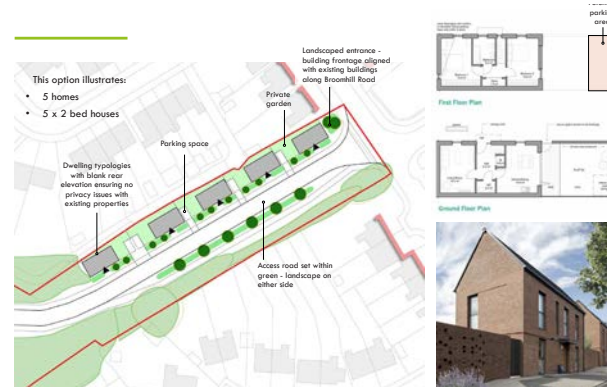


Item 33.2

Curved alignment tested - could allow for more landscaping to be introduced either side of the primary road.

Design option discounted due to reduced width of ecological corridor along eastern edge.

## Option 2



Item 33.3

Consideration of alternative house typologies enable frontage onto the primary street and do not present issues with overlooking to existing properties

Masterplan updated with alternative house types.

## Option 3



Item 33.4

Landscaped area introduced along Broomhill Road instead of housing frontage, this creates the opportunity for further planting to be introduced at the entrance in response to the Design West statement.



## Item 33 Feb 2022

### Design decision

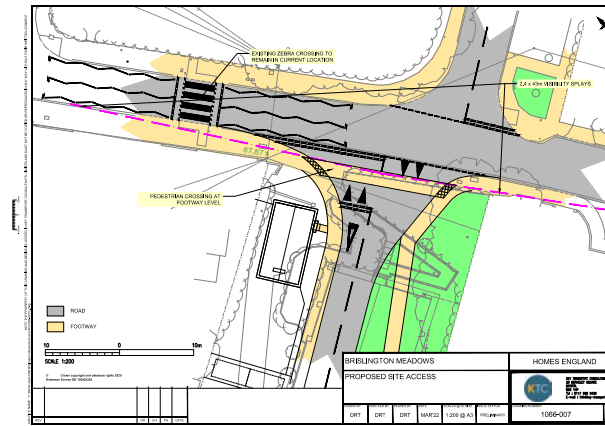
- Option 3 is the preferred option for the Illustrative Masterplan as it is a more satisfactory arrangement of dwellings and creates a different character to the rest of the development.

### The impact on the fixes for the OPA

Allow some flexibility in how this area of the site is developed as part of the RMA, therefore extent of residential area on Land use Parameter Plan should extend to Broomhill Road. This does not preclude greenspace being proposed at the entrance as shown in the Illustrative Masterplan.

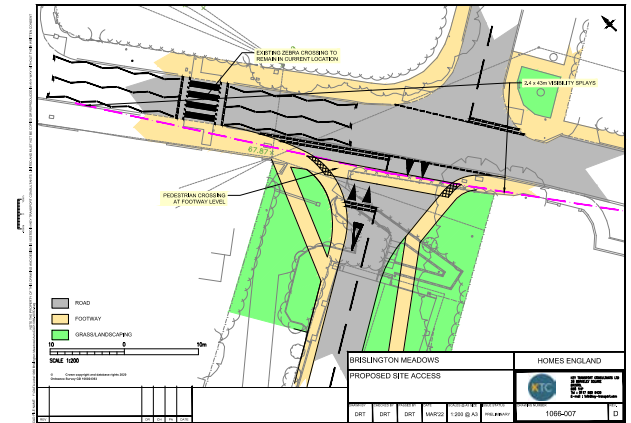
Access drawing updated to reflect agreed approach.

### Previous iteration



Item 33.5

### Updated drawing



Item 33.6

## Item 34

## Feb 2022

Masterplan Update following  
Design West design review

Amendments to masterplan following Design West session. Design West described the design response along the southern boundary as 'suburban' in character. It is a compact house type with side terraces rather than back gardens and therefore the design team do not consider it to be suburban in character. They also provide create multi-aspect homes as they are accessed from the north, but have balconies to the south and elevated terraces on the side of properties providing natural surveillance opportunities onto the wetland meadow.

**What was being tested?**

Design approach was reviewed and updated to reflect the latest earthworks strategy.

**Design Comments**

- Units were aligned in a straight line rather than staggered / stepped to reduce quantum of retaining walls. This also creates a more formal design approach in response to Design West.

**The impact on the fixes for the OPA**

- Precedent images of linked house typology sourced, including 3 storey examples, and included within the Design Code as an illustrative example.
- Design Code - mandatory design principles for the built form response along the Wetland Meadow specifying a consistent building line and an opportunity for a higher density approach with compact / urban house types, taller buildings and/or apartment blocks.

Item 34  
Feb 2022

74



Before



After

Item 34.1

Comparison of masterplan amendments to illustrate changes made





## Item 35

# Feb 2022

### Assessment following Design West

#### Ecology, Drainage and Landscape

Opening up the small watercourse to the south-east boundary to increase its amenity value was assessed following the Design West review. It would require substantial removal of scrub and trees. It would expose only a short section of the watercourse that has no current recreational value (it is not visually or physically accessible from the current site). The degree of scrub and tree removal would weaken the ecological corridor along the south of the site. Creating access to the watercourse would create a risk de-gredation of water quality from dog fouling and soil erosion. The watercourse itself does not create an access barrier and opening it up to public access would risk unauthorised access into adjacent habitats to the south.

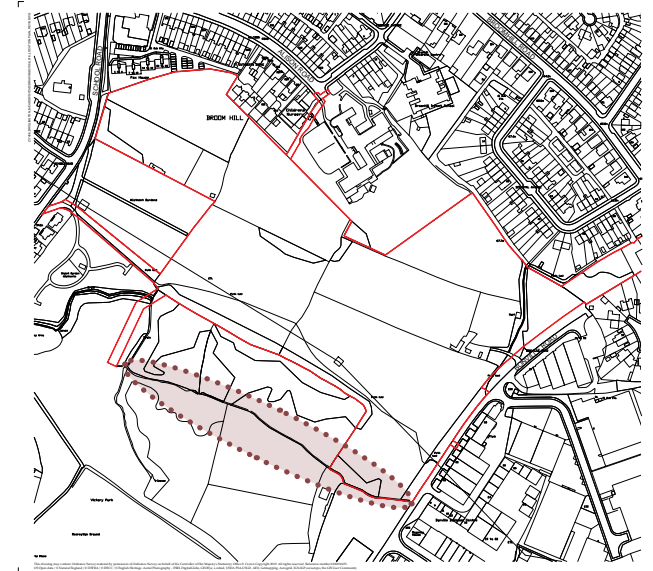
Overall, the risk for ecological harm to scrub and tree habitats, connectivity and associated habitat features adjacent or downstream was deemed to outweigh any public benefit of opening up the watercourse.

Similarly, the scale of scrub loss (including risk of harm to veteran tree TEP Reference T6) anticipated to arise as a consequence of re-establishing the original route of the PROW along the south boundary was considered to outweigh the benefit, considering the well-established public use of the desire line within the site.

Note: This is not Brislington Brook which is located to the west of the site and is not included within the site boundary.

#### The impact on the fixes for the OPA

- The small watercourse is retrained within public open space within the Landscape Parameter Plan.



35.1

Location of small watercourse

## Item 36

Apr 2022

## Submitted Illustrative Masterplan

Illustrative Masterplan submitted as part of the outline planning application, showing how up to 260 homes could be delivered on the site.

## Schedule for Masterplan Item 36

<b>Site area</b>	9.33ha
<b>Gross developable area</b> including incidental green spaces and a proportion of the primary road infrastructure and excluding main public open spaces.	5.12ha
Area equates to the residential development area on the Land Use Parameter Plan.	
<b>Number of homes</b>	257
<b>Percentage Apartments</b>	32%
<b>Percentage Houses</b>	68%
<b>Density</b> (dwellings per hectare)	50
Note: 51 dph if 260 homes	



Item 36.1  
Illustrative Masterplan

## Item 37

# July 2022

## Building with Nature Accreditation

### Policy, Sustainability

Homes England are committed to achieving Building with Nature (BwN) accreditation and have appointed an independent assessment of the scheme. This assessment was undertaken by BwN which confirmed that the proposed scheme is recognised as landscape-led, performs well, despite existing ecological and landscape constraints. A further review and assessment of the scheme will be undertaken following determination of the appeal specifically in relation to the potential SNCI status of the Appeal Site.





## Item 38

Jan 2023

## Building with Nature Accreditation

### Policy, Sustainability

Comparison of minimum tree / hedgerow / wooded area to be retained and residential development areas based on amended Parameter Plans compared to Barton Willmore Masterplan (Item 1). Demonstrates that additional trees / hedgerows have been retained in the submitted plans compared to the masterplan BCC commented on in their pre-app response dated Jan 2020.



## LEGEND

- Minimum trees / hedgerows / wooded areas to be retained according to Landscape Parameter Plan
- Trees / hedgerows / wooded areas in conflict with the Appeal Site masterplan
- Residential development according to Land Use Parameter Plan
- Barton Willmore layout

REV. DESCRIPTION

APP. DA

LDĀDESIGN

PROJECT TITLE  
Brislington MeadowsDRAWING TITLE  
Barton Willmore Layout with  
Developable Area Overlay

ISSUED BY	Bristol	T: 0117 203 3628
DATE	05.12.22	DRAWN MS
SCALE@A3	1:2,500	CHECKED RF
STATUS	Planning	APPROVED RF

DWG. NO 7456\_051

No dimensions are to be scaled from this drawing.  
All dimensions are to be checked on site.  
Area measurements for indicative purposes only.

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Sources Ordnance Survey

Item 38.1  
Comparison of Item 1 with Parameter Plans

## Item 39

# Apr 2022

## Extract from Design and Access Statement (pages 74 - 77)

### Design Evolution

The process of engagement with members of the public and key stakeholders has informed and shaped proposals for Brislington Meadows. A Statement of Community Involvement is submitted as part of the Outline Planning Application. This sets out how the Illustrative Masterplan and Parameter Plans have changed following lessons learnt from the meetings / discussions / events. The following pages give an overview of the masterplan evolution.

# 2019

- Bristol City Council invited Homes England to consider acquiring the land for housing delivery.

# 2020

- Homes England acquired the site.
- Appointed consultant team.



Item 39.1

Initial concept prepared by consultant team



Engagement with Bristol City Council

### Landscape and Biodiversity

- Potential to retain all hedgerows and trees on site was investigated, concluding that the impact of delivering 300 homes (in line with the allocation) could not be adequately mitigated.
- Detailed survey and analysis of trees and hedgerows revealed a range of qualities, characteristics and values, informing decisions on which to retain and remove.
- Apartments located towards the eastern edge of the site in response to lower level topography and less sensitive to landscape context.
- Landscape and visual appraisal concluded 2.5 storey homes appropriate at top of the slope.

## Density

- Options for achieving 300 units on site (in line with allocation) were considered and tested, but rejected because of impact on the site's natural assets.
- Options included fewer, taller apartment buildings were considered but visual impact was more significant, and the market expressed the clear opinion that more than 30% apartments would not match local housing need.

## Access

- Assessment of highway access option via School Road including indicative engineering drawings to assess cut and fill required. Very considerable earthworks and very large retaining walls required to achieve a 1:12 gradient, along with considerable loss of mature trees and significant impact on the developable area of the site.
- Highway access was considered via Bonville Road but significant impact could sever the green link between Victory Park and Eastwood Farm. It was also considered this would lead

to additional through-traffic using the development as a short cut and creating a rat-run to Broomhill Road.

- Considered scope for internal loops via an east-west on-site road on the lower slope but concluded impact on the north-south hedgerows and Tree Preservation Orders (TPO) trees was too great. The scheme therefore incorporates some cul-de-sacs but pedestrian and cycle links introduced to overcome the shortcomings.
- Concluded most appropriate foot and cycle connections to School Road via the allotments and Allison Road. Considered a link to Allison Road via the road serving Fox House but outside Homes England ownership and not able to control quality. A link to School Road north of the allotments considered but connects to a point half way up the hill, with no onward connection.

## Engineering

- Ground investigations undertaken to confirm the ground conditions, for example: depth to bedrock to inform cut and fill efficacy and access gradients.
- Shallow bedrock limits the potential to lower site levels in the north of the site resulting in requirement for retaining walls and steeper gradients.
- Consideration of topography, infiltration rates and surface water catchment areas to inform drainage strategy based upon ground conditions, topographical survey and utilities mapping. Surface water run-off to be managed on site and discharged off site.
- Considered implications for development of retaining the telecommunications mast but notable impact on unit numbers owing to sterilised 'no build zone' around the mast.
- Initially considered platforms with large cut and fill with under-build and stepped frontages.





## Community

- Considered including some kind of community facility within the development but clear position that the development should not undermine the draw of the existing community facilities in Broomhill Local Centre.
- Older Persons Living accommodation considered and tested on the market. Market supportive but the option was discounted following engagement with BCC and the risk of competition with another new facility.



Item 39.2  
First land use plan prepared by the consultant team for Homes England

# 2021

## Landscape and Biodiversity

- Detailed assessment of biodiversity impact and proposals for mitigation
- Design decision for buildings to be set within landscape along the eastern edge and provide natural surveillance to the green corridor.
- Consideration given to locating a 3 storey apartment block south east of the school playing fields which would frame the green space but dropped due



Item 39.3  
Illustrative masterplan evolution to test the capacity of the site in more detail

to concerns on existing Belroyal Avenue residents.

- Inclusion of linked units along southern edge of the masterplan, providing a more urban response and creating a strong frontage to the greenspace.

## Access

- More detailed design of primary route. Considered options for avoiding TPO but resulted in loss of more woodland.
- Design of green spaces integral to road design.
- Engagement with BCC Public Rights of Way team about formalising trodden paths.

## Topography

- Amendment of the structure of the Masterplan to better respond to levels, reducing the need for retaining walls
- Brislington Heights – decision to ensure the road is at the same height as the greenspace / existing trees.

## Sustainability

- A number of sustainable design features were identified during the pre-application discussions with BCC officers to be considered further including orientation of units and general site layout to provide resilience to climate change and the use of green infrastructure to minimise and mitigate the heating of the urban environment.

## Public Consultation

- Decrease of height parameters on northern boundary of the site from 3 / 2.5 storeys to 2 storeys.
- Design changes related to parking and safer crossings to better reflect Liveable streets principles, for inclusion in Design Code.
- Clearer definition of the various green spaces, their roles and design principles.



Item 39.4  
Draft masterplan presented at community engagement event

# 2022

## Topography / Building for Healthy Life

- Reintroduce small retaining wall in gardens to enable level access to homes from the street.
- Revised access proposals to address level changes.

## Building with Nature

- Homes England are committed to achieving building with Nature (BwN) accreditation and have appointed an independent assessment of the scheme. An initial assessment has been carried out and confirms that the proposed scheme is recognised as landscape-led, performs well, despite existing ecological and landscape constraints.

## Ecology

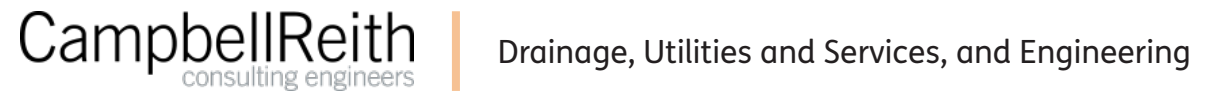
- Design principles refined along the primary street.
- Further exploration of house type design principles.
- Ecological response – inclusion of the Brook.

## Submission of Outline Planning Application April 2022

Engagement with local Councillors and BMAG

Engagement with Bristol City Council

# Team





**Appendix 3: Analysis of Hedgerows H2 and H4**

## **1.0 East-west Hedgerows H2 and H4 Technical Note**

1.1.1. It may be helpful for the Inspector to have drawings 1 and 2 to Mr Hesketh's Proof to hand whilst reading the following section to assist with references to specific hedgerows and other factors that have influenced the design fixes.

### **1.2. General approach**

1.2.1. The approach taken to retention and removal of trees and hedgerows has been informed by an extensive iterative design process as set out in the Design Evolution Document (Appendix 2). It was through this process that we established that most of the north-south orientated hedgerows can be successfully retained within public open space and therefore their future management and maintenance can be guaranteed, without impeding on the delivery of housing on the site. Their retention is therefore fixed within the Landscape Parameter Plan. Furthermore, the baseline evidence review (Item 11 in Appendix 2) established that Hedgerows H1, H3 and H5 performed highest across the comparison of diversity, condition and function, with H4 performing the lowest.

1.2.2. The east-west orientated hedgerows (H2 and H4) are harder to retain within the development because of their location, dissecting the developable areas in a way that creates narrow blocks of development area that would require irregular plot arrangements and depths. Their retention would also fix ground levels and therefore reduce the area in which necessary reprofiling (considering it is a steep site) could be accommodated.

1.2.3. If we were to retain the hedgerows there are four fundamental principles that need to be factored into any design solution that retains H2 and H4 – landscape-led placemaking, management and maintenance, site-wide earthworks strategy and the site-wide access strategy.

## **Landscape led placemaking**

- 1.2.4. We have adopted good urban design and Secure by Design principles of ensuring development fronts onto areas of public open space and streets, and this is further stipulated as requirements in the Design Code. Occasional side elevations are permitted onto public open spaces within the Design Code requirements, as long as facades are activated with prominent windows, small WC windows will not be sufficient.
- 1.2.5. Where trees and hedgerows are being retained, they are to be retained within areas of public open space to ensure their retention can be guaranteed, and so that they are given enough space to grow, further enhancing their habitat potential and connectivity into the wider network.

## **Management and Maintenance**

- 1.2.6. If we were to retain the east-west hedgerows H2 and H4, we would want to ensure appropriate access for management and maintenance of the hedgerows. Therefore, it is preferable for these hedgerows to be sited within an area of public open space, rather than within back gardens where future retention cannot be guaranteed.

## **Site-wide earthworks and levels**

- 1.2.7. We would not want to alter the ground levels alongside the retained hedgerows in order to avoid impacting the root protection area (RPA). Additionally, we would need to provide a relatively flat area surrounding the hedgerow for its maintenance access. Therefore, any reprofiling would need to occur outside of the buffer to the RPA.
- 1.2.8. Level changes in the scheme could be accommodated through a combination of retaining walls between back gardens, sloping back gardens (up to 1:10, while still allowing for 2m of at the rear of the property for a terrace or patio) and/or through split level housing (whilst still providing level access from the street to accord with the principles of Building for a Healthy Life).



## Site-wide access

- 1.2.9. Our working assumption is that the primary street through the development should achieve a 1:20 gradient; secondary streets can be a steeper gradient, but principles of Building for a Healthy Life should be applied including providing level access to properties from the street. Therefore, development should work with the contours, rather than against as much as possible.
- 1.2.10. Vehicular access is required east-west through the site therefore the primary road needs to be positioned either north or south of hedgerows H2 and H4. It cannot be located south of the hedgerows without requiring considerable earthworks to achieve the 1:20 gradient, as the southern part of the site is steeper and the road would need to tie into the primary access north of Brislington Heights open space, which is at 61.6mAOD.
- 1.2.11. Therefore the primary road (minimum 11m width as per Design Code) should be located between the northern boundary and H2 and H4.
- 1.2.12. Access will be required to the areas south of the hedgerows and therefore some breaks will be required in Hedgerow H2 and H4 if they are to be retained.
- 1.2.13. The following sections explore the design options of Hedgerows H2 and H4 respectively. The design applies to the following block depth assumptions for the different arrangement of buildings.

Table 1: Block Depth Assumptions

Back to back arrangement	Distance (metres)
Primary road corridor	11 (as per Design Code)
Front garden	1.5 (minimum)
Typical house depth	10
Back to back distance between homes	21 (in accordance with BCC guidance)
Typical house depth	10

Front garden	1.5 (minimum)
Pedestrianised prioritised street	7.5 (minimum) (as per Design Code)
<b>Total</b>	<b>62.5m *</b>

Table 2: Block Depth Assumptions

<b>Front to front arrangement</b>	<b>Distance (metres)</b>
Typical back garden	10
Typical house depth	10
Front garden	1.5 (minimum)
Primary road corridor	11 (as per Design Code)
Front garden	1.5 (minimum)
Typical house depth	10
Typical back garden	10
<b>Total</b>	<b>54m *</b>

Table 3: Block Depth Assumptions

<b>Front to back arrangement</b>	<b>Distance (metres)</b>
Typical back garden	10
Typical house depth	10
Front garden	1.5 (minimum)
Primary road corridor	11 (as per Design Code)
Typical back garden	10
Typical house depth	10
Front garden	1.5 (minimum)

Pedestrianised prioritised street	7.5 (minimum) (as per Design Code)
<b>Total</b>	<b>61.5m *</b>

\*Note these dimensions assume parking to the side of properties or integral, it does not account for on street parking in a perpendicular or parallel arrangement which would increase the width assumed for the streets. This depth does not include a buffer to existing trees or hedgerows.



## 2.0 Hedgerow H2

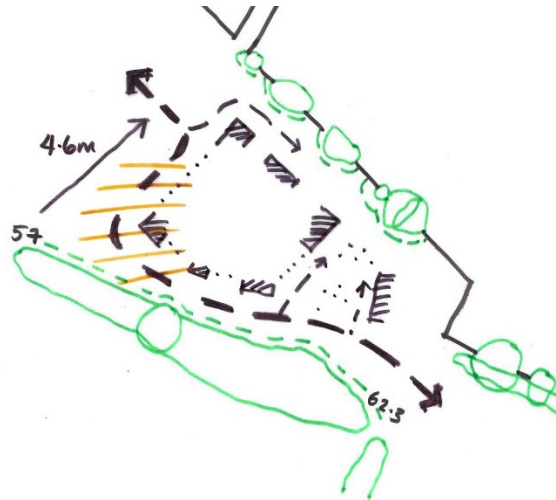
2.1.1. Located between Hedgerow H1 and H5, this hedgerow varies in width from 9m to 20m. The block depth available for residential development, if we allow a buffer (assumed to be 2m) to existing trees and hedgerows RPAs for maintenance is as follows:

Hedgerow H2	Distance
Block depth available between H2 and northern boundary of the Appeal Site (excluding a 2m buffer to existing trees)	27m – 74m
Block depth available between H2 and overhead powerline buffer (the southern extent of the parcel is based on the Land Use Parameter Plan which allows for a buffer of up to 25m from the centreline of the tower)	41m – 51m

## 2.2. North of hedgerow H2

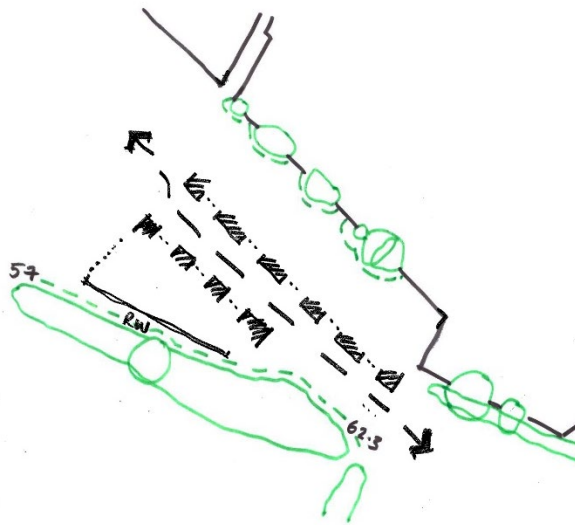
2.2.1. Development in this area could be achieved in four ways. In each of these solutions a minimum of one break in H2 would be required to provide vehicular access to the area south of the hedgerow.

### 2.2.1.1 Properties front onto the northern boundary and front onto H2



- 2.2.1.2 A minimum of 62.5m is required to achieve this back-to-back arrangement of homes (see above table) and would therefore only be viable in the western part of the development area available. The remaining area could have properties siding onto the hedgerow Ref H2 and northern boundary but would require retaining walls between properties to work across the contours as the units step down the slope. Furthermore if the homes front onto H2 and therefore the primary road is positioned at the bottom of the slope down the hill, adjacent to H2, the requirement for a 1:20 primary road would result in further cut and fill (orange hatched area), as there is a 4.6m level difference from the west of the hedgerow H2 existing ground level (57mAOD) and the primary road located north of Brislington Heights greenspace (61.6mAOD). This would reduce the area available for development and impact on the overall number of homes. The primary road could be located along the northern boundary but this arrangement would also leave land in the north east undevelopable and potential concerns regarding secure by design with a lack of frontage onto an area of public open space; and a steep gradient street would be required to access the properties on the southern edge.

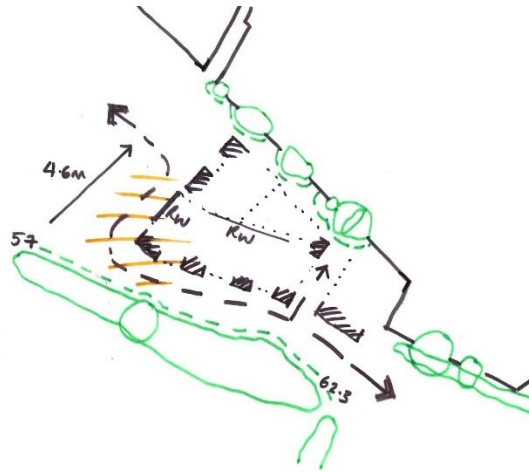
### 2.2.1.3 Properties back onto the northern boundary and back onto H2



2.2.1.4 The single road between the two frontages would act as the primary road at 1:20 gradient. This arrangement requires 54m minimum in block depth and would result in the eastern part of the primary road fronted with development on one side only. This option has been discounted as this goes against good placemaking, urban design and secure by design principles as properties back onto the public open space and/or result in H2 being within rear gardens and therefore future maintenance may be difficult to guarantee.

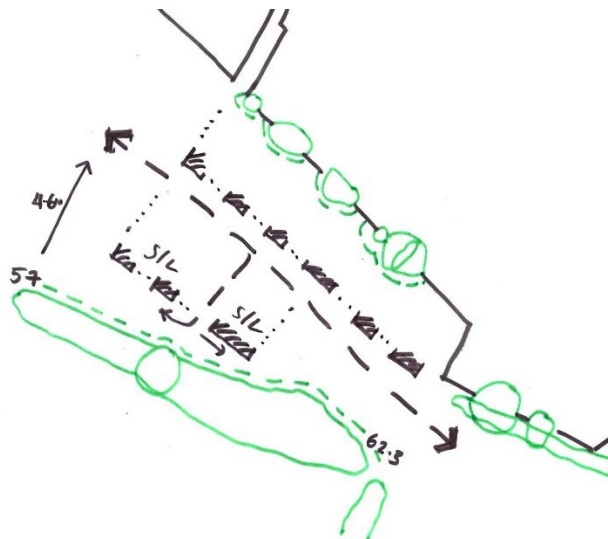


**2.2.1.5 Properties side onto H2 and front onto the northern boundary or vice versa**



**2.2.1.6** This arrangement would likely result in irregular plot sizes and a less efficient use of land because of the narrow block depth available. Similarly to 2.2.1.2 above the primary road alignment along northern edge of H2 would require significant cut and fill to tie into the road at 61.6AOD therefore reducing the developable area and creating an area of reprofiling.

**2.2.1.7 Front onto H2 and back onto northern boundary**



**2.2.1.8** It is not typical for the back of properties to face the front of other properties in this arrangement. It may be possible for properties to the south of the primary road to be split level, with

access on the upper level, directly from the primary street. There would not be sufficient block depth to provide a vehicular access to the front of all properties fronting H2 as it would require 61.5m minimum block depth.

2.2.1.9 Due to the angle of Hedgerow H2 it results in a triangular shaped development area between the hedgerow and primary road which is difficult to efficiently design and therefore likely to result in a reduction in housing numbers.

## **2.3. South of hedgerow H2**

2.3.1. Ideally properties would front onto hedgerow H2 and the Wetland Meadows to align with the placemaking principles set out in the Design Code. A typical block depth for properties back-to-back, with vehicular and parking access to the front of properties, is 62.5m (see table above). However, the block depth available, taking into account a 2m buffer to the RPA of Hedgerow H2, and the 25m buffer from the centre of the overhead powerlines, is between 41m and 51m, and therefore not sufficient to provide a back to back housing layout.

2.3.2. Alternatively, houses could side onto hedgerow H2 and the Wetland Meadow, however properties would therefore be positioned across the contours of the slope rather than with, resulting in additional earthworks and retaining walls between properties to achieve level access from the street.

2.3.3. A third option would be for houses to front onto the Wetland Meadow as shown in the current masterplan and properties back onto H2, but as above this has been discounted as it goes against good placemaking and secure by design principles.

2.3.4. On balance, we have concluded that H2 dissects the residential area into narrow blocks that do not enable us to deliver housing in a way that achieves good placemaking as set out in the Design Code, such as ensuring the retention of hedgerows in areas of public open space that

are activated and contribute to the wider green infrastructure strategy. The resultant block depths are inefficient and would likely result in layouts that work against the existing topography and therefore would result in extensive cut and fill effort. The removal of hedgerow H2 is not ideal, however it enables a more flexible design response to the housing layout, and the potential for an area of incidental open space to be designed into the layout with housing activating the space – the submitted masterplan shows an area of circa 600sqm. If the hedgerow was retained, a similar sized area of incidental open space would not be possible without further reduction in housing numbers, and potentially further earthworks to create a useable space.



### 3.0 Hedgerow H4

3.1.1. Located south of Hedgerow H3, this hedgerow varies in width from 6m to 16m. The block depth available, if we allow a buffer (assumed to be 2m) to existing trees and hedgerows RPAs for maintenance is as follows:

<b>Hedgerow H4</b>	
Development area between H3 and H4 (excluding buffer to existing trees and hedgerow H3).	43m – 47.5m
Block depth between H4 and southern extent of development area (the southern extent of the parcel is based on the Land Use Parameter Plan which allows for a buffer of up to 25m from the centreline of the overhead powerlines)	22m – 80m

### 3.2. North of Hedgerow H4

3.2.1. We would require properties to front onto the primary road, therefore on the upper slopes, properties should be in a back-to-back arrangement. As described above, this would require a minimum of 62.5m if standard housetypes and 21m back-to-back distance is used. However, the block depth between Hedgerow H3 and H4 is typically between 43m – 47.5m, therefore a back-to-back will not fit.

3.2.2. An alternative option for the remainder of the parcel is for one row of homes fronting onto the primary street and back onto Hedgerow H4, however this goes against the good urban design principle of ensuring homes front onto spaces; and would also reduce the number of homes that can be achieved on the site.

3.2.3. Apartments blocks require less parcel depth, but we do not consider it appropriate for apartments to be located along the full length of the primary street considering the visual impacts, and massing / scale within

its context. Furthermore, it would increase the overall proportion of apartments which market analysis expressed the clear opinion that more than circa 30% apartments would not match local housing need.

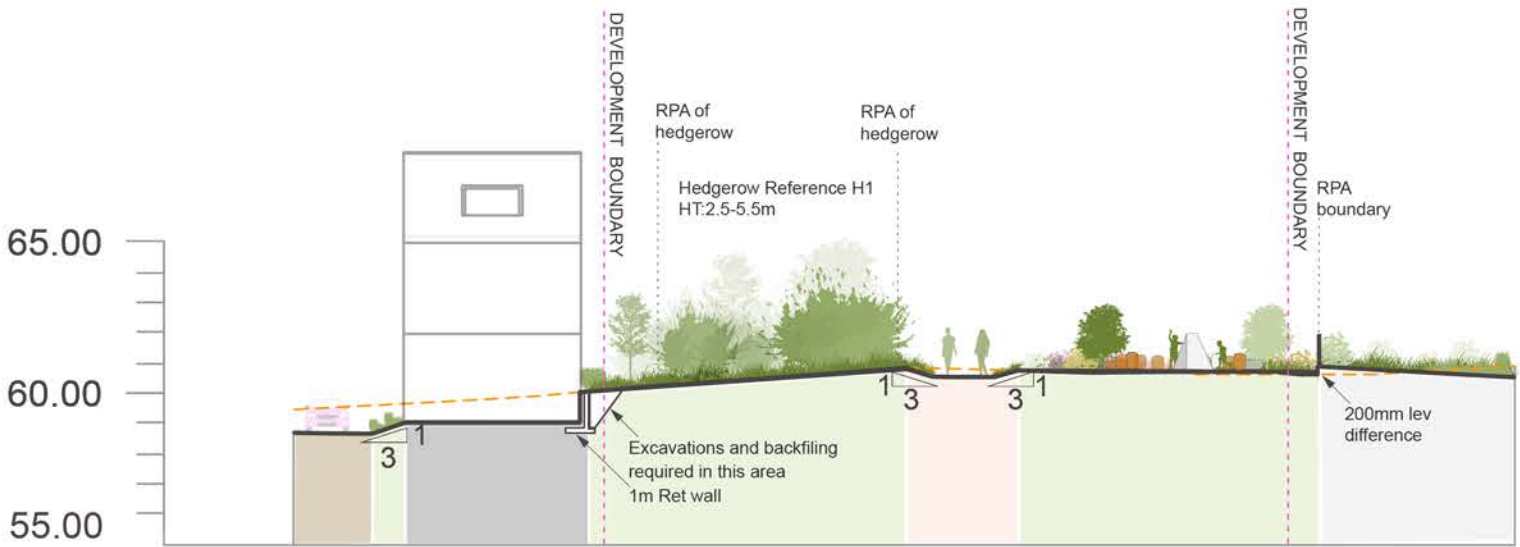
### **3.3. South of hedgerow H4**

3.3.1. The block depth here varies significantly from 22m at its narrowest point, to 80m on the eastern extent. The 22m block depth in the west is very narrow and results in an awkward area of developable area – typically 20m is required for a house and garden, plus minimum road width of 7.5m to allow for vehicular and refuse access. A wide-fronted house type could be positioned here (6m depth rather than 10m), however this would still require 23.5m block depth and results in a house backing onto the hedgerow. This pinch point could be designed to simply include a road to serve a couple of units on the western edge of the parcel, but the block depth at the far west is only 22.5m. These options result in a design that does not provide active frontage to H4 as the hedge is within back gardens, which goes against the landscape-led placemaking principles set out at the beginning of this note.

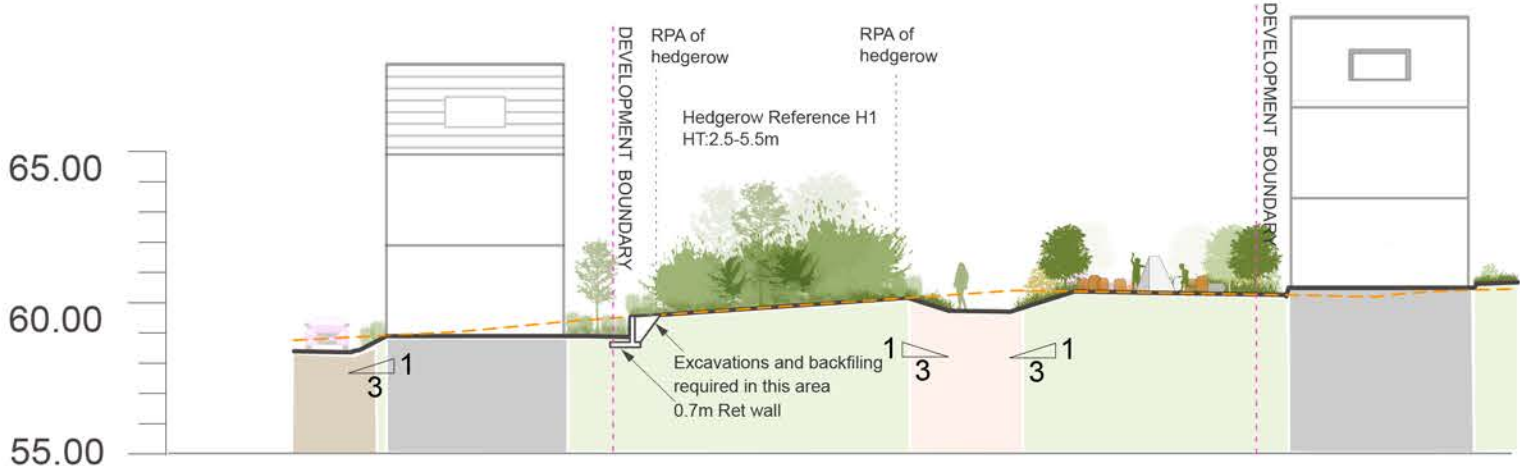
3.3.2. There is more flexibility in the eastern part of the parcel south, and potential to consider part retention of hedgerow H4. However, there is a need for the southern edge of the residential parcel to tie into the earthworks strategy within the wetland meadow and the SuDS network.

**Appendix 4: Sections A-A to F-F**





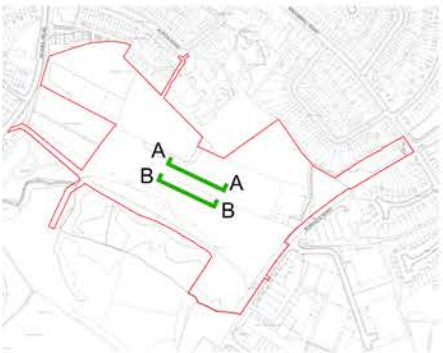
Section A-A



Section B-B

LEGEND

- Site boundary
- Development boundary
- Section line
- Existing ground level
- Footpath
- Road
- Open space
- Proposed built form
- Private garden

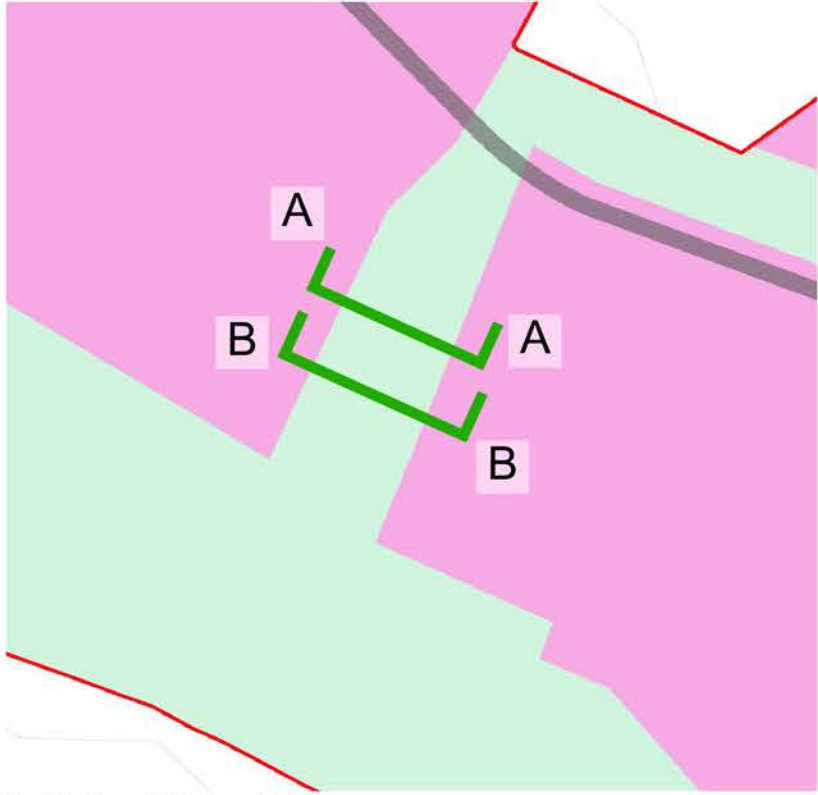


KEY MAP  
REV. DESCRIPTION

APP. DATE



Illustrative Masterplan (zoom-in)



Land Use Parameter Plan (zoom-in)

LDĀDESIGN

PROJECT TITLE  
7456 Brislington Meadow

DRAWING TITLE  
Cross Section through  
the Gate Public Open Space  
Section A-A and B-B

ISSUED BY	Bristol	T: 0117 203 3628
DATE	Jan 2023	DRAWN SS
SCALE@A3	1:250	CHECKED RF
STATUS	Appeal	APPROVED RF

DWG. NO 7456\_AP04

No dimensions are to be scaled from this drawing.  
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Area measurements for indicative purposes only.

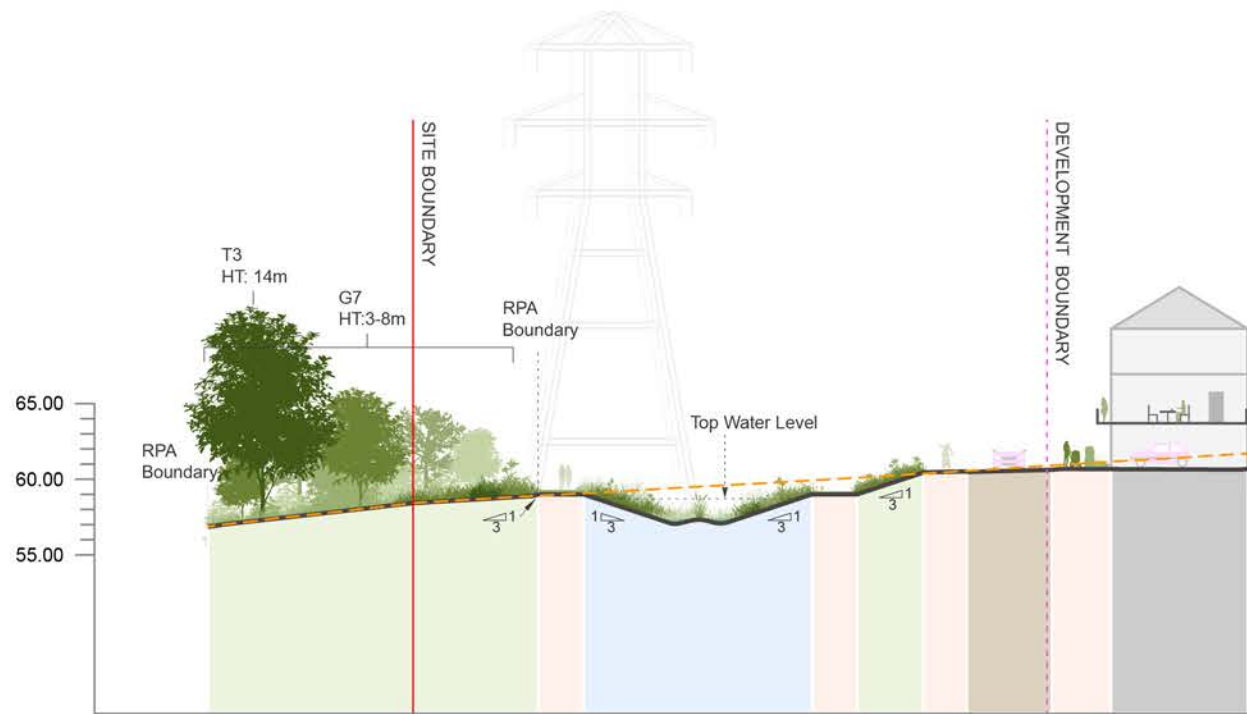
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Sources Ordnance Survey



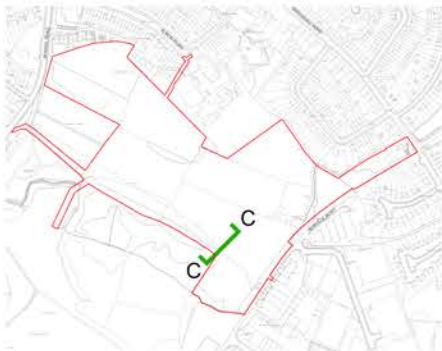


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Section C-C

LEGEND		100
Site boundary		
Development boundary		
Section line		
Existing ground level		
Footpath		
Road		
Open space		
Attenuation pond		
Proposed built form		
Private garden		



KEY MAP

REV.	DESCRIPTION	APP. DATE
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LDĀDESIGN

PROJECT TITLE  
7456 Brislington Meadow

DRAWING TITLE  
Cross Section through  
the Wetland Meadow  
attenuation area\_Section C-C

ISSUED BY	Bristol	T: 0117 203 3628
DATE	Jan 2023	DRAWN JM
SCALE@A3	1:500	CHECKED RF
STATUS	Appeal	APPROVED RF

DWG. NO 7456\_AP05

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Sources Ordnance Survey



Illustrative Masterplan (zoom-in)



Land Use Parameter Plan (zoom-in)



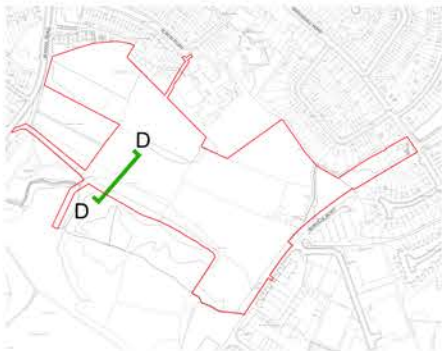


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Section D-D

LEGEND		101
Site boundary		
Development boundary		
Section line		
Existing ground level		
Footpath		
Road		
Open space		
Attenuation pond		
Proposed built form		
Private garden		



KEY MAP

REV.	DESCRIPTION	APP. DATE
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LDĀDESIGN

PROJECT TITLE  
7456 Brislington Meadow

DRAWING TITLE  
Cross Section through the Wetland  
Meadow attenuation  
area\_Section D-D

ISSUED BY	Bristol	T: 0117 203 3628
DATE	Jan 2023	DRAWN JM
SCALE@A3	1:500	CHECKED RF
STATUS	Appeal	APPROVED RF

DWG. NO 7456\_AP06

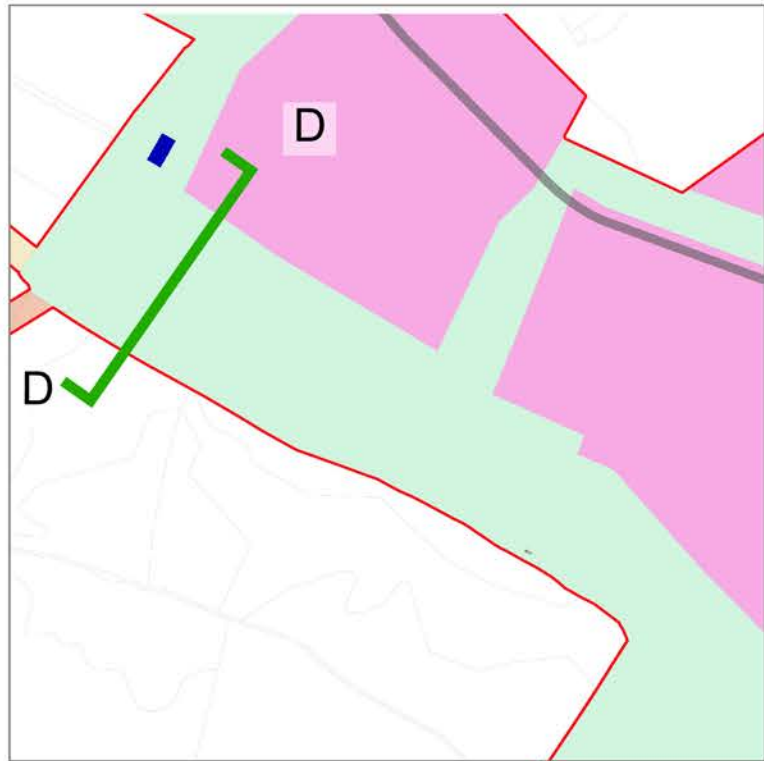
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Sources Ordnance Survey



Illustrative Masterplan (zoom-in)

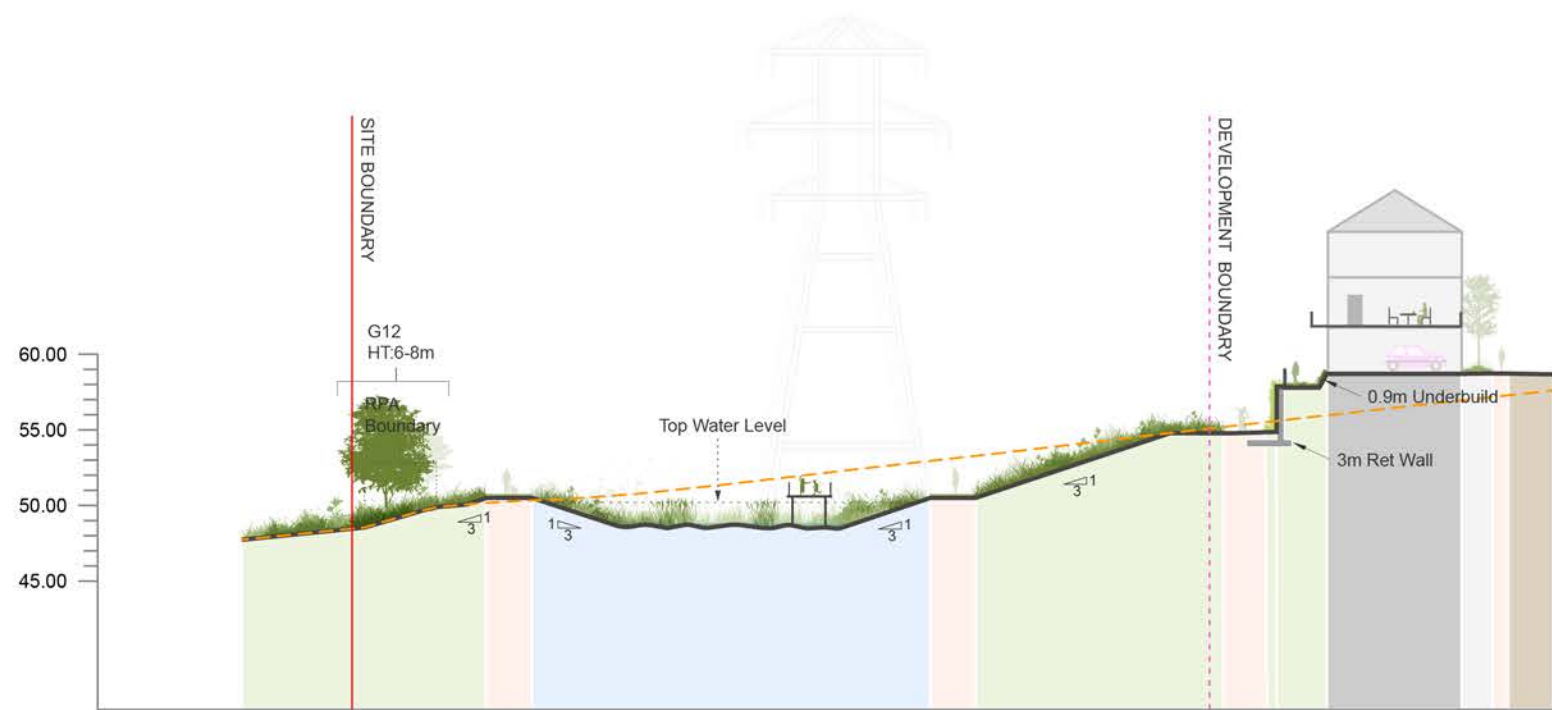


Land Use Parameter Plan (zoom-in)



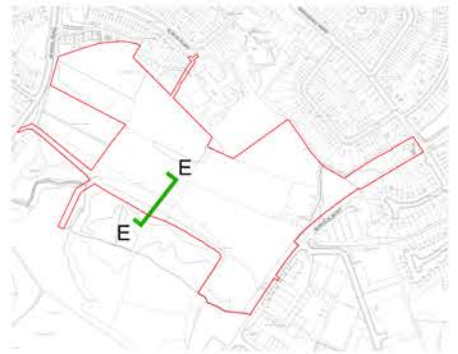


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Section E-E

LEGEND		102
Site boundary		
Development boundary		
Section line		
Existing ground level		
Footpath		
Road		
Open space		
Attenuation pond		
Proposed built form		
Private garden		



KEY MAP

REV.	DESCRIPTION	APP. DATE
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LDĀDESIGN

PROJECT TITLE  
7456 Brislington Meadow

DRAWING TITLE  
Cross Section through the  
Wetland Meadow attenuation  
area\_Section E-E

ISSUED BY	Bristol	T: 0117 203 3628
DATE	Jan 2023	DRAWN JM
SCALE@A3	1:500	CHECKED RF
STATUS	Appeal	APPROVED RF

DWG. NO 7456\_AP07

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Sources Ordnance Survey



Illustrative Masterplan (zoom-in)

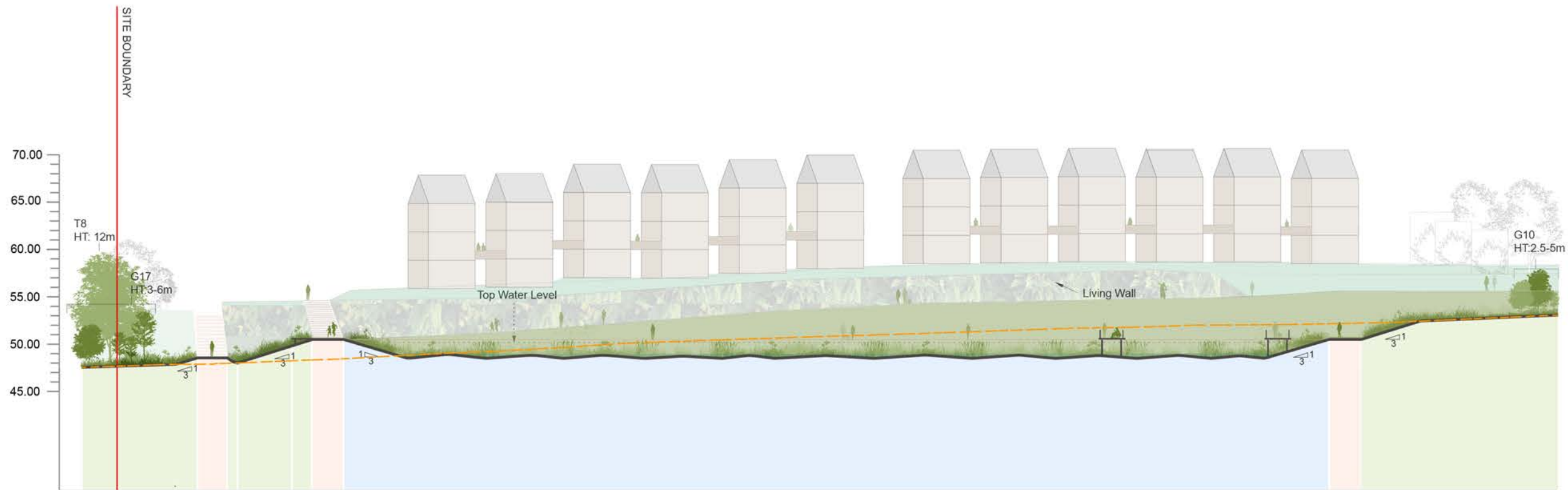


Land Use Parameter Plan (zoom-in)

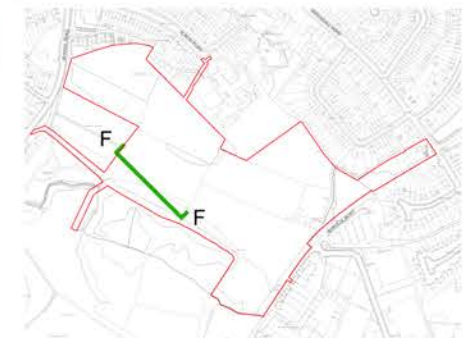




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LEGEND		103
Site boundary		
Development boundary		
Section line		
Existing ground level		
Footpath		
Road		
Open space		
Attenuation pond		
Proposed built form		
Private garden		



KEY MAP

## Section F-F

REV.	DESCRIPTION	APP. DATE
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LDĀDESIGN

PROJECT TITLE  
7456 Brislington Meadow

DRAWING TITLE  
Cross Section through the  
Wetland Meadow attenuation  
area\_Section F-F

ISSUED BY	Bristol	T: 0117 203 3628
DATE	Jan 2023	DRAWN JM
SCALE@A3	1:500	CHECKED RF
STATUS	Appeal	APPROVED RF

DWG. NO 7456\_AP08

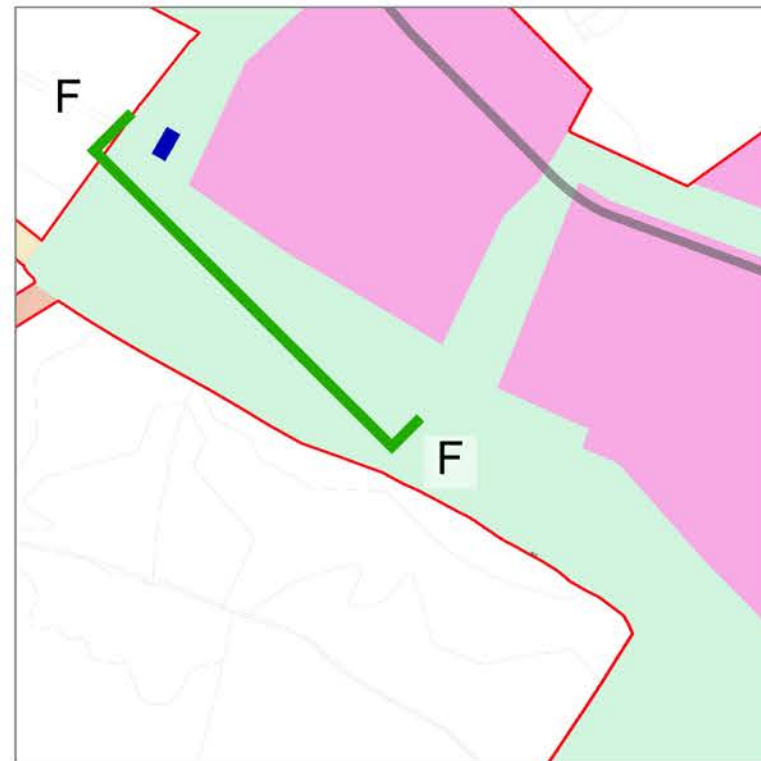
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All dimensions are to be checked on site.  
Area measurements for indicative purposes only.

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Sources Ordnance Survey



Illustrative Masterplan (zoom-in)



Land Use Parameter Plan (zoom-in)



## **Appendix 5: Correspondence re Visualisations**

**Nicholas Atkinson**

---

**From:** Nitin Bhasin <[REDACTED]>  
**Sent:** 28 February 2022 10:16  
**To:** Nicholas Atkinson  
**Cc:** Richard Sewell; [REDACTED] Paul Connelly  
**Subject:** RE: Brislington Meadows: LVIA

Hello Nicholas,

I can confirm the study area is acceptable.

Kind Regards  
 Nitin

---

**From:** Nicholas Atkinson <[REDACTED]>  
**Sent:** 24 February 2022 15:23  
**To:** Nitin Bhasin <[REDACTED]>  
**Cc:** Richard Sewell <[REDACTED]> [REDACTED] Paul Connelly  
**Subject:** RE: Brislington Meadows: LVIA

Hi Nitin,

Many thanks for your return of comments and suggested additional viewpoint locations. We agree to incorporate these suggested views into our assessment, presenting them as 'illustrative viewpoints' in support of our report.

From your email, I trust that the study area we have proposed is also acceptable.

Kind regards,

Nicholas Atkinson  
 Senior Consultant

**LDĀ DESIGN**

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tel: +44 (0) [REDACTED]

email: [REDACTED] | [www.lda-design.co.uk](http://www.lda-design.co.uk)

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During these extraordinary times, many of our team are balancing home and work commitments and might take longer to respond. If you receive an email ou

**From:** Nitin Bhasin <[REDACTED]>  
**Sent:** 22 February 2022 22:52  
**To:** Nicholas Atkinson <[REDACTED]>  
**Cc:** Richard Sewell <[REDACTED]> [REDACTED] Paul Connelly  
**Subject:** RE: Brislington Meadows: LVIA

Hello Nicholas,

Sorry for delay in reply.

Please find attached pdf containing suggestions for additional views. The suggested viewpoints are roughly marked with orange dots and comments give a brief note for the location.

There is a likelihood that taller apartments blocks, especially ones on the higher ground will register presence in some of the views. The extent of visual impact and its appropriateness needs to be tested.

Kind Regards  
Nitin

---

**From:** Nicholas Atkinson <[REDACTED]>  
**Sent:** 21 February 2022 09:11  
**To:** Nitin Bhasin <[REDACTED]>  
**Cc:** Richard Sewell <[REDACTED]> Paul Connelly  
 <[REDACTED]>  
**Subject:** RE: Brislington Meadows: LVIA

Hi Nitin,

I'm sorry to chase, but please can I ask when we are likely to receive your comments on our proposed representative viewpoints in support of our LVIA? Many thanks in advance.

Kind regards,

Nicholas Atkinson  
Senior Consultant

LDĀDESIGN

Worton Rectory Park, Oxford, OX29 4SX

tel: +44 (0) [REDACTED]

email: [REDACTED] | [www.lda-design.co.uk](http://www.lda-design.co.uk)

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During these extraordinary times, many of our team are balancing home and work commitments and might take longer to respond. If you receive an email ou

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**From:** Nicholas Atkinson  
**Sent:** 11 February 2022 17:18  
**To:** Nitin Bhasin <[REDACTED]>  
**Cc:** Richard Sewell <[REDACTED]> Paul Connelly  
 <[REDACTED]>  
**Subject:** RE: Brislington Meadows: LVIA

Hi Nitin,

Many thanks for your email and the update. We'll await receipt of your comments next week.

Have a good weekend.

Kind regards,

---

**From:** Nitin Bhasin <[REDACTED]>  
**Sent:** 11 February 2022 17:13  
**To:** Nicholas Atkinson <[REDACTED]>  
**Subject:** RE: Brislington Meadows: LVIA

Hello,



Apologies I haven't been able to get comments back to you till now. I have drafted comments but need to get it agreed with colleagues before I can send it to you. I hope to get this done early next week.

Kind Regards  
Nitin

---

**From:** Nicholas Atkinson <[REDACTED]>  
**Sent:** 03 February 2022 20:29  
**To:** Nitin Bhasin <[REDACTED]>  
**Cc:** Richard Sewell <[REDACTED]> Paul Connelly  
 <[REDACTED]>  
**Subject:** RE: Brislington Meadows: LVIA

Hi Nitin,

Further to my issue of information last Friday, please may I ask if you have any comments, or are able to confirm your agreement to the representative viewpoints captured in support of the LVIA? Many thanks.

Kind regards

Nicholas Atkinson  
Senior Consultant

LDĀ DESIGN

Worton Rectory Park, Oxford, OX29 4SX

tel: +44 (0) [REDACTED]

email: [REDACTED] | [www.lda-design.co.uk](http://www.lda-design.co.uk)

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**From:** Nicholas Atkinson  
**Sent:** 28 January 2022 14:00  
**To:** [REDACTED]  
**Cc:** Richard Sewell <[REDACTED]> Paul Connelly  
 <[REDACTED]>  
**Subject:** RE: Brislington Meadows: LVIA

Hi Nitin,

Many thanks for taking the time to consider the representative viewpoints we have captured in support of LVIA.

If I can please ask you to review the information I've shared and confirm your agreement to the viewpoint locations and the extent of the study area proposed, that would be greatly appreciated. Should you have any queries, please do not hesitate to contact me.

For your information, I have attached the following:

- **7456\_LVIA\_SK\_101** – Preliminary ZTV study and proposed viewpoint locations. I've update the viewpoint locations in accordance with my recent site visit; and
- **7456\_LVIA\_SK\_102** – Drafted Photopanel of each view (showing the approximate extent of the Site).

Kind regards,

---

**From:** Paul Connelly <[REDACTED]>  
**Sent:** 17 January 2022 15:38  
**To:** [REDACTED] Nicholas Atkinson <[REDACTED]>  
**Cc:** Richard Sewell <[REDACTED]>  
**Subject:** Brislington Meadows: LVIA

Hi Nitin,

Thanks again for your time on Friday. It was a really helpful conversation.

My colleague Nick will be preparing the LVIA, working to the stated methodology. He'll be on site next week to take photos and will share with you the viewpoint photos (showing development extents) as requested.

Given the team's experience, I anticipate the viewpoint coverage being appropriate but by sharing them it provides you the opportunity to comment if required.

I'm putting you and Nick in direct contact with one another for speed, but please can you both keep me and Richard copied into any correspondence.

With thanks and kind regards

PC

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Jon Severs  
Bristol City Council,  
City Hall, PO Box 3399,  
Bristol BS1 9NE

**SENT VIA EMAIL**

7456

25 November 2021

**Brislington Meadows, Brislington, Bristol – Landscape and Visual Impact Assessment**

Dear Jon,

LDA Design Consulting Ltd (LDA Design) is appointed to provide professional landscape services for the proposed residential development on the Land at Broomhill (Brislington Meadows). Part of LDA Design's appointment is to prepare a Landscape and Visual Assessment (LVIA) that will be submitted as part of the forthcoming planning application.

This letter follows the screening report submitted to Bristol City Council (BCC) on 25 November 2020 (ref. 20/05675/SCR) and sets out our planned approach to the LVIA. As part of this process, we would like to confirm BCC's agreement to the following before undertaking our assessment:

- Proposed representative viewpoint locations;
- The extent of study area; and
- Key reference documents.

We would be grateful if you could review the following information and confirm your agreement or return any comments you might have as soon as possible, ideally no later than two weeks from receipt of this letter.

**Methodology**

The findings of the LVIA will be presented in a dedicated report with supporting figures and appendices as necessary. The approach to the assessment will follow LDA Design's



established methodology, which considers both impacts to landscape character and visual receptors, drawing upon the established and best practice standards. These include:

- The Guidelines for Landscape and Visual Impact Assessment (3rd Edition), Landscape Institute and Institute of Environmental Management and Assessment, 2013; and
- An Approach to Landscape Character Assessment, Natural England, 2014.
- Landscape Institute Technical Information Note (LI TIN) 05/2017 regarding townscape character

### **LVIA Study Area**

It is proposed that a 2km study area (defined by a 2km radius from the Site's boundary) is used for the LVIA and would cover all potential landscape and visual effects that could arise from the proposed development. The extent is derived from the findings of early fieldwork; preliminary Zone of Theoretical Visibility (ZTV) modelling; desk-based analysis; and professional experience of similar projects of this nature.

### **Landscape Character**

The LVIA will include an assessment of potential effects on landscape/townscape character and will consider the Site's physical fabric. The following landscape character assessments have been identified and will be used to inform the LVIA:

- National Character Area Profiles;
- South Gloucestershire Landscape Character Assessment (2014); and
- Rural Landscapes of Bath and North East Somerset – A Landscape Character Assessment (2003)

### **Viewpoints and Visual Receptors**

Preliminary ZTV modelling and fieldwork has determined which visual receptors are likely to be affected and merit detailed consideration in the assessment effects. As per prevailing guidance (GLVIA, 3rd Edition, 2013), representative, illustrative and specific viewpoints may be identified to inform the assessment.

The preliminary ZTV study (as shown on the enclosed plan **7456\_LVIA\_SK\_001**) has been modelled on indicative buildings heights of 10.5m and 14m high. The ZTV shows that theoretical visibility would spread to areas either in the immediate context of the Site (up to approximately 500m) or to elevated locations between 1 – 2km where vegetation is less prevalent. Beyond 2km, visibility would become more fragmented and become less prevalent.

It is important to note that the ZTV represents a theoretical model of potential visibility of the proposed development which is based on a computer-generated terrain model and often is unable to account for any localised features such as small copses, hedgerows or individual trees; and/or small elements of built form. Therefore, the extent of visibility on the ground is likely to be less than theoretically indicated.

The LVIA's representative viewpoints are selected to represent a wide range of landscape and visual receptors in publicly accessible locations, where it's judged that the greatest effects could be experienced. The viewpoints provide a 'sample' of the potential effects from the study area, and some locations are purposely selected outside of that zone of 'greatest effects'

to either demonstrate the reduction of effects with distance; or to specifically ensure the representation of a particularly sensitive receptor.

The proposed representative viewpoints and study area are illustrated on the enclosed plan 7456\_LVIA\_SK\_101 and listed below in Table 1:

**TABLE 1: PROPOSED REPRESENTATIVE VIEWPOINT LOCATIONS**

<b>Viewpoint Reference</b>	<b>Representative Receptors</b>	<b>Direction &amp; Distance</b>	<b>Approx. Grid Reference</b>
<b>Viewpoint 1</b> – Public Footpath (BCC/482/20)	Users of public rights of ways	10m South-east	362764 170929
<b>Viewpoint 2</b> – Broomhill Road	Residents and local road users	25m North-east	363024 171176
<b>Viewpoint 3</b> – School Road	Residents and local road users	100m North	362405 171408
<b>Viewpoint 4</b> – Victory Park	Users of public rights of ways and recreational / accessible landscape	260m South	361096 170280
<b>Viewpoint 5</b> – Callington Road Nature Reserve	Users of public rights of ways and recreational / accessible landscape	1.5km South-west	364587 170615
<b>Viewpoint 6</b> – Stockwood Open Space Nature Reserve	Users of public rights of way and recreational / accessible landscape	1.8km South	362407 169078
<b>Viewpoint 7</b> – Abbots Road	Residents; and users of public rights of ways and local roads	1.6km East	362432 170762
<b>Viewpoint 8</b> – Dunridge Park	Residents and users of the recreational / accessible landscape	1.3km North	363226 172455

In addition to the representative viewpoints listed above, illustrative views will be identified during the assessment process to illustrate particular observations made within the assessment and could be captured from outside the study area if necessary.

### **Designated Landscapes**

No landscape designations have been identified within the extent of the Site and proposed study area. It is acknowledged however that the Cotswold Area of Outstanding Natural Beauty (AONB) is approximately 6km to the east. Given the AONB's distance from the Site; the Site's location within Bristol City; and the limited visibility of the proposed development beyond 2km, as a result of the intervening vegetation, landform and built development, it is judged that the Proposed Development is unlikely to affect the 'special qualities' of the Cotswold AONB.

### **Cumulative Assessment**

Cumulative assessment relates to the assessment of the effects of more than one development. In accordance with LDA Design's methodology, the assessment would only

consider operational and consented development, unless specific circumstances that a development in planning should be included.

Typically, operational and consented development are treated as being part of the landscape and visual baseline i.e. it is assumed that consented schemes will be built except for occasions where there is good reason to assume that they will not be constructed.

Please confirm which (but yet to be built) in-planning developments are to be included within the cumulative assessment.

### **Design**

The Landscape Architect plays a leading role in the design process; and the masterplanning, design and assessment stages are inevitably iterative with stages overlapping in parts. Details of any mitigation measures incorporated within the proposals to help reduce identified potential landscape and visual effects will be set out in the relevant sections of the LVIA.

### **Supporting Visualisations**

The LVIA will include panoramic photographs from representative and illustrative viewpoints that will be illustrated on annotated panels.

We also propose that 2 wireframe visualisations are produced to support the LVIA, illustrating the maximum development parameters of the proposed development. We intend to visualise the proposed development from Viewpoints 1 and 4.

### **Key References**

Further to guidance documents already noted in this letter, applicable policies from the following documents will inform the LVIA where relevant:

- Bristol Development Framework Core Strategy (adopted June 2011);
- Site Allocations and Development Management Policies – Local Plan (adopted July 2014);  
and
- Urban Living SPD (adopted November 2018).

Other published sources will be obtained as the assessment progresses and referenced in the LVIA report where appropriate.



**Next Steps**

As stated at the beginning of this letter, I would be grateful if you could review the information above and confirm your agreement as soon as possible.

Should you have any queries or comments, please do not hesitate to contact me by email at the address detail below. If more convenient to speak over the phone, I would welcome this opportunity.

I look forward to receiving your response.

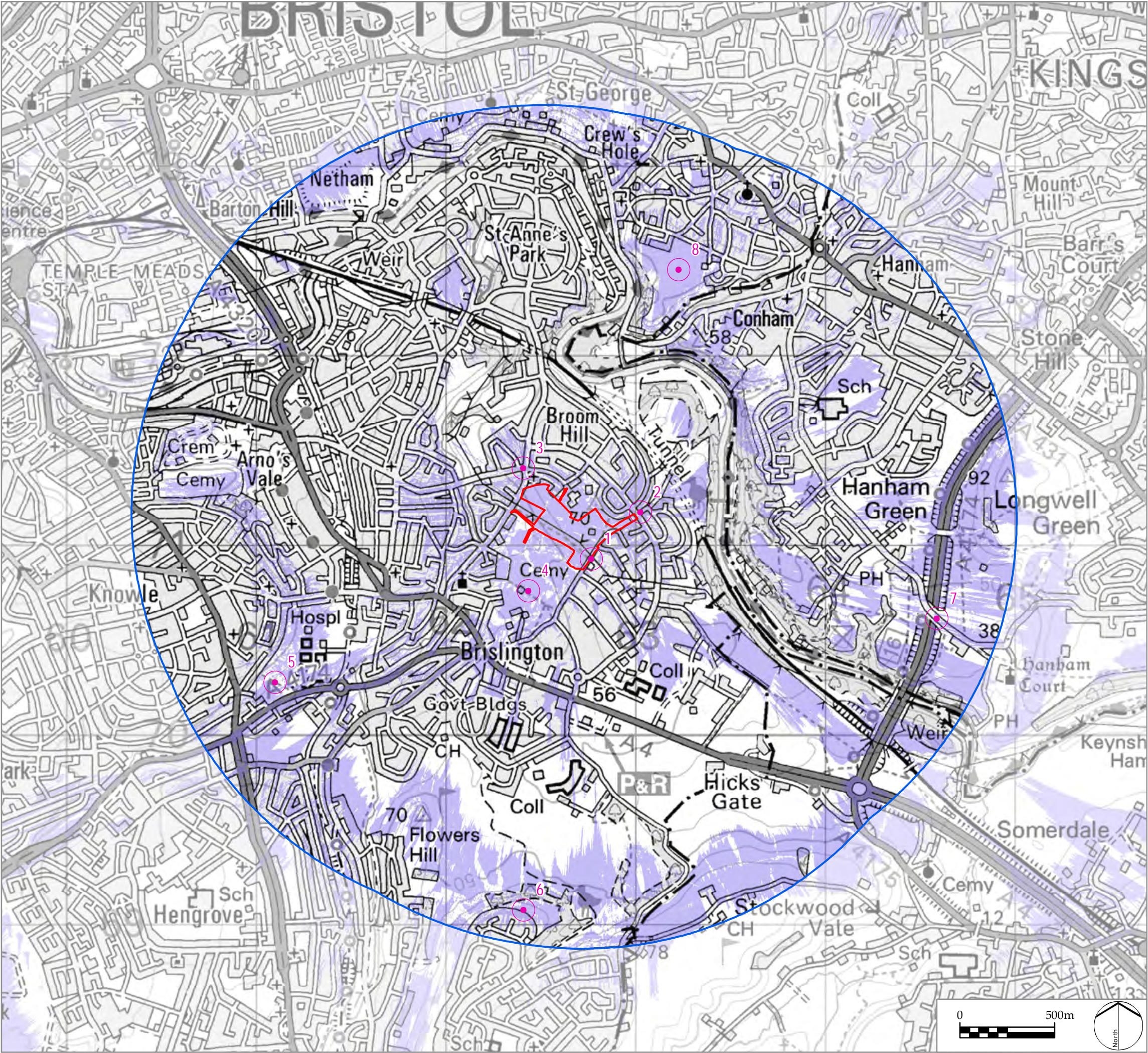
Yours sincerely,

A handwritten signature in black ink, appearing to read 'N. Atkinson', followed by a long, horizontal, wavy flourish.

Nicholas Atkinson  
Senior Consultant  
nicholas.atkinson@lda-design.co.uk



Z:\7456\_BRISLINGTON\_MEADOWS\8GIS\PROJECTS\7456\_LVIA\_SK\_101\_PRELIMINARY\_ZTV\_VPS.MXD



LEGEND

Site boundary

Extent of study area (2km)

Zone of Theoretical Visibility (ZTV) (computer generated) -  
modelled on the preliminary maximum development  
parameters.  
*(NB. Obsutrctions - vegetation and buildings - have been  
accounted for in the ZTV's extent and are not displayed).*

Proposed representative viewpoint locations

This drawing is based upon computer generated Zone of Theoretical Visibility (ZTV) studies produced using the viewshed routine in the ESRI ArcGIS Suite. The areas shown are the maximum theoretical visibility, taking into account topography, vegetation and buildings which have been included in the model with the heights obtained from a LiDAR digital surface model.

Due to its resolution, the surface model does not take into account every localised feature such as walls, small hedgerows or small trees and therefore only gives an impression of the extent of visibility.

The ZTV includes an adjustment that allows for Earth's curvature and light refraction. It is based on LiDAR terrain data with a 1m<sup>2</sup> resolution.

# LD A DESIGN

PROJECT TITLE  
BRISLINGTON MEADOWS, BRISLINGTON

DRAWING TITLE  
Preliminary Zone of Theoretical Visibility (ZTV) Study,  
including proposed viewpoint locations

ISSUED BY	Exeter	T: 01392 260 430
DATE	22 November 2021	DRAWN NA
SCALE @A3	1:20,000	CHECKED BC
STATUS	Final	APPROVED PC

DWG. NO. 7456\_LVIA\_SK\_101

No dimensions are to be scaled from this drawing.  
All dimensions are to be checked on site.  
Area measurements for indicative purposes only.

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Sources: Ordnance Survey



## **Appendix 6: Excerpts from GLVIA3**

# Guidelines for Landscape and Visual Impact Assessment

Third edition

Landscape Institute and Institute  
of Environmental Management  
& Assessment

 **Routledge**  
Taylor & Francis Group  
LONDON AND NEW YORK

**Landscape  
Institute**  
Inspiring great places

**iema**  
Institute of Environmental  
Management & Assessment



**Chapter overview**

- What does landscape mean?
- The importance of landscape
- Landscape change and sustainable development
- The role of LVIA
- Professional judgement in LVIA

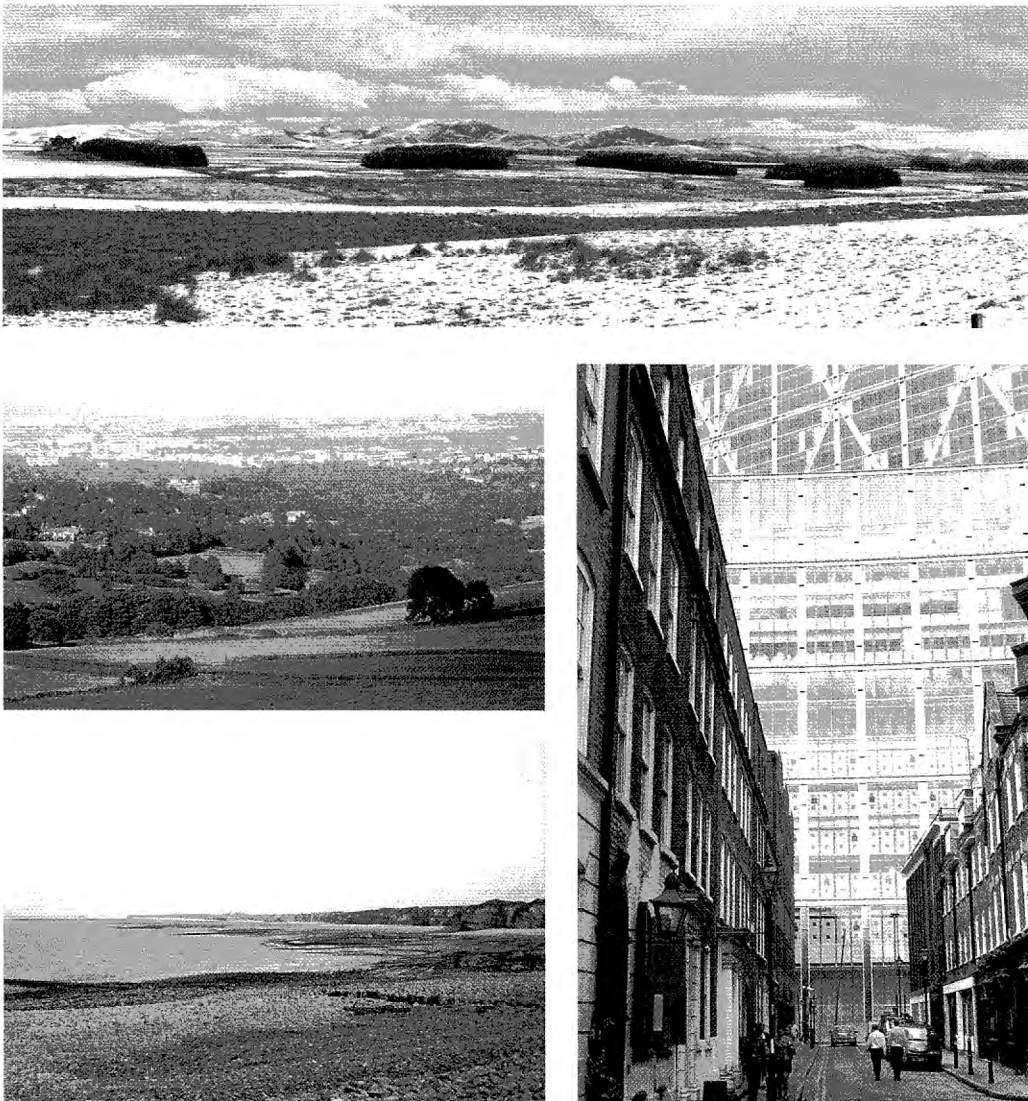
## What does landscape mean?

- 2.1 The UK has signed and ratified the European Landscape Convention (ELC) since 2002, when the last edition of this guidance was published. The recognition that government has thus given to landscape matters raises the profile of this important area and emphasises the role that landscape can play as an integrating framework for many areas of policy. The ELC is designed to achieve improved approaches to the planning, management and protection of landscapes throughout Europe and to put people at the heart of this process.
- 2.2 The ELC adopts a definition of landscape that is now being widely used in many different situations and is adopted in this guidance: 'Landscape is an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors' (Council of Europe, 2000). This definition reflects the thinking that emerged in the UK in the late 1980s and early 1990s and was summarised in the 2002 guidance on Landscape Character Assessment. The inclusive nature of landscape was captured there in a paragraph stating that:
- Landscape is about the relationship between people and place. It provides the setting for our day-to-day lives. The term does not mean just special or designated landscapes and it does not only apply to the countryside. Landscape can mean a small patch of urban wasteland as much as a mountain range, and an urban park as much as an expanse of lowland plain. It results from the way that different components of our environment – both natural (the influences of geology, soils, climate, flora and fauna) and cultural (the historical and current impact of land use, settlement, enclosure and other human interventions) – interact together and are perceived by us. People's perceptions turn land into the concept of landscape.  
(Swanwick and Land Use Consultants, 2002: 2)
- 2.3 This guidance embraces this broad interpretation of what landscape means and uses it throughout. It is not only concerned with landscapes that are recognised as being special or valuable, but is also about the ordinary and the everyday – the landscapes where people live and work, and spend their leisure time. The same approach can be taken in all these different landscape settings, provided that full attention is given to the particular characteristics of each place.
- 2.4 The importance of the ELC definition is that it moves beyond the idea that landscape is only a matter of aesthetics and visual amenity. Instead it encourages a focus on

landscape as a resource in its own right. It provides an integrated way of conceptualising our surroundings and is increasingly considered to provide a useful spatial framework for thinking about a wide range of environmental, land use and development issues.

The ELC definition of landscape is inclusive. Article 2 of the European Landscape Convention states that 2.5

Subject to the provisions contained in Article 15, this Convention applies to the entire territory of the Parties and covers natural, rural, urban and peri-urban



**Figure 2.1A–D** The European Landscape Convention definition of landscape is inclusive and covers natural, rural, urban and peri-urban areas. It includes land, inland water and marine areas

areas. It includes land, inland water and marine areas. It concerns landscapes that might be considered outstanding as well as everyday or degraded landscapes.

(Council of Europe, 2000)

The definition therefore applies, among other things, to:

- all types of rural landscape, from high mountains and wild countryside to urban fringe farmland (rural landscapes);
- marine and coastal landscapes (seascapes);
- the landscapes of villages, towns and cities (townscapes).

- 2.6 Rural landscapes have been the main focus of attention for a number of years. Now both townscape and seascape have also emerged as particular sub-sets of 'landscape' for consideration. This guidance is equally applicable to all forms of landscape and does not separate townscape and seascape out for special treatment. However, for clarity the following paragraphs define these terms. All LVIA work needs to respond to the particular context in which it takes place. Whether the project is located in a rural, an urban or a marine context, attention will need to be paid to the distinctive character of the area and reference made to any relevant specific guidance.

Chapter 5 sets out how the different forms of landscape are assessed to provide baseline descriptions for LVIA.

### Townscape

- 2.7 'Townscape' refers to areas where the built environment is dominant. Villages, towns and cities often make important contributions as elements in wider-open landscapes but townscape means the landscape within the built-up area, including the buildings, the relationships between them, the different types of urban open spaces, including green spaces, and the relationship between buildings and open spaces. There are important relationships with the historic dimensions of landscape and townscape, since evidence of the way that villages, towns and cities change and develop over time contributes to their current form and character.

### Seascape

- 2.8 The importance of coasts and seascapes as part of our marine environment has increasingly been acknowledged, not least due to the growing pressures being placed upon them by new forms of development, notably aquaculture, offshore wind farms, tidal energy schemes and the development of coastal risk management defences. The definition of landscape from the European Landscape Convention includes seascapes and marine environments. As the UK Marine Policy Statement indicates, 'seascape should be taken as meaning landscapes with views of the coast or seas, and coasts and the adjacent marine environment with cultural, historical and archaeological links with each other' (HM Government, Northern Ireland Executive, Scottish Government and Welsh Assembly Government, 2011: 21).



They include land management, especially farming and forestry, and many forms of development, including (among many others): new housing; commercial developments; new forms of energy generation including wind turbines; new infrastructure such as roads, railways and power lines; and extraction of minerals for a variety of uses.

In the last thirty years there has been growing emphasis on the need to accommodate such change and development in ways that are sustainable. Definitions of sustainable development have been extensively debated but according to the widely accepted definition in the Brundtland report this means ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’ (World Commission on Environment and Development, 1987). It is broadly agreed that it involves finding an appropriate balance between economic, social and environmental matters, and that protecting and enhancing the natural, built and historic environment is an important part of this. 2.14

As a technical process LVIA has an important contribution to make to the achievement of sustainable development. It takes place in a context where, over time, landscapes evolve and society’s needs and individual and community attitudes change. This can make the professional judgements about the significance of effects identified through LVIA, and whether they are positive or negative, particularly challenging. 2.15

Climate change is one of the major factors likely to bring about future change in the landscape, and is widely considered as the most serious long-term threat to the natural environment. The need for climate change mitigation and adaptation is now well established at a policy level in the UK and beyond. There are many different ways in which mitigation and adaptation can be addressed and landscape professionals are directed to the Landscape Institute’s policy document on climate change (Landscape Institute, 2008a) when considering such matters. Some climate change mitigation and adaptation projects may in themselves require EIA. Further information on climate change and EIA is available in IEMA guidance (e.g. IEMA, 2010a, 2010b). 2.16

There is some emphasis in the UK and elsewhere on appropriate renewable energy development as a means of mitigating climate change. Renewable energy development proposals are subject to the same LVIA process as any other type of development proposal, with the same need for careful siting, design and mitigation, and impartial assessment of the landscape and visual effects. It is for the competent authority to judge the balance of weight between policy considerations and the effects that such proposals may have. 2.17

## The role of LVIA

LVIA must address both effects on landscape as a resource in its own right and effects on views and visual amenity. 2.18

## Effects on landscape as a resource

The ELC definition of landscape supports the need to deal with landscape as a resource in its own right. In the UK this particularly reflects the emphasis on landscape character 2.19

that has developed since the 1980s. Landscape results from the interplay of the physical, natural and cultural components of our surroundings. Different combinations of these elements and their spatial distribution create the distinctive character of landscapes in different places, allowing different landscapes to be mapped, analysed and described. Character is not just about the physical elements and features that make up a landscape, but also embraces the aesthetic, perceptual and experiential aspects of the landscape that make different places distinctive.

## Views and visual amenity

When the interrelationship between people ('human beings' or 'population' in the language of the Directive and Regulations) and the landscape is considered, this introduces related but very different considerations, notably the views that people have and their visual amenity – meaning the overall pleasantness of the views they enjoy of their surroundings. 2.20

Reflecting this distinction the two components of LVIA are: 2.21

1. assessment of landscape effects: assessing effects on the landscape as a resource in its own right;
2. assessment of visual effects: assessing effects on specific views and on the general visual amenity experienced by people.

The distinction between these two aspects is very important but often misunderstood, even by professionals. LVIA must deal with both and should be clear about the difference between them. If a professional assessment does not properly define them or distinguish between them, then other professionals and members of the public are likely to be confused. 2.22

## Professional judgement in LVIA

Professional judgement is a very important part of LVIA. While there is some scope for quantitative measurement of some relatively objective matters, for example the number of trees lost to construction of a new mine, much of the assessment must rely on qualitative judgements, for example about what effect the introduction of a new development or land use change may have on visual amenity, or about the significance of change in the character of the landscape and whether it is positive or negative. 2.23

The role of professional judgement is also characteristic of other environmental topics, such as ecology or cultural heritage, especially when it comes to judging how significant a particular change is. In all cases there is a need for the judgements that are made to be reasonable and based on clear and transparent methods so that the reasoning applied at different stages can be traced and examined by others. Professional judgements must be based on both training and experience and in general suitably qualified and experienced landscape professionals should carry out Landscape and Visual Impact Assessments. 2.24

Even with qualified and experienced professionals there can be differences in the judgements made. This may result from using different approaches or different criteria, or 2.25

The key aspects of the project that need to be understood for LVIA are described in Chapter 4.

Paragraphs 3.15–3.39 describe the steps that are the core of the LVIA process illustrated in Figure 3.1.

## Baseline studies

- 3.15 The initial step in LVIA is to establish the baseline landscape and visual conditions. The information collected will, when reviewed alongside the description of the proposed development, form the basis for the identification and description of the changes that will result in the landscape and visual effects of the proposal:
- For the landscape baseline the aim is to provide an understanding of the landscape in the area that may be affected – its constituent elements, its character and the way this varies spatially, its geographic extent, its history (which may require its own specialist study), its condition, the way the landscape is experienced, and the value attached to it.
  - For the visual baseline the aim is to establish the area in which the development may be visible, the different groups of people who may experience views of the development, the places where they will be affected and the nature of the views and visual amenity at those points.

Details of baseline studies for assessment of landscape and visual effects are provided in Chapters 5 and 6 respectively.

- 3.16 The level of detail provided should be that which is reasonably required to assess the likely significant effects. It should be appropriate and proportional to the scale and type of development and the type and significance of the landscape and visual effects likely to occur. It should also be appropriate to the different stages of the assessment process. For example, at the site selection, screening and scoping stages a preliminary desk-based site appraisal may be adequate using primarily, for example, landscape designations, existing Landscape Character Assessments, information about historic landscapes and known sites of recreational interest. Once the preferred site has been selected more comprehensive and detailed baseline studies are usually required.
- 3.17 Principal sources of background information include the competent authority, the consultation bodies and local special interest groups and organisations. It is important that the information assembled is considered alongside information from other parallel studies, such as cultural heritage and ecology studies, to ensure an integrated approach. The EIA co-ordinator will usually play an important part in facilitating such integration across the topic areas.



way of describing the wider array of factors that underlie the nature of the receptor likely to be affected (sensitivity) and the nature of the effect likely to occur (magnitude). Further background to this is given in Box 3.1. Landscape professionals should assess the nature of a landscape or visual receptor's sensitivity by combining judgements about its susceptibility to change arising from the specific proposal with judgements about the value attached to the receptor. When considering the nature of a predicted effect its magnitude should be determined by combining judgements about matters such as the size and scale of the change, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration. It is important to note that in this approach each judgement already combines several separate judgements.

- 3.25 A step-by-step process, as illustrated by Figure 3.5, should allow the identification of significant effects to be as transparent as possible, provided that the effects are identified and described accurately, the basis for the judgements at each stage is explained and the different judgements are combined in easy to follow ways.

### Step 1: Assess against agreed criteria

- 3.26 The initial step should be to consider each effect in terms firstly of its sensitivity, made up of judgements about:

- the susceptibility of the receptor to the type of change arising from the specific proposal; and
- the value attached to the receptor;

and secondly its magnitude, made up of judgements about:

- the size and scale of the effect – for example, whether there is complete loss of a particular element of the landscape or a minor change;
- the geographical extent of the area that will be affected; and
- the duration of the effect and its reversibility.

Consideration of all these criteria should feed into a comprehensive assessment of significance.

In Chapters 6 and 7 the meanings of 'sensitivity' and 'magnitude' are defined as they relate to landscape effects and to visual effects respectively.

- 3.27 In assessing the identified effects against these criteria, two key principles should normally apply:
1. Numerical scoring or weighting of criteria should be avoided, or at least treated with considerable caution, since it can suggest a spurious level of precision in the judgements and encourage inappropriate mathematical combining of scores.
  2. Word scales, with ideally three or four but a maximum of five categories, are preferred as the means of summarising judgements for each of the contributing criteria.

predicted landscape and visual effects is, however, often summarised in a series of categories of significance reflecting combinations of sensitivity and magnitude. These tend to vary from project to project but they should be appropriate to the nature, size and location of the proposed development and should as far as possible be consistent across the different topic areas in the EIA.

When drawing a distinction between levels of significance is required (beyond significant/not significant) a word scale for degrees of significance can be used (for example a four-point scale of major/moderate/minor/negligible). Descriptions should be provided for each of the categories to make clear what they mean, as well as a clear explanation of which categories are considered to be significant and which are not. It should also be made clear that effects not considered to be significant will not be completely disregarded. 3.34

In reporting on the significance of the identified effects the main aim should be to draw out the key issues and ensure that the significance of the effects and the scope for reducing any negative/adverse effects are properly understood by the public and the competent authority before it makes its decision. This requires clear and accessible explanations. The potential pitfalls are: 3.35

- over-reliance on matrices or tabular summaries of effects which may not be accompanied by clear narrative descriptions;
- failure to distinguish between the significant effects that are likely to influence the eventual decision and those of lesser concern;
- losing sight of the most glaringly obvious significant effects because of the complexity of the assessment.

To overcome these potential problems, there should be more emphasis on narrative text describing the landscape and visual effects and the judgements made about their significance. Provided it is well written, this is likely to be most helpful to non-experts in aiding understanding of the issues. It is also good practice to include a final statement summarising the significant effects. Tables and matrices should be used to support and summarise descriptive text, not to replace it. 3.36

## Mitigation

Measures which are proposed to prevent, reduce and where possible offset any significant adverse effects (or to avoid, reduce and if possible remedy identified effects), including landscape and visual effects, should be described. The term 'mitigation' is commonly used to refer to these measures; however, it is not a term used in the EIA Regulations although it is used in some specific legislation, such as the Electricity Act 1989, and in guidance. Mitigation measures are not necessarily required in landscape appraisals carried out for projects not subject to EIA procedures, although some local authorities may request them and even if they do not it is nevertheless often helpful to think about ways of dealing with any negative effects identified. 3.37

As EIA practice has evolved the terminology used to refer to mitigation measures has been adapted; for example, it has become common practice to use the term 3.38

5.36 All effects that are considered likely to take place should be described as fully as possible:

- Effects on individual components of the landscape, such as loss of trees or buildings for example, or addition of new elements, should be identified and mapped (and if appropriate and helpful quantified by measuring the change).
- Changes in landscape character or quality/condition in particular places need to be described as fully as possible and illustrated by maps and images that make clear, as accurately as possible, what is likely to happen.

Good, clear and concise description of the effects that are identified is key to helping a wide range of people understand what may happen if the proposed change or development takes place.

5.37 One of the more challenging issues is deciding whether the landscape effects should be categorised as positive or negative. It is also possible for effects to be neutral in their consequences for the landscape. An informed professional judgement should be made about this and the criteria used in reaching the judgement should be clearly stated. They might include, but should not be restricted to:

- the degree to which the proposal fits with existing character;
- the contribution to the landscape that the development may make in its own right, usually by virtue of good design, even if it is in contrast to existing character.

The importance of perceptions of landscape is emphasised by the European Landscape Convention, and others may of course hold different opinions on whether the effects are positive or negative, but this is not a reason to avoid making this judgement, which will ultimately be weighed against the opinions of others in the decision-making process.

## Assessing the significance of landscape effects

5.38 The landscape effects that have been identified should be assessed to determine their significance, based on the principles described in Paragraphs 3.23–3.36. Judging the significance of landscape effects requires methodical consideration of each effect identified and, for each one, assessment of the sensitivity of the landscape receptors and the magnitude of the effect on the landscape.

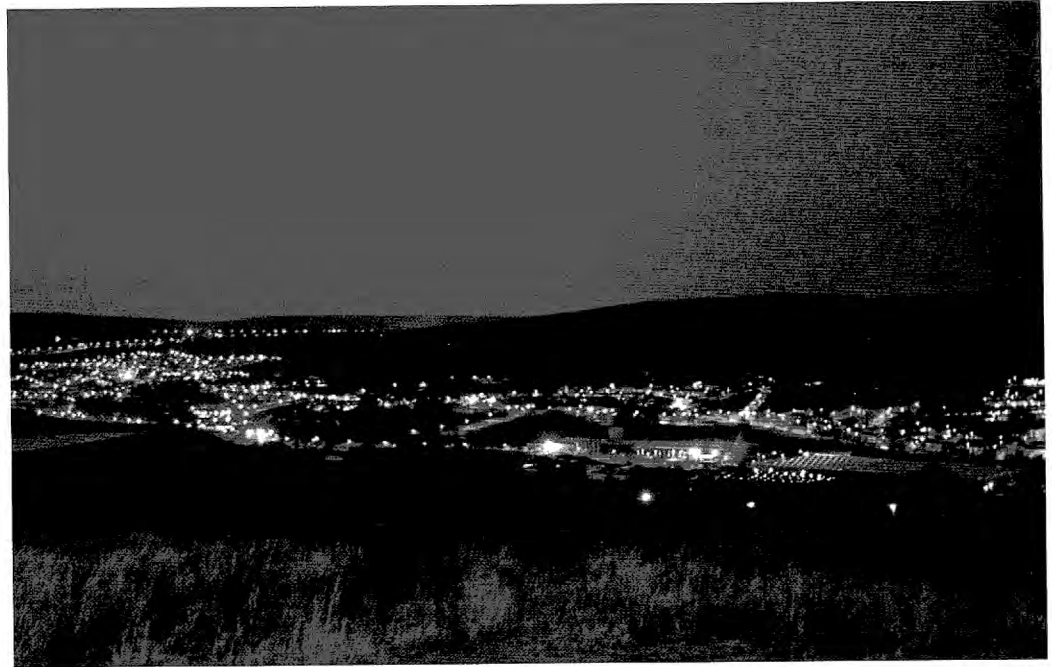
### Sensitivity of the landscape receptors

5.39 Landscape receptors need to be assessed firstly in terms of their sensitivity, combining judgements of their susceptibility to the type of change or development proposed and the value attached to the landscape. In LVIA sensitivity is similar to the concept of landscape sensitivity used in the wider arena of landscape planning, but it is not the same as it is specific to the particular project or development that is being proposed and to the location in question.

### *Susceptibility to change*

5.40 This means the ability of the landscape receptor (whether it be the overall character or quality/condition of a particular landscape type or area, or an individual element

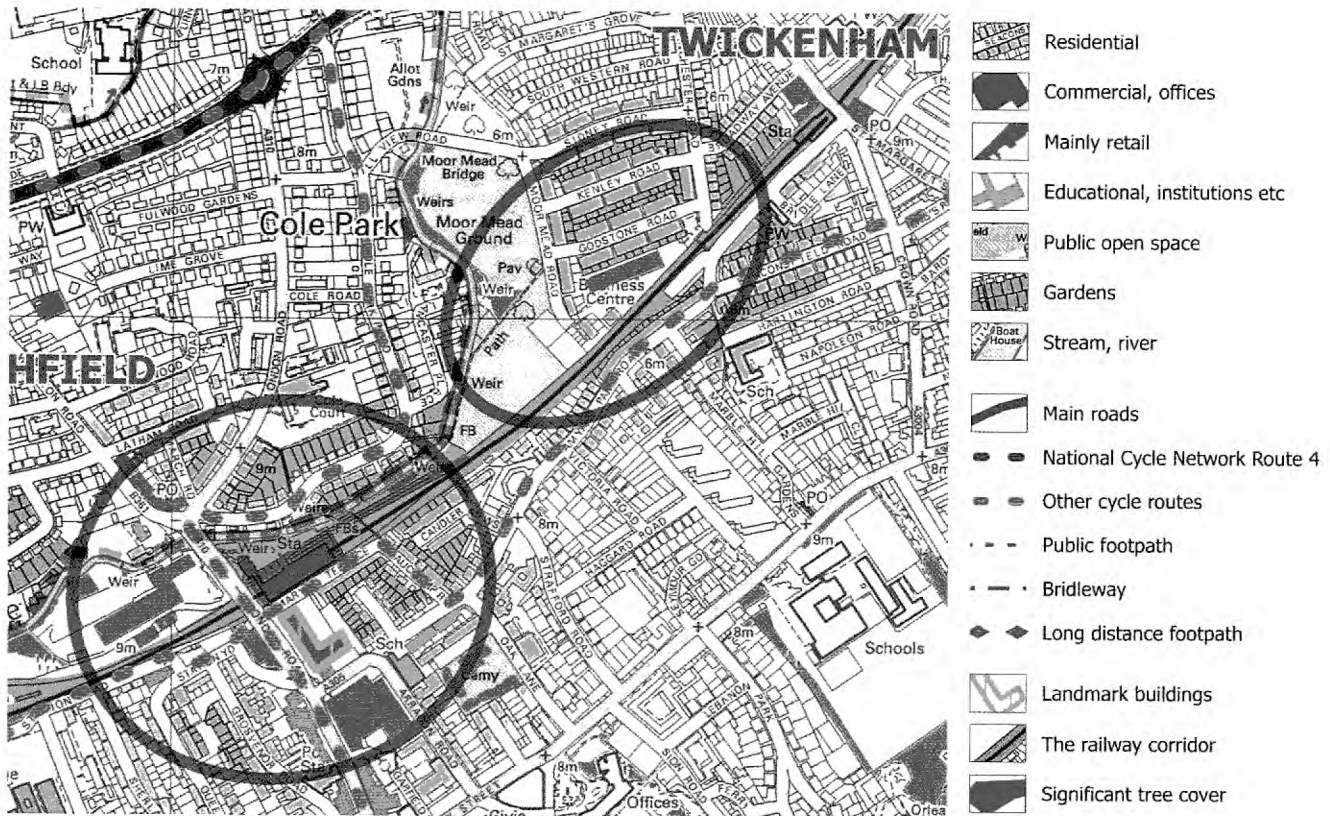




**Figure 6.6** View over the South Wales valley town of Rhymney, showing the contrast of urban lighting in the valley and the darkness of the enclosing ridges

### Receptors of visual effects

- 6.13 The ZTV identifies land that, theoretically, is visually connected with the proposal and this is refined by site survey to confirm the extent of visibility. But in parts of this area there will be relatively few people to experience the effects of the proposal on views. The baseline studies must therefore identify the people within the area who will be affected by the changes in views and visual amenity – usually referred to as ‘visual receptors’. They may include people living in the area, people who work there, people passing through on road, rail or other forms of transport, people visiting promoted landscapes or attractions, and people engaged in recreation of different types.
- 6.14 People generally have differing responses to changes in views and visual amenity depending on the context (location, time of day, season, degree of exposure to views) and purpose for being in a particular place (for example recreation, residence or employment, or passing through on roads or by other modes of transport). During passage through the landscape, certain activities or locations may be specifically associated with the experience and enjoyment of the landscape, such as the use of paths, tourist or scenic routes and associated viewpoints.
- 6.15 The types of viewers who will be affected and the places where they will be affected should be identified. Where possible an estimate should also be made of the numbers of the different types of people who might be affected in each case. Where no firm data are available this may simply need to be a relative judgement, for example noting comparatively few people in one place compared with many in another.



**Figure 6.7** Mapping the locations of potential visual receptors in an urban context

## Viewpoints and views

The viewpoints from which the proposal will actually be seen by these different groups of people should then be identified (but see Paragraphs 6.18 and 6.19 for detail on selecting viewpoints). They may include:

6.16

- public viewpoints, including areas of land and buildings providing public access – in England and Wales, this includes different forms of open access land, and public footpaths and bridleways; in Scotland, a range of recognised paths also exists, while access rights apply to most land and inland water;
- transport routes where there may be views from private vehicles and from different forms of public transport;
- places where people work.

In some instances it may also be appropriate to consider private viewpoints, mainly from residential properties. In these cases the scope of such an assessment should be agreed with the competent authority, as must the approach to identifying representative viewpoints since it is impractical to visit all properties that might be affected. Effects of development on private property are frequently dealt with mainly through ‘residential amenity assessments’. These are separate from LVIA although visual effects assessment may sometimes be carried out as part of a residential amenity assessment,

6.17

in which case this will supplement and form part of the normal LVIA for a project. Some of the principles set out here for dealing with visual effects may help in such assessments but there are specific requirements in residential amenity assessment.

The viewpoints to be used in an assessment of visual effects should be selected initially through discussions with the competent authority and other interested parties at the scoping stage. But selection should also be informed by the ZTV analysis, by fieldwork, and by desk research on access and recreation, including footpaths, bridleways and public access land, tourism including popular vantage points, and distribution of population. 6.18

Viewpoints selected for inclusion in the assessment and for illustration of the visual effects fall broadly into three groups: 6.19

1. **representative viewpoints**, selected to represent the experience of different types of visual receptor, where larger numbers of viewpoints cannot all be included individually and where the significant effects are unlikely to differ – for example, certain points may be chosen to represent the views of users of particular public footpaths and bridleways;
2. **specific viewpoints**, chosen because they are key and sometimes promoted viewpoints within the landscape, including for example specific local visitor attractions, viewpoints in areas of particularly noteworthy visual and/or recreational amenity such as landscapes with statutory landscape designations, or viewpoints with particular cultural landscape associations;
3. **illustrative viewpoints**, chosen specifically to demonstrate a particular effect or specific issues, which might, for example, be the restricted visibility at certain locations.

The selection of the final viewpoints used for the assessment should take account of a range of factors, including: 6.20

- the accessibility to the public;
- the potential number and sensitivity of viewers who may be affected;
- the viewing direction, distance (i.e. short-, medium- and long-distance views) and elevation;
- the nature of the viewing experience (for example static views, views from settlements and views from sequential points along routes);
- the view type (for example panoramas, vistas and glimpses);
- the potential for cumulative views of the proposed development in conjunction with other developments.

Issues relating to the cumulative effects of proposals are covered in Chapter 7.

The viewpoints used need to cover as wide a range of situations as is possible, reasonable and necessary to cover the likely significant effects. It is not possible to give specific guidance on the appropriate number of viewpoints since this depends on the context, the nature of the proposal and the range and location of visual receptors. The 6.21