

# Appendix 11.1

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## **A31 Blackwell Farm Link Road**

Highway Access Feasibility Design

May 2018

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# **A31 Blackwell Farm Link Road**

## Highway Access Feasibility Design

May 2018

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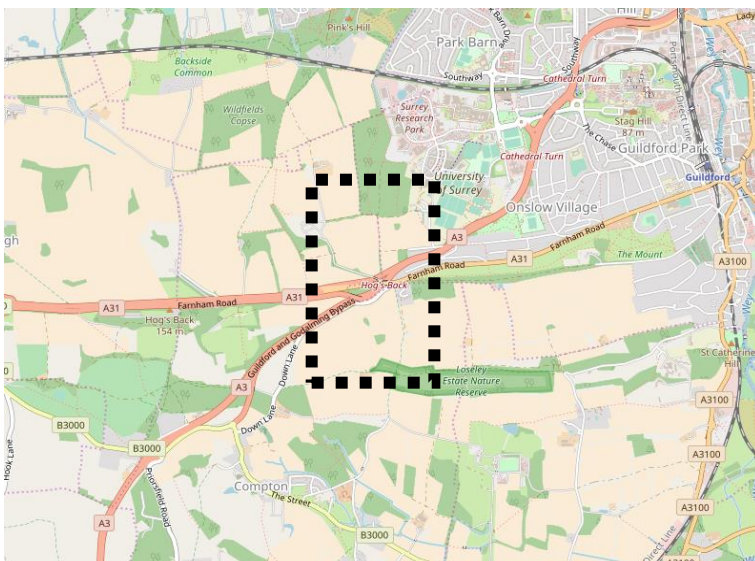
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# 1 Introduction

## 1.1 Context

- 1.1.1 Guildford Borough Council (GBC) has prepared a new Local Plan. The Guildford Borough Submission Local Plan: Strategy and Sites (December 2017) outlines the spatial development strategy for the borough up to 2034, including the quantum and location of development. This is based on an assessment of the objectively assessed need for new homes, employment and retail space and an assessment of whether this quantum of development can be provided in a sustainable way following consideration of other policy constraints.
- 1.1.2 The Local Plan includes an allocation for a new development on the Blackwell Farm site. Policy A26 details the allocation for “a residential led mixed use development, allocated for approximately 1,800 homes of which a minimum of 1,500 homes (C3) will be delivered within the plan period.” The development will also include 30,000 sq m of employment (B1) on a 10-11 ha extension to the Surrey Research Park, along with a new Local Centre and shops, and new primary and secondary schools.
- 1.1.3 This report considers the facets of providing a new junction access and road from the A31 to serve the proposed development site at Blackwell Farm, as shown on the location plan below.
- 1.1.4 This report assesses the likely civil and transportation engineering constraints of accessing the site with respect to junction capacity, highways alignment and earthworks imposition. Access at this location also requires a new bridge to traverse the northbound on-slip from the A31 to the A3 and minor alterations to drainage, whilst being sensitive to the existing tree corridor.

**Figure 1: Location of A31 Farnham Road & Blackwell Farm**



Source: © OpenStreetMap contributors

## 1.2 Brief

- 1.2.1 The brief was to prepare an outline design for a proposed highway access from the A31 Farnham Road to the Blackwell Farm site allocation, as proposed in the Guildford Borough Council Submission Local Plan: Strategy and Sites (December 2017).
- 1.2.2 The table below shows the design criteria and assessment format used.

**Table 1: Outline Design & Assessment**

Item	Outline Design	Assessment
<b>DMRB Primary Vehicular Signal Junction Access and Pedestrian / Cycle Connection</b>	Horizontal and Vertical Alignment based on 3D topographic survey within the Local Plan boundary and Surrey CC highway ownership  Inclusion of Bus and Pedestrian /Cycle Connections  To consider link with nearby Down Lane junction	DMRB Signal Junction Capacity Assessment  New LINSIG model for design year flows  Traffic demand based on the 2016 Strategic Highway Assessment Report (SHAR), adjusted to include a secondary school and to model peak hours  Based on historic ATC data to identify existing peak hours
<b>DMRB Access Road Design and transition to Guildford Highway Design Standard for Residential developments.</b>	Horizontal and Vertical Alignment based on 3D topographic survey within the Local Plan boundary and Surrey CC highway ownership  Provide long-section and cross-sections	Horizontal and Vertical Alignment  Options for width of road and cycleway and their impacts on trees
<b>New Bridge crossing over A3 Slip Road</b>	Sufficient headroom above the A31 slip to A3 and that allowance has been made for the structure when looking at the levels.	Outline concept for bridge to include pedestrian and cycle provision.  Structural Assessments are excluded

Source: Mott MacDonald Technical Proposal

## 1.3 Existing Highway Configuration

- 1.3.1 The existing access through Down Place would not be suitable for providing access to the A31 for the composition of the proposed new development at Blackwell Farm.
- 1.3.2 The existing access through Down Place is proposed to be retained for the provision of access for non-motorised users.

**Photo 1: Junction Visibility Right from Existing Access.**



Source: Site Visit Photograph

**Photo 2: Junction Visibility Left from Existing Access.**



Source: Site Visit Photograph

1.3.3 The A31 Farnham Road is a 50-mph link at this location interchanging with Down Place. Approximately half a mile west of this location the A31 is joined by slip roads to/from the A3 and the A31 becomes a two-lane dual carriageway.

1.3.4 The images below illustrate the form of the 'A' road link on the urban edge of Guildford.

**Photo 3: A31 Westbound lane at 50mph speed limit.**



Source: Site Visit Photograph

**Photo 4: A31 Eastbound at existing uncontrolled crossing.**



Source: Site Visit Photograph

## 2 Proposed A31 Farnham Road Signalised Junction

### 2.1 Signalised Junction Design

- 2.1.1 The feasibility of this preliminary design is based on the assumption that the existing speed limit is reduced on the A31 Farnham Road from 50mph to 40mph through the signalised junction and extent of approaches.
- 2.1.2 It is recommended that the change in speed limit is positioned at the appropriate forward Stopping Sight Distance (SSD) away from the worst case back of the queue on the eastbound carriageway. For a speed limit of 40mph a desirable medium SSD of 120m is required, with a mean maximum predicted queue of 20pcus (as detailed below), the 40mph speed limit should start around 280m west of the new junction.
- 2.1.3 The signalised layout includes two lanes at the stop line of each arm of the junction, detailed on drawing number MMD-390510-C-DR-BB01-XX-0001 in **Appendix A**. For the westbound right-turn into the new access road, a 25m turning lane is provided, the length of which is constrained by the existing bridge over the A3.
- 2.1.4 For eastbound movements a 160m long left-turn lane is provided, with 65m for separate right and left-turn lanes out of the new access road.

### 2.2 Drainage

- 2.2.1 There is formal gully drainage in the carriageway, from which it reasonably can be assumed that an appropriate drainage system is in place. This system would need to be assessed for capacity with the likely expansion of the ghost island and new bellmouth junction.

### 2.3 Street Lighting

- 2.3.1 There is existing street lighting at the junction of the A31 Farnham Road and Down Lane. It is likely that the street lighting would need to be extended to include the proposed junction, based on the requirement of Surrey CC Highway street lighting standards.

### 2.4 Ghost Island

- 2.4.1 The design speed would necessitate a ghost island extending into the width of the carriageway over the main A3 bridge. This would interact with the existing ghost island for right turns into the Down Lane and is incorporated into the design.

### 2.5 Design Year Peak Hour Demands

- 2.5.1 Traffic demand at the new junction has been calculated based on data provided by Surrey County Council from their strategic traffic model (SINTRAM), specifically Scenario 3 in the 2016 SHAR. The model included the proposed development for the full plan period with a forecast year of 2031. For the Blackwell Farm site this is as detailed below:



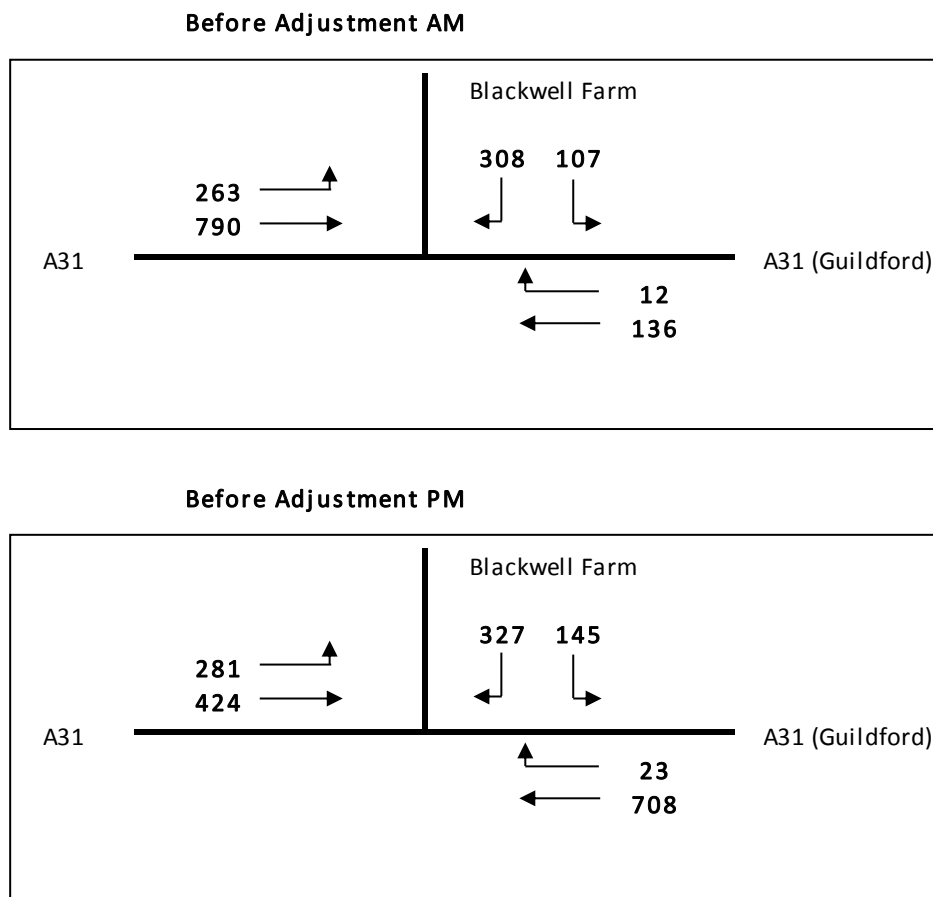
- 1800 houses
- 31,000 sq m GFA of office (B1b)
- Approximately 500 sq m of comparison retail and 660 sq m of convenience retail (A1) in a new Local Centre
- Approximately 550 sq m services in a new Local Centre (A2 –A5)
- A primary school (D1) (two form entry, 420 pupils assumed).

2.5.2 However, a new secondary school (six form entry, 900 pupils assumed) that is now included in the Local Plan was not allowed for. Additional trips were added to allow for a secondary school, based on TRICS, giving 92 trips to the site and 62 from the site in the AM peak hour, and PM peak hour of 7 trips to and 12 trips from the site. For these additional trips, it was assumed that 60% would be either contained within the mixed-use development or to/from Guildford via the alternative Hospital/University access. The remaining 40% of trips were assumed to use the new A31 signalised junction, with 30% to/from Guildford via the A31 and 10% to/from the west.

2.5.3 SINTRAM also includes the predicted background growth in traffic on the A31, associated with other new development in Guildford and the surrounding area, as well as general growth due to car ownership and relative fuel costs.

2.5.4 The average peak period flows provided by SCC from SINTRAM are shown below, for the periods 07:00-10:00 and 16:00-19:00 as pcus/hour (noting that this excludes the secondary school trips).

**Figure 2: Peak Period Demand from SINTRAM**



2.5.5 Peak **period** flows have been adjusted to peak **hour** flows based on the factors below:

**Table 2: Peak Period to Peak Hour Factors**

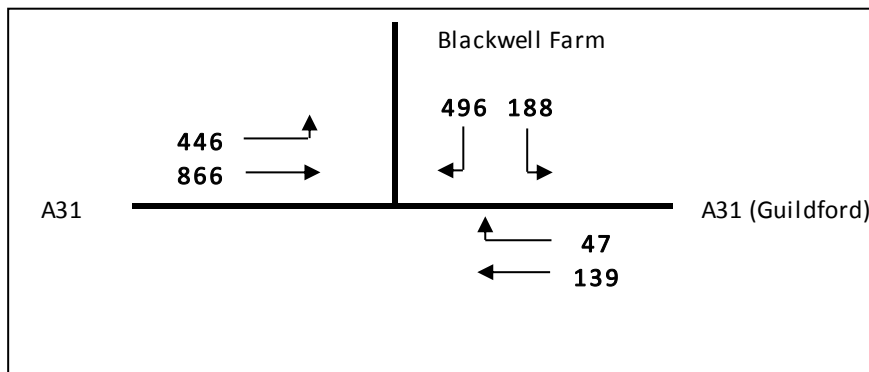
	AM Peak		PM Peak	
	EB	WB	EB	WB
A31 factor	1.10	1.03	1.13	1.14
	To Site	From Site	To Site	From Site
TRICS Factor (Residential)		1.59	1.50	
TRICS Factor (Business Park)	1.66			1.56

Source: ATC data on A31 and TRICS trip rate data

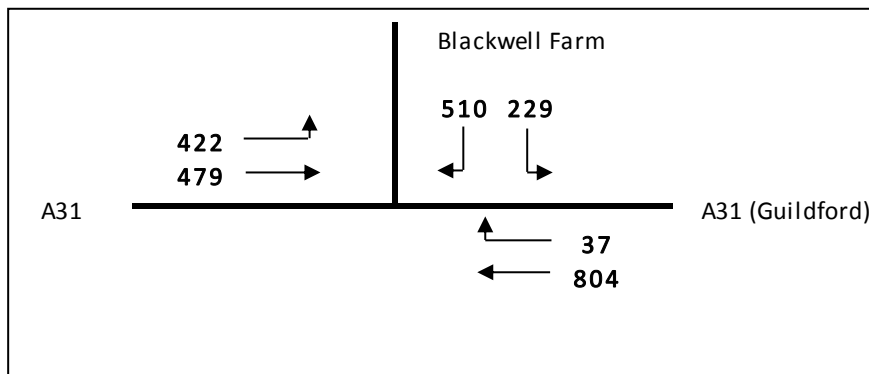
2.5.6 For the A31 straight ahead movements, automatic traffic count (ATC) data on the A31 in the vicinity of the new junction were used. Average weekday flows by hour and by direction were calculated from data for three weeks in November 2014, from which peak hours factors were determined.

2.5.7 For development trips to/from the site, factors were determined from hourly trip rates from TRICS for residential and employment land uses. Data extracted from TRICS was provided by SCC so is consistent with that used for the SINTRAM model. Trips from the site in the AM peak and to the site in the PM peak were adjusted based on factors for mixed private/affordable housing and for Business Park for trips into the site (AM) and out of the site (PM). The resultant peak hour flows (pcus/hour) are shown below, including the allowance for secondary school trips.

**Figure 3: Calculated Peak Hour Demand**  
**After Adjustment AM**



**After Adjustment PM**



2.5.8 Traffic counts were undertaken on a weekday in March 2018 at the A31 junctions with Down Place and Downs Lane to the east. **Appendix B** contains details of the traffic survey results, with a summary of the flows on the A31 west of Down Place and the new junction given in **Table 3** below.

**Table 3: Traffic Flows on the A31**

Direction and Peak Hour	2018 Traffic Count (pcus/hour)	2031 Predicted Flow (pcus/hour)
A31 Eastbound 08:00-09:00	930	1312
A31 Eastbound 17:00-18:00	800	901
A31 Westbound 08:00-09:00	420	635
A31 Westbound 17:00-18:00	944	1314

Source: SCC Traffic count and adjusted SINTRAM flows

2.5.9 Based on the 2018 counts, it is recognised that the 2031 predicted A31 straight ahead movements in the non-peak direction appear low i.e. A31 westbound in AM peak and A31 eastbound in PM peak. However, this does not affect the junction capacity assessment as it is the flow in the peak direction balanced with the flow exiting the new link road that dictates the overall capacity (as the A31 straight ahead movements run at the same time in the signal plan).



## 2.6 Junction Capacity Assessment

- 2.6.1 A LINSIG model was built of the proposed junction layout and used to assess the performance with the predicted peak hour flows for 2031. The results are shown in **Table 4**, assuming a two-stage cycle with both directions of the A31 running on green at the same time (with the westbound right-turn into the access road giving way to eastbound traffic).

**Table 4: 2031 Junction Capacity Assessment**

	AM Peak		PM Peak	
	Degree of Saturation	Mean Max Queue (pcus)	Degree of Saturation	Mean Max Queue (pcus)
A31 Eastbound	87.5%	22.8	47.3%	8.2
Access road	86.2%	14.1	89.2%	15.4
A31 Westbound	38.5%	2.1	88.9%	22.2

Source: LINSIG results

- 2.6.2 As expected from the demand flows, in the AM peak hour green time is balanced between the access road and A31 eastbound which show degree of saturations of 86-88%. In the PM peak hour, the A31 westbound and access road arms both show a degree of saturation of 89%.
- 2.6.3 For a signalised junction it is generally accepted that a maximum degree of saturation of less than 90% indicates that the junction is within capacity and its operation is acceptable. This is shown to be the case for the proposed A31 junction layout.

## 3 Access Road Design

### 3.1 Design Principles

- 3.1.1 The design principles for the access road and junction with the A31, (drawing number MMD-390510-C-DR-BB01-XX-0003), are based on the application of the Design Manual for Roads and Bridges (DMRB) for the junction and approach from the development to the proposed junction.
- 3.1.2 Local guidance from Surrey County Council has been applied to the transition (Section shown as red on drawing number MMD-390510-C-DR-BB01-XX-0003) from the proposed access junction and approach road with the section of road continuing into the development (The Surrey Guide, a strategic guide to quality built environment, 2002).

### 3.2 Design Speed

- DMRB TD 9/93 Highway Link Design has been used for the horizontal and vertical alignment for the signalised junction and approaches (Section shown as green and blue on drawing number MMD-390510-C-DR-BB01-XX-0003).
- DMRB TD 9/93, Para. 1.8 states a design speed of 60kph should be used for an urban road with speed limit of 30mph (Section shown as green and blue on drawing number MMD-390510-C-DR-BB01-XX-0003).
- Due to the horizontal and vertical constraints of the site (Section shown as red on drawing number MMD-390510-C-DR-BB01-XX-0003) the design has been defaulted to the Surrey Design Guidance.

### 3.3 Alignment

- 3.3.1 The proposed access road alignment sits within the Local Plan boundary and is shown on drawing number MMD-390510-C-DR-BB01-XX-0004 in Appendix A.
- 3.3.2 DMRB design standards have been applied for the A31 signalised junction layout and initial extent of the access road alignment for the extent of the approach to the access junction with the A31.
- 3.3.3 DMRB standards are suitable for the proposed road alignment and then the alignment is in transition due to geometric and boundary constraints. Therefore, local highway design standards have been applied for the transition into the Blackwell Farm development (Section shown as red on drawing number MMD-390510-C-DR-BB01-XX-0003).

### 3.4 Horizontal Alignment

- The sections relating to the junction approaches and transitions to the development are shown on drawing number MMD-390510-C-DR-BB01-XX-0003.
- The transition to the development between Ch. 235 – 374m (Radius = 120m) are designed to Surrey Design Guidance.
- The connection from the radius to the yellow section toward the proposed urban area shown on drawing number MMD-390510-C-DR-BB01-XX-0003, between Ch. 608 – 650m (Radius = 40m), would be designed to the Manual for Streets.

### 3.5 Vertical Alignment

- The existing ground profile is very steep. To minimise earthworks, the vertical alignment has sections with increased gradients
- Using a 10% gradient, the largest height difference between the existing ground level and the proposed alignment is approx. 2.5m.

### 3.6 Stopping Sight Distance (SSD)

- Stopping Sight Distance has been assessed for 70m (DMRB) horizontal and the visibility envelope generally falls within the proposed boundary.

### 3.7 Gradients

- 3.7.1 The gradients for each section as shown in drawing number MMD-390510-C-DR-BB01-XX-0003 in Appendix A have been determined using a 3D digital ground model in CAD drawn to the design standard of the DMRB and Surrey Guide.
- 3.7.2 The vertical alignment has been determined from the fixed points of the crossing height over the A3 slip and arriving at existing ground level when the road crosses the existing access road lined with the tree corridor.

### 3.8 Tree Root Protection Zones

- 3.8.1 The design alignment is sensitive to tree root protection zones of the tree lined corridor, however more detail is required of this constraint for detailed design.

### 3.9 Earthworks

- 3.9.1 See drawing number MMD-390510-C-DR-BB01-XX-0002 in Appendix A
- A 1:3 slope assumed for earthworks.
  - Between Northbound Ch. 190 – Ch. 280m earthworks have been steepened to 1:1.5 slope to present spill of structurally reinforced earthworks beyond the project boundary.
  - Earthworks are not included between Ch. 0 – 50m due to assumed bridge structure
  - To improve visibility, the verges have been widened in the following locations.  
Southbound Side Ch. 220 – 305m & Ch. 598 – 650m

**Table 5: Earthworks Volume Calculations**

Earthworks Volume Calculations		
	Cut (m <sup>3</sup> )	Fill (m <sup>3</sup> )
Combined Volume	1,173	10,329
Volume excluding Ch. 0 – 50m	<b>1,105</b>	<b>7,499</b>

Source: Mott MacDonald

- 3.9.2 Note: Between Ch. 0 – 50m excessive fill is required due to the assumed bridge. The volume has been adjusted to take this into consideration

### 3.10 Retaining Wall

- 3.10.1 To avoid earthworks spilling onto Down Place, a retaining Wall has been included between Southbound Ch. 45 – Ch. 153m at approximately 4m high. See drawing number MMD-390510-C-DR-BB01-XX-0001 in **Appendix A**.

- 3.10.2 Initial design has considered a precast reinforced modular block retaining wall system such as Redi-Rock. The image below illustrates how the proposed access road link would fit with respect of the existing access road which is to be utilised as the pedestrian and cycle link to the development.

**Figure 4: Typical use of Redi-Rock Retaining wall for Bridge Tie-In**



Source: [https://www.redi-rock.com/documents/Engineering/PC\\_Docs/PC\\_System](https://www.redi-rock.com/documents/Engineering/PC_Docs/PC_System)

### 3.11 Access to Properties

- 3.11.1 Under the design proposals, the provision for access to three private residential dwellings located to the north west of the proposed new access road, which presently have vehicular provisions via Down Place, has been considered and accommodated. A private spur road from the new access road at chainage 630 – 640 has been incorporated within the design and will provide an improved access link to the A31 for these properties, compared to the existing Down Place. The form of the junction, where the private spur road is proposed to connect with the new access road, would be a standard DMRB compliant priority junction. The proposed priority junction would be at grade with the new access road when including the formation of the carriageway.
- 3.11.2 The alignment of the proposed spur road has taken into consideration the presence and location of a number of mature and well established trees that line Down Place and mitigates the need to remove or damage those in the vicinity. It is also envisaged that priority across the proposed spur road, where it cuts through Down Place, would be for non-motorised users (NMUs), which under the wider design proposals are intended to utilise this section of Down Place as a dedicated NMU route.
- 3.11.3 Drawing MMD-390510-C-DR-BB01-XX-0005 shows this proposed junction layout and swept path vehicle tracking for a Refuse vehicle. This location joins the main access road alignment (section shown as red on drawing number MMD-390510-C-DR-BB01-XX-0003).

## 4 Pedestrian / Cycle Connection Design

### 4.1 Design Principle

- 4.1.1 The design principles are to enhance the existing connections for non-motorised users and to the bus stops from the A31 (drawing number MMD-390510-C-DR-BB01-XX-0001).

**Photo 5: Sign to Surrey hills and public rights of way and bus stops.**



Source: MM Photo

### 4.2 NCN22 / North Downs Way and Bridleways

- 4.2.1 The NCN number 22 passes close to the proposed junction site, this NCN route then connects with the North Down Way via Down Lane not far from this proposal access junction location.
- 4.2.2 The development would be able to better connect these sustainable links, and provide a concession of betterment to the wider sustainable transport network.
- 4.2.3 The development site itself also has bridleways passing through it and would be in a position to connect these sustainable links, and provide a concession of betterment to the wider sustainable transport network.
- 4.2.4 The development site itself also has bridleways passing through it and would be in a position to connect these sustainable links, and provide a concession of betterment to the wider sustainable transport network.
- 4.2.5 These cycle links could be included into the design of the access and egress junction and the internal development network.

### 4.3 A31 Farnham Road - A3 Overbridge – Down Lane

- 4.3.1 There is considered to be sufficient width on the north side of the overbridge to convert the existing footway, between the parapet and the vehicle restraint barrier, to a 3m wide shared use pedestrian and cycle facility.

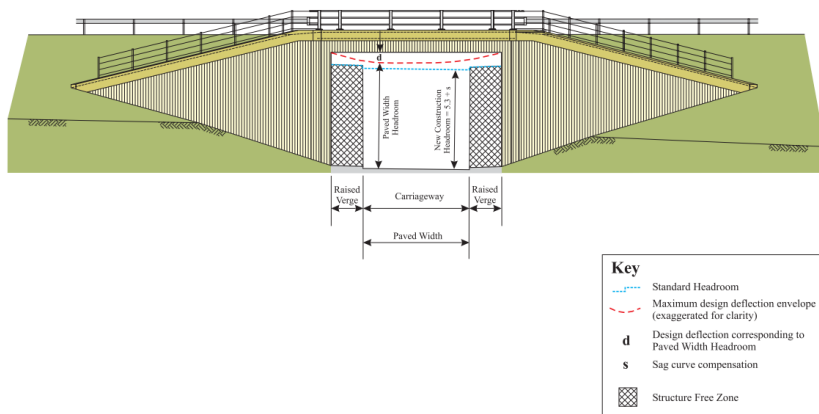
- 4.3.2 The height of the overbridge parapet will require further assessment to ensure it meets highway standards for a cycleway at 1.4 metres, considered to be the minimum height for cyclist comfort.
- 4.3.3 There exist bus stops on the A31 and the Down Lane which are connected informally by a track across the grass indicating the desire line, refer to MMD-390510-C-DR-BB01-XX-0001 for the proposed enhancements.

## 5 New Access Bridge

### 5.1 New A3 Northbound Slip Road Overbridge

- 5.1.1 The new access bridge is located west of the existing Down Place bridge, which has been stopped up to public vehicular traffic (only provides access to properties on Down Place). The new access bridge spans the A3 north bound slip road, a single carriageway road which is not designated as a 'High Load' route.
- 5.1.2 The minimum headroom clearance, as set out in the Design Manual for Road and Bridges (DMRB) for a new overbridge structure not vulnerable to vehicle impact, is a headroom clearance of 5.3m minimum (Figure 5).

**Figure 5: Headroom Clearance for a Single Carriageway Road**



Source: DMRB Volume 6 Section 1 TD27/05

- 5.1.3 It has been assessed from the topographical survey data and proposed alignment of the Blackwell Farm access road that the new overbridge would have a minimum headroom clearance of 6.2 metres at its lowest point, increasing to 6.4 metres. See Drawing number MMD-390510-C-DR-BB01-XX-0001 in Appendix A
- 5.1.4 The bridge is proposed to be a single span bridge, approximately 15 m span, making allowance for visibility on the north edge. It would be constructed from precast concrete beams with solid concrete infill fully integral with full height abutments.
- 5.1.5 The concrete span would be low maintenance and would allow for services within the deck if they could not be located in the footway construction.
- 5.1.6 The A31 is close to the slip road so constructing an abutment between the two roads will be difficult but there ought to be sufficient room. It is assumed that piles would be used to reduce risk to A31 even though a spread footing would probably work within a chalk area. Reinforced soil wing walls would be used to retain the north approach to be consistent.

## 6 Initial Capital Cost Estimate

6.1.1 A breakdown of the estimated scheme costs is shown in **Table 6**.

**Table 6: Estimated Construction Costs**

Item	Cost Estimate £
Series 200: Site Clearance	35,940
Series 400: Road Restraint Systems (vehicle & pedestrian)	55,034
Series 500: Drainage & Service Ducts	191,920
Series 600: Earthworks	427,883
Series 700: Pavements	516,733
Series 1100: Kerbs, Footway & Paved Areas	28,800
Series 1200: Traffic Signals & Road Markings	146,000
Series 1300: Road Lighting Columns	41,027
Series 1600: Piling and Embedded Retaining Wall	142,759
Series 2500: Special Structures (Bridge)	2,109,740
Series 3000: Landscaping & Ecology	4,750
Allowance for out of hours working	370,058
<b>Construction Costs Total</b>	<b>4,070,643</b>
OH&P	407,064
<b>Construction Cost Total Inc OH&amp;P</b>	<b><u>4,477,708</u></b>
Design	671,656
Prelims	1,119,427
T&C	44,777
TM @ 5%	223,885
Client Project Mgmt.	447,771
<b>Estimate TOTAL</b>	<b><u>6,985,224</u></b>
<b>Estimate of Uncertainty +66%</b>	<b><u>11,595,472</u></b>

Source: Mott MacDonald

6.1.2 Reliant on industry experience, an allowance of 66% has been applied as an increase to the construction cost estimate for uncertainties.

6.1.3 With 44% added for optimism bias, the total cost is £16,697,479m.

6.1.4 Exclusions from the estimate include:

- VAT
- 3rd party compensation costs
- Planning and approval charges
- Land purchase or rental
- Costs associated with Statutory Fees (e.g. HMRI, Local Authority, etc.)
- Costs associated with taxes, levies and licenses
- Allowances for unforeseen ground conditions / provisions for ground stabilisation unless specifically identified
- Costs associated with changes in legislation and any form of applicable standards



- Christmas, Easter and Bank Holiday working
- Archaeological digs
- Inflation beyond the base date
- Utilities diversions, relocation and protection
- Environmental mitigation works
- Tree schedule/planting
- Petrol/oil interceptor
- Root protectors/barriers

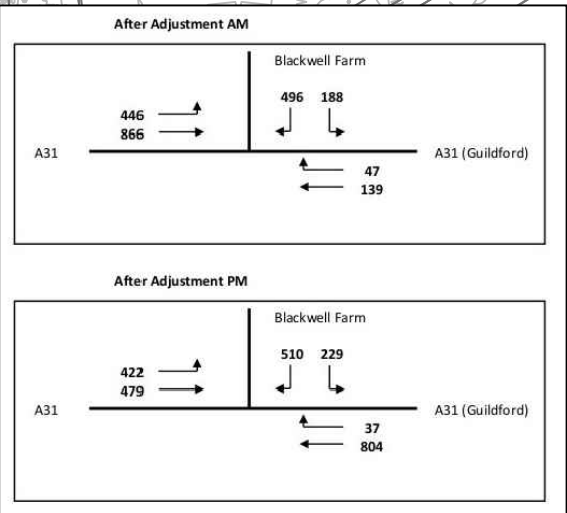
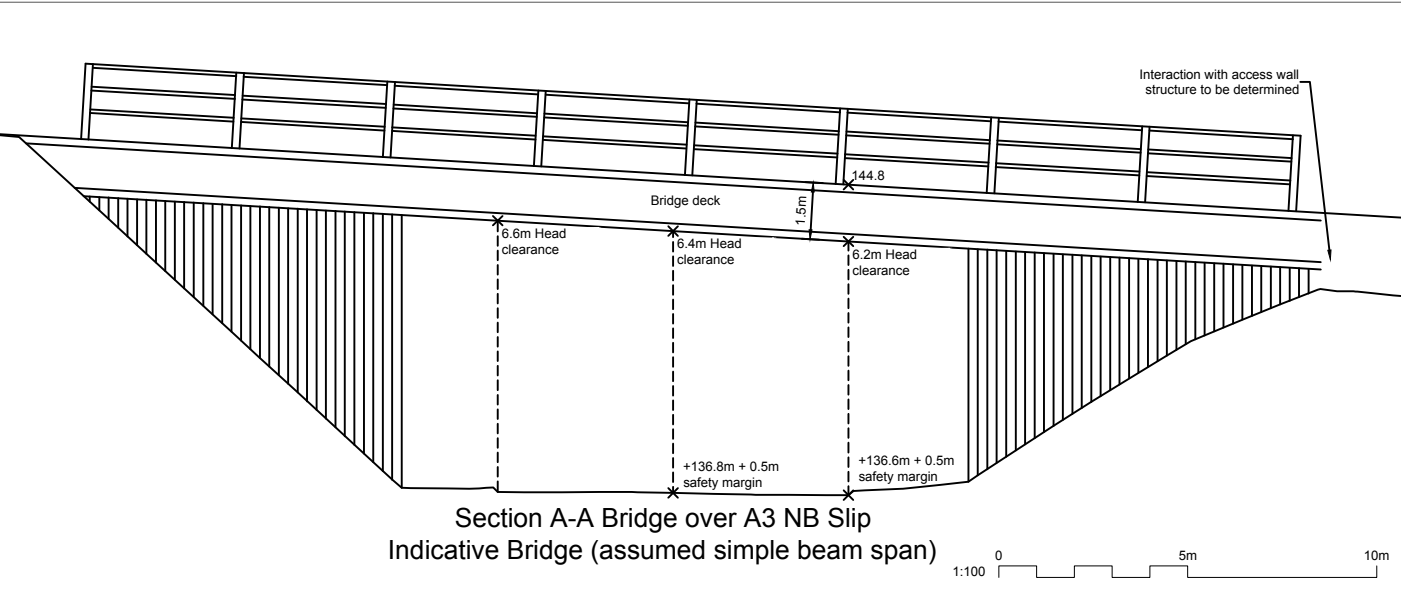
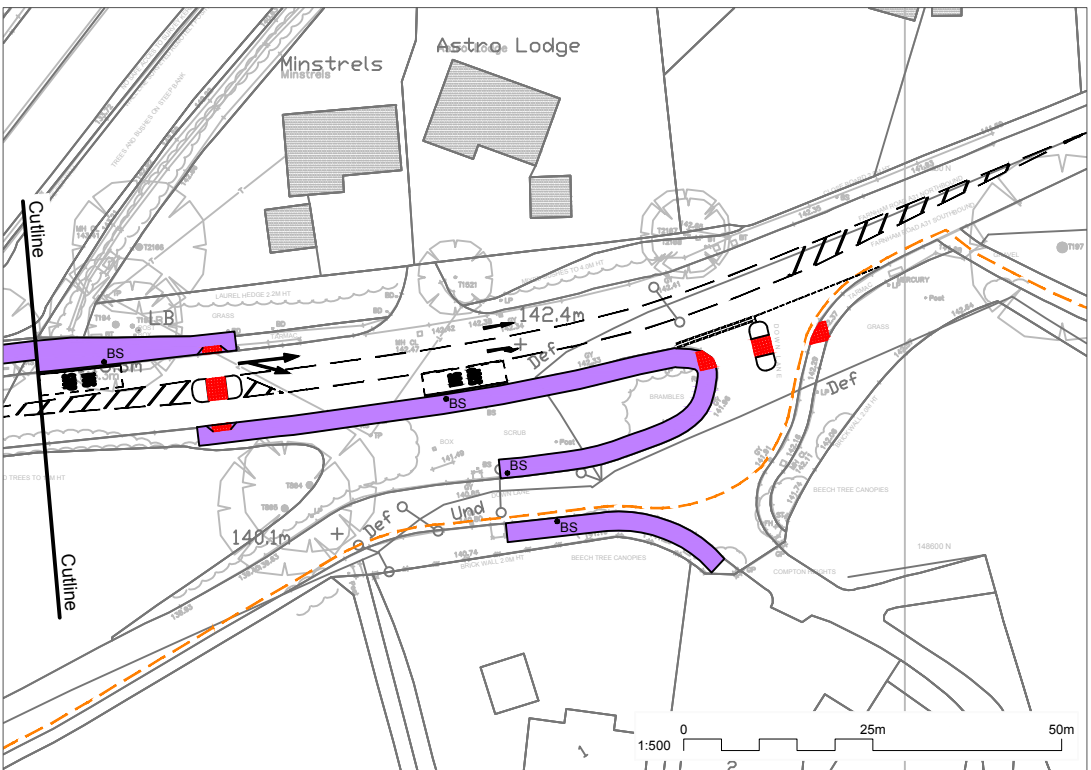
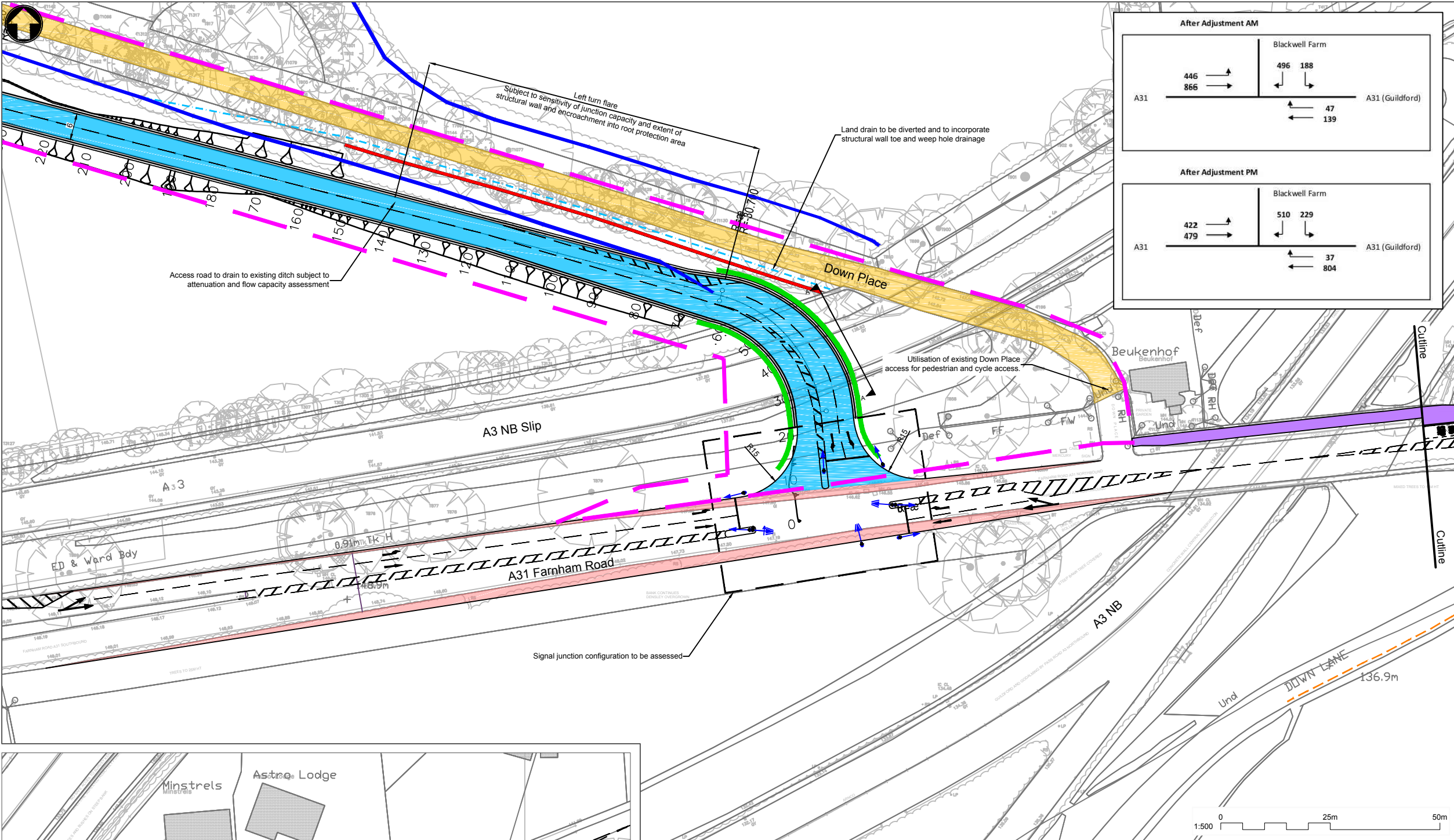
## 7 Summary

- 7.1.1 This report has demonstrated that access to the proposed development site is compliant with DMRB design standards which have been applied to the A31 signalised junction layout and initial extent of the access road alignment.
- 7.1.2 The proposed junction offers sufficient capacity on the A31 up to the full design year traffic composition of 2031.
- 7.1.3 DMRB standards are suitable for the proposed road alignment on approach to the A31 and then the alignment is in transition due to geometric and boundary constraints. Therefore, local highway design standards have been applied for the transition into the Blackwell Farm development.
- 7.1.4 The mitigation of a retaining wall included as part of the design would minimise the impact of the new road on the tree line corridor of the existing Down Place.
- 7.1.5 Wider improvements to non-motorised user access and links have been incorporated into the design feasibility, refer to MMD-390510-C-DR-BB01-XX-0001 for the proposed enhancements.

# Appendices

A.	Design Drawings	19
B.	A31 Traffic Counts	20

# A. Design Drawings



- Notes
1. Design speed of new access road to be 30mph
  2. Carriageway width 6m - widening to 9m over bridge and allowance for two lane exit onto junction of A31.
  3. Concept design subject to 3d topographic translation.
  4. Construction of earthworks pavement formation and sub-surface services and drainage subject to agreement with arboriculturist.
  5. Attenuation for proposed access road not shown.
  6. Subject to detailed design.
  7. Subject to road safety audit 1/2.

- Key to symbols
- Proposed new road surface with bridge over A31
  - Proposed carriageway widening on A31
  - Down Place (existing access) to be designated footway / cycleway
  - 2.5m wide footway / cycleway
  - Existing ditch
  - Local plan boundary
  - Indicative bridge structure
  - Indicative structural wall for proposed carriageway access subject to assessment of RPZ
  - Diverted land drain
  - NCN22 cycle route
  - Primary traffic signal
  - Secondary traffic signal
  - Secondary traffic signal with additional green arrow signal
  - Tactile paving
  - Bus stop

Reference drawings

**Preliminary Design**  
**NOT FOR CONSTRUCTION**

P1	13/02/2018	RB	First issue	GT	SF
Rev	Date	Drawn	Description	Ch'k'd	App'd

**MOTT MACDONALD**  
Stoneham Way  
Stoneham Lane  
Southampton, SO50 9NW  
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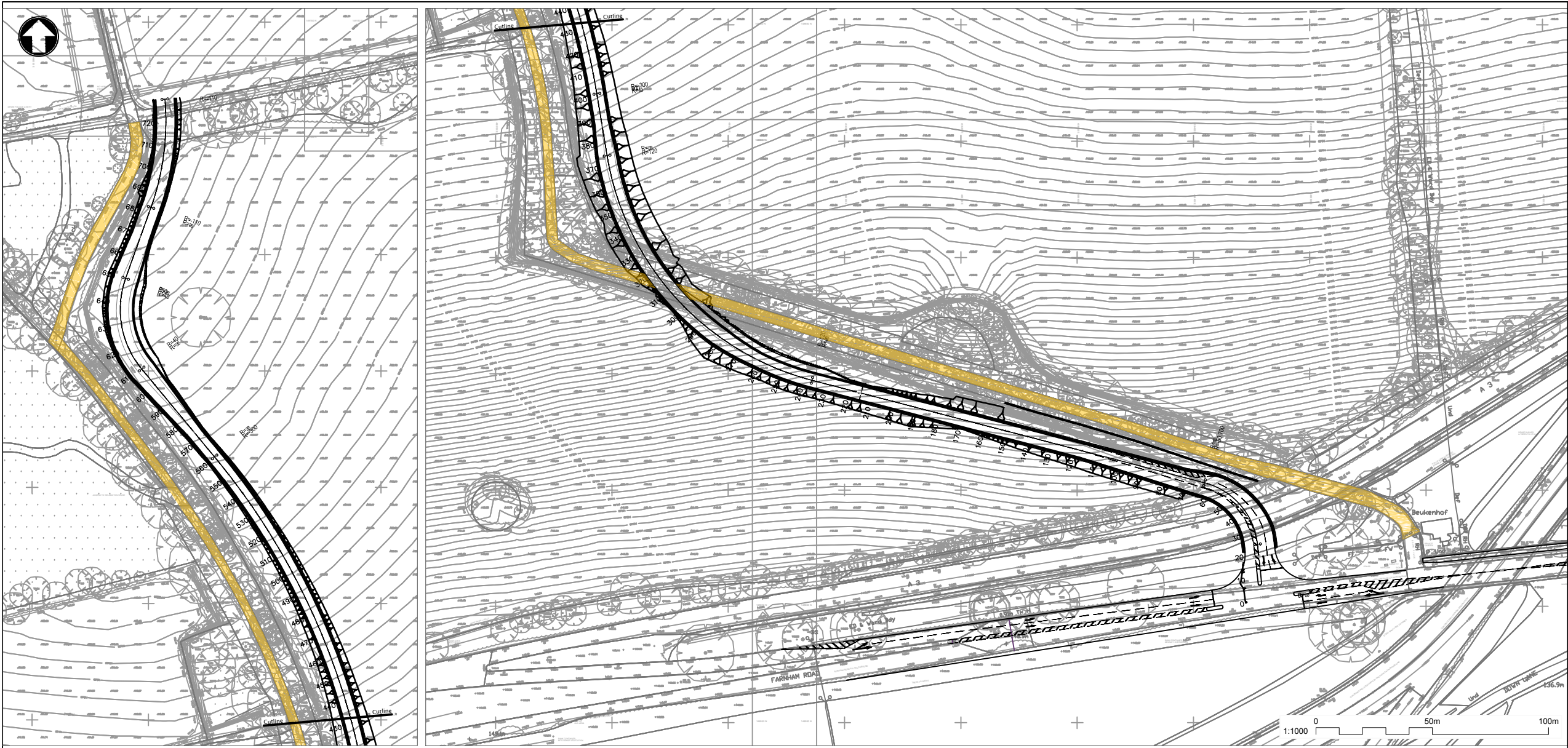
Client  
**Guildford Borough Council**

Title  
**Blackwell Farm**  
**A31 Access Road**

Designed	C Cole	Eng check	G Tregillis
Drawn	R Barwell	Coordination	
Dwg check	G Tregillis	Approved	S Finney
Scale at A1	Status	Rev	Security
As Shown	PRE	P1	STD

Drawing Number  
**MMD-390510-C-DR-BB01-XX-0001**





Notes

Key to symbols

Down Place (existing access) to be designated footway / cycleway

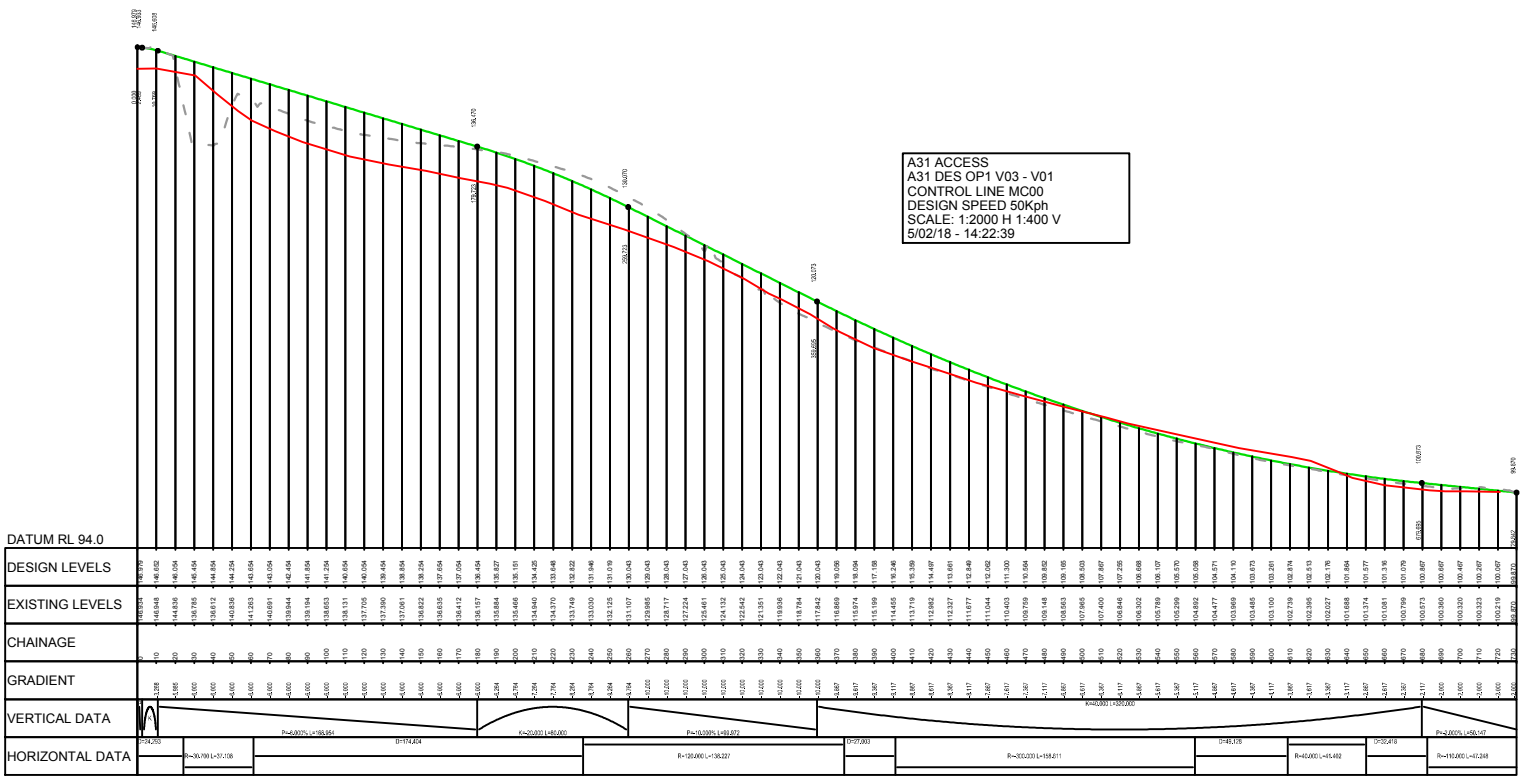
Existing surface level

Existing Down Place level

Proposed Access Road level

Reference drawings

Preliminary Design  
NOT FOR CONSTRUCTION



Earthworks Volume Calculations		
	Cut (m³)	Fill (m³)
Combined Volume	1,173	10,329
Volume excluding Ch. 0 – 50m	1,105	7,499

A31 ACCESS  
A31 DES OP1 V03 - V01  
CONTROL LINE MC00  
DESIGN SPEED 50Kph  
SCALE: 1:2000 H 1:400 V  
5/02/18 - 14:22:39

P1	14/02/2018	RB	First issue	GT	SF
Rev	Date	Drawn	Description	Ch'k'd	App'd

M

M

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Client  
Guildford Borough Council

Title  
Blackwell Farm  
A31 Access Road  
Longsection

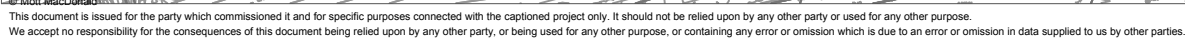
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Drawn	R Barwell	Coordination	
Dwg check	G Tregillis	Approved	S Finney
Scale at A1 As Shown	Status PRE	Rev P1	Security STD

Drawing Number  
MMD-390510-C-DR-BB01-XX-0002

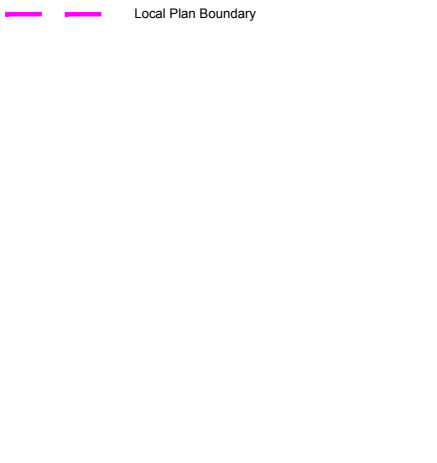









Key to symbols



Local Plan Boundary

Reference drawings



**M M**  
**MOTT**  
**MACDONALD**

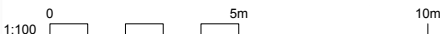
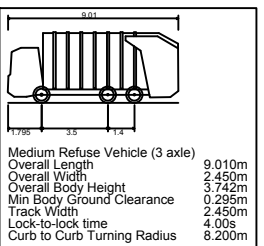
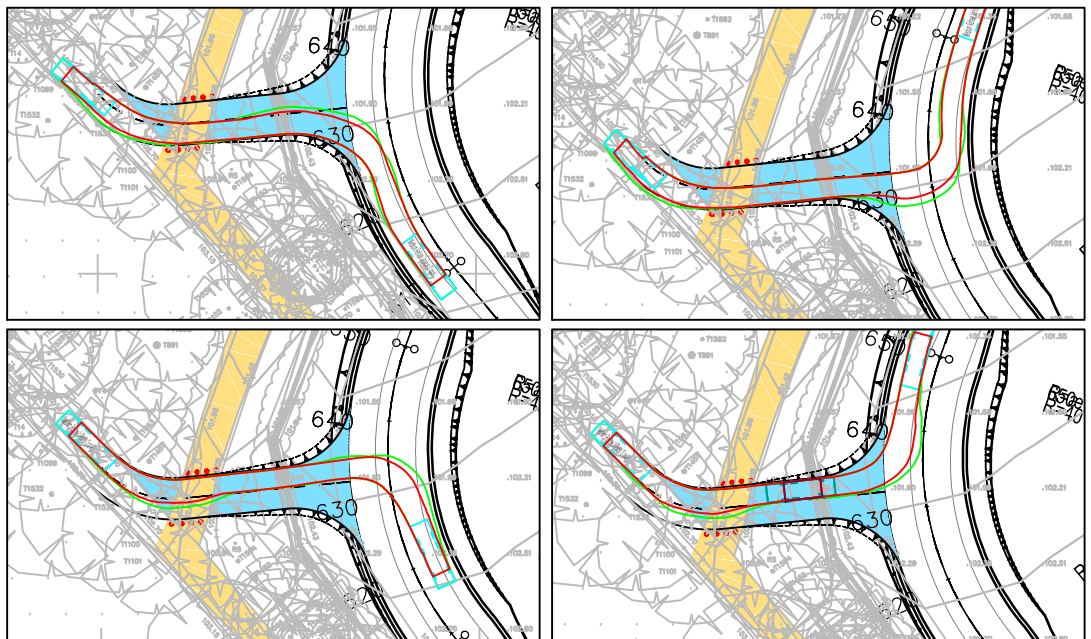
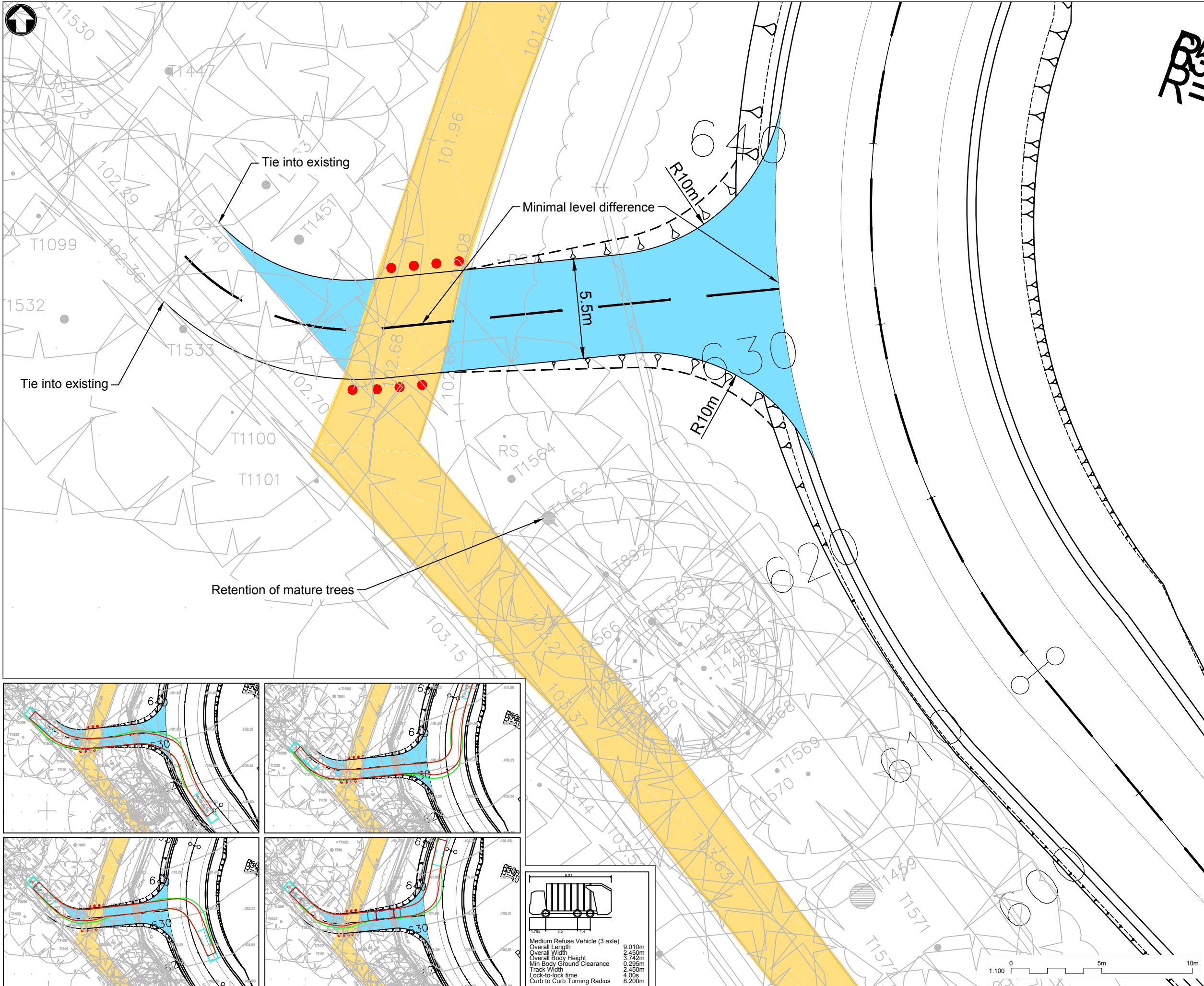
Stoneham Way  
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Title	Blackwell Farm  A31 Access Road Local Plan Boundary
-------	--

Designed	C Cole	Eng check	G Treigillis
Drawn	R Barwell	Coordination	
Dwg check	G Treigillis	Approved	S Finney
Scale at A1	Status	Rev	Security
1:1000	PRE	P1	STD
Drawing Number			
MMD-390510-C-DR-BB01-XX-0004			





- Notes
1. Design speed of new access road to be 30mph
  2. Carriageway width 5.5m.
  3. Concept design subject to 3d topographic translation.
  4. Construction of earthworks pavement formation and sub-surface services and drainage subject to agreement with arboriculturist.
  5. Attenuation for proposed access road not shown.
  6. Subject to detailed design.
  7. Subject to road safety audit 1/2.

Key to symbols

- Down Place (existing access) to be designated footway / cycleway
- Private access road
- Access for non-motorised users only

Reference drawings

**Preliminary Design**  
**NOT FOR CONSTRUCTION**

P1	09/05/2018	RB	First issue	GT	SF
Rev	Date	Drawn	Description	Ch'k'd	App'd

**MOTT MACDONALD**

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Client  
**Guildford Borough Council**

Title  
**Blackwell Farm**  
**A31 Access Road**  
**Private Access Road**

Designed	C Cole	Eng check	G Tregillis
Drawn	R Barwell	Coordination	
Dwg check	G Tregillis	Approved	S Finney
Scale at A1	Status	Rev	Security
1:100	PRE	P1	STD
Drawing Number <b>MMD-390510-C-DR-BB01-XX-0005</b>			

## **B. A31 Traffic Counts**

A31 Farnham Road j/w C147 Down Lane, Hog's Back, Guildford

Grid Reference: 496708 148634

Date: Thursday 15/03/2018

Weather : Weather

Turning movements

START TIME	END TIME	ENTERING JUNCTION FROM					JUNCTION TOTAL	
		A31 (from Guildford)	C147 Down Lane from Compton	A31 from Farnham	A31 from Farnham	A31 from Farnham	TOTAL	TOTAL
07:30	07:30	26	173	199	10	24	34	794
07:30	08:00	35	145	180	10	71	81	854
08:00	08:30	58	186	244	41	133	174	980
08:30	09:00	53	152	205	28	127	155	728
09:00	09:30	41	123	164	24	44	68	737
09:30	10:00	34	90	124	8	21	29	442
10:00	11:00	67	252	319	9	23	32	719
11:00	12:00	84	265	349	8	36	44	860
12:00	13:00	75	261	336	4	33	37	770
13:00	14:00	97	303	400	15	24	39	853
14:00	15:00	144	491	635	15	34	49	1065
15:00	16:00	140	559	699	27	27	54	1075
16:00	17:00	122	394	516	34	11	45	761
17:00	18:00	110	313	423	42	11	53	804
18:00	19:00	148	402	550	61	8	69	1017
19:00	20:00	131	433	564	47	12	59	1017
20:00	21:00	125	316	441	30	16	46	767
21:00	22:00	89	241	330	7	8	15	563
TOTAL		1579	5099	6678	420	663	1083	14806

CLASSIFICATION	ENTERING JUNCTION FROM					JUNCTION TOTAL	
	A31 (from Guildford)	C147 Down Lane from Compton	A31 from Farnham	A31 from Farnham	A31 from Farnham	TOTAL	TOTAL
0800-0900	94	285	52	239	810	33	33
Motor Cars	15	30	12	18	59	4	4
Light Goods	2	8	4	1	13	1	1
OGV1	0	2	0	0	4	0	0
OGV2	0	0	0	0	5	0	0
Motor Cycles, etc	0	3	1	2	1	0	0
Buses & Coaches	111	338	66	260	862	38	38
Pedal cycles	0	0	0	1	0	0	0
TOTAL	264	761	87	18	377	310	310
1700-1800	10	65	18	0	35	53	53
Motor Cars	2	2	0	0	1	7	7
Light Goods	0	0	0	0	3	0	0
OGV1	1	4	2	1	3	1	1
OGV2	2	3	1	1	2	0	0
Motor Cycles, etc	279	835	108	20	421	371	371
Buses & Coaches	2	1	0	0	0	0	0
Pedal cycles	2	1	0	0	0	0	0
TOTAL	284	761	87	18	377	310	310

Note  
1 2 or 3 axle rigid vehicles > 3.5 tonnes  
OGV2 4 or more axle rigid, 3 or more axle articulated or other goods vehicles with trailer

Prepared by	Sham Byrne	Name	Index / Signature	Date
Checked by		Sham Byrne	SB	21/03/2018
Drawn by				
Comments				
Project No.	P-15/16/17/18			
File reference	P-15/16/17/18			



A31 Farnham Road j/w Down Place, Guildford

Date: Thurs 15/03/2018  
Weather : Weather

Turning movements

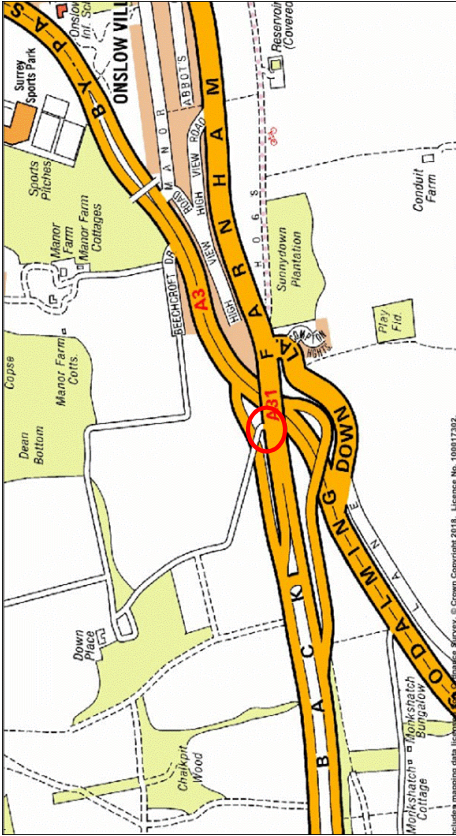
START TIME	END TIME	ENTERING JUNCTION FROM					JUNCTION TOTAL	
		Down Place	A31 Farnham Road	A31 Hog's Back			TOTAL	
07:30	07:30	0	2	2	0	1	1	2
07:30	08:00	2	1	3	0	4	0	0
08:00	08:30	0	0	0	0	0	0	0
08:30	09:00	1	0	1	0	1	0	2
09:00	09:30	0	0	0	0	0	1	1
09:30	10:00	0	0	0	0	0	0	0
10:00	11:00	0	0	0	0	0	0	0
11:00	12:00	0	0	0	1	1	0	1
12:00	13:00	2	0	2	0	1	1	1
13:00	14:00	0	1	1	0	2	0	3
14:00	15:00	0	0	0	2	2	0	0
15:00	16:00	2	2	4	0	0	0	4
16:00	16:30	0	0	0	0	0	0	0
16:30	17:00	0	0	0	0	0	0	0
17:00	17:30	0	0	0	0	1	0	0
17:30	18:00	0	0	0	0	0	0	0
18:00	18:30	1	1	2	0	2	2	0
18:30	19:00	1	0	1	0	0	0	1
TOTAL		9	7	16	0	15	4	35

CLASSIFICATION	ENTERING JUNCTION FROM				
	Down Place	A31 Farnham Road	A31 Hog's Back		
0800-0900	1	0	0	1	0
Motor Cars	0	0	0	0	0
Light Goods	0	0	0	0	0
OGV1	0	0	0	0	0
OGV2	0	0	0	0	0
Buses & Coaches	0	0	0	0	0
TOTAL	1	0	0	1	0
Motor & Pedal cycles	0	0	0	0	0
1700-1800	0	0	0	1	0
Motor Cars	0	0	0	0	0
Light Goods	0	0	0	0	0
OGV1	0	0	0	0	0
OGV2	0	0	0	0	0
Buses & Coaches	0	0	0	0	0
TOTAL	0	0	0	1	0
Motor & Pedal cycles	0	0	0	0	0

Note  
2 or 3 axle rigid vehicles > 3.5 tonnes  
OGV1  
4 or more axle rigid, 3 or more axle articulated, or other goods vehicles with trailer  
OGV2

Prepared by:	Name	Initials / Signature	Date
Checked & approved by:	Sarah Bryane	SB	21/03/2018
Status			
Comments			
Project No.			
For reference	P:\roads\A31\CT\150318		

Grid Reference: 496546;148613





BLACKWELL FARM, LAND ALLOCATION  
SOUTHERN ACCESS

## LANDSCAPE IMPACT REPORT

ON BEHALF OF GUILDFORD BOROUGH COUNCIL  
IN RESPONSE TO LOCAL PLAN INSPECTOR'S QUESTION Q 11.15

15TH MAY 2018  
MA.3123.RP001





# INTRODUCTION

Macfarlane + Associates have been commissioned by Guildford Borough Council to provide an independent landscape assessment in relation to the landscape impacts of the:

- Council's proposed southern access route, and the
- Blackwell Farm's alternative proposed southern access route

Both proposals connect the A31 with the proposed Blackwell Farm masterplan.

The assessment specifically addresses the Planning Inspector's question regarding the southern access impacts upon the landscape and will consider the appropriate mitigation measures.

## Inspector's Question

*Can access to this site from the south be successfully achieved from the A3 / A31 without significant detriment to the landscape?*

This assessment has been conducted without the benefit of an up-to-date ecological habitat survey; arboricultural survey, soil resource survey or landscape visual impact assessment. The included drawings are created using uneditable base information, to this limitation Macfarlane + Associates have overlaid information without specific base coordinates.

The Blackwell Farm, Hogs Back Land Allocation (A26) is located to the west of central Guildford. The land is owned by the University of Surrey and is currently being used as arable farmland.

Presently, the only vehicular route through the site is Down Place, accessible from Farnham Road, A31. Down Place has a bridge which spans across the east-bound route of the Farnham Road, A31.

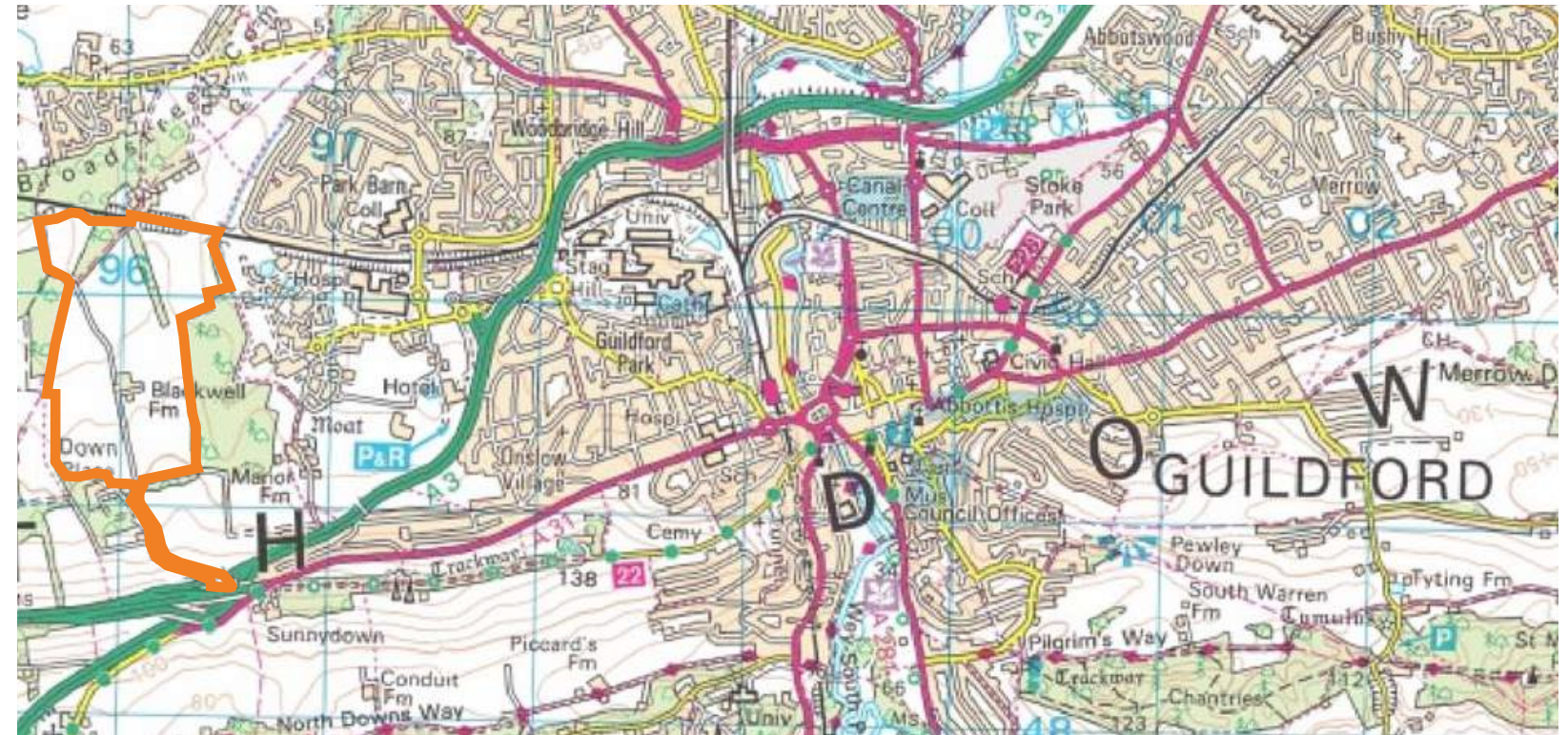


Fig 1 : OS Location Plan

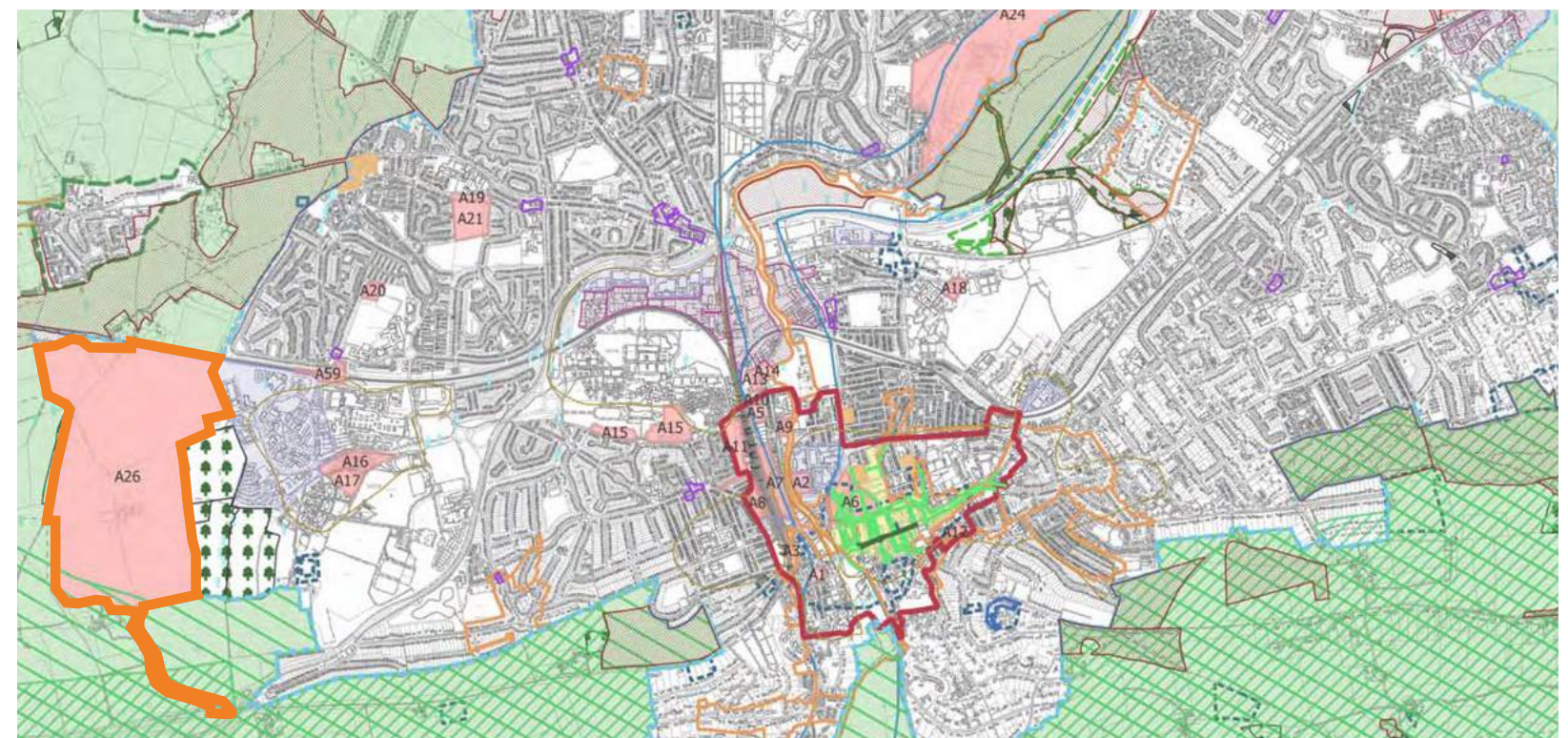


Fig 2 : Guildford Borough Council - Urban Area Local Plan  
Blackwell Farm indicated as Area 26  
Site Boundary ———



SITE PHOTOGRAPHS



Fig 3 : Panorama facing north from Down Place



Fig 4 : Down Place and Farnham Road, facing west from bridge



Fig 5 : Facing south from the Down Place access to Blackwell House



Fig 6 : View from southern aspect of Down Place tree line, facing east



Fig 7: View east from A31 to Down Place access



Fig 8: OS Map with Photo Point Locations



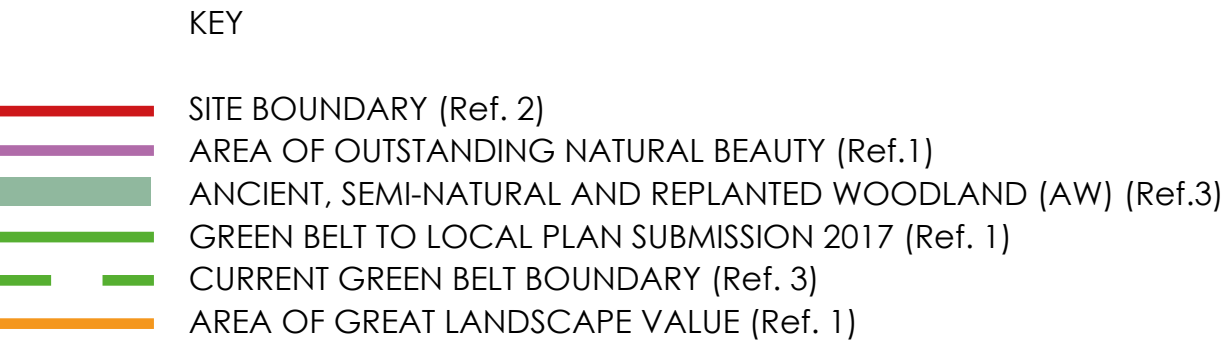
# BASELINE ANALYSIS - DESIGNATIONS

The Blackwell Farm, Hogs Back Land Allocation (A26) sits within and close to statutory and non-statutory designated sites. Figure 9 shows the proximity of these designations to the site area, correct to Guildford Borough Council's Submission Local Plan 2017.

Designations have been plotted on by Macfarlane + Associates, using Guildford Borough Council Submission for Local Plan documents (Ref. 1 and 2), and Magic Map (Ref. 3).

The proposed southern access routes will be located within: Surrey Hills Area of Outstanding Natural Beauty; Surrey County Council's Area of Great Landscape Value and the Metropolitan Green Belt.

The proposals will seek to amend the existing Green Belt boundaries to the perimeter of the proposed access route.





# BASELINE ANALYSIS - TOPOGRAPHY

Topographical analysis of the site shows the extent of the level change as the land falls north from the A31, Farnham Road.

Mature tree planting along the A31 and Down Place will aid to masking views from and on to either of the proposed access routes.

The topography creates a ridge within the landscape to the east of Down Place. This creates the AONB's characteristic panoramas and also aids to conceal the access routes as they fall behind the horizon at the western aspect.

KEY

SITE BOUNDARY (Ref. 2)

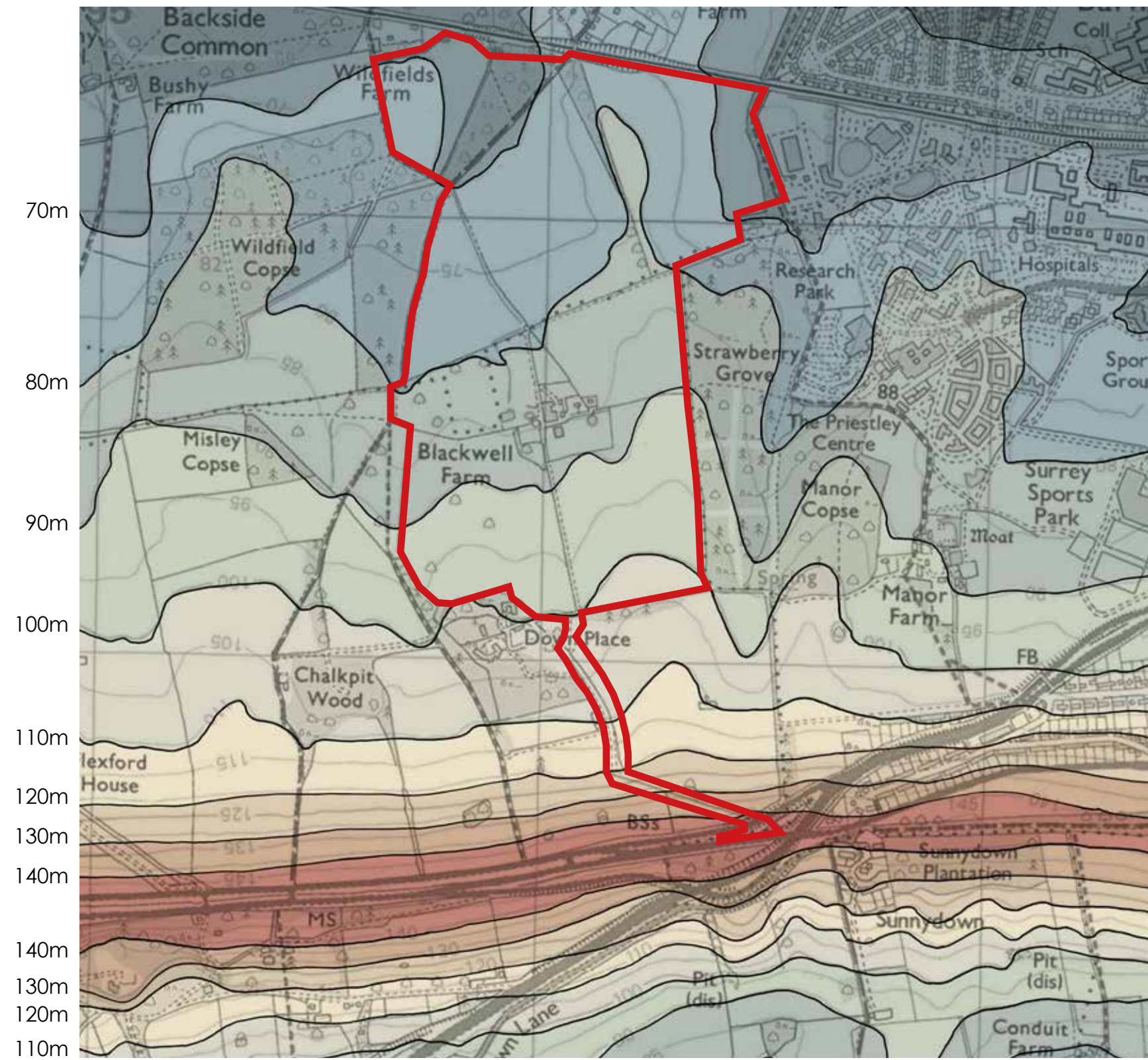


Figure 10 : OS Location Plan with 10m Topographic Levels



# BASELINE ANALYSIS - AONB

The northern edge of the Surrey Hills Area of Outstanding Natural Beauty is located to the south of the proposed site boundary. Both southern access routes will transect the AONB to connect the site to the A31.

The Hog's Back and Puttenham Vale accommodates “dramatic views of Hog’s Back ridge from wide area, and extensive views northwards from Hog’s Back”; “large open arable fields on dip slope and smaller irregular fields with hedges on scarp slope (Hog’s Back)” and “species rich semi-ancient natural woodland, shaws and hedgerows” (Ref. 4).

There is an existing impact from traffic and suburban pressures on the AONB. Furthermore, a decline in the quality of woodland and hedgerows has been noted as an issue, in addition to a loss of beech trees (Ref. 4).

The Surrey Hills AONB Management Plan (Ref. 5) acknowledges the landscape will change due to the social and economic forces placed upon it and strives to emphasise the need to ensure that these changes will conserve and enhance the features that define the special character of the AONB. Of which it lists as:

Views	Commons	Historic Buildings
Woodland	Farmland	Country Lanes
Parkland	Heathland	
Tranquility	Chalk Grassland	

Designations have been plotted on by Macfarlane + Associates, using Guildford Borough Council Submission Local Plan (Ref. 1 and 2).

KEY

SITE BOUNDARY (Ref. 2)

AREA OF OUTSTANDING NATURAL BEAUTY (Ref.1)

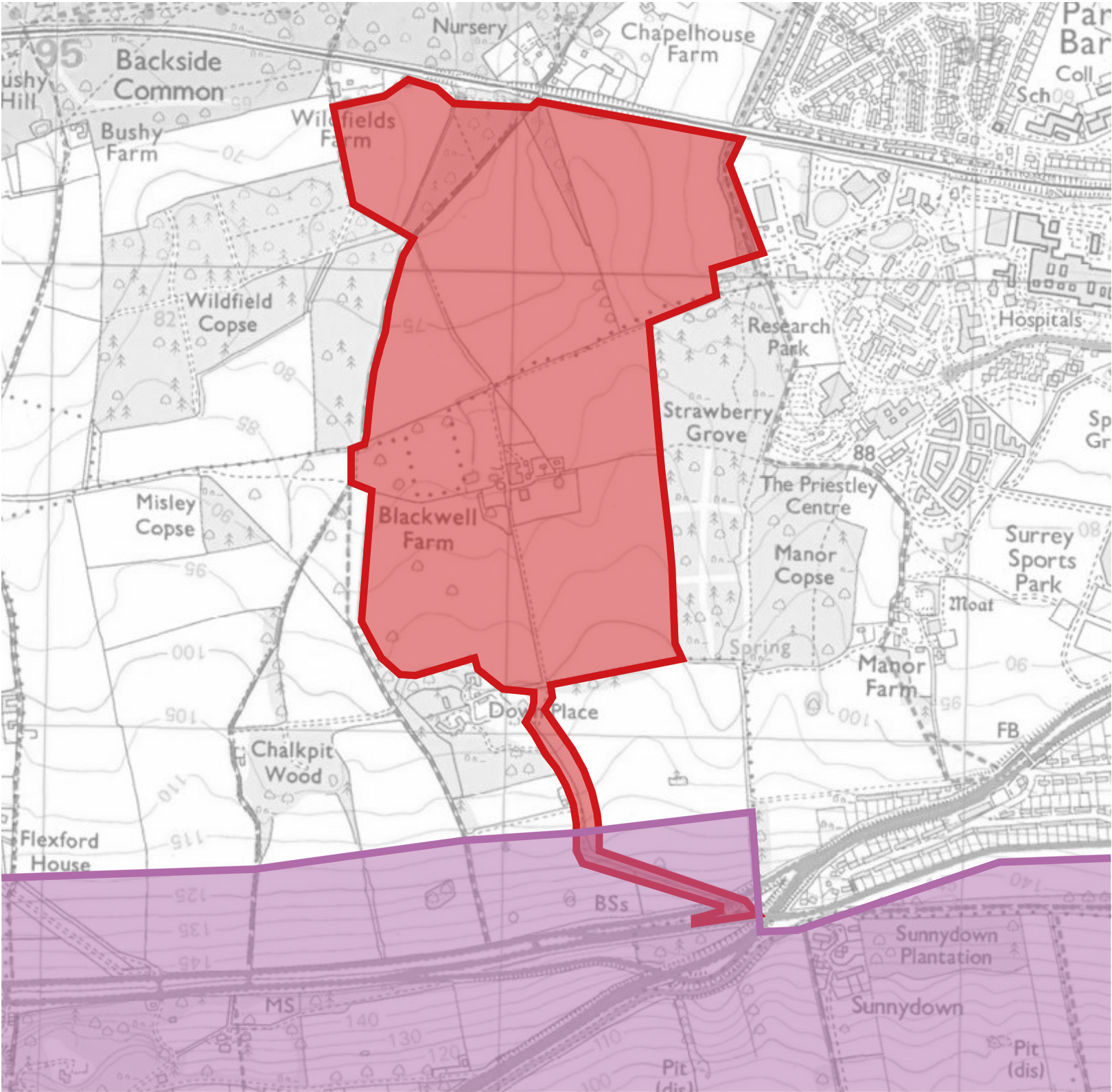


Figure 11 : OS Location Plan with Mapped AONB Designation



# BASELINE ANALYSIS - GREEN BELT

Green Belts have five key purposes, as identified in the National Planning Policy Framework (NPPF) (Ref. 6):

1. To check the unrestricted sprawl of large built-up areas
2. To prevent neighbouring towns merging into one another
3. To assist in safeguarding the countryside from encroachment
4. To preserve the setting and special character of historic towns
5. To assist in urban regeneration, by encouraging the recycling of derelict and other urban land

There is a presumption against development on Green Belt land. Local authorities should plan positively to enhance uses, biodiversity and quality of the landscapes. Boundaries should only be reviewed in exceptional circumstances, which promote sustainable development focussed towards the urban areas of the Green Belt boundary.

Designations have been plotted on by Macfarlane + Associates, using Guildford Borough Council Submission Local Plan (Ref. 1 and 2), and Magic Map (Ref. 3).

The eastern boundary of the Green Belt is proposed to be realigned to accommodate the Blackwell Farm development and southern access route.

## KEY

-  SITE BOUNDARY (Ref. 2)  
 GREEN BELT TO LOCAL PLAN SUBMISSION 2017 (Ref. 1)  
 CURRENT GREEN BELT BOUNDARY (Ref. 3)

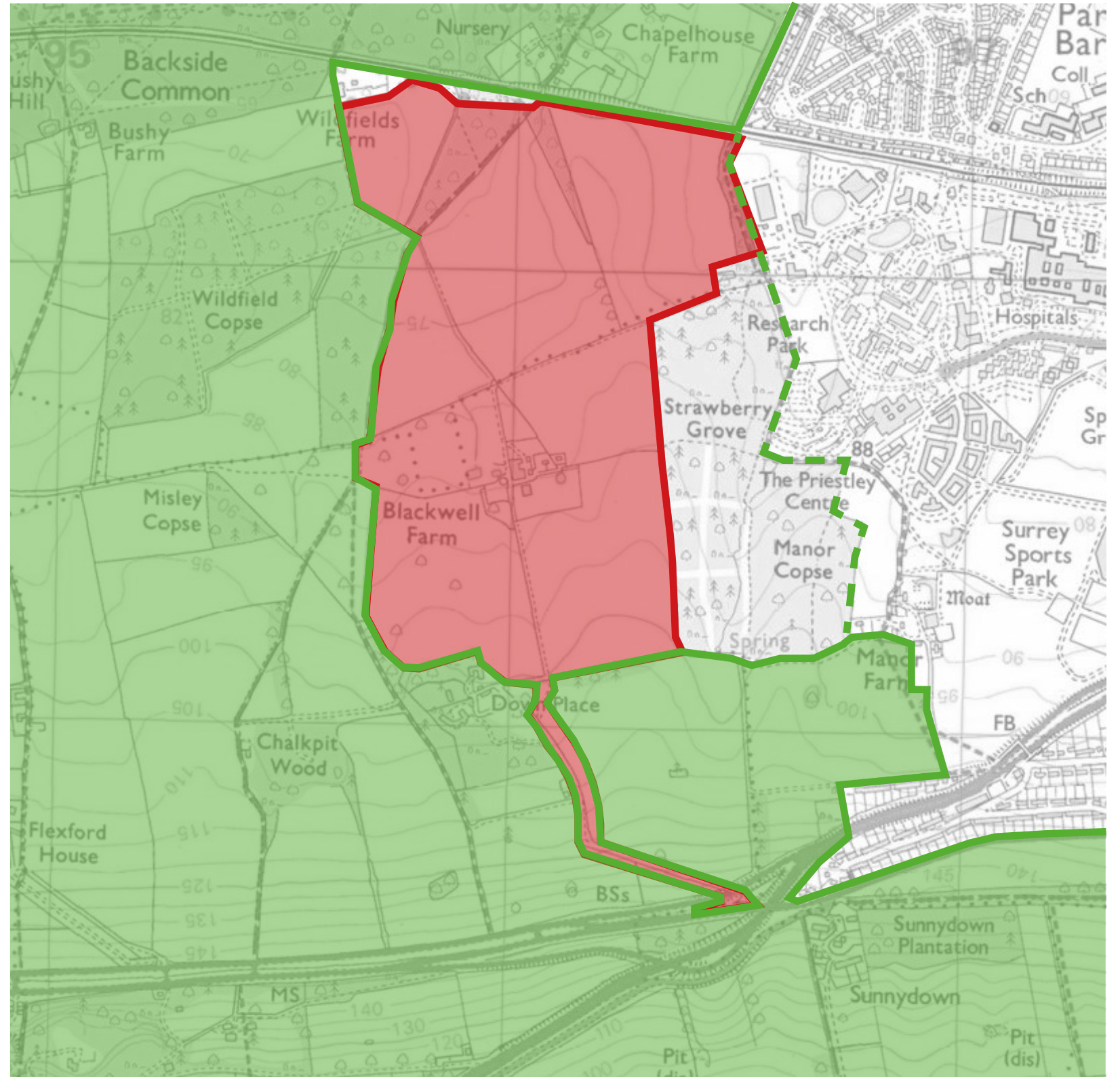


Figure 12 : OS Location Plan with Mapped Green Belt Designation



# BASELINE ANALYSIS - AGLV

Areas of Great Landscape Value are a county level designation, which act as a buffer to the Surrey Hills AONB whilst providing an individual quality. Consequently, they are protected for their own landscape conservation and to protect views in to and out of the AONB.

The northern slopes of the Hog's Back was included in the AGLV designation following a 1971 review. The Surrey Hills AGLV Review (Ref. 6) states that any development within the AGLV: *"should be consistent with the intention of protecting the distinctive landscape character of the area."* Specifically to Guildford Borough Council, any development will conserve the local landscape and support management practices, which do not adversely impact on the landscape characteristic patterns.

Both southern access routes will intersect the AGLV to connect to the A31. The proposals overlap but will not affect the boundary position of the AGLV.

Designations have been plotted on by Macfarlane + Associates, using Guildford Borough Council Submission Local Plan (Ref. 1 and 2).

KEY

SITE BOUNDARY (Ref. 2)

AREA OF GREAT LANDSCAPE VALUE (Ref. 1)

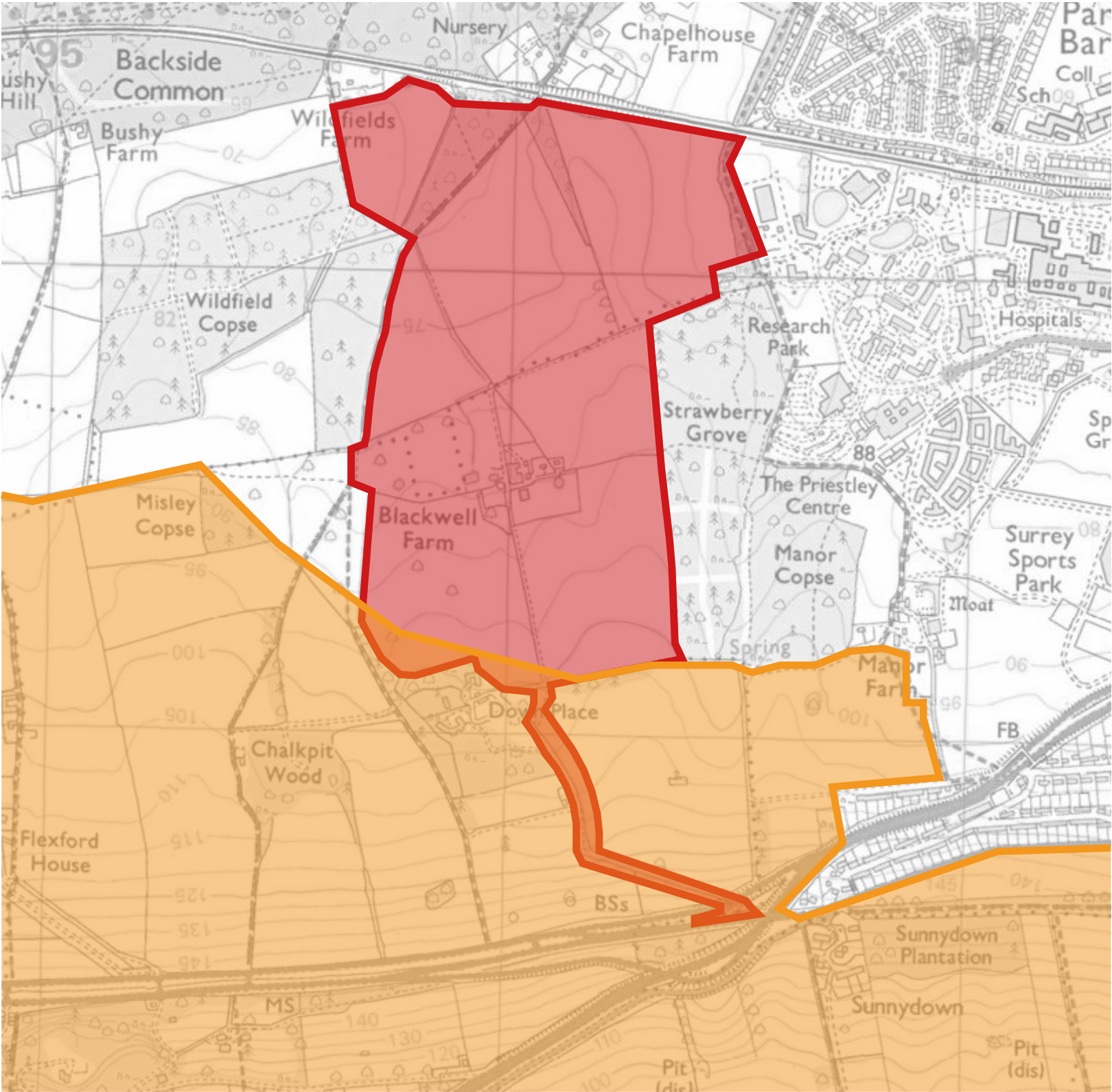


Figure 13 : OS Location Plan with Mapped AGLV Designation



# PROPOSAL 1 - GUILDFORD BOROUGH COUNCIL

Guildford Borough Council have submitted a proposal created by Mott MacDonald which shows a route aligned to Down Place.

The route creates a new access to the A31 approximately 20m west from the current Down Place entrance. The entrance will require signage and lighting to ensure a safe junction. Macfarlane + Associates understand this proposal intends to widen the A31 to the south, to allow adequate visibility and traffic lanes.

The route will then bridge across the northern A31 slip road route to turn west and align with the southern tree line boundary of Down Place. Developing a bridge across the A31 slip road will require creating a break in the existing tree planting along this A31 northern boundary.

To accommodate the steep change in levels at this section, the road requires an embankment on its southern aspect and a length of retaining wall to the northern interface with Down Place.

The proposals intend to break the Down Place tree line at the western corner. From our site visit (02.05.2018), there appears to be a break in the density of vegetation at this point, however this requires further arboricultural and ecological surveys coordinated to the proposals.

The proposals continue to follow Down Place along the eastern aspect. At this stretch, the road will be hidden from higher viewpoints to the east due to the topography of the site. Furthermore, the embankments are less severe as the change in level shallows.

Area 1: See Figure 15

Area 2: See Figure 16

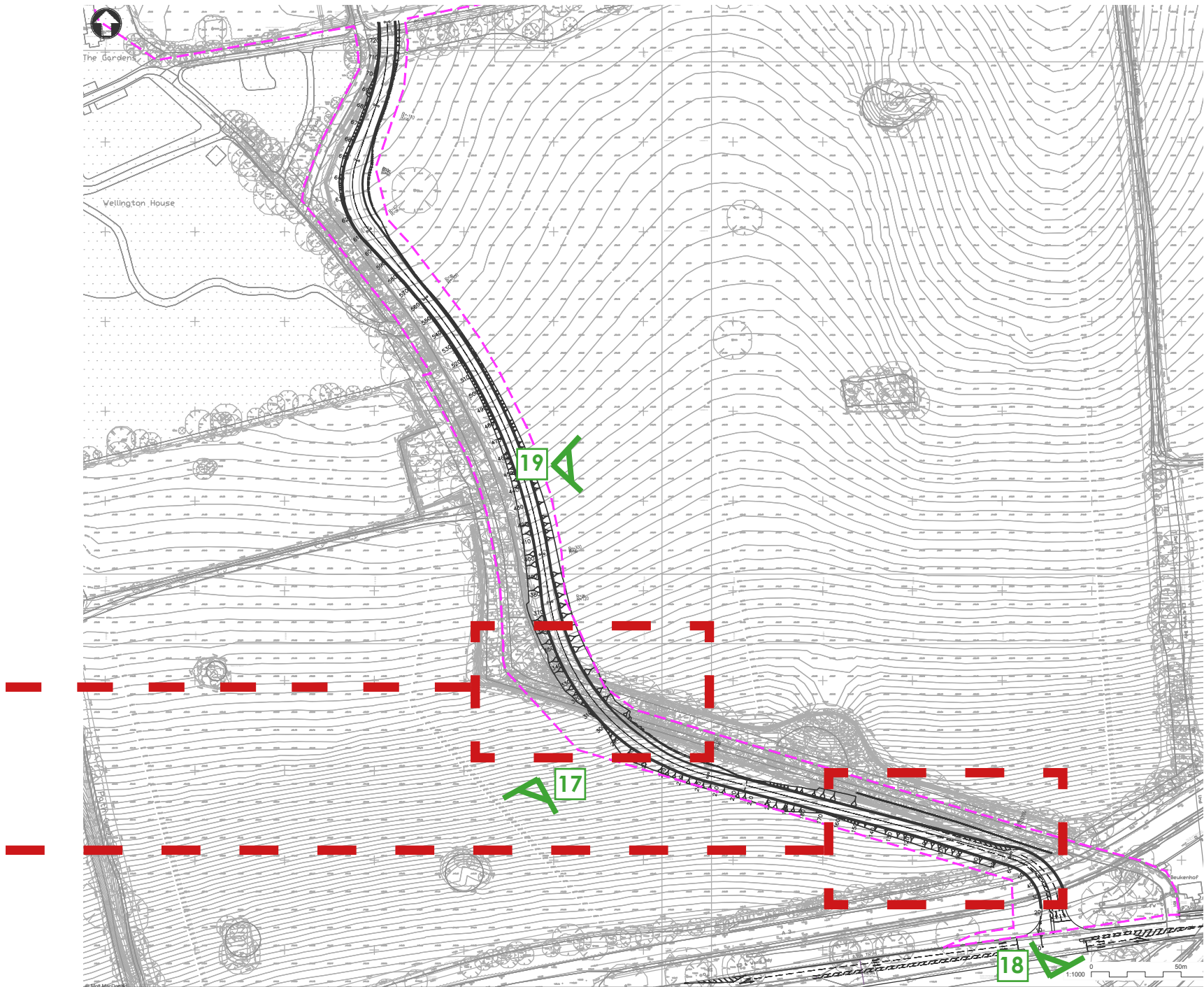


Figure 14 : Mott MacDonald Access Route Proposal



# PROPOSAL 1 - GUILDFORD BOROUGH COUNCIL

To provide a more conclusive assessment of the proposal's impacts upon the existing tree planting, Macfarlane + Associates have overlaid the proposed route layout (Ref. 8) with a tree constraints plan (Ref. 7). This assessment has been conducted based on these two references only and without the support of a thorough arboricultural survey. The uneditable base information has been positioned on considered points and is not arranged to coordinate point accuracy.

The proposals will break the tree lines at three locations:

### Down Place (Fig. 15)







The route has been positionned to minimise the extent of tree removal along this mature tree lined corridor. The surveys show the road parameters extend in to the root protection areas for the associated embankments.

### A31 Boundary Bridge (Fig. 16)

Group 144 will be reduced to allow bridge access across the A31 route. Traversing the root protection area of this corner is unavoidable to develop a new bridge crossing.

The tree survey information does not include for the tree planting along the A31 where the proposed road access will be located (Fig. 16). At the time this assessment is conducted, it is unclear the degree of tree removal required here for junction safety.

### KEY

-  BS CATEGORY A TREE - TREE OF HIGH QUALITY
-  BS CATEGORY B TREE - TREE OF MODERATE QUALITY
-  BS CATEGORY C TREE - TREE OF LOW QUALITY
-  BS CATEGORY U TREE - TREES UNSUITABLE FOR RETENTION
-  ZONE 1 - ROOT PROTECTION AREA
-  ZONE 2 - SPACE FOR FUTURE GROWTH

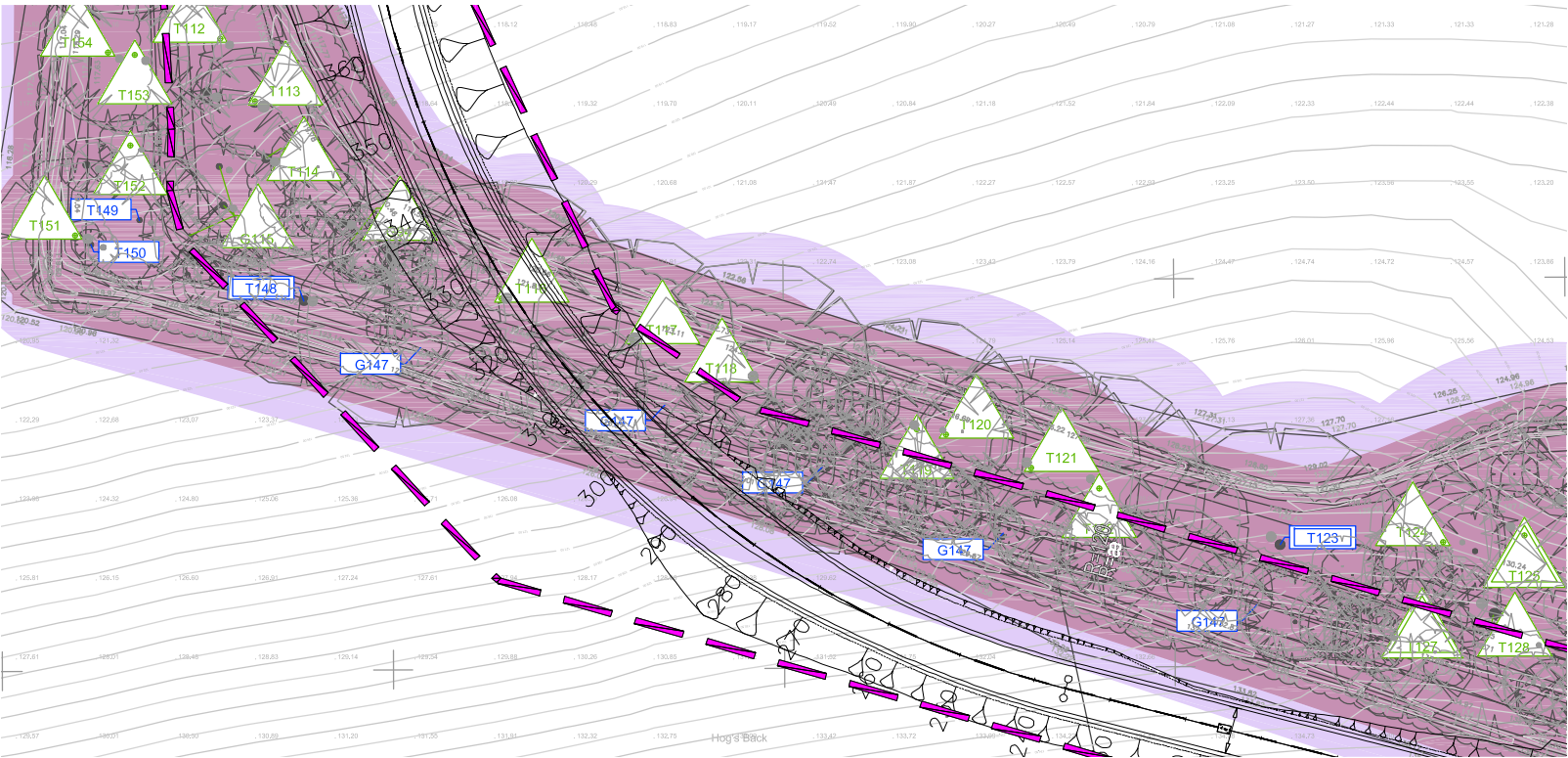


Figure 15 : Area 1 Mott Macdonald Access Route Proposal

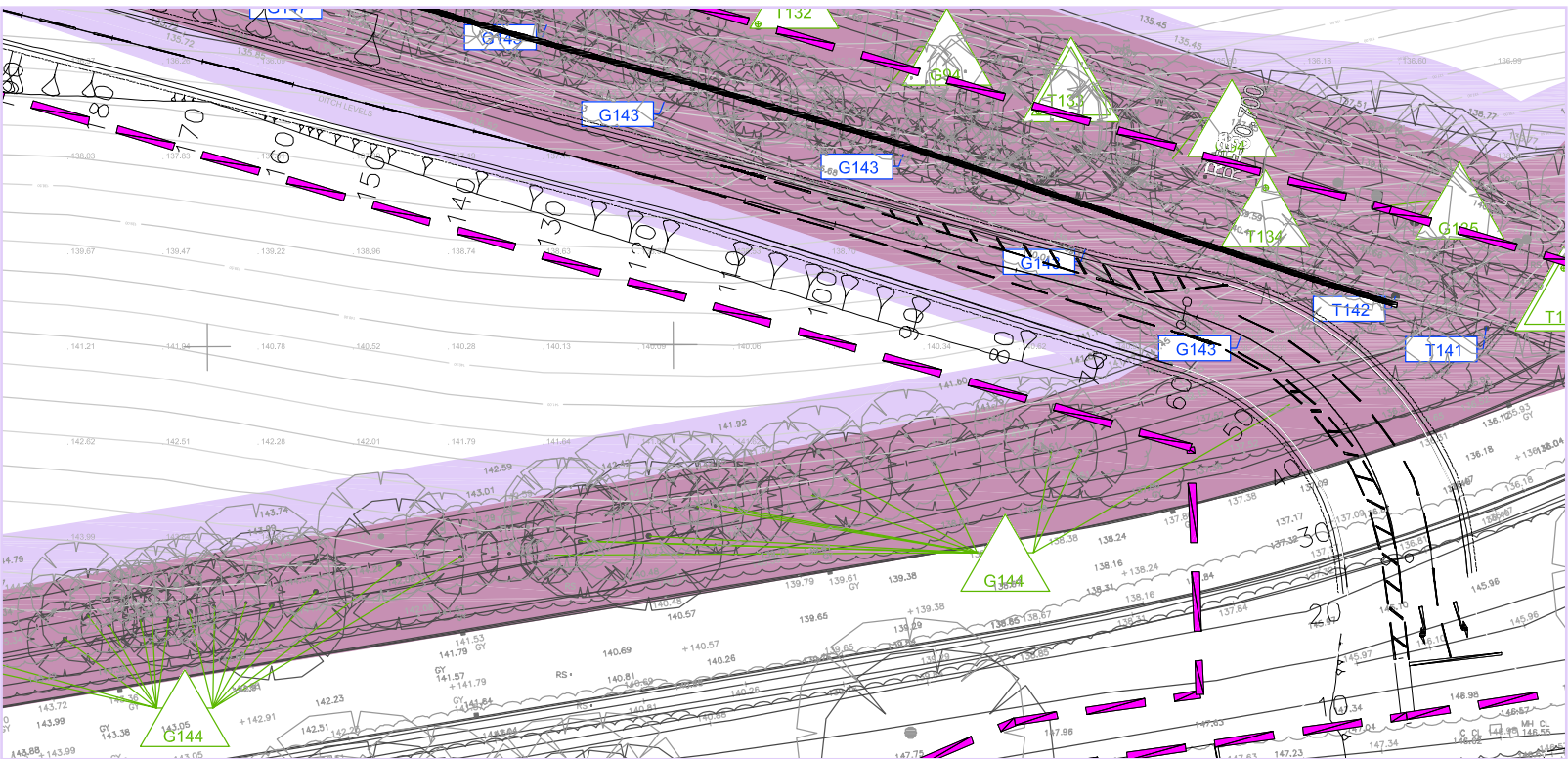


Figure 16 : Area 2 Mott MacDonald Access Route Proposal



# PROPOSAL 1 - GUILDFORD BOROUGH COUNCIL

Photos show keys views from and on to the proposed access route; please refer to Figure 14 for location details. View locations to proposed plans are approximate, based on a site visit.

Figure 17 shows the extent of level change from the A31. At the ridge the A31 forks and the northern route drops in to the valley, of which the proposed route will bridge across. Due to the topography and mature tree planting, the views of the proposals from the A31 will be reduced for a passing vehicle.

Figure 18 is taken approximately immediately opposite the intended entrance, Down Place existing entrance can be seen in the background. The access will require tree removal and reduction in vegetation to install adequate visibility, signage and lighting.

Figure 19 highlights the change in topography from Down Place. At this point, the proposals drop below the horizon of the existing landscape and so will help conceal the route from any higher aspect to the east.



Figure 17 : View facing south towards the A31, refer to Fig. 14 for location.



Figure 18 : Facing east on the A31 to Down Place entrance, refer to Fig. 14 for location.



Figure 19 : Facing east from the Down Place tree line, refer to Fig. 14 for location.



# PROPOSAL 2 - UNIVERSITY OF SURREY (BLACKWELL FARM)

The University of Surrey have submitted a proposal by Peter Brett Associates (PBA), which outlines a route which curves east and west away from the Down Place to overcome the level change and to provide a junction crossing with Down Place.

A new access is required across the A31, which will bridge across the northern A31 route, similar to the Mott MacDonald proposal. As to Proposal One the entrance will require further detail to ensure a safely illuminated and signed access junction.

The route curves west in line with Down Place and requires embankments to overcome the level change at this point. Proposal Two is located further south, away from the tree line than Proposal One.

The proposals curve west and turn to break the tree line within an existing copse of tree planting. At this point, the embankments are no longer required as the route has dropped to existing levels.

The junction with Down Place will allow existing residents to continue their right of access. The route will be retained as a private vehicular access and a quieter passage for cyclists and pedestrians.

On the eastern aspect of the tree line, the route will curve and join at the base of Down Place.

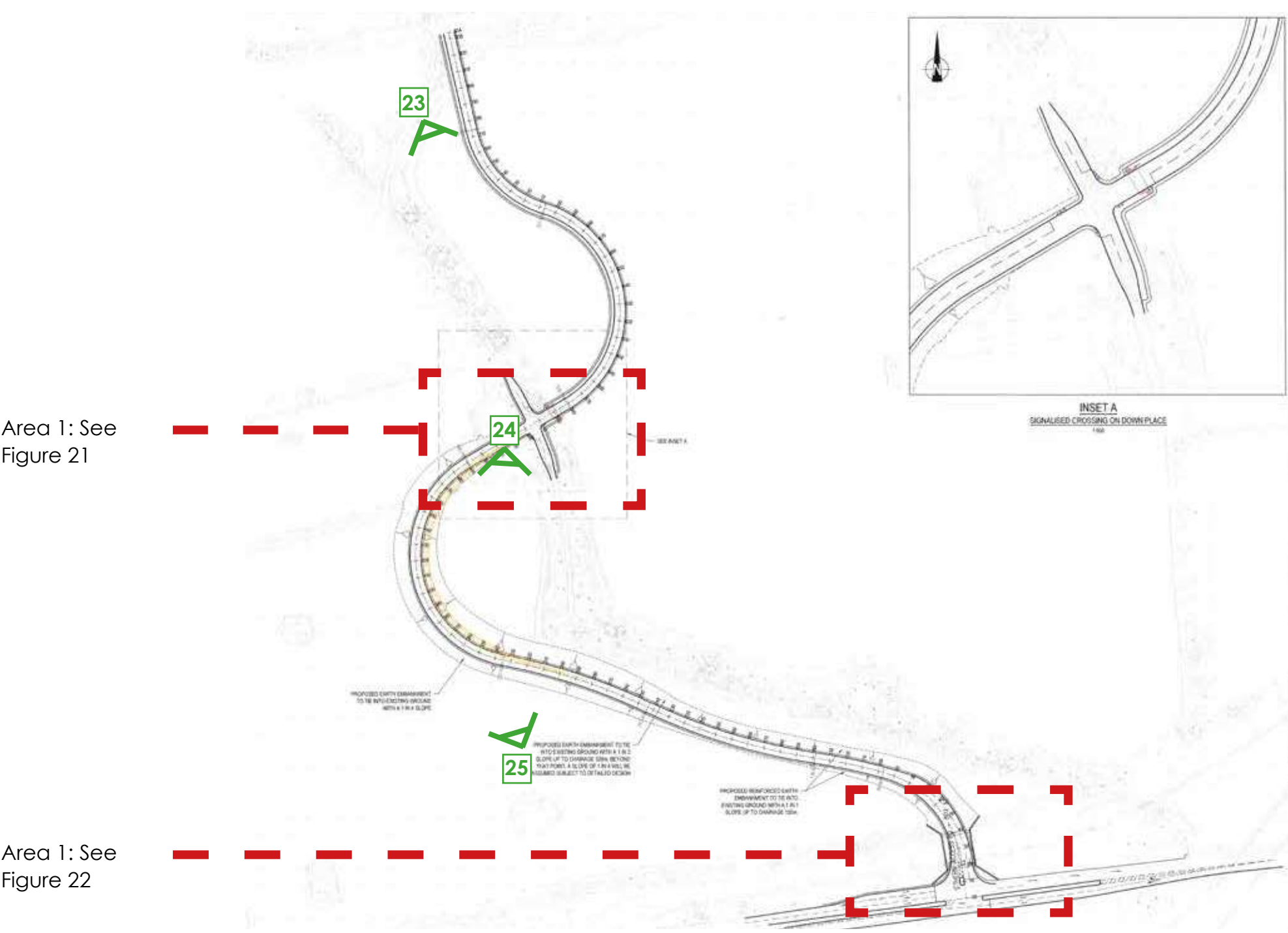


Figure 20 : PBA Access Route Proposal

# PROPOSAL 2 - UNIVERSITY OF SURREY (BLACKWELL FARM)

Macfarlane + Associates have overlaid the proposed route layout (Ref. 8) with a tree constraints plan (Ref. 7). This assessment has been conducted based on these two references only and without the support of a thorough arboricultural survey. The uneditable base information has been positioned on considered points, this is not arranged to coordinate point accuracy.

The proposals will break the tree lines at three locations:

**Down Place (Fig. 21)**  
The proposal will cross and realign the existing Down Place route to provide a safe junction to allow residents to continue with their right of access. The survey shows root protection area extends across the existing Down Place route and provides a buffer both sides of the road.

**A31 Boundary Bridge (Fig. 22)**  
As to Proposal 1; Group 144 will be reduced to allow bridge access across the A31 route. Traversing the root protection area of this corner is unavoidable to develop a new bridge crossing.

The tree survey information does not include for the tree planting along the A31 where the proposed road access will be located (Fig. 22). At the time this assessment is conducted, it is unclear the degree of tree removal required here for junction safety.

KEY

BS CATEGORY A TREE - TREE OF HIGH QUALITY

BS CATEGORY B TREE - TREE OF MODERATE QUALITY

BS CATEGORY C TREE - TREE OF LOW QUALITY

BS CATEGORY U TREE - TREES UNSUITABLE FOR RETENTION

ZONE 1 - ROOT PROTECTION AREA

ZONE 2 - SPACE FOR FUTURE GROWTH

Figure 21 : Area 1 PBA Access Route Proposal

Figure 22 : Area 2 PBA Access Route Proposal

MA.3123.RP001 BLACKWELL FARM, AND ALLOCATION - ACCESS IMPACT

13



# PROPOSAL 2 - UNIVERSITY OF SURREY (BLACKWELL FARM)

Photos show keys views from and on to the proposed access route; please refer to Figure 20 for location details. View locations to proposed plans are approximate, based on a site visit.

Figure 23 faces south to the A31 on the top of the horizon. The view is taken approximately where the proposed route will curve back in to the tree line; therefore, will be visible from this section of the A31 before it drops in to the valley.

Figure 24 is taken at the base of Down Place, the tree planting lining the field is a guideline for the location of Down Place. At this point, it is understood the proposed route will curve through the open field and join Down Place to the right of this viewpoint location.

Figure 25 is taken at the curve of Down Place, facing north towards the existing private residence. At this location, the route will leave the alignment of the tree line and curve in to the field to accommodate the level change; then curve back and break the tree line approximately where the copse of tree planting can be seen in the midground of the image.



Figure 23 : View facing south towards the A31, refer to Fig. 20 for location.



Figure 24 : Facing south from Down Place, refer to Fig. 20 for location.



Figure 25 : Facing north from the Down Place tree line, refer to Fig. 20 for location.



# PROPOSAL ASSESSMENT

We understand both proposals have been created to optimise the level changes, with minimal tree removal or visual impact from and in to the Area of Outstanding Natural Beauty. Furthermore, both proposals have considered traffic assessments and the proposals account for volume and safe access on to the A31.

This assessment is concerned with analysing the impacts of the proposals on the landscape. As stated, there are limitations in the analysis as this is based on general proposals and limited survey information on the existing baseline conditions.

## Earthworks

Both proposals require significant embankments to incorporate the topography of the site. This will require detailed design and considerations in regards to drainage and the associated wider impact on the landscape.

Proposal One is situated closer to the Down Place route and so the embankment encroaches on the existing tree planting and RPA. Furthermore, Proposal One includes provision for a retaining wall to prevent earthworks spilling on to Down Place. Full detailed design is required to conclusively assess the landscape impacts of the construction details and methodology for both engineering elements. In overview; both features will consequently require significant tree removal, the extent of which is not clear at this stage.

Proposal Two embankments are located away from the existing tree line and so will have reduced impacts, however the route curves out in to the fields in order to integrate the topography. Thus avoiding impact to trees, but creating a larger visual impact.

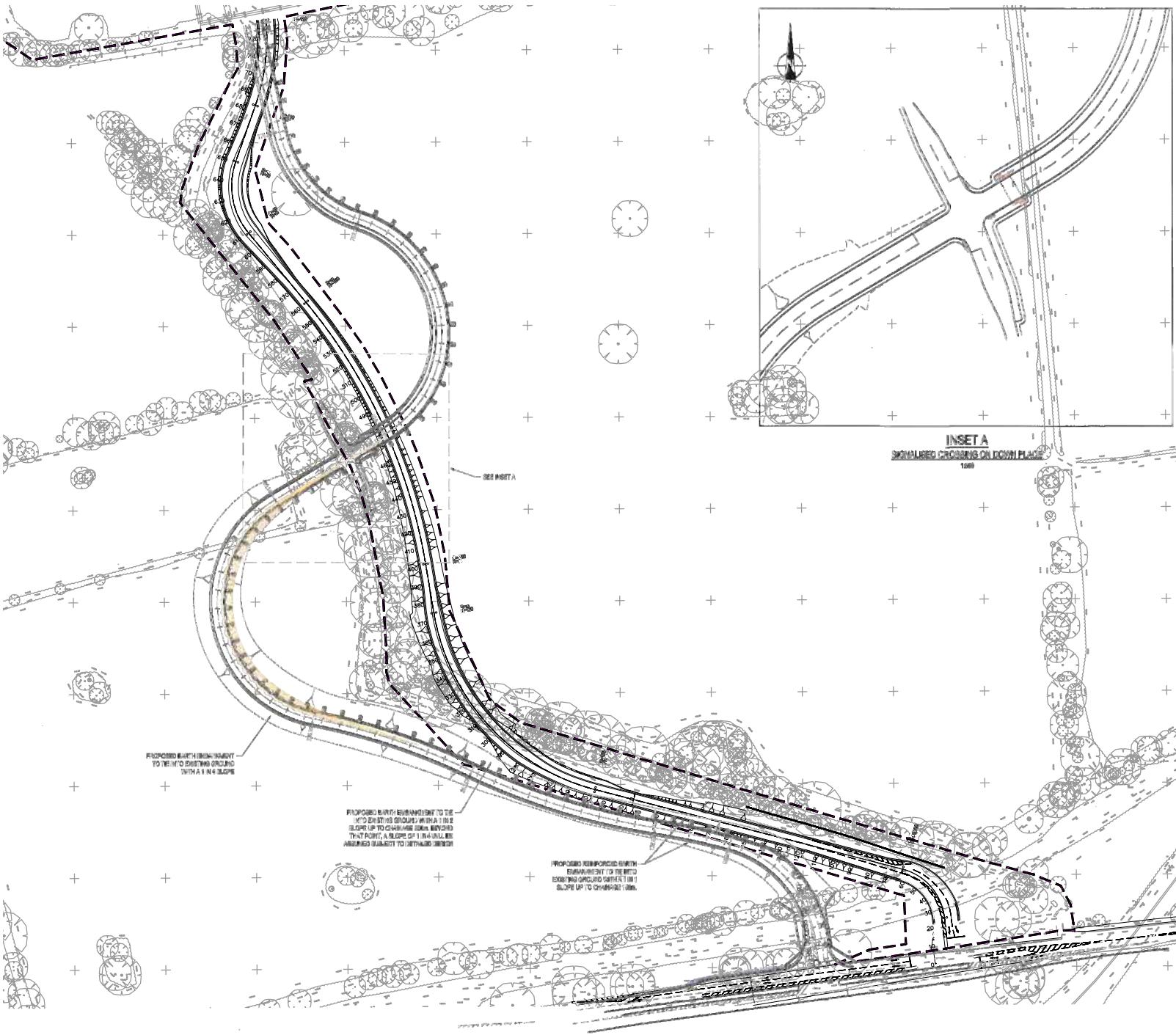


Figure 26 : Mott MacDonald and PBA Access Route Proposal

# PROPOSAL ASSESSMENT

## Views

Immediate views of the road will be from five key areas:

1. Passing traffic on the A31, before mature tree planting and level change
2. Pedestrians at the southern curve of Down Place facing north;
3. View from the northern reach of Down Place facing south towards the hill and A31;
4. Private residences within Blackwell Farm site, with views south towards the hill and A31
5. Passing traffic on the A31 of proposed new junction

Both proposals are benefiting from the fall in levels to the north and the bank across the field which allows the routes to fall behind the horizon. As shown in the analysis of both Proposals, there are limited restricted views from the A31 and from surrounding private residences.

Proposal One is more sympathetic to the private residences as it crosses the tree line before the curve of Down Place, whereas Proposal Two curves out in the western landscape and is thus more apparent to the private residence and passing traffic of the A31.

As Proposal One follows the tree line, it drops below the horizon line when it has crossed to the eastern aspect of Down Place. Conversely, Proposal Two extends in to the landscape and will be more visually apparent from the higher northern viewpoints.

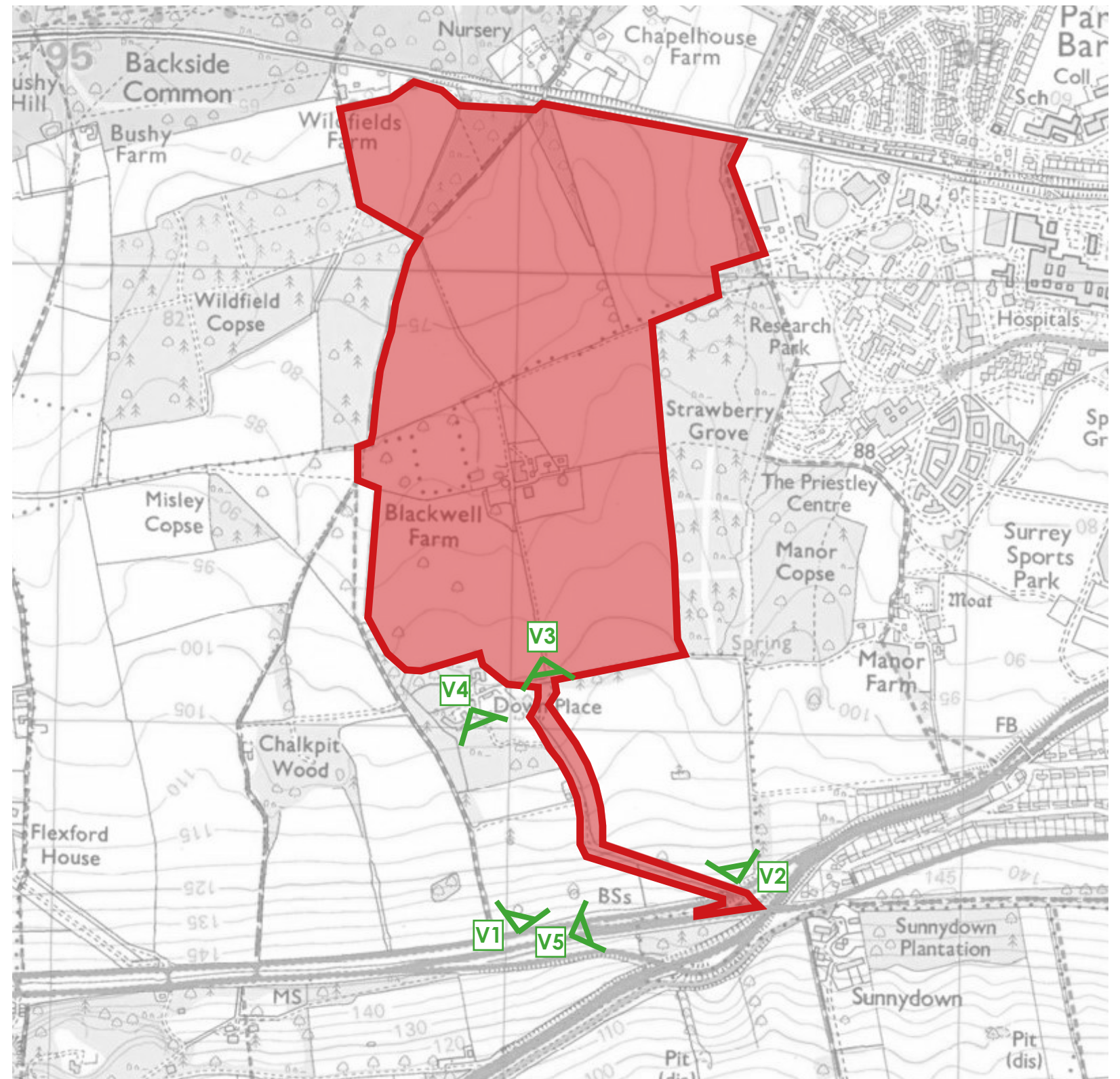


Figure 28 : OS Location Plan with Immediate Key Views Identified



# PROPOSAL ASSESSMENT

## Tree Planting

Both proposals include significant tree removal from the A31 entrance and at a point along Down Place to allow the route to traverse the road.

The quantum of trees is not possible to estimate at this stage of design, however the site supports a combination of Category A to Category U trees.

The A31 junction will require road widening or a reduction in vegetation to allow for lighting, signage and visibility. Similarly, tree removal will be necessary to allow bridge access across the northern A31 route.

Proposal One breaks through Down Place at one localised location, whereas Proposal Two will include a wider area of tree removal to accommodate the road. However, the embankments and proximity of Proposal One's route to the tree line may have associated tree removal.

In addition to identified tree removal, the Tree Constraints Plan (Ref. 7) highlights two specific areas in which development should be restricted. Namely: Root Protection Area (RPA) and space for future growth. Encroachment in to the RPA must be assessed on individual tree analysis to protect from disturbance and damage from construction. Whereas, the space for future growth is a recommended zone to allow mature expansion.

Both proposals infringe on the RPA and space for future growth. The degree and intensity is variable and cannot be quantified without further surveys and detailed design. In general review, there is damage which could be mitigated through considered construction techniques and replacement planting.

## Designations

### *Area of Outstanding Natural Beauty*

Defining features of the Area of Outstanding Natural Beauty relevant to this proposal are: views; woodland; farmland and country lanes.

Views from and in to the AONB have been reviewed above. The extent of the views have been reduced using the topography of the site and could be further decreased through mitigative planting measures.

Removal of mature tree planting of Down Place and lining the A31 will be concentrated to key areas, the proposals vary in their encroachment in to the RPA and their extent of direct tree removal. Both proposals intend to retain Down Place as a right of access and secondary route.

The site is currently used for arable farming, the proposed use of the land surrounding the proposed access route is not known at this stage of analysis. However, Proposal One would intrude less on available land than Proposal Two.

### *Green Belt*

To remove land from the Green Belt, development is required to enhance uses, biodiversity and quality of the landscape with the promotion of sustainable development at its focus. Detailed construction methods will need to prove sustainable methodology and mitigative planting will perform to promote biodiversity.

### *Area of Great Landscape Value*

Proposals will impact the landscape characteristic patterns as the development is a new feature in this localised section. Alignment to mask the routes from the key immediate viewpoints and mitigative planting will reduce the impact of the development upon the character of the site and of views to and from the AONB.

# MITIGATION AND ENHANCEMENTS

## Mitigation

Proposed mitigation actions aim to reduce the severity of the impacts from the proposed developments.

Both proposals could reduce the extent of lighting requirements to the A31 junction only. Thus reducing the impact upon the wider AONB from light overspill at night and during the day from lighting columns.

Lighting of the junction is unavoidable to provide a safe junction, however this could be cowled to focus light and reduce light spill to the surrounding landscapes.

Buffer planting along the road will reduce light overspill from headlights.

Tree identification and calculated extents of the RPA is critical in developing detailed designs of the routes and their construction methods. The design will need to be sustainable and avoid damage to the existing tree planting as much as possible.

Depending on an updated ecological survey, mitigative planting should be specified to recommended planting species.

Any construction works on site must happen outside of critical species periods to avoid disturbance to wildlife. It is recommended that a maintenance plan is created in line with the Surrey Hills AONB Management Plan (Ref. 5) to ensure the establishment of proposed planting and health of the existing landscape continues.

## Enhancement

Enhancement actions are recommended to improve the quality, extent or value of the landscape. These are to be reviewed by Surrey Hills AONB Joint Action Committee to confirm the recommendations are in line with the AONB Management Plan objectives.

Mature tree planting could be implemented to support the existing landscape character. Selection of species should be based on recommendations from the Joint Action Committee's objectives for the AONB and the ecologist's report.

# CONCLUSION

**Inspector's Question**

*Can access to this site from the south be successfully achieved from the A3 / A31 without significant detriment to the landscape?*

Based on the baseline information available, it is our professional opinion Proposal One will achieve an access to the site from the A3 / A31 without significant detriment to the landscape. Assuming sensitive construction techniques, seasonal clearance of vegetation and the implementation of mitigation measures.

There will be a localised visual impact. The landscape and ecology impacts can be mitigated against in the long-term through deliverable measures to: replace habitat loss, provide new mature tree planting, reduce lighting requirements and minimise disruption to wildlife.

Macfarlane + Associates have examined the topography of the site; located key immediate viewpoints; assessed baseline conditions of the site's use and character and interrogated each proposal in relation to the impact upon views and existing tree planting. The extent of these impacts has been outlined, but not established due to the level of information at this stage.

Proposal One connects to the landscape lines closer than Proposal Two and will be further concealed from key vantage points due to the topography of the land. However, the majority of the tree removal will be within the boundaries of the AONB.

Proposal Two will have more visual impact as the road curves away from the tree line, but the route's tree removal to cross Down Place is outside of the AONB boundary. Both proposals will require detailed construction methods to ensure embankments and retaining walls do not require excess tree removal and causes minimal damage to the RPA.

As views from and in to the AONB are a key defining feature of this AONB, Macfarlane + Associates consider Proposal One to be the preferred route.

Proposal One minimises it's visual impact by utilising the mature tree planting and topography of the land. The tree removal will need to be addressed through mitigative planting to ensure there is no net loss of tree planting and to assist in further concealing the route from the AONB viewpoints.



# REFERENCES

## FIGURE REFERENCES

**Figure 1:** 'OS Location Plan'

Bing Maps, accessed: 02.05.2018

**Figure 2:** 'Guildford Borough Council - Urban Area Local Plan'

Submission Local Plan: Strategy and Sites (2017) Appendix H: Maps A-G.

Published 2017-11-02

**Figures 3-7:** Macfarlane and Associates, Site Photos - 02.05.2018

**Figure 8:** 'OS Map with Photo Point Locations'

OS Location Plan. Bing Maps, accessed: 02.05.2018

**Figure 9:** 'OS Location Plan with Mapped Designations'

OS Location Plan. Bing Maps, accessed: 02.05.2018

**Figure 10:** 'OS Location Plan with 10m Topographic Levels'

OS Location Plan. Bing Maps, accessed: 02.05.2018

**Figure 11:** 'OS Location Plan with Mapped AONB Designation'

OS Location Plan. Bing Maps, accessed: 02.05.2018

**Figure 12:** 'OS Location Plan with Mapped Green Belt Designation'

OS Location Plan. Bing Maps, accessed: 02.05.2018

**Figure 13:** 'OS Location Plan with Mapped AGLV Designation'

OS Location Plan. Bing Maps, accessed: 02.05.2018

**Figure 14:** 'Mott Macdonald Access Route Proposal'

MMD-390510-C-DR-BB01-XX-0004. Rev P1 14/02/2018

**Figure 15:** 'Area 1 Mott Macdonald Access Route Proposal'

Overlay of MMD-390510-C-DR-BB01-XX-0004. Rev P1 14/02/2018; with Barrell Tree Consultancy; Tree Constraints Plan BD/TS/186014/1 Rev A

**Figure 16:** 'Area 2 Mott Macdonald Access Route Proposal'

Overlay of MMD-390510-C-DR-BB01-XX-0004. Rev P1 14/02/2018; with Barrell Tree Consultancy; Tree Constraints Plan BD/TS/186014/1 Rev A

**Figures 17-19:** Macfarlane and Associates, Site Photos - 02.05.2018

**Figure 20:** 'PBA Access Route Proposal'

40700/2001/SK009. Rev B 05/02/2018

**Figure 21:** 'Area 1 PBA Access Route Proposal'

Overlay of 40700/2001/SK009. Rev B 05/02/2018; with Barrell Tree Consultancy; Tree Constraints Plan BD/TS/186014/1 Rev A

**Figure 22:** 'Area 2 PBA Access Route Proposal'

Overlay of 40700/2001/SK009. Rev B 05/02/2018; with Barrell Tree Consultancy; Tree Constraints Plan BD/TS/186014/1 Rev A

**Figures 23-25:** Macfarlane and Associates, Site Photos - 02.05.2018

**Figure 26:** 'Mott Macdonald and PBA Access Route Proposal'

Overlay of MMD-390510-C-DR-BB01-XX-0004. Rev P1 14/02/2018; with 40700/2001/SK009. Rev B 05/02/2018

**Figure 27:** 'Mott MacDonald and PBA Access Route Proposals to Existing Tree Constraints'

Overlay of MMD-390510-C-DR-BB01-XX-0004. Rev P1 14/02/2018; with 40700/2001/SK009. Rev B 05/02/2018; with Barrell Tree Consultancy; Tree Constraints Plan BD/TS/186014/1 Rev A

**Figure 28:** 'OS Location Plan with Immediate Key Views Identified'

OS Location Plan. Bing Maps, accessed: 02.05.2018

## REFERENCES

**Reference 1:** Guildford Borough Council Submission Local Plan: Strategy and Sites (2017) Appendix H: Maps A-G. Urban Area Plan. Published 2017-11-02

**Reference 2:** Guildford Borough Council Submission Local Plan: Strategy and Sites (Dec 2017). Policy A26: Blackwell Farm, Hogs Back, Guildford.

**Reference 3:** Magic Map.

[www.natureonthemap.naturalengland.org.uk/magicmap.aspx](http://www.natureonthemap.naturalengland.org.uk/magicmap.aspx)

**Reference 4:** Surrey Hills Landscape Character Areas.

<http://www.surreyhills.org/board/appendix-1/> Accessed: 02.05.2018.

**Reference 5:** Surrey Hills AONB Management Plan 2014-2019.

Published Surrey Hills Board.

<http://www.surreyhills.org/board/management-plan-2014-2019/>

Accessed: 02.05.2018

**Reference 6:** Surrey Hills AGLV Review. Chris Burnett Associates 26.06.2007

**Reference 7:** Barrell Tree Consultancy; Tree Constraints Plan BD/TS/186014/1 Rev A

**Reference 8:** Mott MacDonald; A31 Blackwell Farm Link Road. Highway Access Feasibility Design. March 2018

BLACKWELL FARM, LAND ALLOCATION

LANDSCAPE IMPACT REPORT

ON BEHALF OF GUILDFORD BOROUGH COUNCIL  
IN RESPONSE TO LOCAL PLAN INSPECTOR’S QUESTION Q 11.17

15TH MAY 2018  
MA.3123.RP002





# INTRODUCTION

Macfarlane + Associates have been appointed by Guildford Borough Council to provide an independent landscape assessment following the receipt of the University of Surrey's updated landscape assessment of the:

- impact on the overall development on views from the Surrey Hills Area of Outstanding Natural Beauty
- the wider landscape impacts of the development

## Inspector's Question

*How would the wider landscape impacts of this development be mitigated, including impacts on views from the AONB?*

This assessment has been conducted without the benefit of an up-to-date ecological habitat survey; arboricultural survey, soil resource survey or landscape visual impact assessment. The included drawings are created using uneditable base information, to this limitation Macfarlane + Associates have overlaid information without specific base coordinates.

The Blackwell Farm, Land Allocation (A26) is located to the west of central Guildford. The land is owned by the University of Surrey and is currently being used as arable farmland.

Presently, the only vehicular route through the site is Down Place, accessible from Farnham Road, A31. Down Place has a bridge which spans across the east-bound route of the Farnham Road, A31.

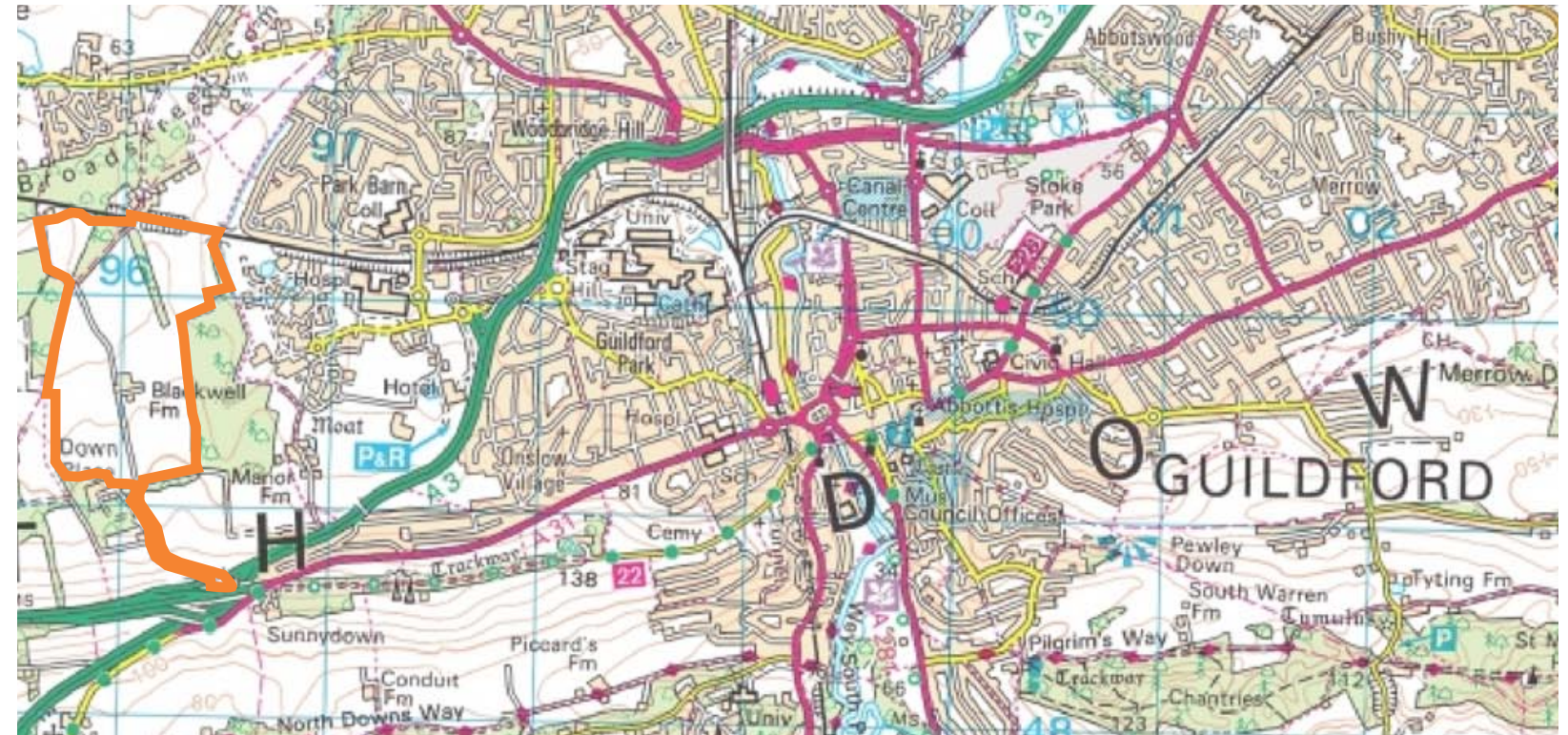


Fig 1 : OS Location Plan

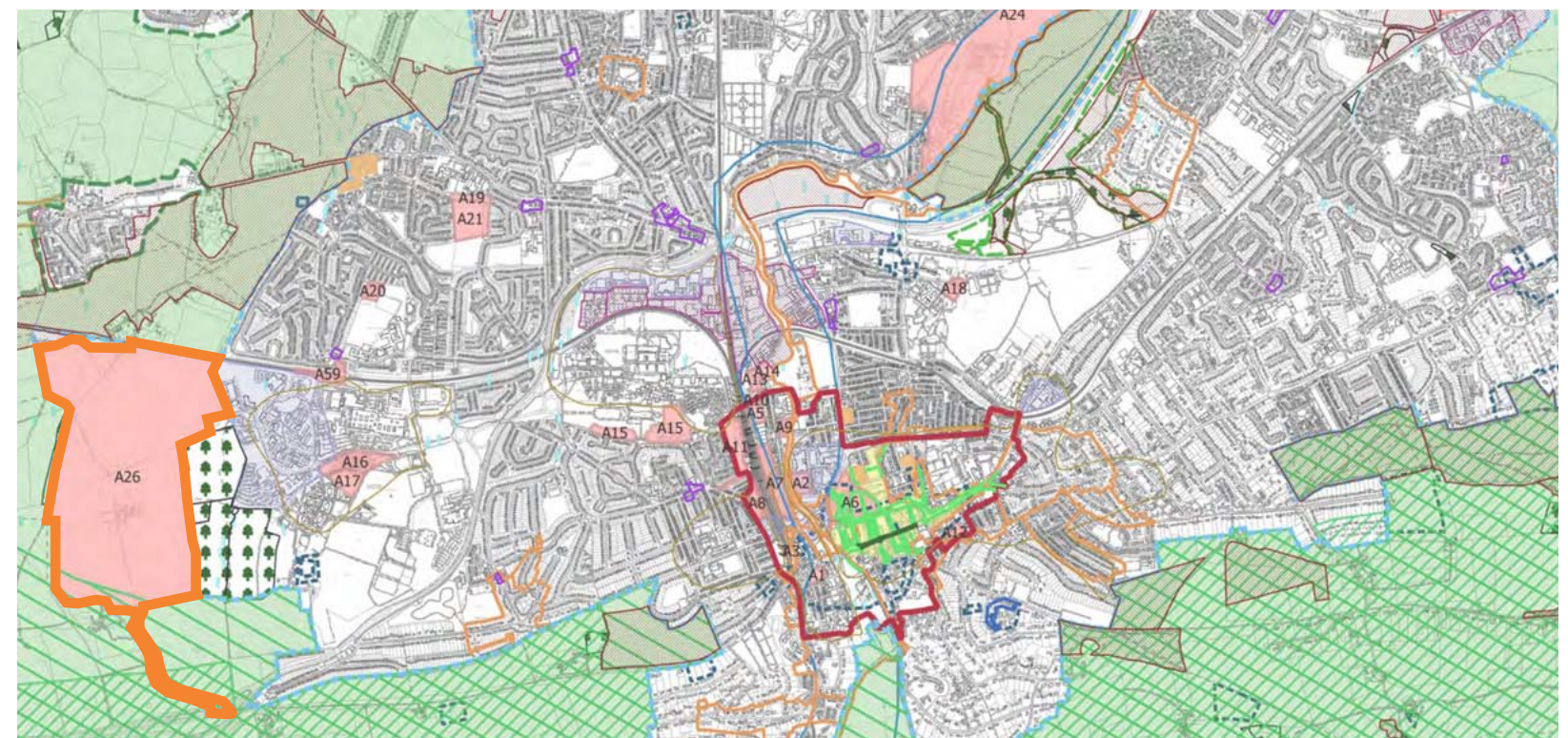


Fig 2 : Guildford Borough Council - Urban Area Local Plan  
Blackwell Farm indicated as Area 26  
Site Boundary ———



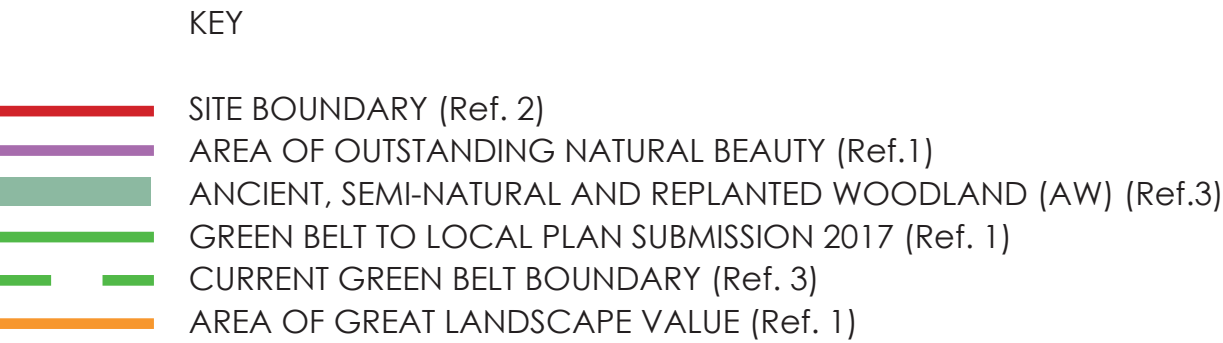
# BASELINE ANALYSIS - DESIGNATIONS

The Blackwell Farm, Land Allocation (A26) sits within and close to statutory and non-statutory designated sites. Figure 9 shows the proximity of these designations to the site area, correct to Guildford Borough Council's Submission Local Plan 2017.

Designations have been plotted on by Macfarlane + Associates, using Guildford Borough Council Submission Local Plan (Ref. 1 and 2), and Magic Map (Ref. 3).

The proposed development will be located within: Surrey Hills Area of Outstanding Natural Beauty; Surrey County Council's Area of Great Landscape Value and the Metropolitan Green Belt. The boundaries of the development will be in direct contact with two identified area of Ancient and Semi-Natural Woodland.

The proposals will seek to amend the existing Green Belt boundaries to the perimeter of the proposed site and access route.





# BASELINE ANALYSIS - TOPOGRAPHY

Topographical analysis of the site shows the extent of the level change as the land falls north from the A31, Farnham Road.

Mature tree planting along the A31 and Down Place will aid to masking views from and on to either of the proposed access routes and wider site development.

The topography creates a ridge within the landscape to the east of Down Place. This creates the AONB's characteristic panoramas and also aids to conceal the access routes as they fall behind the horizon at the western aspect.

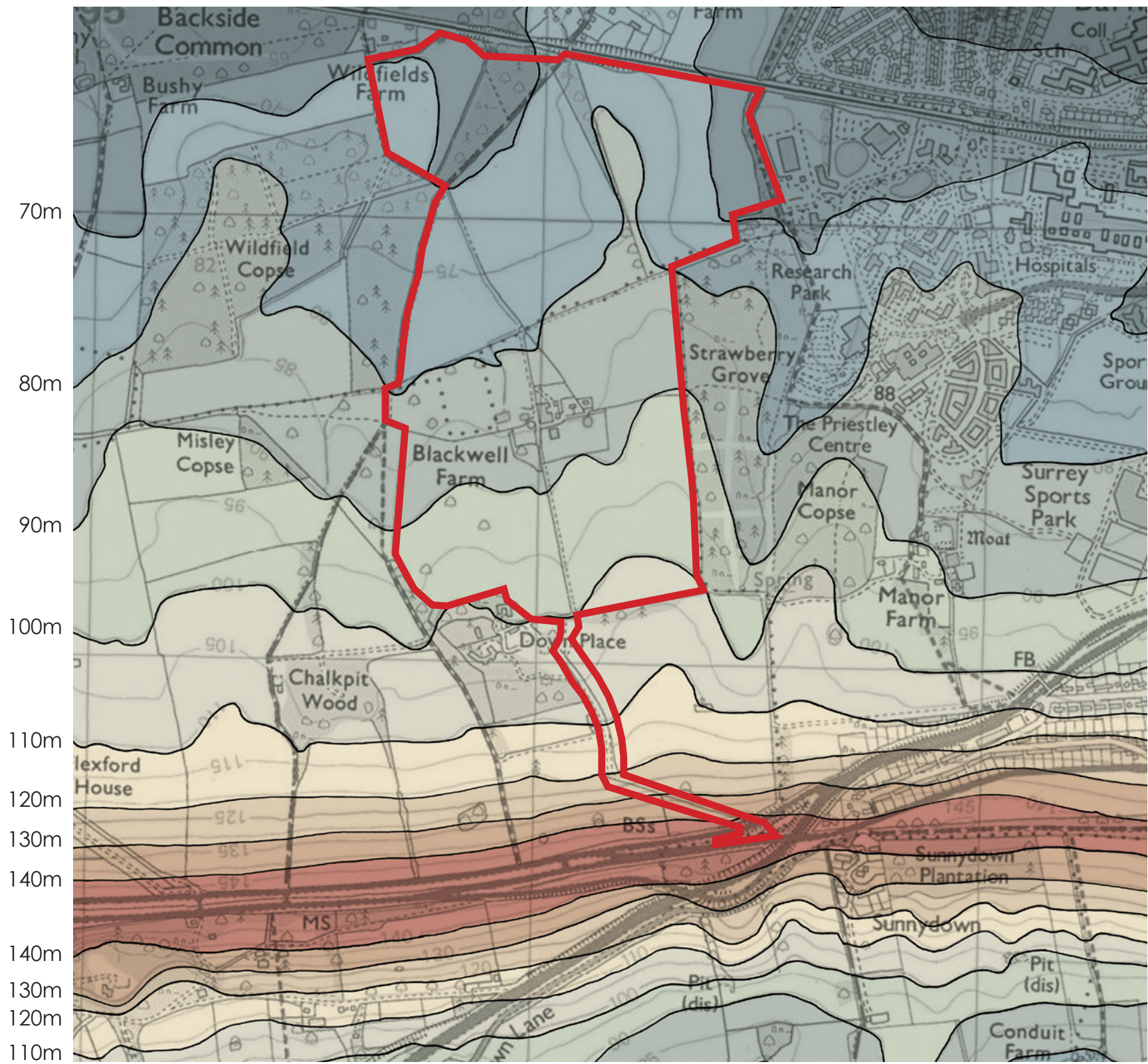
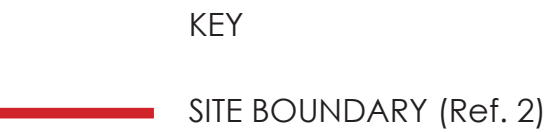


Figure 10 : OS Location Plan with 10m Topographic Levels



# BASELINE ANALYSIS - AONB

The northern edge of the Surrey Hills Area of Outstanding Natural Beauty (AONB) is located to the south of the proposed site boundary. Both southern access routes will transect the AONB to connect the site to the A31.

The Hog's Back and Puttenham Vale accommodates “dramatic views of Hog’s Back ridge from wide area, and extensive views northwards from Hog’s Back”; “large open arable fields on dip slope and smaller irregular fields with hedges on scarp slope (Hog’s Back)” and “species rich semi-ancient natural woodland, shaws and hedgerows” (Ref. 4).

There is an existing impact from traffic and suburban pressures on the AONB. Furthermore, a decline in the quality of woodland and hedgerows has been noted as an issue, in addition to a loss of beech trees (Ref. 4).

The Surrey Hills AONB Management Plan (Ref. 5) acknowledges the landscape will change due to the social and economic forces placed upon it and strives to emphasise the need to ensure that these changes will conserve and enhance the features that define the special character of the AONB. Of which it lists as:

Views	Commons	Historic Buildings
Woodland	Farmland	Country Lanes
Parkland	Heathland	
Tranquillity	Chalk Grassland	

Designations have been plotted on by Macfarlane + Associates, using Guildford Borough Council Submission Local Plan (Ref. 1 and 2).

KEY

SITE BOUNDARY (Ref. 2)

AREA OF OUTSTANDING NATURAL BEAUTY (Ref.1)

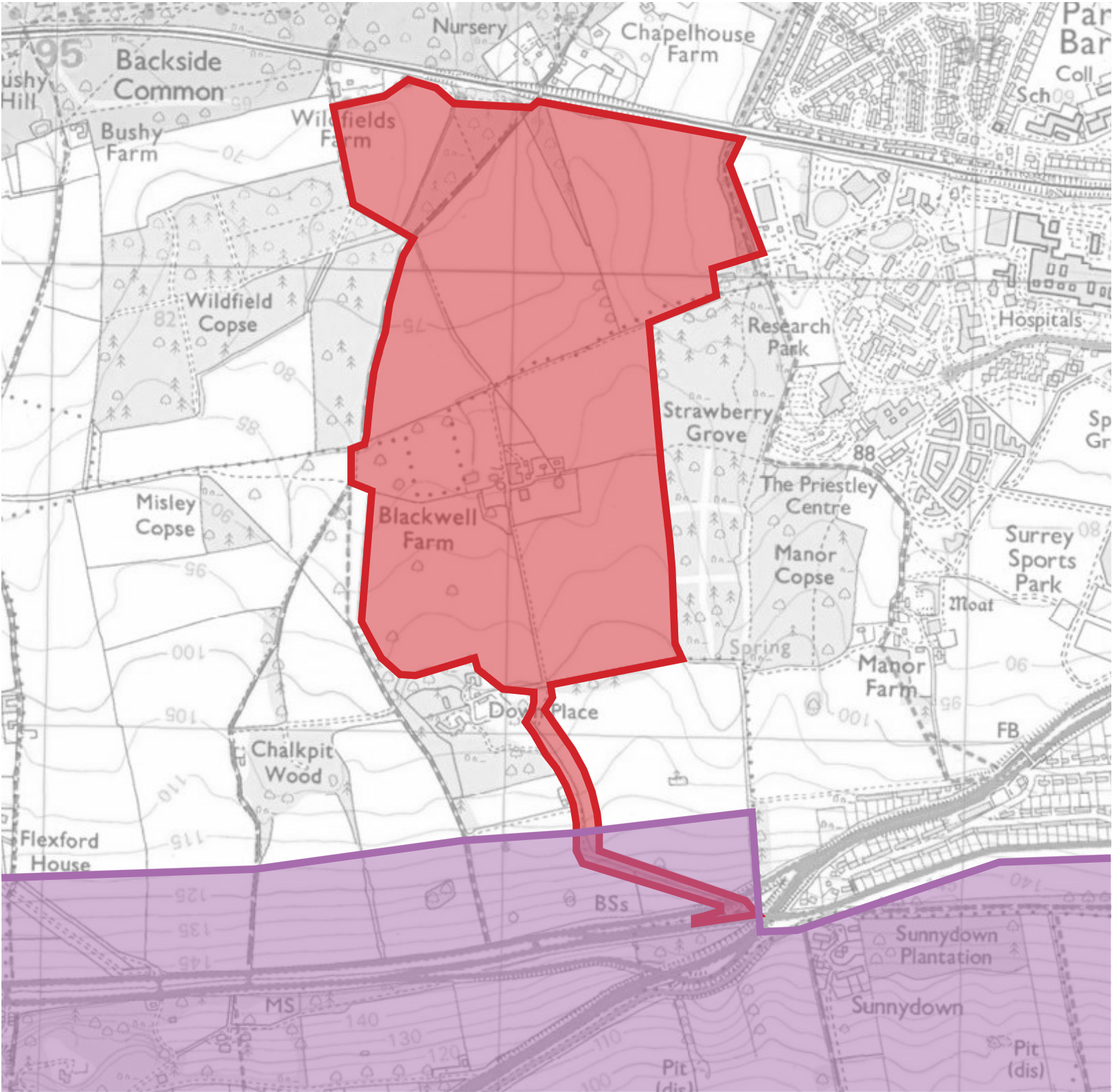


Figure 11 : OS Location Plan with Mapped AONB Designation



# BASELINE ANALYSIS - GREEN BELT

Green Belts have five key purposes, as identified in the National Planning Policy Framework (NPPF) (Ref. 9):

- 1. To check the unrestricted sprawl of large built-up areas
- 2. To prevent neighbouring towns merging into one another
- 3. To assist in safeguarding the countryside from encroachment
- 4. To preserve the setting and special character of historic towns
- 5. To assist in urban regeneration, by encouraging the recycling of derelict and other urban land

There is a presumption against development on Green Belt land. Local authorities should plan positively to enhance uses, biodiversity and quality of the landscapes. Boundaries should only be reviewed in exceptional circumstances, which promote sustainable development focussed towards the urban areas of the Green Belt boundary.

Designations have been plotted on by Macfarlane + Associates, using Guildford Borough Council Submission Local Plan (Ref. 1 and 2), and Magic Map (Ref. 3).

The western boundary of the Green Belt is proposed to be realigned to accommodate the Blackwell Farm development and southern access route.

KEY

SITE BOUNDARY (Ref. 2)

GREEN BELT TO LOCAL PLAN SUBMISSION 2017 (Ref. 1)

CURRENT GREEN BELT BOUNDARY (Ref. 3)

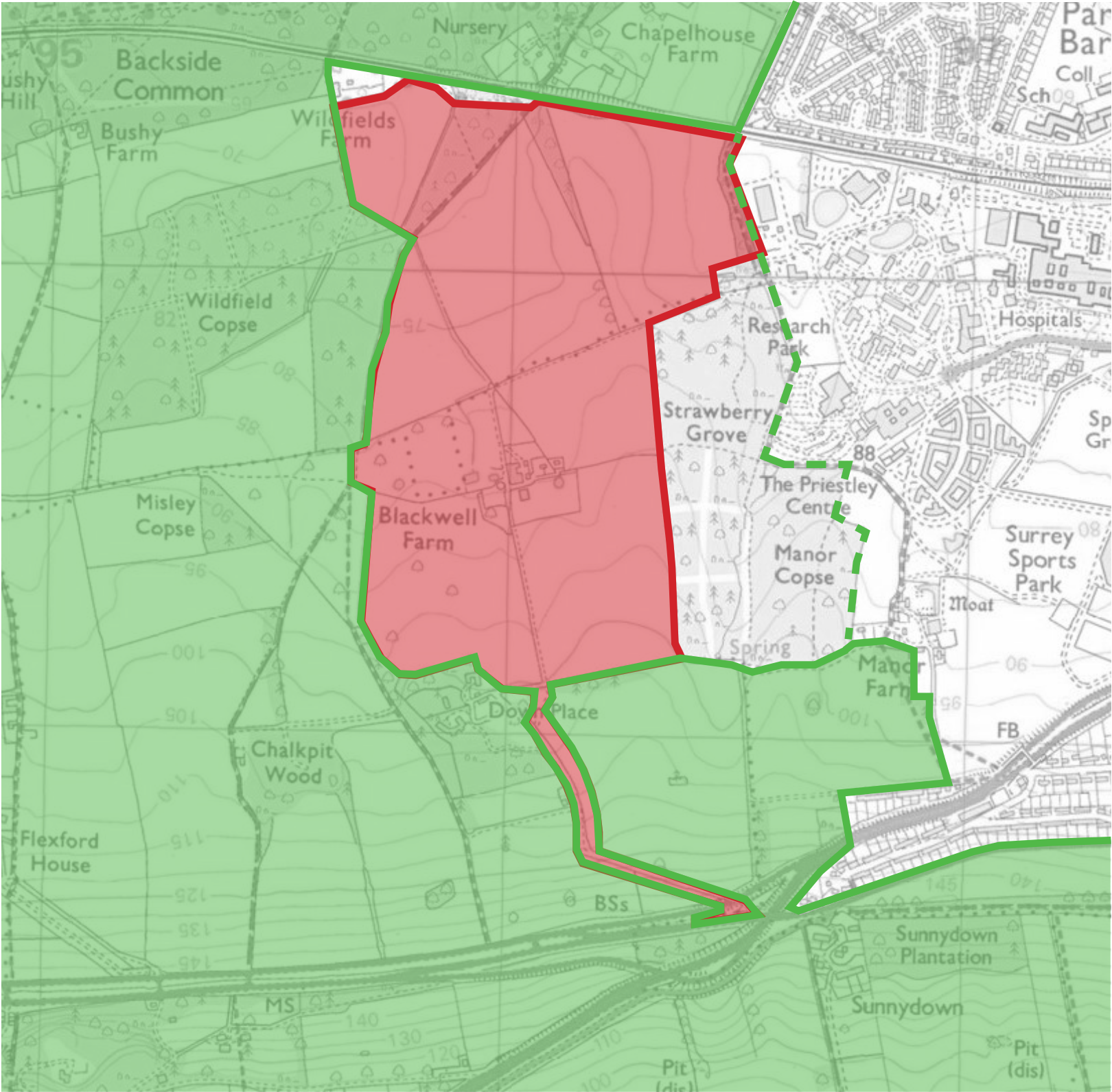


Figure 12 : OS Location Plan with Mapped Green Belt Designation



# BASELINE ANALYSIS - AGLV

Areas of Great Landscape Value are a county level designation, which act as a buffer to the Surrey Hills AONB whilst providing an individual quality. Consequently, they are protected for their own landscape conservation and to protect views in to and out of the AONB.

The northern slopes of the Hog's Back was included to the AGLV designation following a 1971 review. The Surrey Hills AGLV Review (Ref. 6) states that any development within the AGLV: *"should be consistent with the intention of protecting the distinctive landscape character of the area."* Specifically to Guildford Borough Council, any development will conserve the local landscape and support management practices, which do not adversely impact on the landscape characteristic patterns.

Both southern access routes will intersect the AGLV to connect to the A31. The proposals will not affect the boundary of the AGLV.

Designations have been plotted on by Macfarlane + Associates, using Guildford Borough Council Submission Local Plan (Ref. 1 and 2).

KEY

SITE BOUNDARY (Ref. 2)

AREA OF GREAT LANDSCAPE VALUE (Ref. 1)

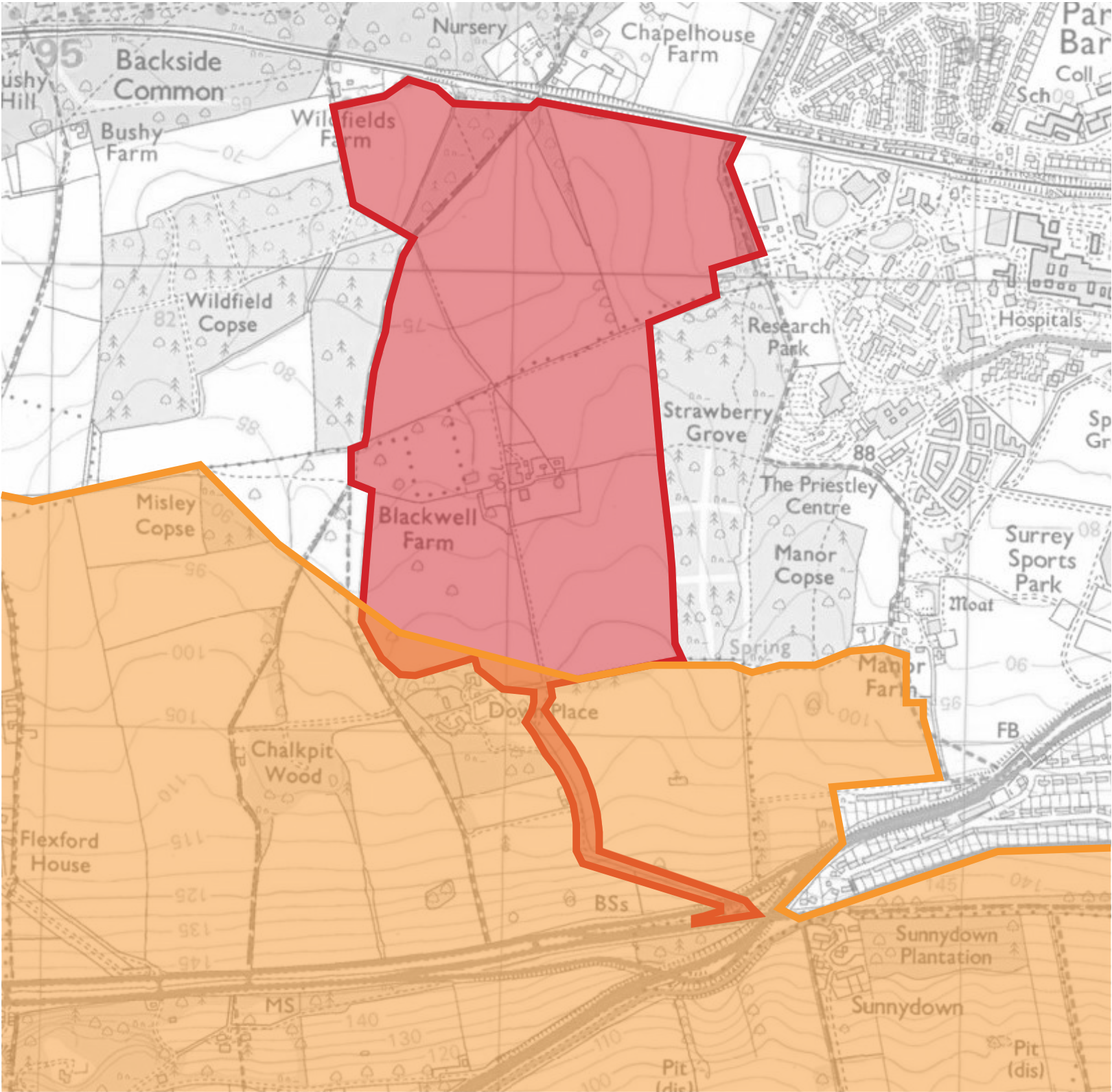


Figure 13 : OS Location Plan with Mapped AGLV Designation



# BASELINE ANALYSIS - ANCIENT WOODLAND

Ancient woodland is any area of woodland dating since at least 1600 AD. This includes both ancient, semi-natural woodland created from regeneration, historic parkland and plantations on ancient woodland sites.

They have no statutory protection but are afforded protection in the National Planning Policy Framework (Ref. 6). The individual trees, wildlife they support and ecologies within an ancient woodland are specific to the wood itself.

Due to the complex relationships within the ecology of an ancient woodland, further surveys are required to understand the degree of biodiversity present in order to assess potential impacts.

Designations have been plotted on by Macfarlane + Associates, using Guildford Borough Council Submission Local Plan (Ref. 1 and 2), and Magic Map (Ref. 3).

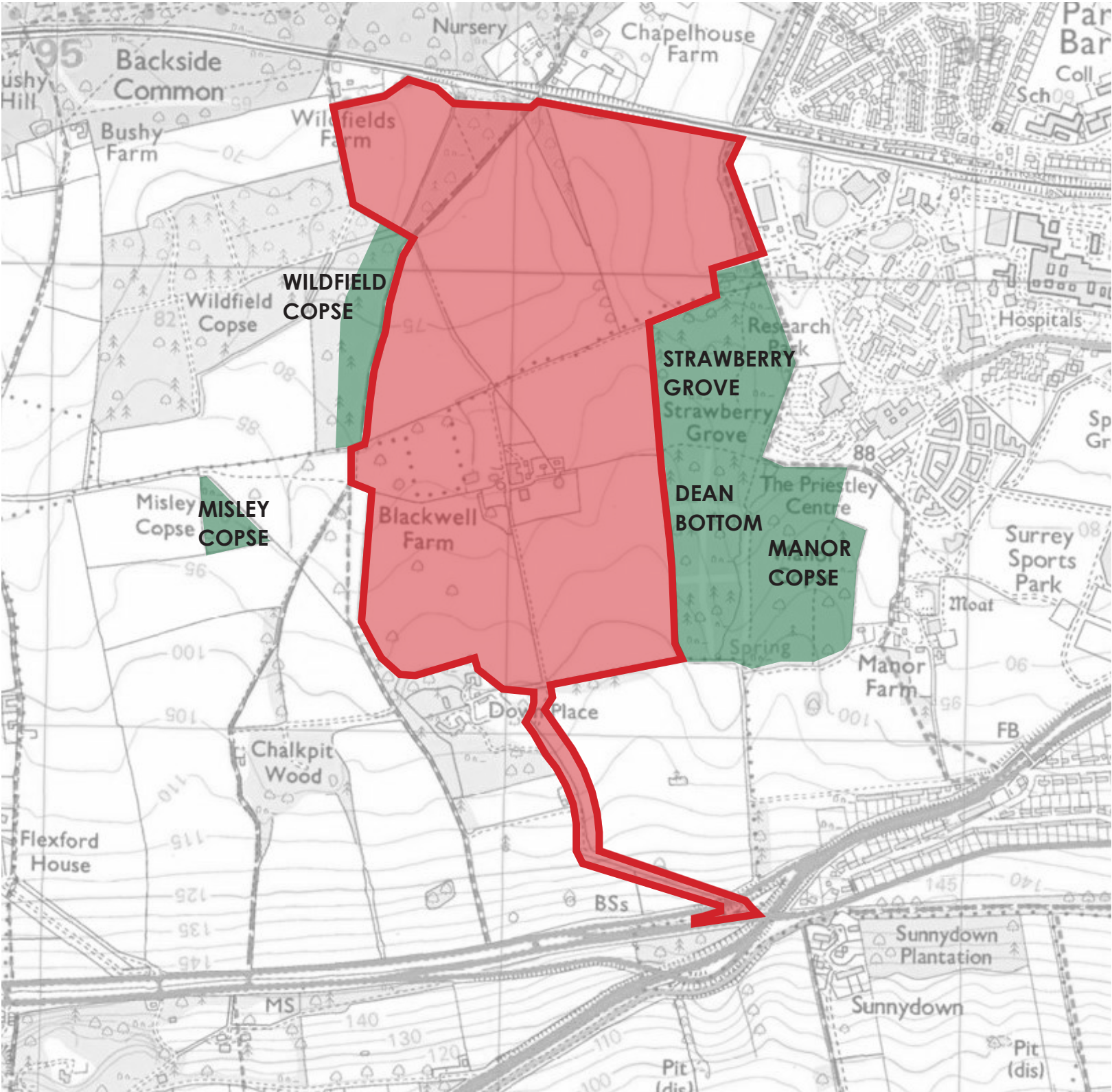
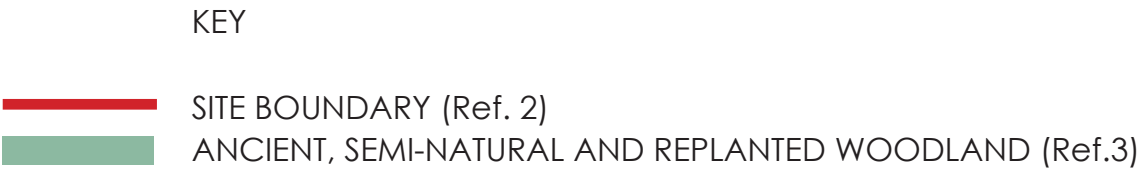


Figure 14 : OS Location Plan with Mapped Ancient Woodland Designations



# ILLUSTRATIVE MASTERPLAN - UNIVERSITY OF SURREY



At the time of writing this report, Terence O'Rourke have issued an illustrative masterplan of the development. We understand this is a generalised proposal which will be developed following recommendations of further surveys.

Figure 15 : Terence O'Rourke  
Illustrative Masterplan



# SELECTION OF KEY VIEWS - UNIVERSITY OF SURREY

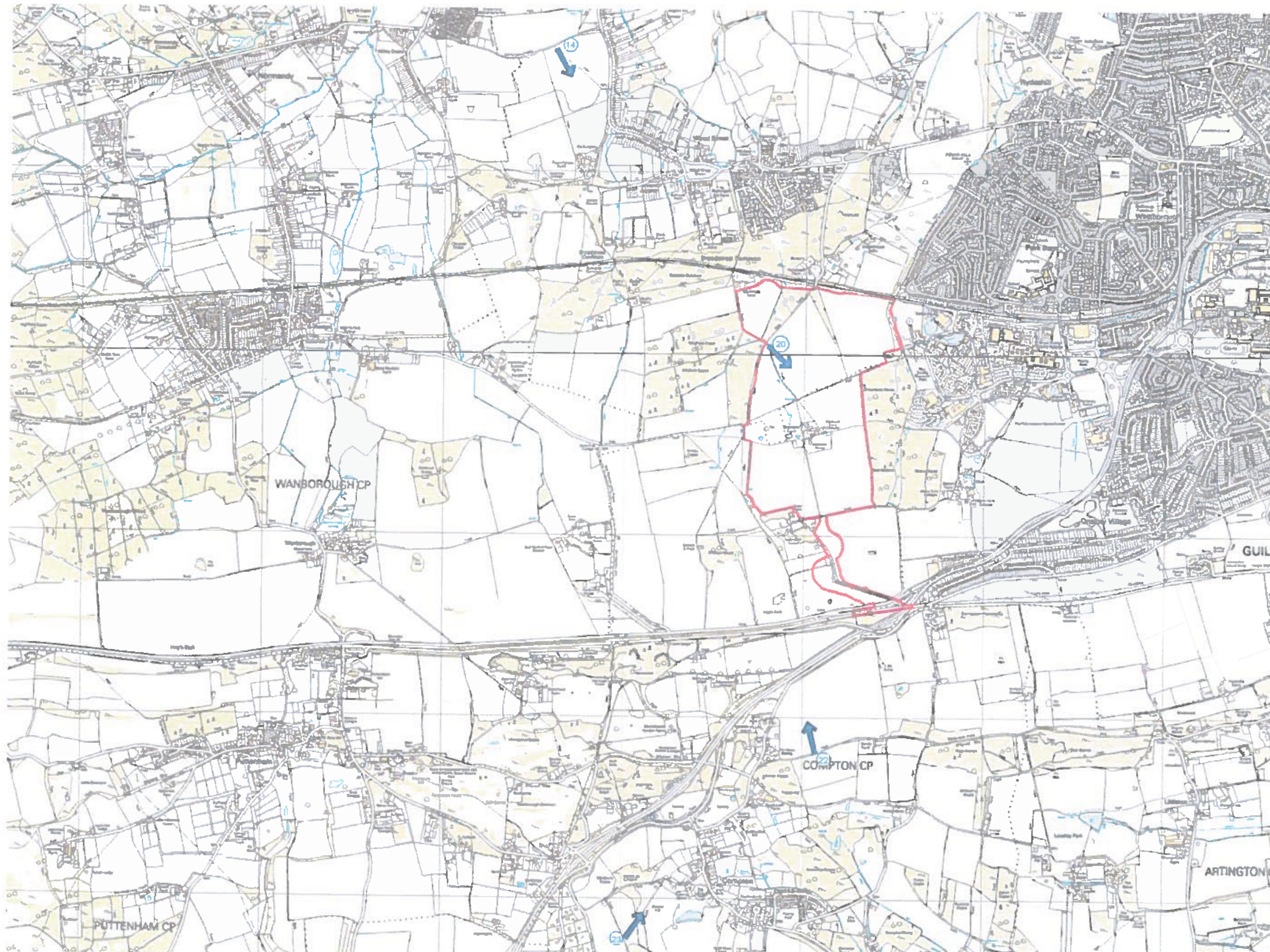


Figure 16: Views of the Access Road,  
Terence O'Rourke



# ASSESSMENT

This assessment has been based on Terence O'Rourke's response to the Inspector's Question 11.17 (Ref. 7). We understand, should the land be allocated for development, the masterplan will undergo a robust Landscape and Visual Impact Assessment (LVIA) to carefully mitigate wider landscape impacts through planting proposals and building height restrictions.

This appraisal is concerned with analysing the impacts of the development upon the wider landscape and views from the AONB. As stated, there are limitations in the analysis as this is based on general proposals and limited survey information on the existing baseline conditions.

## Viewpoints

Macfarlane + Associates understand several representative viewpoints have been previously agreed between the University of Surrey / Terence O'Rourke and stakeholders for the proposed masterplan LVIA.

Terence O'Rourke have included 4 of these within their 2018 report (Ref. 16) to assess views of the southern access route. At the time of writing this report, Terence O'Rourke have not issued formal assessment.

In regards to visual impacts, this assessment is concerned with the impacts on views from and towards the AONB only. To this affect, viewpoints from publicly accessible locations within the AONB and towards the AONB should be priority in assessing visual impacts.

## Designations

### *Area of Outstanding Natural Beauty*

The Surrey Hills AONB Management Plan (Ref. 5) references 'Views' as on the key features which define the character of the AONB. Furthermore, the Area of Great Landscape Value functions to protect views in to and out of the AONB, in

addition to its own landscape conservation.

Views from the AONB will be restricted to the ridge and northern slope of the Hog's Back. Within this location, the majority of the publicly accessible views will be from passing vehicles on the A31.

There are also a number of Public Rights of Way within this zone of AONB, including one Bridleway (Fig. 17). Views from these locations should be included within the LVIA prior to planning application and to inform mitigation measures.

Views in to the AONB will be affected from viewpoints within the development, and from the wider landscape which will overlook the development area.

The extent of the views from and in to the AONB would be reduced through the topography of the landscape. Mitigative planting measures will lessen views further and could be focussed to mitigate key viewpoints where necessary.

The Surrey Hills AONB Management Plan (Ref. 5) also lists 'Farmland' and 'Woodland' as key defining features of the AONB's character.

The northern slopes of the Hog's Back and the site development area is currently used as arable farmland. The proposed use of the land to the northern slope is not known at this stage of analysis. However, it is understood this will remain farmland.

Without the benefit of conclusive ecological habitat, arboricultural or soil resource surveys; it is not possible to assess the wider landscape impacts of the change in use of the site upon the AONB.

### *Green Belt*

Detailed construction methods will need to prove sustainable methodology and mitigative planting will perform to promote biodiversity.



# ASSESSMENT

## Tree Planting

Macfarlane + Associates understand the development proposals intend to retain existing trees and hedgerows, and evolve a design sensitive to the neighbouring Ancient Woodland.

An arboricultural survey and impact assessment is necessary to analyse impacts on existing trees from detailed proposals.

In general review, future proposals should account for any tree loss through considered construction techniques and replacement planting. Furthermore, the development should provide adequate space and provisions for both existing and proposed trees to reach maturity.

*Ancient Woodland*  
Development neighbouring an Ancient Woodland will require a ecological habitat and species surveys to mitigate impacts on the complex biodiverse relationships. Furthermore, Natural England and the Forestry Commission will be able to provide advice and comment on the proposals.

KEY

SITE BOUNDARY (Ref. 2)

AREA OF OUTSTANDING NATURAL BEAUTY (Ref.1)

PUBLIC RIGHT OF WAY, INCL. BRIDLEWAYS (Ref.8)

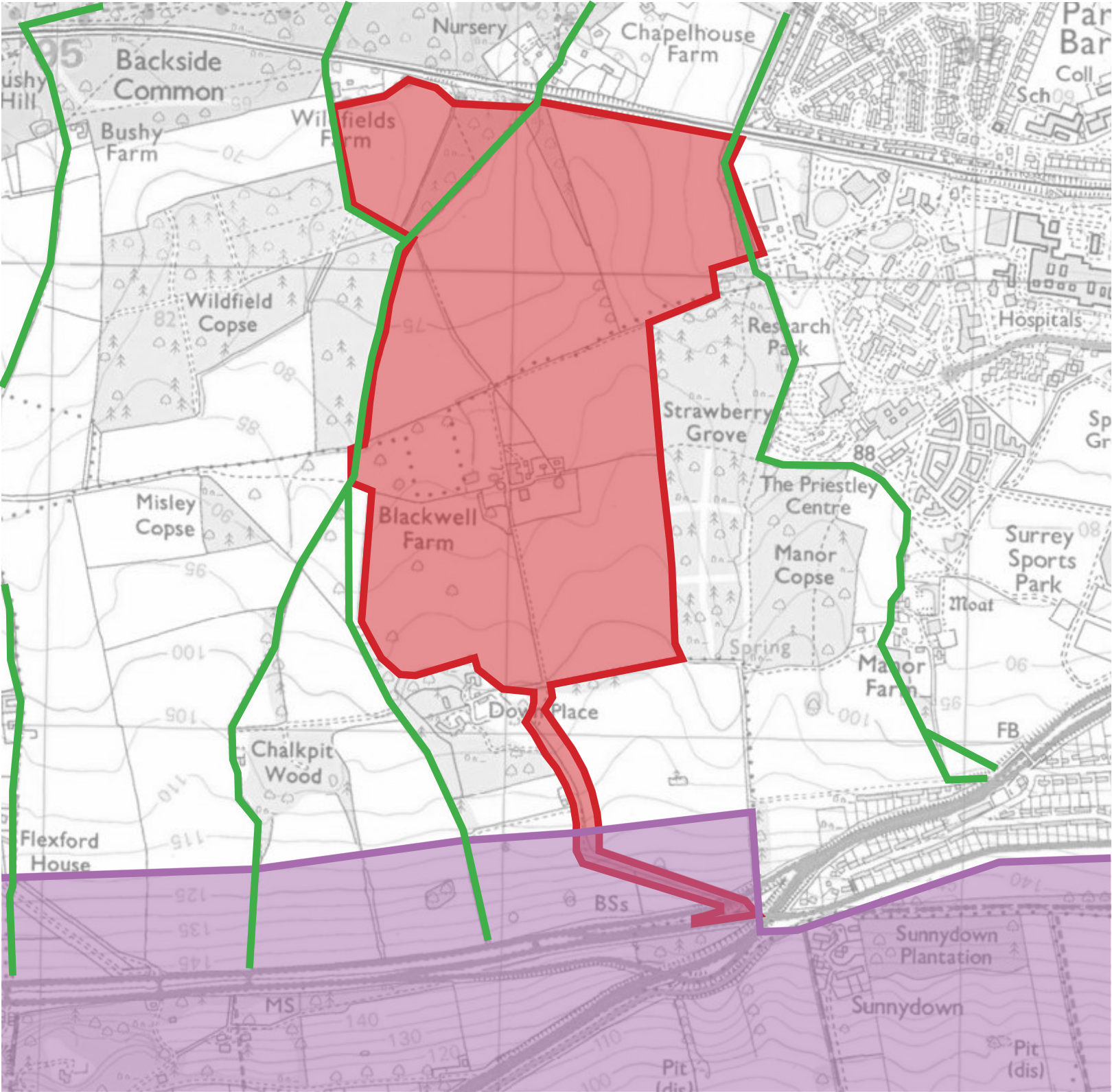


Figure 17 : OS Location Plan with Mapped AONB Designation and Public Rights of Way

# MITIGATION AND ENHANCEMENTS

## Mitigation

Proposed mitigation actions aim to reduce the severity of the impacts from the proposed development. These are intended to be general measures, which should be reviewed again once development proposals are finalised.

Construction works on site must happen outside of nesting bird season to avoid disturbance to wildlife. It is recommended a maintenance plan is created in line with the Surrey Hills AONB Management Plan (Ref. 5) to ensure the establishment of proposed planting.

Lighting design must provide safe vehicular and pedestrian access routes, to minimal secure design light levels, whilst sympathetic to the existing surrounding landscape. The development could reduce the extent of lighting impacts through road typology design which require less illumination. Lighting at key junctions could be cowled to focus light and reduce light spill. Light source, spectrum, lux levels and positioning should be coordinated with a M+E consultant and ecologist to minimise the visual and environmental impact.

The planting design should be complementary to the existing ecology of the landscape, to encourage biodiversity and mitigate any habitat loss. A planting palette should take direction from an ecologist's recommendations.

A comprehensive LVIA based on fixed masterplan proposals will locate key areas where planting would reduce visual impacts of the development.

Due to the topography of the landscape and location of the development, areas of screening planting may be required outside of the development's red line boundary, of which is still inside the site's ownership boundary.

## Enhancement

Enhancement actions are recommended to improve the quality, extent or value of the landscape. These are to be reviewed by Surrey Hills AONB Joint Action Committee to confirm the recommendations are in line with the AONB Management Plan objectives.

Mature tree planting and native shrub planting could be implemented to support the existing landscape character. Relevant and appropriate habitat creation is encouraged, subject to an ecological analysis of the site. Selection of species should be based on recommendations from the Join Action Committtee's objectives for the AONB and the ecological report.



# CONCLUSION

**Inspector's Question**

*How would the wider landscape impacts of this development be mitigated, including impacts on views from the AONB?*

Based on the baseline information available, it is our professional opinion that the wider landscape impacts, including visual impacts from the AONB, could be reduced through mitigation measures.

Mitigation measures should include:

*Restrict Scale*

It is understood the proposals would consist of new buildings which are limited in height. This would largely restrict views of the development. The scale of the development, if in keeping with the vicinity, could be viewed as a settlement extension to Surrey Research Park.

*Buffer Planting*

Visual impacts from the AONB are limited to the passing traffic on the A31 and pedestrian access on the identified Public Rights of Way (Fig. 17). Views of the development, from within the AONB, could be reduced and experienced as an extension of the Surrey Research Park through mitigative planting in key locations of sufficient maturity and species suitable to the context.

The illustrative masterplan (Fig. 15) indicates mature planting to the boundaries, which in combination with the topography, would further reduce and soften views in to the site.

*Design to Topography*

Views south towards the AONB would be largely unaffected due to the topography of the area; with the exception of publicly accessible viewpoints in close vicinity to the site.

*Lighting Design*

The visual impacts from each receptor would vary depending on construction techniques and lighting design.

*Further Analysis*

Further to our assessment, an ecological assessment would advise planting palettes and construction methodology to identify key impacts, appropriate alternatives and relevant mitigation measures.

The proposals include significant tree planting within the site boundary. It is not clear the quantum of trees necessary for removal and new planting could result in a net gain of tree planting. However, retaining suitable existing trees is favoured over replacement planting. An arboricultural impacts assessment will conclude the impacts on existing tree planting and inform development proposals.

It is assumed sustainable design in all aspects of the project is evident and at the focus of the design development.

# REFERENCES

## FIGURE REFERENCES

**Figure 1:** 'OS Location Plan'

Bing Maps, accessed: 02.05.2018

**Figure 2:** 'Guildford Borough Council - Urban Area Local Plan'

Submission Local Plan: Strategy and Sites (2017) Appendix H: Maps A-G. Published 2017-11-02

**Figures 3-7:** Macfarlane and Associates, Site Photos - 29.04.2018

**Figure 8:** 'OS Map with Photo Point Locations'

OS Location Plan. Bing Maps, accessed: 02.05.2018

**Figure 9:** 'OS Location Plan with Mapped Designations'

OS Location Plan. Bing Maps, accessed: 02.05.2018

**Figure 10:** 'OS Location Plan with 10m Topographic Levels'

OS Location Plan. Bing Maps, accessed: 02.05.2018

**Figure 11:** 'OS Location Plan with Mapped AONB Designation'

OS Location Plan. Bing Maps, accessed: 02.05.2018

**Figure 12:** 'OS Location Plan with Mapped Green Belt Designation'

OS Location Plan. Bing Maps, accessed: 02.05.2018

**Figure 13:** 'OS Location Plan with Mapped AGLV Designation'

OS Location Plan. Bing Maps, accessed: 02.05.2018

**Figure 14:** 'OS Location Plan with Mapped Ancient Woodland Designations' OS Location Plan. Bing Maps, accessed: 02.05.2018

**Figure 15:** 'Terence O'Rourke Illustrative Masterplan'

Guildford Local Plan: Strategy and Sites. Id-3 Matters and Issues for Examination: Statement on behalf of the University of Surrey. Terence O'Rourke. Appendix G. May 2018.

**Figure 16:** 'Views of the Access Road, Terence O'Rourke''

Guildford Local Plan: Strategy and Sites. Id-3 Matters and Issues for Examination: Statement on behalf of the University of Surrey. Terence O'Rourke. Appendix I. May 2018.

**Figure 17:** 'OS Location Plan with Mapped AONB Designation and Public Rights of Way'

OS Location Plan. Bing Maps, accessed: 02.05.2018

## REFERENCES

**Reference 1:** Guildford Borough Council Submission Local Plan: Strategy and Sites (2017) Appendix H: Maps A-G. Urban Area Plan. Published 2017-11-02

**Reference 2:** Guildford Borough Council Submission Local Plan: Strategy and Sites (Dec 2017). Policy A26: Blackwell Farm, Hogs Back, Guildford.

**Reference 3:** Magic Map.

[www.natureonthemap.naturalengland.org.uk/magicmap.aspx](http://www.natureonthemap.naturalengland.org.uk/magicmap.aspx)

**Reference 4:** Surrey Hills Landscape Character Areas.

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**Reference 5:** Surrey Hills AONB Management Plan 2014-2019.

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**Reference 7:** Guildford Local Plan: Strategy and Sites. Id-3 Matters and Issues for Examination: Statement on behalf of the University of Surrey. Terence O'Rourke. May 2018.

**Reference 8:** Surrey Interactive Map.

<http://surreymaps.surreycc.gov.uk/public/viewer.asp> Accessed: 11.05.2018.

**Reference 9:** National Planning Policy Framework (NPPF). <https://www.gov.uk/guidance/national-planning-policy-framework/9-protecting-green-belt-land> Accessed: 02.05.2018



# Appendix 11.4



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**Project name:**  
Guildford Borough Submission Local Plan:  
Strategy and Sites

**Project ref:**  
60537035

**Document ref:**  
60537035\_AQ\_06

**From:**  
Elisha Coutts

**Date:**  
17 May 2018

**To:**  
Planning Policy Team  
Guildford Borough Council

**CC:**

## Technical Note

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### Response to Inspector's Question re. Send

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#### Introduction

During the Examination of the Local Plan, the following question was posed to Guildford Borough Council by the Inspector:

***“A43, Land at Garlick's Arch, Send***

***A43a, New North-facing Slip Roads on the A3***

***A58, Land adjacent to Burnt Common Warehouse, Send***

*11.37 What are the anticipated movement patterns arising from the new slip roads in combination with the housing and employment allocation, taking into account the potential for a redistribution of traffic from the strategic road network (notably from the east towards Woking), and what would their effects be on the roads through Send, including traffic flow, noise and air quality?”*

This technical note sets out the traffic, noise and air quality review of potential changes in traffic flow within Send, to inform Guildford Borough Council's response to the above question.

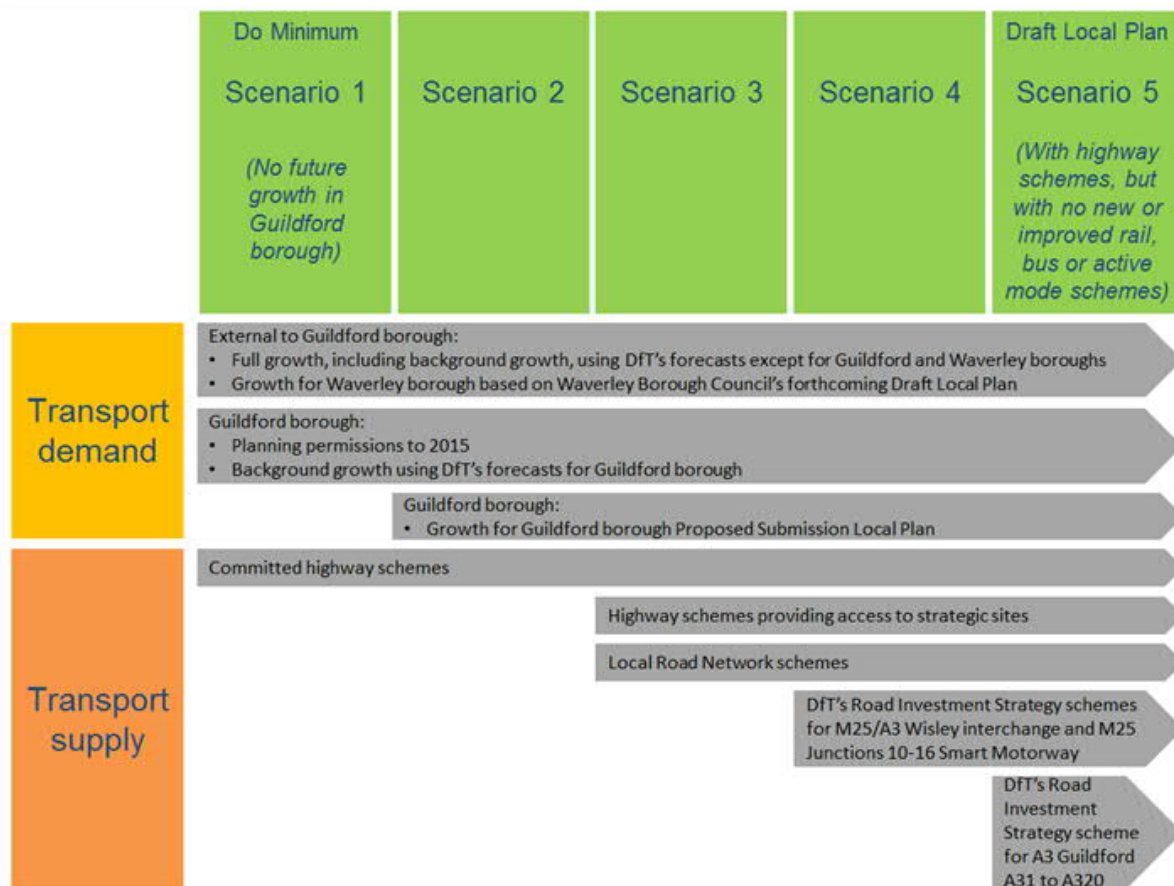
#### Review

##### Traffic Data

Surrey County Council provided traffic flows for the A247 through Send for an average AM peak hour and an average PM peak hour.

AECOM used this information along with an Automatic Traffic Count (ATC) for the A247 to calculate 24 hour Annual Average Daily Traffic (AADT) flows and 18 hour Annual Average Weekday Traffic (AAWT) flows for consideration in terms of air quality and noise respectively. Heavy Goods Vehicle (HGV) data was also derived from the ATC data. No site specific speed information was available, however this road is has a speed limit of 30 mph (48 kph).

Data was provided and calculated for the following scenarios:



The traffic flow data derived for each of the above scenarios for the A247 is presented in Table 1 below as a flow for each direction, and in Table 2 for a combined two-way flow.

**Table 1: Calculated Traffic Flow Data One Way**

Scenario	Direction	24hr AADT	AADT %HGV	18hr AAWT	AAWT %HGV
1	Northbound	10,193	1.6	10,841	2.1
1	Southbound	8,199	2.0	8,720	2.6
2	Northbound	10,933	1.6	11,628	2.1
2	Southbound	7,631	2.0	8,116	2.6
3	Northbound	10,851	1.6	11,541	2.1
3	Southbound	7,121	2.0	7,573	2.6
4	Northbound	10,947	1.6	11,644	2.1
4	Southbound	7,410	2.0	7,882	2.6
5	Northbound	10,713	1.6	11,395	2.1
5	Southbound	7,396	2.0	7,866	2.6



**Table 2: Combined Traffic Flow Data Two Way**

Scenario	24hr AADT	AADT %HGV	Flow difference compared to Option 1	18hr AAWT	AAWT %HGV	Flow difference compared to Option 1
1	18,392	1.8	-	19,561	2.3	-
2	18,564	1.8	+172	19,744	2.3	+183
3	17,972	1.8	-420	19,114	2.3	-447
4	18,358	1.8	-34	19,525	2.3	-36
5	18,110	1.8	-282	19,261	2.3	-300

## Noise

The differences in the 2 way 18hr AAWT traffic data for this section of the A247 are very small between each of the 5 scenarios. The difference between the highest (scenario 2) and lowest (scenario 3) 18hr AAWT is around 3%. The % HGV and speed are identical in all 5 scenarios.

Changes in 18hr daytime traffic noise levels of less than 1 dB are normally classed as 'negligible', in accordance with the Highways England assessment methodology as outlined in the Design Manual for Roads and Bridges (DMRB). As a rule of thumb, an increase in the 18hr AAWT traffic flow of around 25% results in a 1 dB increase in the corresponding traffic noise level (assuming no change in % HGV or speed).

On this basis the maximum difference in 18hr AAWT traffic flows between the 5 scenarios of 3% this is anticipated to result in a very small difference in traffic noise levels between each scenario which would be classed as negligible in Send.

## Air Quality

The potential for significant adverse effects on air quality reported in the Air Quality Review of the Guildford Local Plan takes into account the traffic change criteria set out in DMRB Air Quality Guidance (Highways Agency, 2007) for changes in traffic flows that may lead to a significant change in air quality. These criteria are:

- road alignment will change by 5m or more; or
- annual average daily traffic ("AADT") flows will change by 1,000; or
- heavy duty vehicles ("HDV") (vehicles more than 3.5 tonnes, including buses and coaches) flows will change by 200 AADT or more; or
- daily average speeds will change by 10 km/h or more; or
- peak hour speed will change by 20 km/h or more.

The same criteria can be used for to consider the potential for significant adverse effects at sensitive receptors for the A247 through Send.

The maximum increase in AADT flows in scenarios 2-5 compared to scenario 1 (no growth in Guildford borough) is an increase of 172 vehicles per day with scenario 2. The maximum improvement in traffic flows in any of these scenarios compared to scenario 1 is a reduction of 420 vehicles per day with scenario 3. Additionally, the largest change in flows between any of the scenarios above is a difference of 592 vehicles between scenarios 2 and 3. These changes are all below the AADT change criteria of 1,000 vehicles per day as set out in the DMRB Air Quality Guidance. No significant changes in air quality are therefore anticipated with these aspects of the Local Plan in Send.

## Conclusions

The maximum difference in 18hr AAWT traffic flows between the 5 scenarios is 3%, which is anticipated to result in very small differences in traffic noise levels between each scenario which would be classed as negligible in Send.

All changes in traffic flow are below the DMRB air quality screening criteria for potentially significant adverse effects on air quality, therefore no significant effects are anticipated from these aspects of the Local Plan in Send.



Quality information

Prepared by	Checked by	Approved by
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Revision History

Revision	Revision date	Details	Authorized	Name	Position

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# Appendix 11.5



## M25 junction 10/A3 Wisley interchange improvement scheme

Statutory consultation brochure

Revised 12.02.2018



12 February to 26 March 2018



## About us

Highways England is responsible for the operation, maintenance and improvement of England's motorways and major A roads, known as the Strategic Road Network (SRN).

In 2014 the Government announced its Road Investment Strategy, which set aside £15bn of funds for over 100 major schemes to enhance, renew and improve the SRN. Within this, M25 junction 10/A3 Wisley interchange was identified as one of the key investments for the London and south east region.

## Revised version 12.02.18

This revised version of the brochure has the following changes:

- Updated Scheme Plan (pages 4 and 5)
- Date changed from 2016 to 2018 (page 11)
- Change title to map on pages 14 to 15 to 'Key Plan for maps 1 to 4'
- Updated maps, pages 16 to 23

## Introduction

The M25 junction 10/A3 Wisley interchange is on a section of the motorway network that is of national and strategic importance. The M25 is a critical route between the Channel ports and much of the mainland UK, as well as providing a key access route for Heathrow Airport. The A3, which intersects with the M25 at junction 10, is a regionally important route and it provides access to the major employment areas at Guildford, Brooklands and Kingston-upon-Thames.

The M25 junction 10/A3 Wisley interchange has been identified for improvements as it experiences heavy congestion on a daily basis. This junction also has a poor safety record that needs to be addressed. Highways England accident data shows M25 junction 10 was found to have the highest number of casualties at any junction on the SRN, and more than double the average number of casualties at M25 junctions.

In peak hours, traffic on the A3 regularly queues back beyond Ockham Park junction and Painshill junction which delays users accessing the M25 as well as continuing along the A3. This causes queues and prevents access from Ockham Park junction (A3) to the M25 junction 10 and on to Painshill junction (A3) in both directions. A similar problem is experienced by traffic entering and exiting the M25 junction 10/A3 Wisley interchange.

This situation is likely to deteriorate given traffic forecasts associated with population and economic growth in the south east. If no action is taken there would be a significant impact on traffic flow, road safety, the environment and customer satisfaction as well as its ability to keep traffic moving when things go wrong. Ultimately it will reduce the ability of the junction to perform its role in supporting local and regional aspirations for development and growth, as well as affecting the quality of life for the many commuters who depend on this part of the network.

## The scheme objectives and its environmental context

We have assessed the transport and safety issues at M25 junction 10, as well as the environmental context, to inform our scheme objectives.

The solutions must also be informed by the environmental context of the land surrounding M25 junction 10 and on either side of the A3, which is environmentally sensitive. It encompasses heathland and woodland that is designated as part of the Thames Basin Heaths Special Protection Area (SPA), which is of European importance for nature conservation. It is also designated as the Ockham and Wisley Commons Site of Special Scientific Interest (SSSI), a nationally important nature conservation designation.

There are parcels of irreplaceable ancient woodland alongside the A3 as well as nationally-important registered historic parks and gardens at Painshill Park and RHS Garden Wisley. There are scheduled monuments and historic listed buildings in close proximity to the interchange. The common land surrounding the junction is a valued outdoor recreational resource and the area is entirely within the green belt.

The area immediately surrounding the junction is sparsely populated however there are properties adjacent to the A3 and the communities of Cobham, Byfleet, Ripley and Ockham. We recognise that these are affected to varying degrees by traffic using local roads to access the A3 and M25, making them potentially sensitive to changes in flows along those routes.

### In summary the key scheme objectives are to:

- Improve journey time reliability and reduce delay
- Improve safety and reduce both collision frequency and severity
- Improve crossing facilities for pedestrians, cyclists and horse riders and incorporate safe, convenient, accessible and attractive routes
- Minimise impacts on the surrounding local road network
- Support projected population and economic growth in the area.

### The environmental design objectives in summary are to:

- Avoid, reduce, mitigate and/or compensate for any significant adverse effects or substantial harm through good design
- Improve the quality of life for local residents by mitigating any significant noise effects and supporting targets on air quality
- Seek good design, balancing functionality with achieving positive environmental outcomes.

The scheme's objectives are set out in full in our Preliminary Environmental Information Report, which has been published as part of our consultation materials.

## The proposed scheme

Between December 2016 and February 2017, we consulted on two main options for improving the interchange. The first (referred to as Option 9) was for a flyover structure, the second (referred to as Option 14) was an elongated roundabout. The need to widen the A3 between Painshill and Ockham was also confirmed, which for safety reasons would necessitate the closure of some local side road junctions and private accesses that currently connect directly with the A3 mainline carriageway.

We considered all the feedback given. Although there was strong support for Option 9, there were a number of significant concerns about its environmental impact. Recognising these concerns, we have now developed a design solution (based on Option 14) that meets the scheme transport and safety objectives, but with significantly less environmental impact than Option 9.

A preferred route announcement was made on 29 November 2017. This included proposals for replacement side road and access arrangements, which were necessary to address safety concerns and were developed following discussions with affected stakeholders and residents.

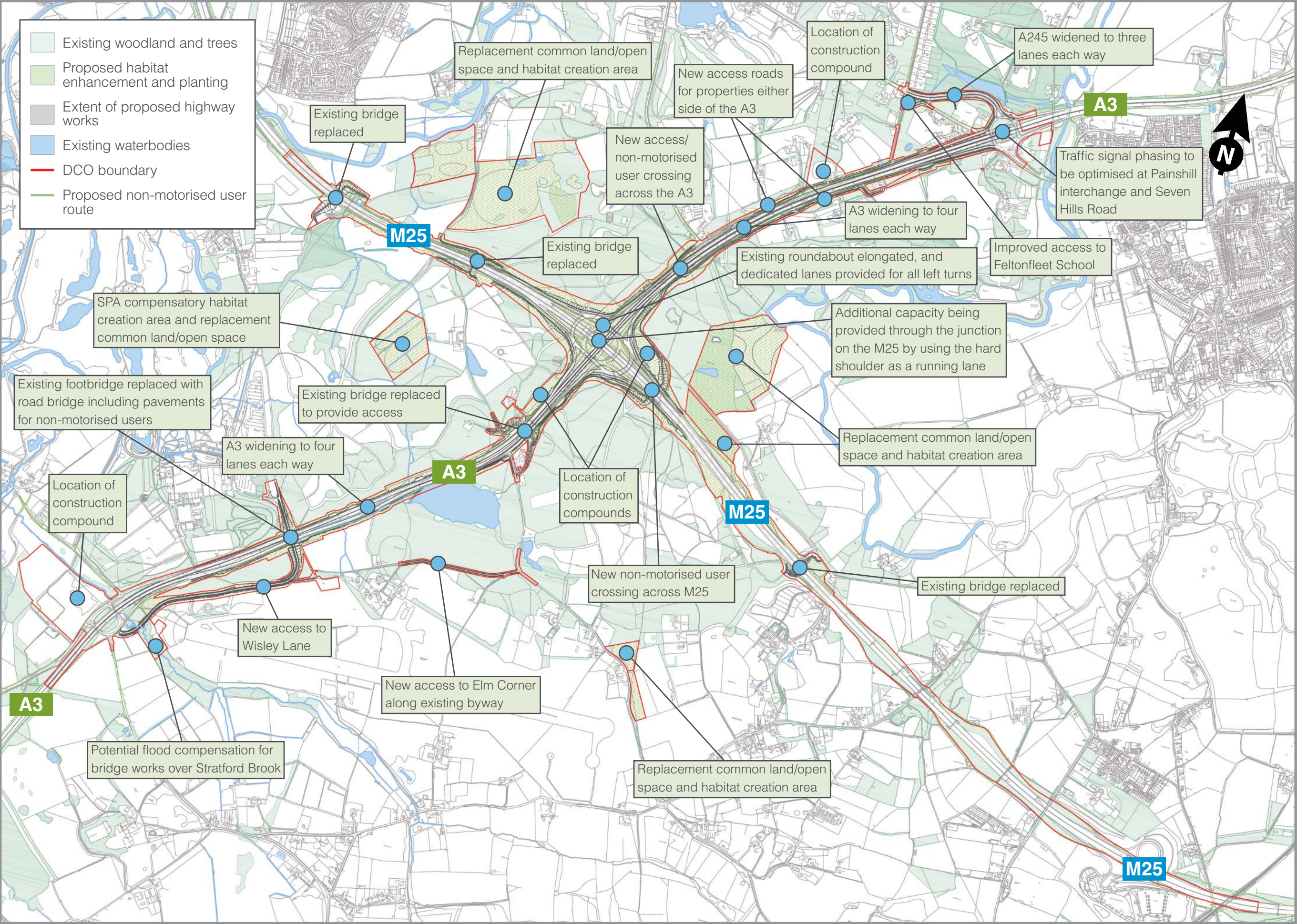
### The proposed scheme includes the following measures:

- An elongated roundabout at M25 junction 10 to provide more capacity
- Construction of four new dedicated free-flowing slip roads, to enable all left-turning traffic approaching junction 10 to interchange without having to pass through traffic lights
- Widening of the A3 from three to four lanes either side of junction 10, between the Painshill junction to the north and the Ockham junction to the south, to increase capacity and meet the latest design and safety standards
- Widening of the A245 Byfleet Road to the west of the A3 Painshill junction, to provide three lanes in each direction and improve the capacity of the road to accommodate traffic joining and leaving the A3
- Improved routes for pedestrians, cyclists and horse riders.

In October 2017 the Government announced the results of its review of the Roads Investment Strategy (RIS) to ensure key corridors of the network can be delivered in a way to minimise disruption and keep road users moving. As a result of this, Highways England will now incorporate works to increase the number of lanes running through M25 junction 10, by utilising the hard shoulder (this scheme is known as the M25 junction 10 to junction 16 Smart Motorway Project). Incorporating these works within the proposed scheme will help us to reduce any disruption to road users and local communities during construction.



Scheme plan





# Scheme benefits

Below is a summary of the scheme objectives and the benefits it will deliver.

Objective	Benefits/impacts delivered
Improving journey times and reliability	<ul style="list-style-type: none"><li>■ The new M25 junction 10 roundabout and widening of the A3 between Ockham and Painshill will add capacity to the road network and improve reliability.</li><li>■ The scheme will generate an average saving of over two minutes for vehicles using the M25 junction 10 roundabout in the morning peak from opening in 2037. Some journeys will save up to five minutes.</li><li>■ Less delay on the A3 in both directions in the morning peak with a reduction of up to three minutes in the northbound direction from opening.</li></ul>
Improved local road network	<ul style="list-style-type: none"><li>■ Less traffic on the local road network in the AM peak.</li><li>■ However, traffic through Ripley is forecast to increase as a result of background growth and this scheme adds a further 4% more traffic through the Newark Lane junction in the AM peak in 2037.</li><li>■ The addition of north facing slips at Burnt Common as proposed in Guildford Borough Council's Draft Local Plan would reduce traffic through the Newark Lane junction by 11% the AM peak in 2037. (Please note this is not a Highways England scheme)</li><li>■ Extra capacity on the A3 will accommodate an extra 5% of traffic through the Painshill interchange and journeys will also be quicker, with a reduction in delays of almost one minute in the AM peak as a result of the scheme.</li></ul>
Improved safety	<ul style="list-style-type: none"><li>■ Our scheme brings the M25 junction 10 roundabout and the section of the A3 up to modern design standards. Residents and businesses who currently have direct access to the A3 will be provided with safer side road accesses meaning they will no longer directly merge with a high-speed 4-lane road.</li></ul> <p>The scheme is predicted to reduce the number of personal injury accidents by an average of 14 per year within the scheme boundary including:</p> <ul style="list-style-type: none"><li>■ 5 fewer per year at M25 junction 10</li><li>■ 4 fewer per year at the Painshill Interchange &amp; Seven Hills Road junction</li><li>■ 3 fewer per year on the A3 between Painshill and Ockham</li></ul> <p>The scheme will result in an overall reduction in the number of accidents which lead to fatal or serious injury on this section of the road network.</p>

Supporting economic growth

- The capacity improvements at the M25 junction 10 roundabout will allow for all additional traffic demand associated with the housing and employment growth predicted as a result of local planning policy (up to 2037) to be accommodated.

## Side roads and local access arrangements

Highways England has undertaken extensive engagement with stakeholders and landowners about the access arrangements on and off the A3 between the Painshill and Ockham junctions.

The safety of all road users is our highest priority. For this scheme, we wish to ensure that there is no conflict between vehicles directly entering and exiting what will become a 4-lane, high speed section of the A3. Allowing these direct accesses to continue would be unsafe and we are therefore proposing to provide alternative arrangements as summarised in the table below.

Option name	Description
Wisley Lane (Map 1)	Access to Wisley Lane will be via a two-way bridge accommodating both vehicles and non-motorised users. There will no longer be direct access on to, or off the A3 from Wisley Lane and this new bridge will replace the existing footbridge.
Elm Lane (Map 2)	Direct access to Elm Lane from the A3 will be stopped up. Instead residents will use the new road to access Old Lane and the A3 southbound.
Old Lane (Map 2)	Old Lane will be kept open, with direct access onto the A3 southbound via the slip road. There will be safety improvements to the Old Lane junction, including better sightlines and improved slip roads.
Pond Farm/Birchmere Campsite (Map 2)	Access via a new bridge connecting the Ockham Common side of the A3 to Pond Farm and the Scout campsite (replacing the existing Cockrow bridge). It also links the Wisley and Ockham Commons for pedestrians, cyclists and horse riders.
A3 northbound (M25 junction 10 to Painshill) (Map 3)	A new road will provide access to all properties along the northbound side of the A3 to A245/Seven Hills Road.
A3 southbound (Painshill to M25 junction 10) (Map 3)	For properties on the A3 southbound whose direct access will be stopped up, a two-way bridge over the A3 close to its slip roads to the M25 junction 10 interchange will be provided. This will accommodate both vehicles and non-motorised users. The bridge links to the new northbound service road.
Painshill Junction/ Seven Hills Road (Map 4)	The A245 will be widened, adding an extra lane between the A3 Painshill Junction and Seven Hills Road. Feltonfleet school will have a safer access via Seven Hills Road south

# Environmental considerations

The M25 junction 10/A3 Wisley interchange scheme is located within the green belt and surrounded by heath and woodland with residential properties nearby, and as such presents a significant number of environmental constraints and challenges.

Large areas around the junction are designated as part of the Thames Basin Heaths Special Protection Area, so are of international importance with the highest level of protection from development. Much of the area around the junction is also designated as a Site of Special Scientific Interest, a Site of Nature Conservation Interest and local nature reserve. Common and access land which the public can use freely surrounds the junction and numerous historic features are present including Scheduled Monuments, listed buildings and two Registered Park and Gardens.

However, the current road layout is poor if you wish to walk, cycle or horse ride either around the junction or the land that surrounds it. Noise

is an important issue with the M25 and A3 both generating high levels of noise which disturbs local people and affects enjoyment of the common land. Air pollution is also a problem, affecting the ecological sites at the junction and people in the local area.

This is a complex and challenging environment in which to develop a road scheme, however the ongoing engagement with land owners and stakeholders has been critical in helping shape our designs and reduce its impacts wherever possible.

As part of the scheme development and consultation process, we have published the Preliminary Environmental Information Report (PEIR). The PEIR provides consultees with the information compiled by Highways England to date about the predicted environmental impacts of the scheme and the proposed mitigation measures, to inform this statutory consultation.

The full PEIR document is available in both hard copy at consultation events and deposit points, as well as online and we are seeking your views on it as part of the consultation questionnaire.

The key issues are as follows:

Issue	Effect	Mitigation/compensation
Land take	Approximately 26 hectares of land are permanently required for the scheme, including some designated for its environmental value and for public access.	Option 14 was selected after consideration of the concerns raised about environmental impacts, including land take, at the first stage of consultation. Whilst the land take is smaller than for Option 9, permanent land take from designated and access land must be compensated for and the scheme includes areas to replace and compensate for that taken. This has been discussed with both land owners and those who manage land as well as national and local stakeholder organisations.
	Approximately 33 hectares of temporary land take is required during the construction of the scheme	The land taken temporarily will be restored and returned to its original landowners after construction has been completed.
Special Protection Area / SSSI and biodiversity	Loss of habitat for rare species.	The design has sought to avoid or reduce the effect on these areas of land where possible.  The potential mitigations for impacts on biodiversity include replacement land which can provide suitable habitat in place of that lost and enhancements to existing habitats. A further Habitats Regulation Assessment is to be undertaken.

Ancient woodland and landscape	Small sections of ancient woodland may be lost as well as larger areas of existing trees. Increases in the visual impact of the M25 and A3 are likely.	The design seeks to minimise the loss of ancient woodland and provides areas of replacement land where woodland planting and management can be provided to compensate for losses. New tree and shrub planting will take place within the new highway boundary to replace lost trees and provide screening.
Scheduled monuments, listed buildings and other heritage assets	Effects on the setting of historic features and potential impact on buried archaeology.	The design avoids heritage assets where possible and minimises land take where unavoidable. The design will provide sensitive mitigation for receptors which may include, where appropriate, archaeological investigations, screen planting and environmental barriers.
Common land - access for pedestrians, cyclists and horse riders	Loss of common and access land as well as amenity effects and alterations to footpaths and bridleways.	The scheme will provide replacement land to compensate for the loss of common or access land. The design will realign affected rights of way and provide routes to better link up new and existing areas of public access. This will include the construction of new or replacement bridges.
Air quality and noise	Changes to levels of air and noise pollution, some of which may be worse than existing. Seek to reduce any negative impact on air quality and noise in the vicinity of the scheme.	Highways England will introduce low noise surfacing on new sections of road. The scheme will replace noise barriers along the M25 and provide new barriers where assessments indicate these are necessary. Analysis of air quality effects and implementation of measures to mitigate pollutant levels in the surrounding environment will be undertaken.





# Purpose of this consultation

It is a key requirement of the DCO process that Highways England consults with the public and other bodies before submitting our application. It is therefore an important opportunity to have your say before decisions are finalised. Our consultation has been undertaken in accordance with the Statement of Community Consultation, published separately, as well as the statutory requirements of the Planning Act 2008.

This consultation is the first stage in the statutory DCO process for the general public to provide feedback. As part of this consultation, we have published a Preliminary Environmental Information Report (PEIR) alongside this summary brochure. The PEIR sets out further information about the proposed scheme, the alternatives that have been considered and the scheme's potential environmental effects. We have also published a questionnaire so that you may provide your comments.

A standalone scheme plan is available in addition to this brochure.

We welcome feedback on any aspect of our proposals, including:

- The need for improvements at this interchange
- The design, nature and extent of our proposals and whether we have omitted to address any matters that people consider important
- Whether there are any design modifications that people would like us to consider to address problems or the scheme's potential effects on people, the local environment, land and property
- Our environmental mitigation measures
- Any of our preliminary environmental information and assessment findings contained in the Preliminary Environmental Information Report

Our consultation will run for six weeks, from 12 February until 26 March 2018. **All responses must be received by 23.45 on 26 March 2018.**

## What is a Development Consent Order?

The proposed scheme constitutes a Nationally Significant Infrastructure Project, which means that permission for its construction has to be authorised by a Development Consent Order (DCO) made by the relevant Secretary of State (in this case, the Secretary of State for Transport). A DCO can incorporate a range of consents that normally have to be obtained separately, such as environmental permits. The DCO for the M25 junction 10/A3 Wisley improvement scheme will also need to include powers for the compulsory acquisition of land, as the works will require land beyond the current highway boundary. Applications for a DCO are made to the Planning Inspectorate, the body appointed by the Government to examine the merits of proposals and to make recommendations to the Secretary of State on whether consent should be granted.

# Find out more

## Public exhibitions

We are holding consultation events at a number of venues in the vicinity of the proposed scheme. Please do come along to one of these if you want to find out more or talk to members of the project team. The events are as follows:

Dates	Venues
Friday 16th February 14:00 – 19:30 Saturday 17th February 10:00 – 17:00	<b>East Horsley Village Hall</b> , Kingston Avenue, East Horsley, KT24 6QT
Friday 23rd February 12:00 – 19:30 Saturday 24th February 10:00 – 17:00	<b>Cobham Hilton</b> , Seven Hills Road, Cobham, KT11 1EW
Friday 2nd March 14:00 – 19:30 Saturday 3rd March 10:00 – 17:00	<b>Cobham Village Hall</b> , Lushington Drive, Cobham, KT11 2LU
Friday 9th March 15:30 – 20:00 Saturday 10th March 10:00 – 17:00	<b>Ripley Village Hall</b> , High Street, GU23 6AF
Friday 16th March 08:00 – 20:00 Friday 23rd March 08:00 – 20:00	<b>Cobham Services</b> , M25

## Consultation materials public inspection locations

Consultation materials, including the PEIR will also be available to view from 12 February until 26 March 2018 at the following locations:

- Guildford Borough Council, Millmead House, Millmead, Guildford, Surrey. GU2 4BB
- Elmbridge Borough Council, Civic Centre, High Street, Esher, Surrey. KT10 9SD
- Surrey County Council, County Hall, Penrhyn Road, Kingston upon Thames, Surrey. KT1 2DW
- Cobham Library, The Cedar Centre, Cedar Road, Cobham, Surrey. KT11 2AE
- Horsley Library, Parade Court, Ockham Road South, East Horsley, Surrey. KT24 6QR
- Walton Library, 54 The Heart, Walton on Thames, Surrey. KT12 1GH
- Byfleet Community Library, High Road, Byfleet, Surrey. KT14 7QN
- West Byfleet Library, The Corner, West Byfleet, Surrey. KT14 6NY
- Addlestone Library, Runnymede Civic Centre, Station Road, Addlestone, Surrey. KT15 2AF
- Woking Library, Gloucester Walk, Woking, Surrey. GU21 6EP.

**Please check opening times at locations for access.**

## Online

Copies of this brochure together with our other consultation materials and supporting documents will also be available online during the consultation period on the project website at [www.highways.gov.uk/M25j10](http://www.highways.gov.uk/M25j10). We are seeking views on:

- Any information contained in this brochure
- Preliminary Environmental Information Report (PEIR)
- Scheme plan.

We have also published on the project website copies of relevant documents published earlier in the project. Whilst we are not actively seeking feedback on these documents and nor do they form part of our consultation materials, they may be of interest to people as further background.

## How to request copies of consultation materials

Copies of our consultation materials may also be provided on request to Highways England – please check our "Get in touch" section for our contact details.

CD copies of our consultation materials can be provided free of charge. Paper copies of this scheme consultation brochure and feedback form and the Statement of Community Consultation will be supplied free of charge. For paper copies of the PEIR, a reasonable charge to cover printing, postage and VAT (at 20% will be charged), up to a maximum of £200. Please contact Highways England regarding payment methods using the contact details in our "Get in touch" section.

## We want to hear your views

Your views are important to us. You can provide feedback to us in a number of ways:

- Completing the online questionnaire at [www.highways.gov.uk/m25j10](http://www.highways.gov.uk/m25j10)
- Completing a paper copy of the questionnaire and either returning it to [FREEPOST M25 junction 10/A3 Wisley interchange](mailto:FREEPOST M25 junction 10/A3 Wisley interchange) or handing it to a member of the project team at any of our consultation events listed above. Copies of the questionnaire will be available at the document inspection locations listed above and will be available at all of the public exhibition events.

Alternatively, any other comments can be made in writing and emailed to [info@highwaysengland.co.uk](mailto:info@highwaysengland.co.uk) or sent to the FREEPOST address above, quoting the reference: M25 junction 10/A3 Wisley interchange improvement.

**All comments and responses must be received no later than Monday 26 March 2018 at 23:45.**

We look forward to hearing your views, but due to the high volume of responses anticipated we may not be able to reply to everyone individually.

All responses will be analysed by the project team. Your details will only be used in connection with the M25 junction 10/A3 Wisley interchange consultation process and will not be passed to any third parties. As part of our DCO application we will be required to submit a report setting out how we have had regard to all of the comments made. Therefore, in providing any comment, it should be borne in mind that the substance of it may be communicated to others as part of the Consultation Report.

## Next steps

Once the consultation period has ended on 26 March 2018 we will consider all of the feedback given before finalising our proposals. We then expect to submit an application for a DCO to the Planning Inspectorate by the end of this year.

Any further small-scale or localised changes to the scheme may require targeted consultation and engagement.

After the application has been submitted, the Planning Inspectorate have 28 days in which to decide whether it is of a satisfactory standard and whether it has been prepared in accordance with the relevant statutory requirements to enable it to be accepted for examination. If accepted, the application will be publicised and anyone will be able to register to submit their views to the Planning Inspectorate. An Examination will then be held, typically within six months, during which time those people who have registered will be invited to submit their detailed views in writing. Some public hearings are also likely to be held, during which the Inspectors will ask questions.

A final decision on a DCO application is normally made within 12 months of acceptance of the application by the Planning Inspectorate, which could mean a decision being made on the proposed scheme by the end of 2019. If consent is granted, we anticipate that the scheme will take approximately two years to build.

For further information about the DCO process, the role of the Planning Inspectorate and how to get involved in the examination stage please visit the Planning Inspectorate's website <http://infrastructure.planninginspectorate.gov.uk> or calling them on **0303 4445000**. A video explaining the DCO process is also available online at <https://infrastructure.planninginspectorate.gov.uk/application-process/the-process/>

## Get in touch

If you need any further information about our proposed scheme, or about this consultation or how to request copies of any of the consultation materials, please get in touch.

**Telephone us:** 0300 123 5000

**Email us:** [info@highwaysengland.co.uk](mailto:info@highwaysengland.co.uk)

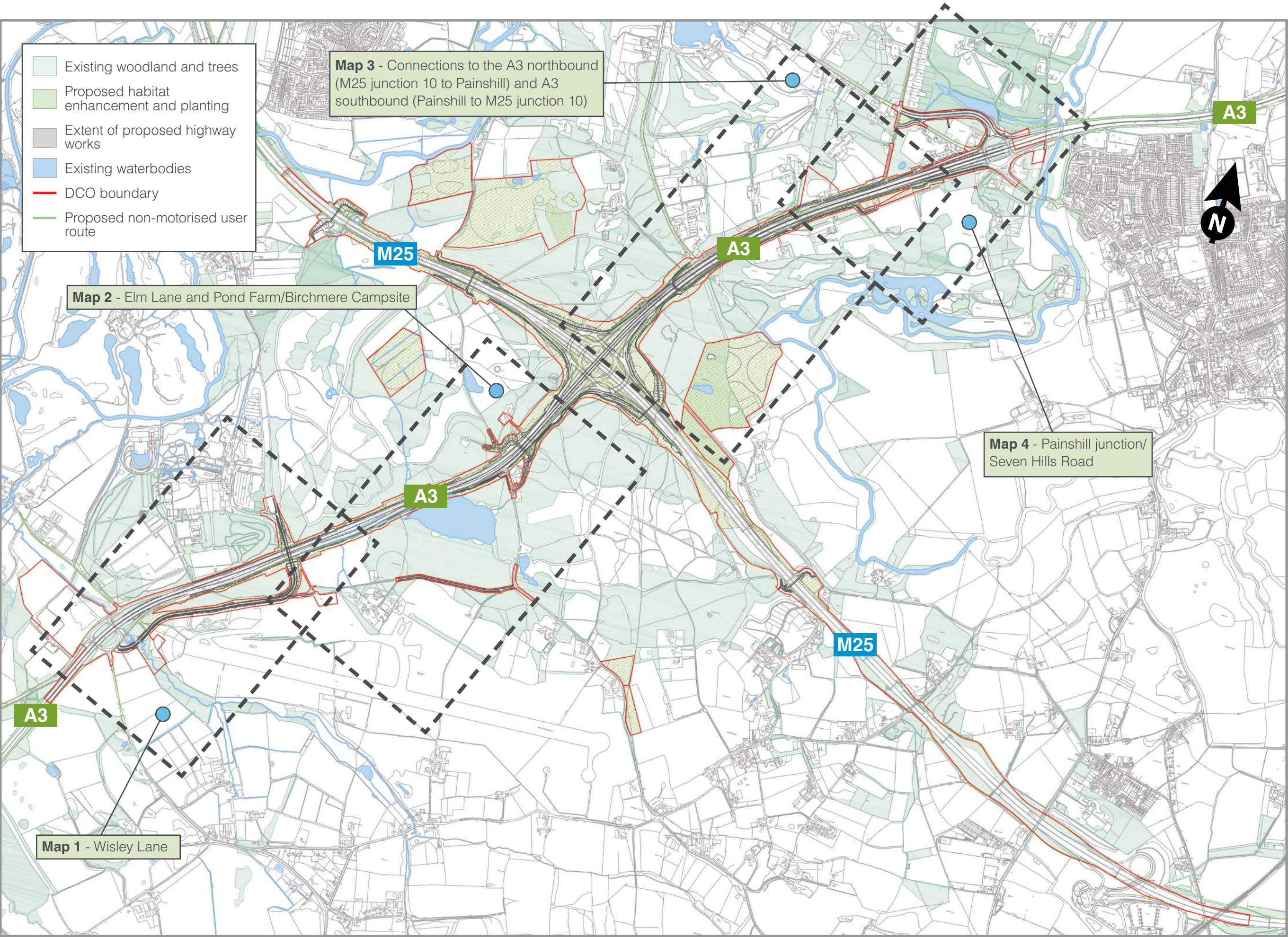
**Write to us:** Mr Brian Gash, Senior Project Manager, Highways England, Bridge House, 1 Walnut Tree Close, Guildford GU1 4LZ



Painshill junction

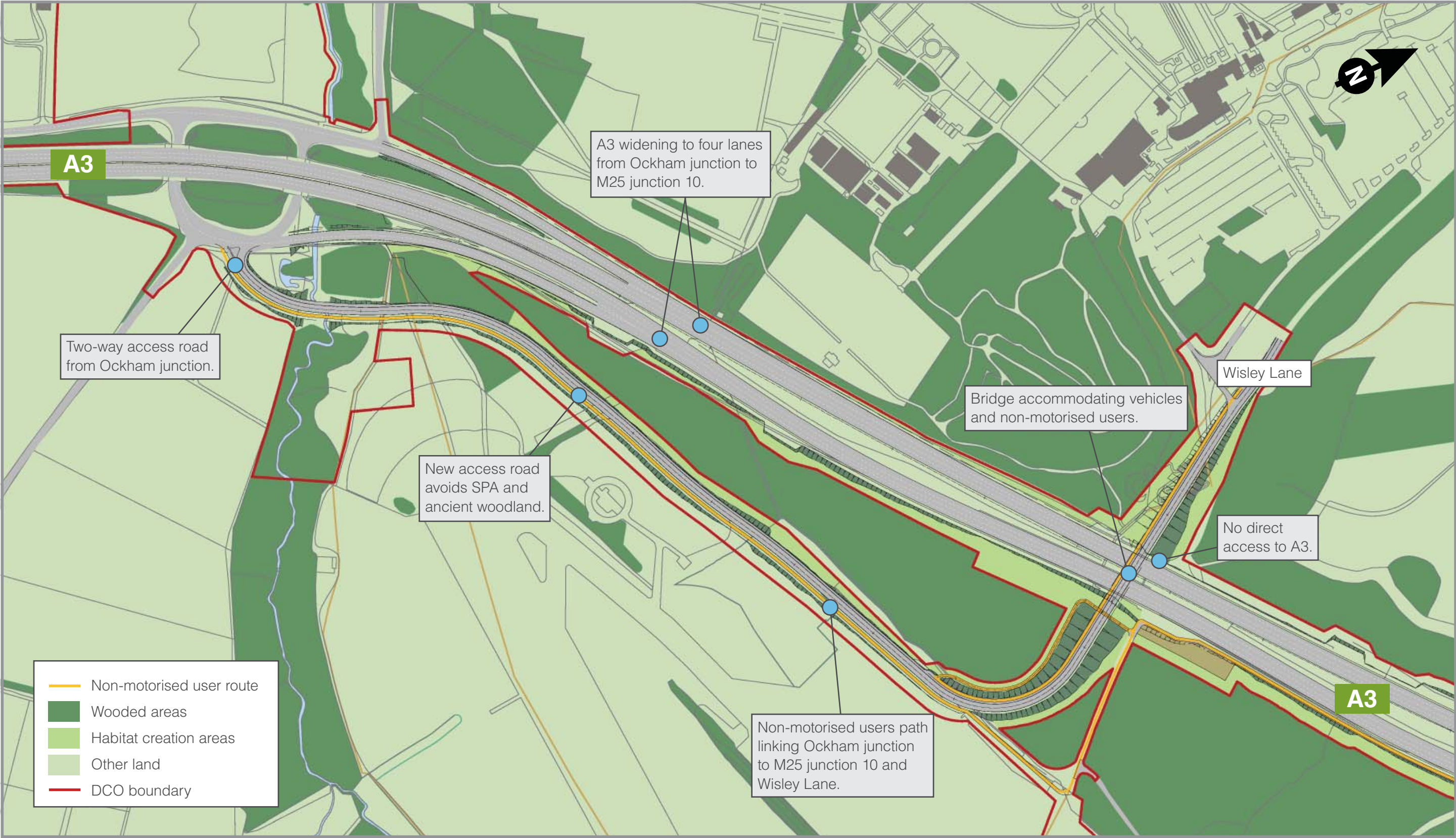


Key plan for maps 1 to 4





Map 1 - Wisley Lane



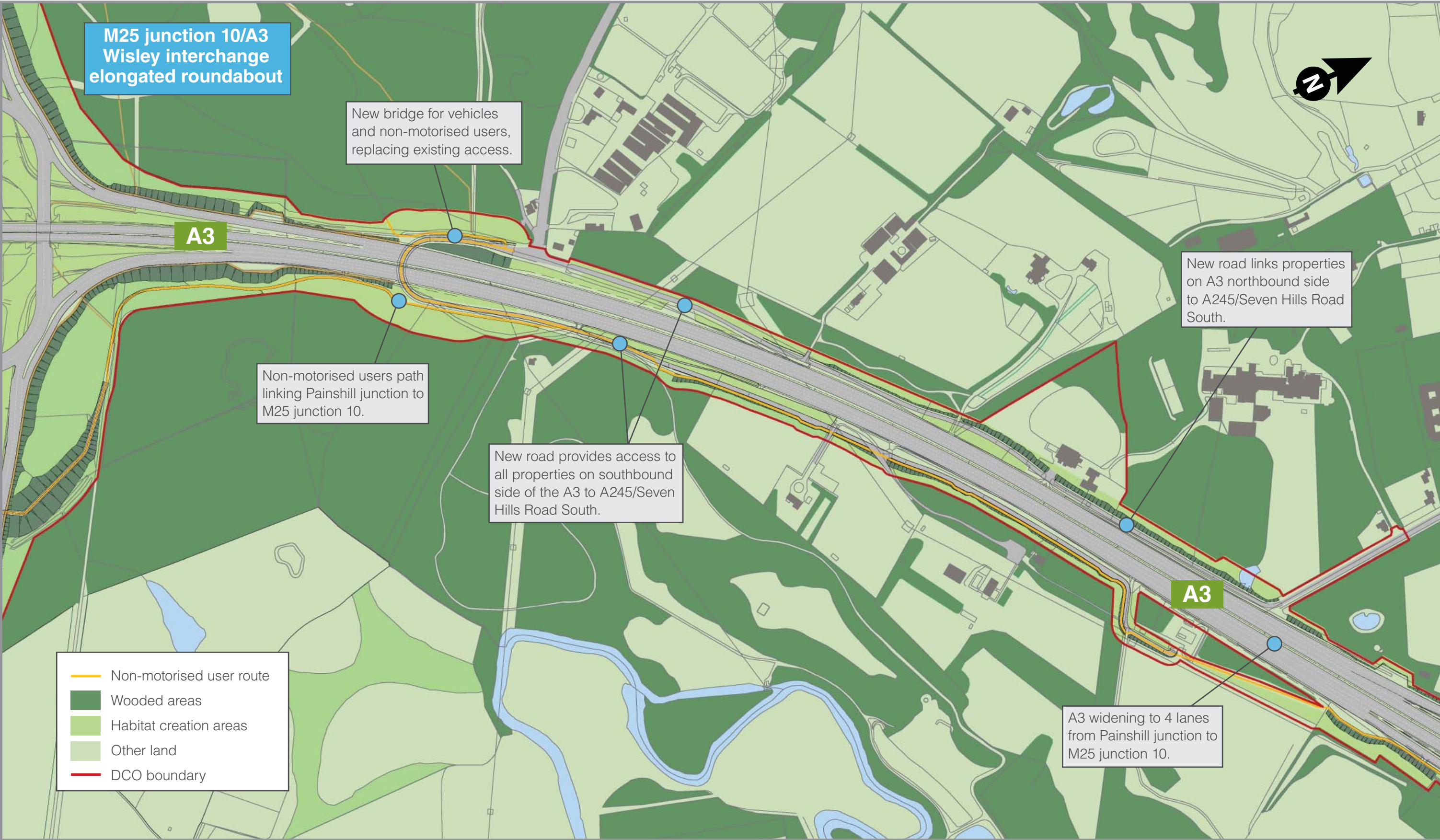


Map 2 - Elm Lane and Pond Farm/Birchmere Campsite



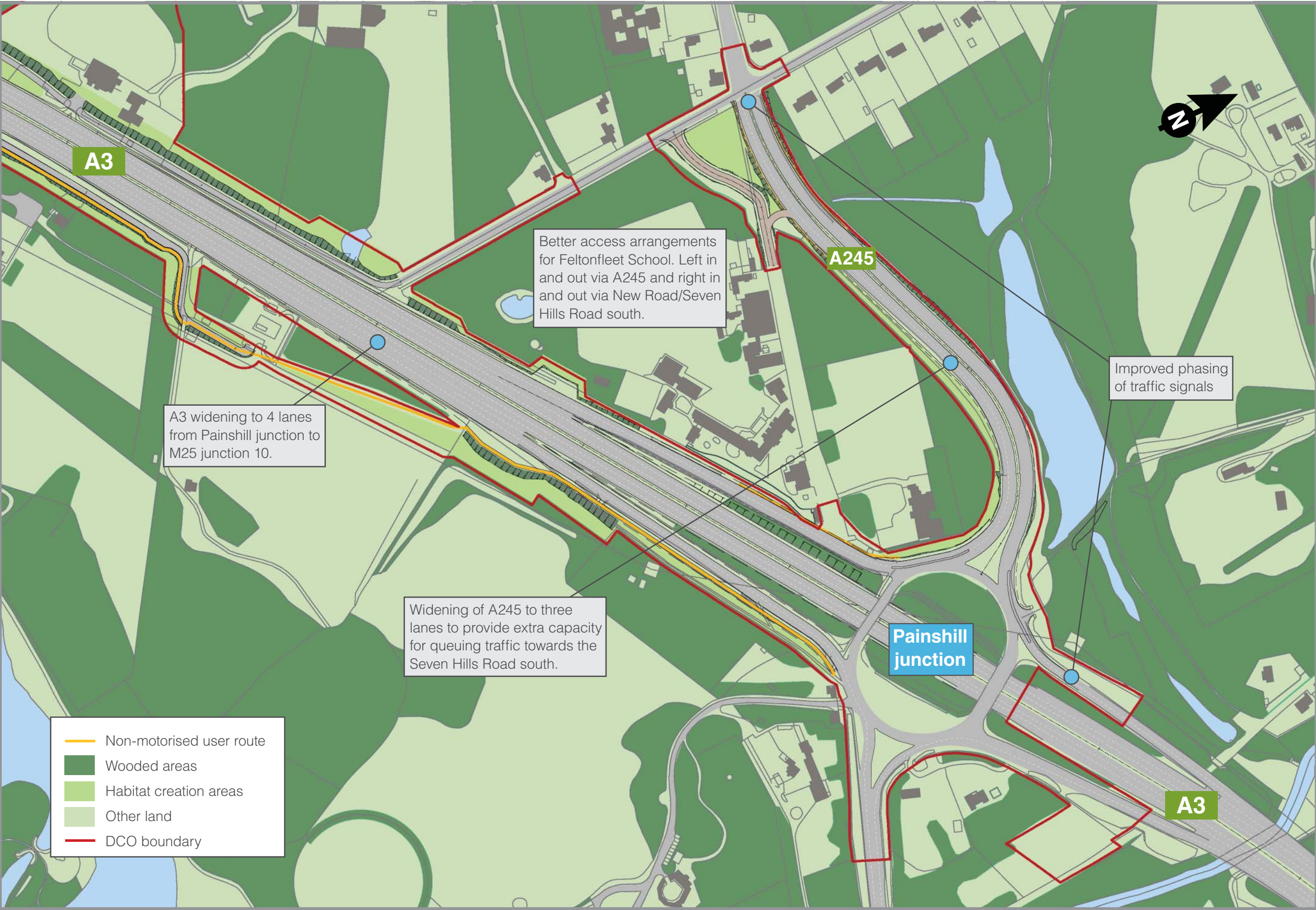


Map 3 - Connections to the A3 northbound (M25 junction 10 to Painshill)  
and A3 southbound (Painshill to M25 junction 10)





Map 4 - Painshill junction/Seven Hills Road



- Non-motorised user route
- Wooded areas
- Habitat creation areas
- Other land
- DCO boundary

A3 widening to 4 lanes from Painshill junction to M25 junction 10.

Better access arrangements for Feltonfleet School. Left in and out via A245 and right in and out via New Road/Seven Hills Road south.

Widening of A245 to three lanes to provide extra capacity for queuing traffic towards the Seven Hills Road south.

Improved phasing of traffic signals

Painshill junction

A3

A245





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This document is also available on our website at [www.gov.uk/highways](http://www.gov.uk/highways)

If you have any enquiries about this publication email [info@highwaysengland.co.uk](mailto:info@highwaysengland.co.uk) or call **0300 123 5000\***. Please quote the Highways England publications code **PR177/17**.

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