

# A41 Pioneer Road, Graven Hill

## Technical Note – Biodiversity Net Gain Assessment

**Date:** July 2021  
**Client Name:** Graven Hill Village Development Company Limited  
**Document Reference:** WIE11386-145-TN-18-2-1 BNG

This document has been prepared and checked in accordance with Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS EN ISO 45001:2018)

Issue	Prepared by	Checked by	Approved by
First	Susie Lowe Graduate Ecologist 	Simon Dowell Senior Ecologist 	Nick Jones-Hill Technical Director 
Second	Susie Lowe Consultant 	Simon Dowell Senior Ecologist 	Nick Jones-Hill Technical Director 
Comments	Second issue following update landscape plans.		

## 1. Introduction

Waterman Infrastructure & Environment Ltd (Waterman) was commissioned by Graven Hill Village Development Company Limited (hereafter referred to as the 'Applicant') to carry out a Biodiversity Net Gain (BNG) Assessment at an area of land along the A41, to the south east of Bicester Oxfordshire (hereafter referred to as the 'Site').

The purpose of this Note is to provide a technical submission to Cherwell District Council to discharge Planning Condition 8 of Planning Permission 20/01830/F for a proposed roundabout junction at access to Graven Hill and Wretchwick Green, London Road Bicester.

Condition 8 states:

*"Prior to the commencement of the development hereby approved, including any demolition, and any works of site clearance, full details of a scheme for biodiversity net gain (minimum 10% net gain) shall be submitted to and approved in writing by the Local Planning Authority. Thereafter, the biodiversity enhancement measures shall be carried out and retained in accordance with the approved details."*

### Site Setting

The Site is approximately 1.38 hectares (ha) in area, centred on Ordnance Survey Grid Reference SP5966 2075. The Site currently comprises a T-junction between the A41 and Pioneer Road within the Graven Hill Development, with associated soft landscape. Habitats present include amenity

grassland, bare ground, hardstanding, hedgerows, semi-improved grassland, plantation mixed woodland, scattered trees and drainage ditches.

Assessments undertaken as part of the Ecological Impact Assessment (EclA, ref: WIE11386-145-R-5-2-5-EclA) submitted to support planning comprised an ecological data search, 'Extended Phase 1 Habitat Survey, search for common invasive plants, preliminary roost assessment of trees, endoscope tree inspections, and pre-dawn re-entry / dusk emergence surveys for bats. The report also took into account those assessments undertaken on the wider Graven Hill Development Site (hereafter referred to as 'the Wider Site'), further details of these surveys are described within the EclA<sup>1</sup>. The assessment found the Site to comprise following habitats, and when converted to UK HABS<sup>2</sup> were categorised as:

- Urban – Other developed land;
- Urban – Artificial unvegetated, unsealed surface;
- Urban – Amenity grassland;
- Urban – Sustainable urban drainage feature;
- Grassland – Modified grassland;
- Grassland – Tall herb communities;
- Woodland and forest – Other woodland, mixed;
- Hedgerows – Native hedgerow, associated with bank or ditch; and
- Urban – Street tree

The extent of the Site together with the location of these habitats are provided on **Figure 1**.

### 1.1.1 Proposed Development

The proposals are detailed as follows:

- A planning application was submitted on 9th July 2020 (ref. 20/01830/F) for the proposed development of a new roundabout junction at the Site to facilitate access to/from the Wider Site, Wretchwick Green and the existing A41 (hereafter referred to as the 'Development').
- An area of land to the east of Graven Hill wood at grid reference SP591203, approximately 0.6km south-west of the Site, within the Wider Site, is to be used for biodiversity off-setting. Proposals for this off-site habitat include the planting of native trees through accelerated succession.

The proposed Development plans for the Site, both on Site through habitat creation, and off-Site through succession, are shown within **Appendix A**.

### Planning Policy

The following planning policies are considered relevant to this assessment:

- National Planning Policy
  - National Planning Policy Framework, 2019<sup>3</sup>
- Local Planning Policy

<sup>1</sup> Waterman numbered report WIE11386-145-R-5-2-5-EclA

<sup>2</sup> UK Habitat Classification Working Group (2018). *UK Habitat Classification –Habitat Definitions V1.0* at <http://ecountability.co.uk/ukhabworkinggroup-ukhab>

<sup>3</sup> Department of Communities and Local Government. (2019). *National Planning Policy Framework*.

- The Cherwell Local Plan 2011 – 2031 (Part 1)<sup>4</sup>

Refer to **Appendix B** for additional details of the above planning policies. In summary Policy ESD 10 details that Developments should target an overall net gain, and Policy Bicester 2: Graven Hill details that Graven Hill Developments should also target an overall biodiversity net gain.

Furthermore, the discharge of Planning Condition No. 8 in the decision notice from Cherwell district council (Application no. 20/01830/F) states that the works should achieve a minimum 10% BNG.

## 2. Methodology

### 2.1 Baseline survey and Baseline Units

As part of the EclA an 'Extended' Phase 1 Habitat Survey of the Site was undertaken on the 2<sup>nd</sup> June 2020, using the Joint Nature Conservancy Council standard 'Phase 1' survey technique<sup>5</sup>. The Phase 1 Habitat Survey methodology was 'Extended' by undertaking an assessment of the Site to support protected and notable faunal species. For the purpose of this reports the habitat map has been converted to UKHabs<sup>6</sup>, **Figure 1** details this.

The baseline biodiversity unit value of the Site has been determined using the Biodiversity Metric 2.0 Calculation Tool (Beta Test December 2019 Update – 2019/12/19). This calculation tool was developed to provide a standardised methodology for completing BNG.

Baseline biodiversity units have been established using the findings of:

- The 'Extended' Phase 1 Habitat Survey (converted to UKHabs);
- The accurate measurement of on-site habitats and hedgerows in accordance with current topographical survey information; and
- Professional judgement.

### 2.2 Condition assessment

#### 2.2.1 Habitats and Hedgerows

A condition assessment has been undertaken on the habitats and hedgerows recorded on Site as part of the 'Extended' Phase 1 Habitat Survey using the Biodiversity Metric 2.0 – Technical Supplement<sup>7</sup>. This document sets out criteria and characteristics for each habitat and provides guidance on an assessment of habitat condition (which can be 'good', 'fairly good', 'moderate', 'fairly poor' and 'poor'). The assessment criteria is varied for each habitat but includes criteria such as the presence of undesirable species, habitat extent, habitat health and vegetation structure.

#### 2.2.2 Proposed Habitat and Hedgerow Conditions

Proposed habitat conditions have been assigned to newly created, retained and enhanced habitats, both on and off Site. This has been achieved by reviewing the criteria characteristics for

<sup>4</sup> Cherwell District Council North Oxfordshire (2016) Part 1 Adopted 20 July 2015 (incorporating policy Bicester 13 re0adopted on 19 December 2016)

<sup>5</sup> JNCC. (2010). *Handbook for Phase 1 Habitat Survey*. Joint Nature Conservancy Council

<sup>6</sup> UK Habitat Classification Working Group (2018). *UK Habitat Classification User Manual* at <https://ukhab.org/ukhab-documentation/>.

<sup>7</sup> Ian Crosher, Susannah Gold, Max Heaver, Matt Heydon, Lauren Moore, Stephen Panks, Sarah Scott, Dave Stone & Nick White (2019) *The Biodiversity Metric 2.0: Auditing and accounting for biodiversity value: technical supplement (Beta version, July 2019)*. Natural England

each habitat, set out in the Biodiversity Metric 2.0 – Technical Supplement and the proposed soft landscaping plans to determine a realistic, likely achievable condition once the habitats have established and been subject to appropriate management.

### 2.2.3 Limitations

This BNG Assessment has not accounted for habitat connectivity in line with the Biodiversity Metric Connectivity Tool<sup>8</sup>. However, a habitat connectivity calculation is only required for habitats of high or very high distinctiveness and no pre-development or post-development habitats on site meet these criteria. As no habitats of high or very high distinctiveness are present / to be created, the interim connectivity guidance as set out within the Biodiversity Metric 2.0 – Technical Supplement has been used in this instance.

Furthermore, with regards to ‘strategic significance’ it has been assumed that all habitats are of ‘medium significance’ i.e., ‘location ecologically desirable but not in local strategy’.

## 3. Habitat Condition Assessment

### 3.1 On Site Habitat

This section refers to habitats within the red line boundary of the Site only.

#### 3.1.1 Pre-Development Baseline Conditions

See **Figure 1** for the on-Site habitat and hedgerow baseline.

#### Habitats Biodiversity Value

**Table 1** details the pre-development habitat biodiversity value results for the on-site habitat baseline.

Table 1: Pre-development on-site habitat baseline results

Habitat	Area (ha)	Habitat Distinctiveness	Habitat Condition	Biodiversity Value
Urban – Other developed land	0.94	V.Low	N/A*	<b>0.00</b>
Urban – Artificial unvegetated, unsealed surface	0.02	V.Low	N/A*	<b>0.00</b>
Urban – Amenity grassland	0.03	Low	Poor	<b>0.06</b>
Urban – Sustainable urban drainage feature	0.02	Low	Poor	<b>0.04</b>
Grassland – Modified grassland	0.19	Low	Poor	<b>0.38</b>
Grassland – Tall herb communities	0.09	High	Poor	<b>0.59</b>
Woodland and forest – Other woodland, mixed	0.09	Medium	Poor	<b>0.40</b>
Urban – Street tree	0.38**	Low	Moderate	<b>1.52</b>
<b>Total</b>	<b>1.38</b>	-	-	<b>2.99</b>

\*condition N/A due to habitat type

<sup>8</sup> The Defra 2.0 Metric connectivity tool was not functioning properly at the time of the BNG assessment: we have made Defra aware of such teething issues

\*\*Trees on Site measured using the DEFRA BNG calculator tool for tree area<sup>9</sup>

### Hedgerows Biodiversity Value

**Table 2** details the pre-development hedgerow biodiversity value results for the on-site hedgerow baseline.

Table 2: Pre-development on-site hedgerow baseline results

Hedgerow	Length (km)	Hedgerow Distinctiveness	Hedgerow Condition	Biodiversity Value
Hedgerows – Native hedgerow, associated with bank or ditch	0.28	Medium	Poor	<b>1.232</b>
<b>Total</b>	<b>0.28</b>	-	-	<b>1.23</b>

### 3.1.2 Post-development score

Current Development plans (**Appendix A**) include the provision of the following habitats on-site:

- Urban – Introduced shrub;
- Urban – Street tree;
- Grassland – Modified grassland
- Urban – Developed land; sealed surface; and

#### Habitat

#### Habitat losses

**Table 3** details the post-development habitat biodiversity value loss results for on-site habitat.

Table 3: Post-development on-site habitat losses biodiversity value results

Habitat	Area (ha) retained	Area (ha) lost	Habitat Distinctiveness	Habitat Condition	Biodiversity Value Lost
Urban – Other developed land	0.00	0.94	V.Low	N/A*	<b>0.00</b>
Urban – Artificial unvegetated, unsealed surface	0.00	0.02	V.Low	N/A*	<b>0.00</b>
Urban – Amenity grassland	0.00	0.03	Low	Poor	<b>0.06</b>
Urban – Sustainable urban drainage feature	0.02	0.00	Low	Poor	<b>0.00</b>
Grassland – Modified grassland	0.00	0.19	Low	Poor	<b>0.38</b>
Grassland – Tall herb communities	0.00	0.09	High	Poor	<b>0.59</b>
Woodland and forest – Other woodland, mixed	0.00	0.09	Medium	Poor	<b>0.40</b>
Urban – Street tree	0.05**	0.33	Low	Moderate	<b>1.32</b>
<b>Total</b>	<b>0.07</b>	<b>1.69</b>	-	-	<b>2.75</b>

\*condition N/A due to habitat type

<sup>9</sup> Natural England (2019) The Biodiversity Metric 2.0 auditing and accounting for biodiversity USER GUIDE

\*\*Trees on Site measured using the DEFRA BNG calculator tool for tree area<sup>10</sup>

### Habitat creation

**Table 4** details the post-development habitat biodiversity value results for on-site habitat creation.

Table 4: Post-development on-site habitat creation results

Habitat	Area (ha)	Habitat Distinctiveness	Habitat Condition	Biodiversity Value
Urban – Introduced shrub	0.07	Low	Good	<b>0.41</b>
Urban – Street tree	0.69**	Low	Moderate	<b>1.16</b>
Grassland – Modified grassland	0.33	Low	Good	<b>1.28</b>
Urban - Developed land; sealed surface	1.29	Very Low	N/A*	<b>0.00</b>
<b>Total</b>	<b>1.69</b>	-	-	<b>2.84</b>

\*condition N/A due to habitat type

\*\*Trees on Site measured using the DEFRA BNG calculator tool for tree area<sup>11</sup>

### Hedgerow

#### Hedgerow losses

The hedgerow on-site is to be retained, as such there is to be no hedgerow losses.

#### Hedgerow creation

**Table 5** details the post-development hedgerow biodiversity value results for on-site hedgerow creation.

Table 5: Post-development on-site hedgerow creation results

Habitat	Area (ha)	Habitat Distinctiveness	Habitat Condition	Biodiversity Value
Hedgerows – Native hedgerow, associated with bank or ditch	0.06	High	Good	<b>0.64</b>
<b>Total</b>	<b>0.06</b>	-	-	<b>0.64</b>

## 3.2 Off Site Habitat

This section refers to habitats within the areas designated for biodiversity off-setting, as detailed within Section 1.1.1 above.

### 3.2.1 Pre-Development Baseline Conditions

#### Habitats Biodiversity Value

**Table 6** details the pre-development habitat biodiversity value results for the off-site habitat baseline.

<sup>10</sup> Natural England (2019) The Biodiversity Metric 2.0 auditing and accounting for biodiversity USER GUIDE

<sup>11</sup> Natural England (2019) The Biodiversity Metric 2.0 auditing and accounting for biodiversity USER GUIDE

Table 6: Pre-development off-site habitat baseline results

Habitat	Area (ha)	Habitat Distinctiveness	Habitat Condition	Biodiversity Value
Grassland – Modified grassland	0.42	Low	Poor	<b>0.84</b>
<b>Total</b>	<b>0.42</b>	-	-	<b>0.84</b>

### 3.2.2 Post-development score

Current Development plans (**Appendix A**) include the provision of the following habitats off-site through succession:

- Woodland and forest; other woodland, young trees planted

#### *Habitat losses*

**Table 7** details the post-development habitat biodiversity value loss results for off-site habitat.

Table 7: Post-development off-site habitat losses biodiversity value results

Habitat	Area (ha) retained	Area (ha) lost	Area succession (ha)	Habitat Distinctiveness	Habitat Condition	Biodiversity Value Lost
Grassland – Modified grassland	0.00	0.00	0.42	Low	Low	<b>0.00</b>
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.42</b>	-	-	<b>0.00</b>

#### *Habitat succession*

**Table 8** details the post-development habitat biodiversity value results for off-site habitat succession.

Table 8: Post-development off-site habitat succession results

Habitat	Area (ha)	Habitat Distinctiveness	Habitat Condition	Time to target condition (yrs)	Biodiversity Value
Woodland and forest; other woodland, young trees planted	0.42	Medium	Good	32+	<b>2.93</b>
<b>Total</b>	<b>0.42</b>	-	-		<b>2.93</b>

#### Biodiversity Net Gain Assessment

In line with the Defra biodiversity Metric 2.0 Calculation Tool, the BNG Assessment confirms a biodiversity net gain of:

- **72.88%** net gain for habitat units; and
- **52.03%** net gain for hedgerow units.

This is based on current landscape plans. Refer to **Appendix C** for the headline results. The full Defra biodiversity Metric 2.0 Calculation Tool can be provided upon request.

## 4. Conclusion

Current site proposals will provide a habitat biodiversity net gain of **72.88%**, and a hedgerow biodiversity net gain of **52.03%**. It is therefore confirmed that the proposed habitat creation,

succession and mitigation for the Site is compliant with local planning policy, and in line with the planning decision notice of achieving at least 10% BNG.

The use of off-site habitat for biodiversity off-setting in order to achieve an overall BNG, provides an added benefit to ecology at the wider Site through extending habitat of high ecological value already present, opposed to additional planting on-Site at low ecological value habitat. The inclusion of newly planted woodland, provides more suitable habitat for local BAP species and in the future will provide additional habitat to those species potentially affected by the Development such as bats (local BAP species) and other bird species. In summary, this additional off-site habitat is of greater benefit to local BAP species than additional soft landscaping on-Site.

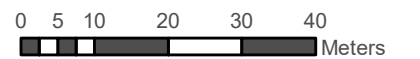


## FIGURES

Figure 1: UK HABs Map (Ref. WIE11386-145-GR-GIS-BNG-3A)



- Site Boundary (1.642ha)
- Urban - Other Developed Land (0.944ha)
- Urban - Artificial Unvegetated, Usealed Surface (0.020ha)
- Urban - Sustainable Urban Drainage Feature (0.022ha)
- Urban - Amenity Grassland (0.284ha)
- Grassland - Tall Herb Communities (0.091ha)
- Woodland and Forest - Other Woodland Mixed (0.091ha)
- Grassland - Modified Grassland (0.19ha)
- Urban - Street Tree
- Hedgerows - Native Hedgerow, Associated with Bank or Ditch (276.889m)



Project Details	WIE11386-145: A41 Pioneer Road, Graven Hill
Figure Title	Figure 3: Habitat Features Plan - Areas
Figure Ref	WIE11386-100_GR_BNG_GIS_3A
Date	May 2021
File Location	\\s-bm\wiel\projects\wie11386\145\gr\bng\gis\issued figures



## **APPENDICES**

### **A. Development Plans**



### PLANTING SCHEDULES

Qty.	Species	Girth (cm)	Overall Height (cm)	Form	Clear Stem (cm)	Root or Container
8	<i>Acer campestre</i>	14-16	425-600	Standard	175-200	CG
6	<i>Alnus glutinosa</i>	14-16	425-600	Standard	175-200	CG
8	<i>Betula pendula</i>	14-16	425-600	Standard	175-200	CG
3	<i>Carpinus betulus</i>	14-16	425-600	Standard	175-200	CG
6	<i>Liquidambar styraciflua</i>	14-16	425-600	Standard	175-200	CG
9	<i>Prunus avium</i>	14-16	425-600	Standard	175-200	CG
5	<i>Quercus robur</i>	14-16	425-600	Standard	175-200	CG
3	<i>Salix alba</i>	14-16	425-600	Standard	175-200	CG
6	<i>Sorbus aria</i>	14-16	425-600	Standard	175-200	CG
4	<i>Sorbus torminalis</i>	14-16	425-600	Standard	175-200	CG
3	<i>Tilia cordata</i>	14-16	425-600	Standard	175-200	CG

**Native Shrub Mix**  
Total Area: 542,1 sqm

QTY	Species	Habit/Form	Overall Height (cm)	Density (per sqm)	Percentage %	Root Condition
216	<i>Crataegus monogyna</i>	Whip	100-125	2	20	CG
216	<i>Corylus avellana</i>	Whip	100-125	2	20	CG
325	<i>Ilex aquifolium</i>	Whip	100-125	2	30	CG
108	<i>Salix caprea</i>	Whip	100-125	2	10	CG
216	<i>Viburnum opulus</i>	Bushy	40-60	2	20	CG

\* To be planted in a staggered 1.5m grid in groups of 3 of the same

**Native Hedge Mix**  
Total Area: 113 sqm

QTY	Species	Habit/Form	Overall Height (cm)	Density (per sqm)	Percentage %	Root Condition
23	<i>Acer campestre</i>	Whip	60-90cm	2	10	CG
136	<i>Crataegus monogyna</i>	Whip	60-90cm	2	60	CG
11	<i>Ligustrum vulgare</i>	Whip	60-90cm	2	5	CG
23	<i>Prunus spinosa</i>	Whip	60-90cm	2	10	CG
11	<i>Quercus ilex</i>	Whip	60-90cm	2	5	CG
11	<i>Rosa canina</i>	Whip	60-90cm	2	5	CG
11	<i>Viburnum opulus</i>	Whip	60-90cm	2	5	CG

\* To be planted in a staggered double row, with plants 250 - 300mm apart

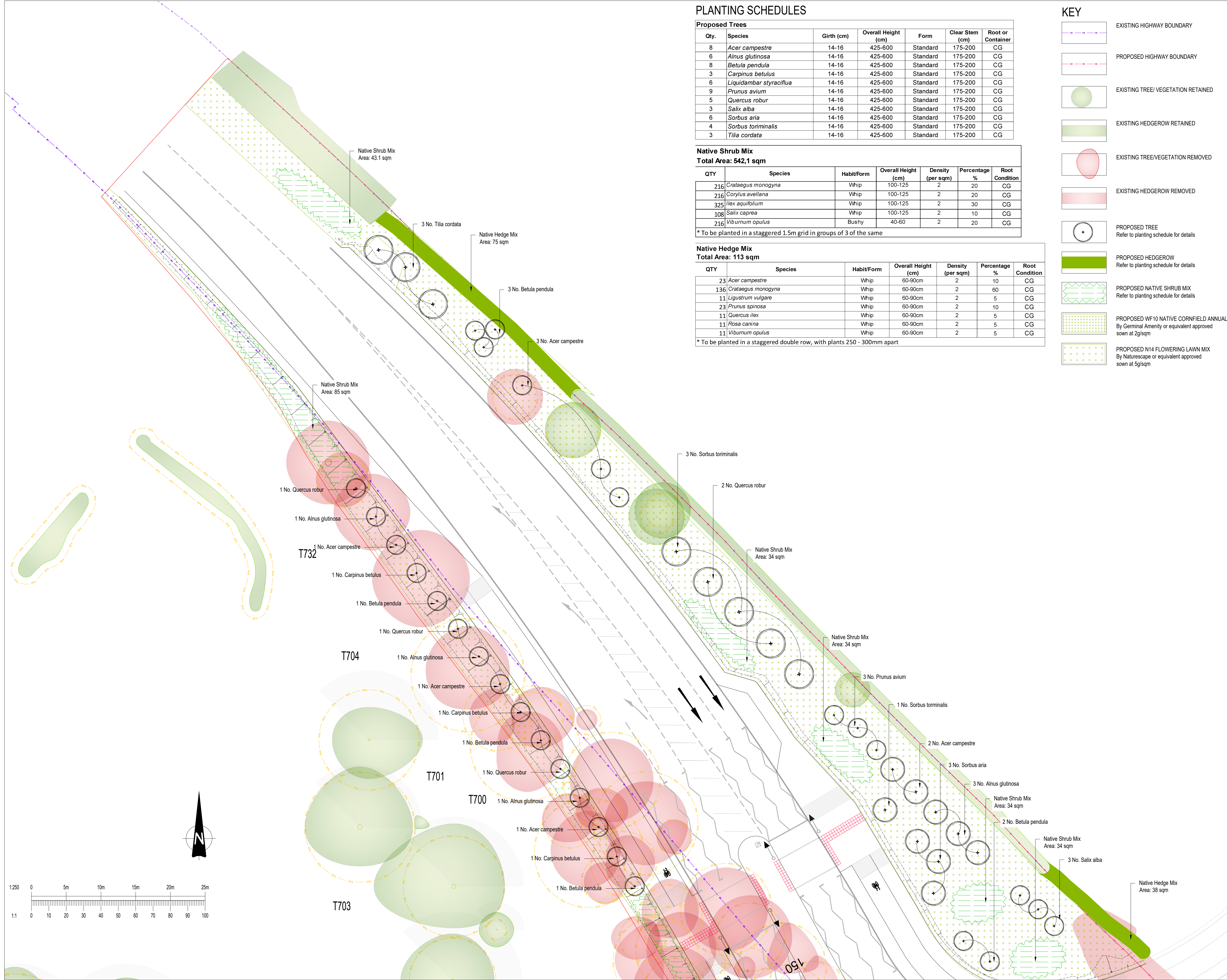
### KEY

- EXISTING HIGHWAY BOUNDARY
- PROPOSED HIGHWAY BOUNDARY
- EXISTING TREE/ VEGETATION RETAINED
- EXISTING HEDGEROW RETAINED
- EXISTING TREE/VEGETATION REMOVED
- EXISTING HEDGEROW REMOVED
- PROPOSED TREE  
Refer to planting schedule for details
- PROPOSED HEDGEROW  
Refer to planting schedule for details
- PROPOSED NATIVE SHRUB MIX  
Refer to planting schedule for details
- PROPOSED W/F10 NATIVE CORNFIELD ANNUALS  
By Geminal Amenity or equivalent approved sown at 2g/sqm
- PROPOSED N14 FLOWERING LAWN MIX  
By Naturescape or equivalent approved sown at 5g/sqm

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Rev	Date	Description	By
P06	28.07.21	OCC COMMENTS	DDL
P05	19.07.21	OCC COMMENTS	DDL
P04	13.07.21	OCC COMMENTS INCORPORATED	NYP
P03	21.06.21	OCC COMMENTS DATED 21.06.21	DL
P02	17.06.21	CO-ORDINATION WITH CIVILS	DL
P01	28.05.21	ISSUED	LT

Project: **GRAVENHILL, BICESTER**

Title: **A41 ROUNDABOUT LANDSCAPE GA SHEET 1 OF 3**

Client: Graven Hill Village Development Company Limited

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Drawing Status: **PRELIMINARY**

Designed by	LT	Checked by	TH	Project No	WIE11386
Drawn by	LT	Date	JUNE 2021	Computer File No	WIE11386-145-XX-ZZ-DR-74-1000.DWG
Scales @ A1	work to figured dimensions only		1:250@A1	Computer File No	WIE11386-145-XX-ZZ-DR-74-1000.DWG

WIE-11386-145-XX-ZZ-DR-74-1001 **P06**





**KEY**

	EXISTING HIGHWAY BOUNDARY
	PROPOSED HIGHWAY BOUNDARY
	EXISTING TREE/ VEGETATION RETAINED
	EXISTING HEDGEROW RETAINED
	EXISTING TREE/VEGETATION REMOVED
	EXISTING HEDGEROW REMOVED
	PROPOSED TREE Refer to planting schedule for details
	PROPOSED HEDGEROW Refer to planting schedule for details
	PROPOSED NATIVE SHRUB MIX Refer to planting schedule for details
	PROPOSED W10 NATIVE CORNFIELD ANNUALS By Geminal Amenity or equivalent approved sown at 2g/sqm
	PROPOSED N14 FLOWERING LAWN MIX By Naturescape or equivalent approved sown at 5g/sqm

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P04	13.07.21	OCC COMMENTS INCORPORATED	NYP
P03	21.06.21	OCC COMMENTS DATED 21.06.21	DL
P02	17.06.21	CO-ORDINATION WITH CIVILS	DL
P01	28.05.21	ISSUED	LT

Amendments			
Project	GRAVENHILL, BICESTER		
Title	A41 ROUNDABOUT LANDSCAPE GA SHEET 2 OF 3		
Client	 Graven Hill Village Development Company Limited		

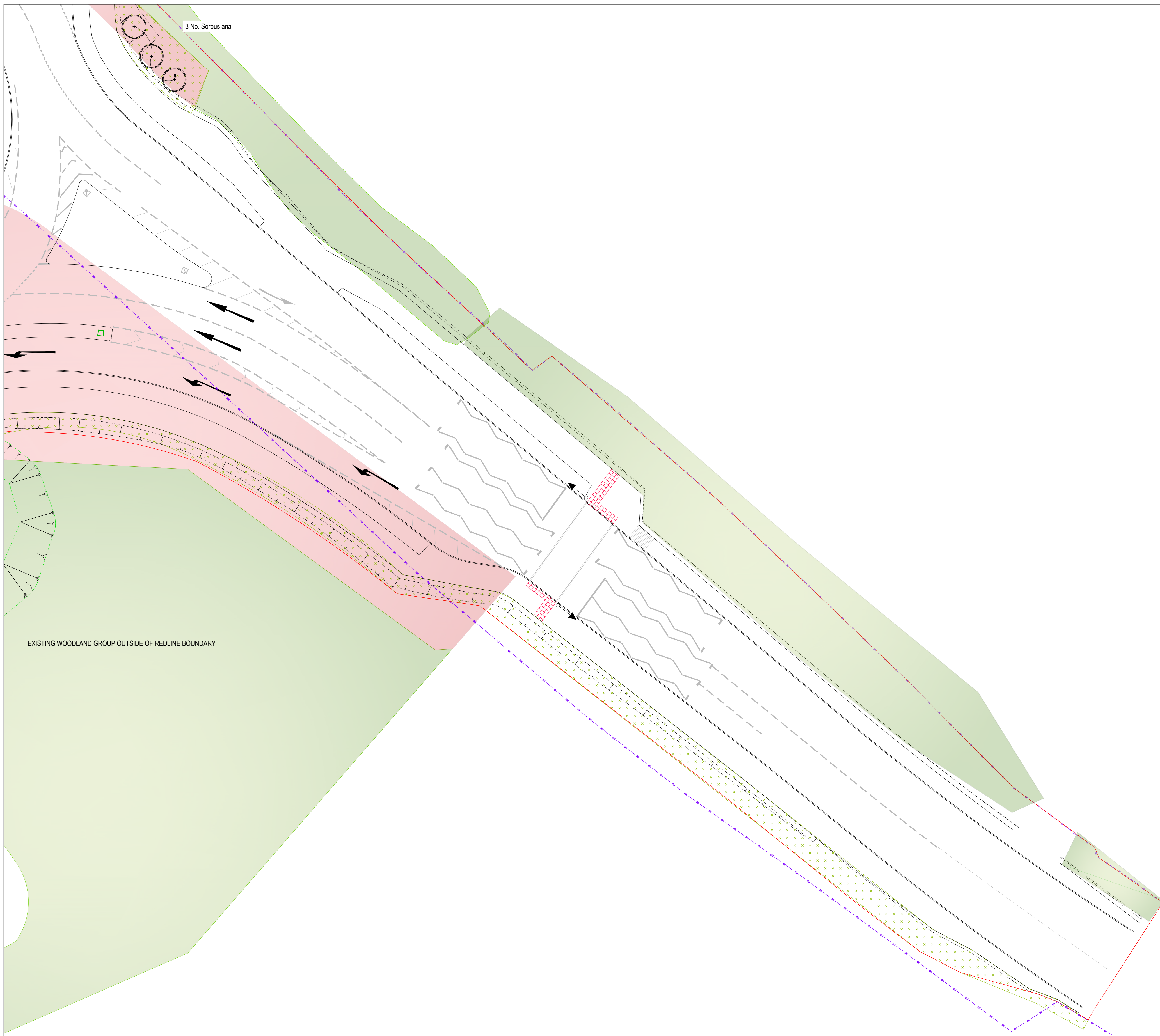
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work to figured dimensions only		WIE11386-145-XX-ZZ-DR-74-1000.DWG	

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3 No. Sorbus aria

EXISTING WOODLAND GROUP OUTSIDE OF REDLINE BOUNDARY

KEY	
	EXISTING HIGHWAY BOUNDARY
	PROPOSED HIGHWAY BOUNDARY
	EXISTING TREE/ VEGETATION RETAINED
	EXISTING HEDGEROW RETAINED
	EXISTING TREE/VEGETATION REMOVED
	EXISTING HEDGEROW REMOVED
	PROPOSED TREE Refer to planting schedule for details
	PROPOSED HEDGEROW Refer to planting schedule for details
	PROPOSED NATIVE SHRUB MIX Refer to planting schedule for details
	PROPOSED WF10 NATIVE CORNFIELD ANNUALS By Geminal Amenity or equivalent approved sown at 2g/sqm
	PROPOSED N14 FLOWERING LAWN MIX By Naturescape or equivalent approved sown at 5g/sqm

This drawing should not be scaled. Dimensions to be verified on site.  
Any discrepancies should be referred to the Engineer prior to work being put in hand.  
This drawing is the property of Waterman Infrastructure & Environment Limited, and the drawing is issued on the condition that it is not copied, reproduced, related or disclosed to any unauthorised person, either wholly or in part without the consent in writing of Waterman Infrastructure & Environment Limited  
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**GENERAL NOTES**

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEER'S, ARCHITECTS OR OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.
2. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE BY THE CONTRACTOR PRIOR TO PREPARING ANY WORKING DRAWINGS OR COMMENCING ON SITE.
3. THE CONTRACTOR MUST ENSURE AND WILL BE HELD RESPONSIBLE FOR THE OVERALL STABILITY OF THE BUILDING/STRUCTURE/EXCAVATION AT ALL STAGES OF THE WORK.
4. ALL WORK BY THE CONTRACTOR MUST BE CARRIED OUT IN SUCH A WAY THAT ALL REQUIREMENTS UNDER THE HEALTH AND SAFETY AT WORK ACT ARE SATISFIED.
5. ALL WORK IS TO BE CARRIED OUT IN COMPLIANCE WITH THE REQUIREMENTS OF THE RELEVANT STATUTORY AUTHORITIES AND REGULATIONS.

Rev	Date	Description	By
P05	19.07.21	OCC COMMENTS	DDL
P04	13.07.21	OCC COMMENTS INCORPORATED	NYP
P03	21.06.21	OCC COMMENTS DATED 21.06.21	DL
P02	17.06.21	CO-ORDINATION WITH CIVILS	DL
P01	28.05.21	ISSUED	LT

Amendments

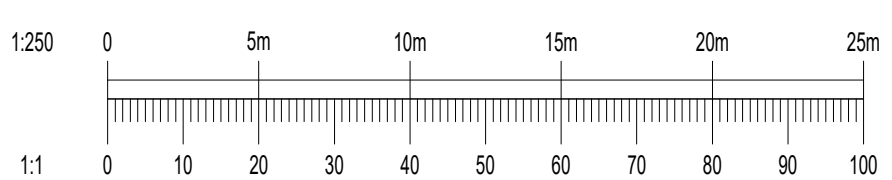
**Project**  
GRAVENHILL, BICESTER

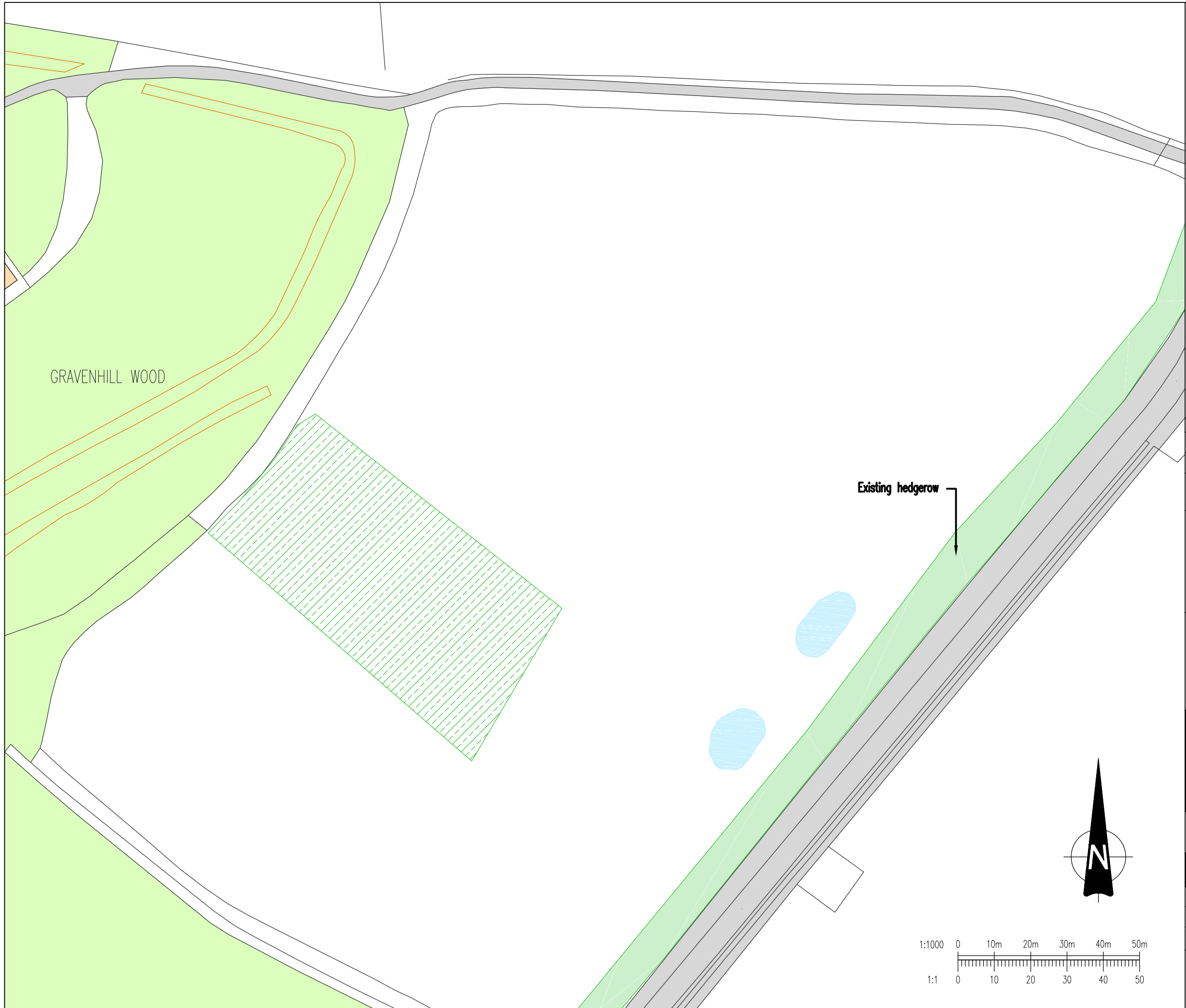
**Title**  
A41 ROUNDABOUT  
LANDSCAPE GA  
SHEET 3 OF 3



Drawing Status <b>PRELIMINARY</b>			
Designed by	LT	Checked by	TH
Drawn by	LT	Date	JUNE 2021
Scales @ A1 work to figured dimensions only		1:250@A1	Computer File No WIE11386-145-XX-ZZ-DR-74-1000.DWG

WIE-11386-145-XX-ZZ-DR-74-1003 **P05**





- KEY
- EXISTING RECEPTOR POND
  - PROPOSED AREA OF NATIVE WOODLAND PLANTING  
0.42 ha for BNG

Rev	Date	Description	By
P01	28.05.21	PRELIMINARY	LT

Amendments			
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Project **GRAVENHILL, BICESTER**

Title **A41 ROUNDABOUT  
BNG OFFSET PLANTING**

Client



Graven Hill Village Development Company Limited



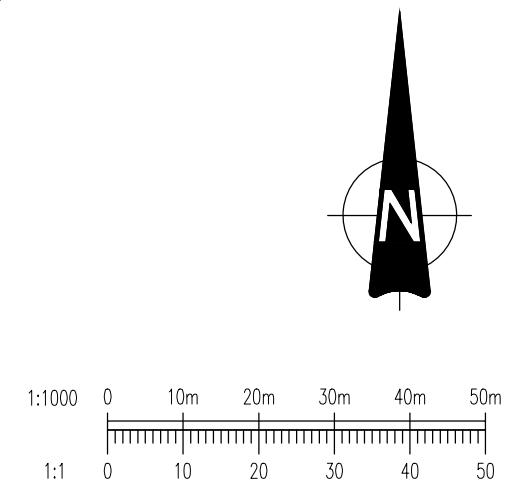
Merchants House Wapping Road Bristol BS1 4RW  
1 0117 937 8200  
mail@watermangroup.com www.watermangroup.com

Drawing Status **PRELIMINARY**

Designed by	SL	Checked by	TH	Project No
Drawn by	LT	Date	MAY 2021	<b>WIE11386</b>

Scales @ A3	1:1000@A3	Computer File No
work to figured dimensions only		WIE11386-145-XX-ZZ-DR-74-1005_BNG_offset.dwg

**WIE11386-145-XX-ZZ-DR-74-1004** **P01**



File Path: IS:\m\w\p\Projects\WIE11386\_GH\_U\_LTA\_2#WO45\_A41\_ROUNDABOUT\_Gat\_P01\_CAD14\_Landscape.dwg

## B. Planning Policy

### National Planning Policy

#### National Planning Policy Framework, 2019

The National Planning Policy Framework<sup>12</sup> (NPPF) was revised in February 2019. Section 11 (outlined below) of the NPPF, 'Conserving and Enhancing the Natural Environment', effectively replaces former Planning Policy Statement 9: Biodiversity and Geological Conservation. However, Government Circular 06/2005<sup>13</sup> - Biodiversity and Geological Conservation: Statutory Obligations and Their Impact within the Planning System, remains valid and is referenced within the NPPF.

The NPPF encourages the planning system to contribute to and enhance the natural and local environment. This should be achieved by:

*Inter alia*

- *Minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the government's commitment to halt the overall decline in biodiversity, including by establishing ecological networks that are more resilient to current and future pressures;*

### Local Planning Policy

#### The Cherwell Local Plan 2011 – 2031 (Part 1)

The Adopted Cherwell Local Plan 2011-2031 (Part 1)<sup>14</sup> contains strategic planning policies for development and the use of land. It forms part of the statutory Development Plan for Cherwell to which regard must be given in the determination of planning applications.

The Plan was formally adopted by the Council on 20 July 2015 with the re-adoption of previous policies on 19 December 2016. The following policies are relevant to this assessment

- Policy Bicester 2: Graven Hill

*Development Area: 241 hectares*

*Development Description: This predominantly brownfield site to the south of Bicester is proposed for a mixed-use development of 2,100 dwellings, significant employment land providing for high quality job opportunities, associated services, facilities and other infrastructure including the potential for the incorporation of a rail freight interchange.*

- *Inter alia "Development that respects the landscape setting and that demonstrates enhancement, restoration or creation of wildlife corridors, and that respects the relationship between the woodland and open areas of Graven Hill and the development through the creation of 'green fingers' leading into the development area.*
- *Biodiversity protection and enhancement measures should be implemented in any future development. Protected species surveys for bats and great crested newts will be required, and sufficient mitigation measures agreed prior to planning permission being granted*

<sup>12</sup> Department of Communities and Local Government. (2012). *National Planning Policy Framework*.

<sup>13</sup> Department of Communities and Local Government. (2005). *Circular 06/05: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System*.

<sup>14</sup> Cherwell District Council North Oxfordshire (2016) Part 1 Adopted 20 July 2015 (incorporating policy Bicester 13 re0adopted on 19 December 2016)



- *Preservation and enhancement of protected habitats and species on site and creation and management of new habitats to achieve an overall net gain in biodiversity*
- *An Ecological and Landscape Management Plan to be provided to manage the woodland and other habitats onsite”*
- **Policy ESD 10: Protection and enhancement of Biodiversity and the Natural Environment**
  - Inter alia “Protection and enhancement of biodiversity and the natural environment will be achieved by the following:*
  - *In considering proposals for development, a net gain in biodiversity will be sought by protecting, managing, enhancing and extending existing resources, and by creating new resources;*
  - *Development which would result in damage to or loss of a site of biodiversity or geological value of regional or local importance including habitats of species of principal importance for biodiversity will not be permitted unless the benefits of the development clearly outweigh the harm it would cause to the site, and the loss be mitigated to achieve a net gain in biodiversity/geodiversity;*
  - *Development proposals will be expected to incorporate features to encourage biodiversity and retain and where possible enhance existing features of nature conservation value within the site. Existing ecological networks should be identified and maintained to avoid habitat fragmentation, and ecological corridors should form an essential component of green infrastructure provision in association with new development to ensure habitat connectivity;*
  - *Relevant habitat and species surveys and associated reports will be required to accompany planning applications which may affect a site, habitat or species of known or potential ecological value;*
  - *Planning conditions/obligations will be used to secure net gains in biodiversity by helping to deliver Biodiversity Action Plan targets and/or meeting the aims of Conservation Target Areas. Developments for which these are the principal aims will be viewed favourably; and*
  - *A monitoring and management plan will be required for biodiversity features on site to ensure their long-term suitable management.*

## **C. Completed Defra Biodiversity Metric 2.0 Calculation Tool Headline Results**

## Headline Results

[Return to results menu](#)

<b>On-site baseline</b>	<i>Habitat units</i>	2.99
	<i>Hedgerow units</i>	1.23
	<i>River units</i>	0.00
<b>On-site post-intervention</b> (Including habitat retention, creation, enhancement & succession)	<i>Habitat units</i>	3.08
	<i>Hedgerow units</i>	1.87
	<i>River units</i>	0.00
<b>Off-site baseline</b>	<i>Habitat units</i>	0.84
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
<b>Off-site post-intervention</b> (Including habitat retention, creation, enhancement & succession)	<i>Habitat units</i>	2.93
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
<b>Total net unit change</b> (including all on-site & off-site habitat retention/creation)	<i>Habitat units</i>	2.18
	<i>Hedgerow units</i>	0.64
	<i>River units</i>	0.00
<b>Total net % change</b> (including all on-site & off-site habitat creation + retained habitats)	<i>Habitat units</i>	72.88%
	<i>Hedgerow units</i>	52.03%
	<i>River units</i>	0.00%