

Biodiversity Statement & Metric Assessment

Northfleet School for Girls, Gravesend, Kent

A Report to: LaboSport

Report Number: RT-MME-RT-MME-180683-05

Date: December 2024

Project Information & Site Context	
Site Name & Location	Northfleet School for Girls, Gravesend, Kent
Site Area (ha)	1.93
Grid Reference	TQ 62962 72672
Topography	There is a significant decline across the proposed pitch footprint from south to north, of between around 3.5 to 4.9m.
Project Background	In July 2024, LaboSport commissioned Middlemarch to undertake a Biodiversity Metric Assessment associated with a proposed development at Northfleet School for Girls in Gravesend, Kent. The assessment is informed by ecological and arboricultural works carried out at the site in August 2024 by Middlemarch. These are: ● Preliminary Arboricultural Assessment (RT-MME-180683-01); ● Arboricultural Impact Assessment (RT-MME-180683-02); ● Arboricultural Method Statement (RT-MME-180683-03); and, ● Preliminary Ecological Appraisal (RT-MME-180683-04 Rev A). An additional Ecological Walkover Assessment was undertaken in November 2024 to accommodate for changes to the red line boundary of the site. The findings of this survey are made available within the revised Preliminary Ecological Appraisal (Report RT-MME-180683-04 Rev A).
Summary of Proposals	The proposed development will comprise the construction of a 3G Artificial Grass Pitch (AGP) with associated fencing, floodlights and drainage infrastructure. There is a significant fall across the proposed pitch footprint from south to north, of between around 3.5 to 4.9m and therefore some levelling earthworks (cut and fill) are anticipated to reduce the fall across the pitch. This includes some artificial raising in the south west corner of the proposed pitch. This assessment is based on the documentation provided by the client and detailed below: ● Northfleet School LSUK 21 0 04 GENERAL ARRANGEMENT 106X70M G 218481 – LaboSport ● Northfleet School LSUK 21 0 04 PROPOSED PLAN G 218481 – LaboSport ● R-SI-27677-01-00 Site Investigation Report – JPP ● G218481 Northflet School 6x15m columns 200lux R1

Methods		
Biodiversity Metric	The biodiversity calculations used within this assessment were undertaken by Richard Sainsbury BSc (Hons) (Senior Ecological Consultant) using 'The Statutory Biodiversity Metric' ¹ and associated User Guide ² .	
Data Sources	The baseline habitat data and condition assessment for the site is detailed in Appendix 2. A Phase 1 Habitat showing the extent and location of each habitat recorded on site pre-development is included in Appendix 1 (C180683-04 Rev A). A post-development habitat map is included in Appendix 1 (C180683-05-01).	
Habitat Attributes	<i>Distinctiveness</i>	An automated score based on the type of habitat present and its value to wildlife. Highly diverse habitats such as those listed as Habitats of Principal Importance under the NERC Act (2006) or Annex 1 habitats in the Habitats Directive (1992) score highly in this category, whilst highly modified and low diversity habitats such as arable crops will have low distinctiveness scores.
	<i>Condition</i>	A score based on the quality of the habitat parcel against published condition criteria (See Appendix 2).
	<i>Strategic Significance</i>	A score based on information set out in local plans or policies. In this instance, a strategic location was defined as the Kent Nature Partnership Biodiversity Strategy 2020 to 2045 ³ .
Constraints & Assumptions	The assumptions regarding target habitat types, or condition, in this report are founded on professional opinion with reference to the likely achievable habitat outcomes at the site, based on the proposed planting plans and presumed management resources. All target habitats presume the implementation of a long-term management plan to achieve these ends and a recommendation to this effect is given. Where the baseline value for any area, linear or watercourse features is zero (i.e. no such feature exists at the site), and where new creation of these features is proposed, the percentage uplift cannot be mathematically calculated, and the metric outputs 'N/A' in the headline results tab. However, it is accepted that any new creation where there was previously no area, linear or watercourse habitat, constitutes meeting the statutory biodiversity requirement.	

¹ Department for Environment, Food and Rural Affairs (DEFRA) (2024) Statutory Biodiversity Metric Calculation Tool.
<https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

² Department for Environment, Food and Rural Affairs (DEFRA) (2024) Statutory Biodiversity Metric Condition Assessments.
<https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

³ Kent Nature Partnership (2020): Biodiversity Strategy 2020 to 2045. Available at: <https://kentnature.org.uk/wp-content/uploads/2022/01/Kent-Biodiversity-Strategy-2020.pdf>

Headline Results				
On-Site Baseline	On-Site Baseline	Habitat units	3.39	
		Hedgerow units	0.00	
		Watercourse Units	0.00	
	On-Site Post Intervention	Habitat units	2.70	
		Hedgerow units	0.00	
		Watercourse Units	0.00	
	On-Site Net Unit Change (units & percentage)	Habitat units	-0.68	-20.16%
		Hedgerow units	0.00	0.00%
		Watercourse Units	0.00	0.00%
Off-Site Baseline	Off-Site Baseline	Habitat units	0.00	
		Hedgerow units	0.00	
		Watercourse Units	0.00	
	Off-Site Post Intervention	Habitat units	0.00	
		Hedgerow units	0.00	
		Watercourse Units	0.00	
	Off-Site Net Unit Change (units & percentage)	Habitat units	0.00	0.00%
		Hedgerow units	0.00	0.00%
		Watercourse Units	0.00	0.00%
Combined Net Unit Change (including all on-site & off-site habitat retention, creation & enhancement)		Habitat units	-0.68	
		Hedgerow units	0.00	
		Watercourse Units	0.00	
Spatial Risk Multiplier (SRM) Deductions		Habitat units	0.00	
		Hedgerow units	0.00	
		Watercourse Units	0.00	

Final Results				
Total Net Unit Change <i>(including all on-site & off-site habitat retention, creation & enhancement)</i>	Habitat units	-0.68		
	Hedgerow units	0.00		
	Watercourse Units	0.00		
Total Net % Change <i>(including all on-site & off-site habitat retention, creation & enhancement)</i>	Habitat units	-20.16%		
	Hedgerow units	0.00%		
	Watercourse Units	0.00%		
Trading Rules Satisfied*				No
*you must state if irreplaceable habitats are on-site at baseline: No irreplaceable habitats were identified on-site at baseline.				
Unit Type	Target**	Baseline Unit	Units Required	Unit Deficit
Habitat units	10.00%	3.39	3.73	1.02
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse Units	10.00%	0.00	0.00	0.00
**From January 2024, the UK Mandatory minimum is a 10% net gain in biodiversity for all development. Kent County Council have set the minimum biodiversity net gain at 10%.				
Discussion				
The calculations used within the metric to quantify biodiversity units differ between habitat, hedgerow and watercourse features, consequently, the values generated are not comparable, and a net gain in one feature cannot compensate for a net loss within another feature.				
How is the target net gain percentage being delivered?	Habitat units	Both on-site & off-site.		
	Hedgerow units	N/A		
	Watercourse Units	N/A		
How many Biodiversity Units are needed off-site to meet the required net gain percentage?	Habitat units	1.02		
	Hedgerow units	0.00		
	Watercourse Units	0.00		

Recommendations

The recommendations below are based on Middlemarch's current understanding of the project. If works are changed in any way these recommendations will need to be amended if appropriate.

R1	The Local Planning Authority should be contacted to discuss the provision of an offsite compensation solution to address the residual requirement of 1.02 BU (Habitats) needed to ensure the development proposals can deliver a biodiversity net gain.
R2	After planning permission has been approved a Biodiversity Gain Plan needs to be produced and submitted to the Local Planning Authority to provide evidence for all BNG decisions and show how BNG will be achieved.
R3	A 30-year Habitat Management and Monitoring Plan (HMMP) should be produced to set out the detailed habitat creation and enhancement specifications and long-term management prescriptions, that will be required to ensure the scheme will achieve its conservation objectives over the lifespan of the project. The HMMP should also be inclusive of a long-term monitoring strategy to measure progress against conservation objectives and inform an adaptive approach to long-term management.

Quality Assurance

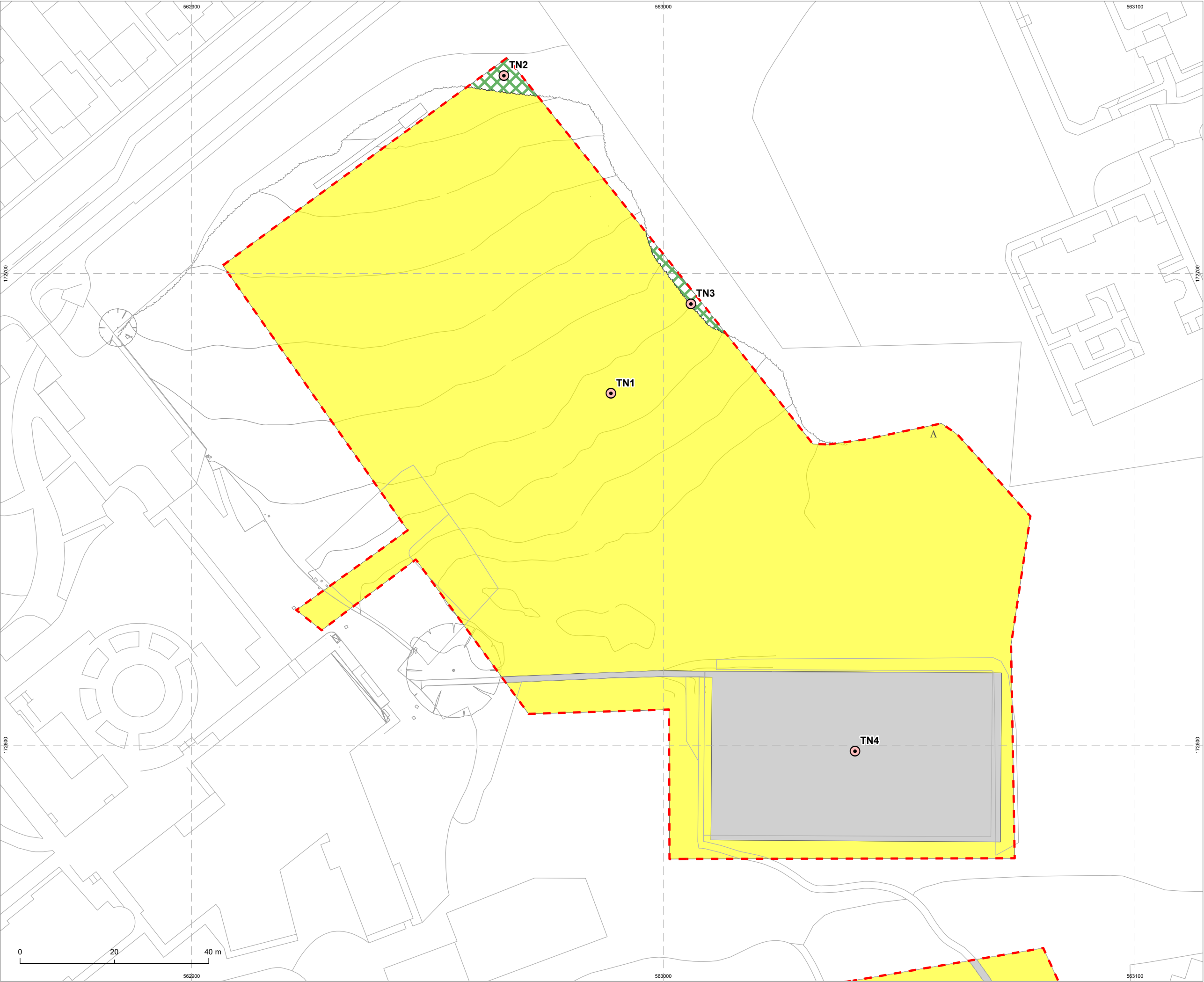
Date	Version	Author	Checked & Approved By
17/12/2024	Final	Richard Sainsbury BSc (Hons) (Senior Ecological Consultant)	Paul Roebuck MSc MCIEEM (Regional Manager: South)

Appendix 1

Drawings

Drawing C180683-04-01 Rev A – Phase 1 Habitat Survey

Drawing C180683-05-01 - Drawing Adaptation of Landscape Strategy Proposal for Purposes of the BMA



C180683-04-01-RevA

Legend

Site boundary

Amenity grassland

Dense scrub

Hardstanding

Target note - habitat parcel

Project

Northfleet School for Girls, Gravesend, Kent

Drawing

Phase 1 Habitat Map

Client

Labosport

Drawing Number

C180683-04-01-RevA

Revision

Rev A

Scale @ A3

1:750

Date

December 2024

Approved By

RS

Drawn By

JR

MIDDLEMARCH

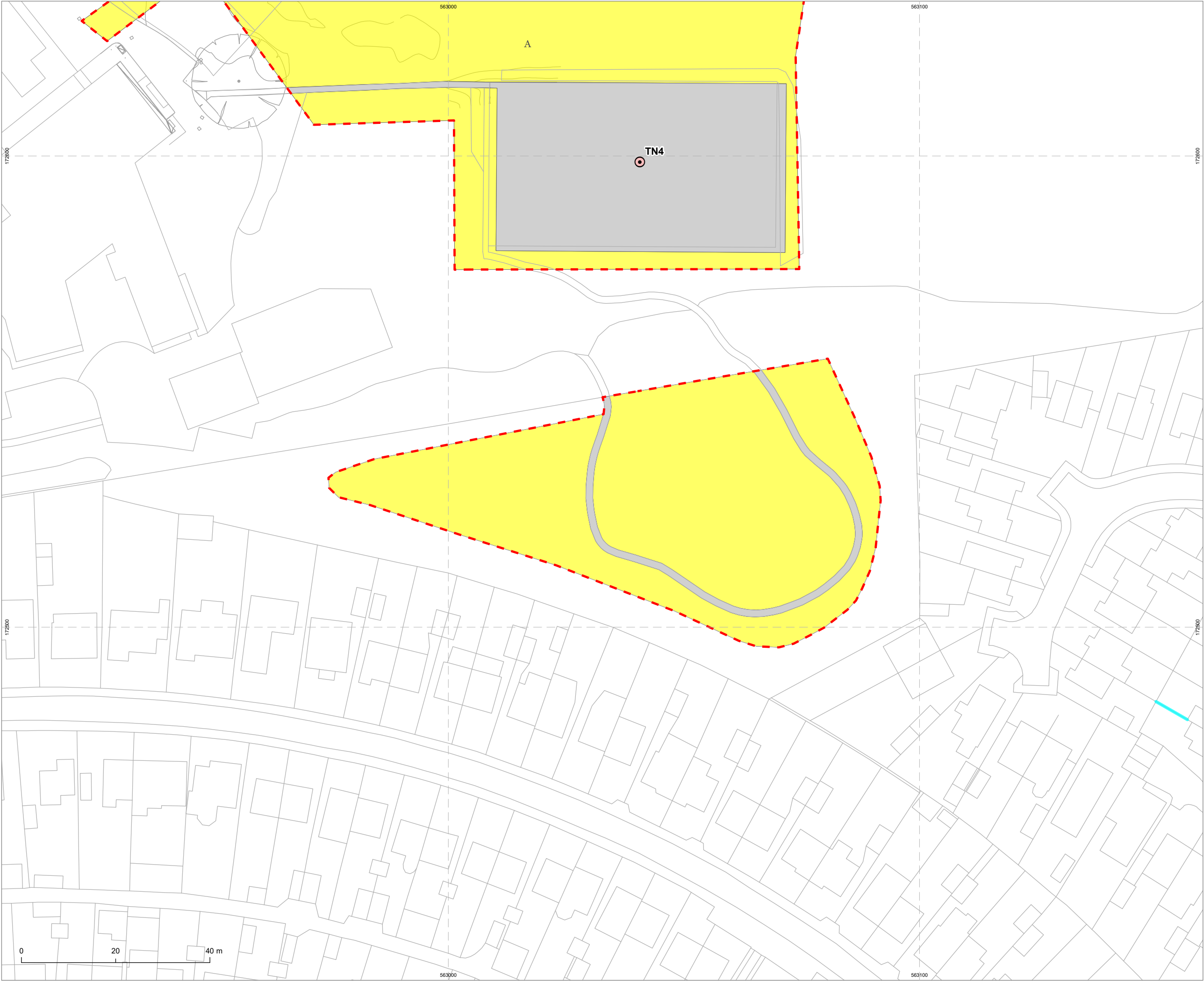
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C180683-04-01-RevA

Legend

Site boundary

Amenity grassland

Dense scrub

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Target note - habitat parcel

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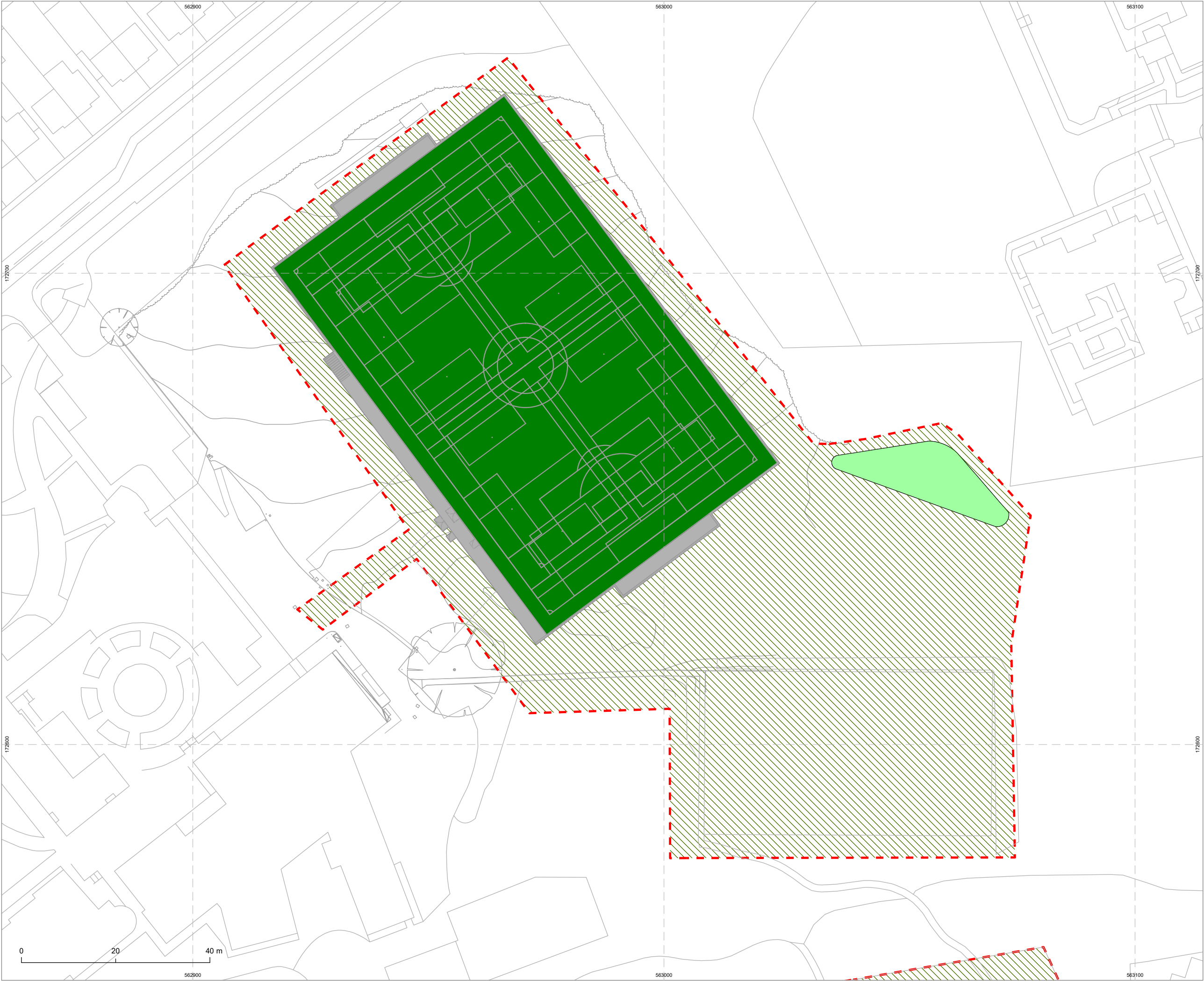
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C180683-05-01-RevA

Legend

Site boundary

Proposed tree

Hardstanding and buildings

Proposed bund

Proposed sports pitch

Retained habitat

Project

Northfleet School for Girls, Gravesend, Kent

Drawing

Biodiversity Metric Assessment

Client

Labosport

Drawing Number

C180683-05-01-RevA

Revision

Rev A

Scale @ A3

1:750

Date

December 2024

Approved By

RS

Drawn By

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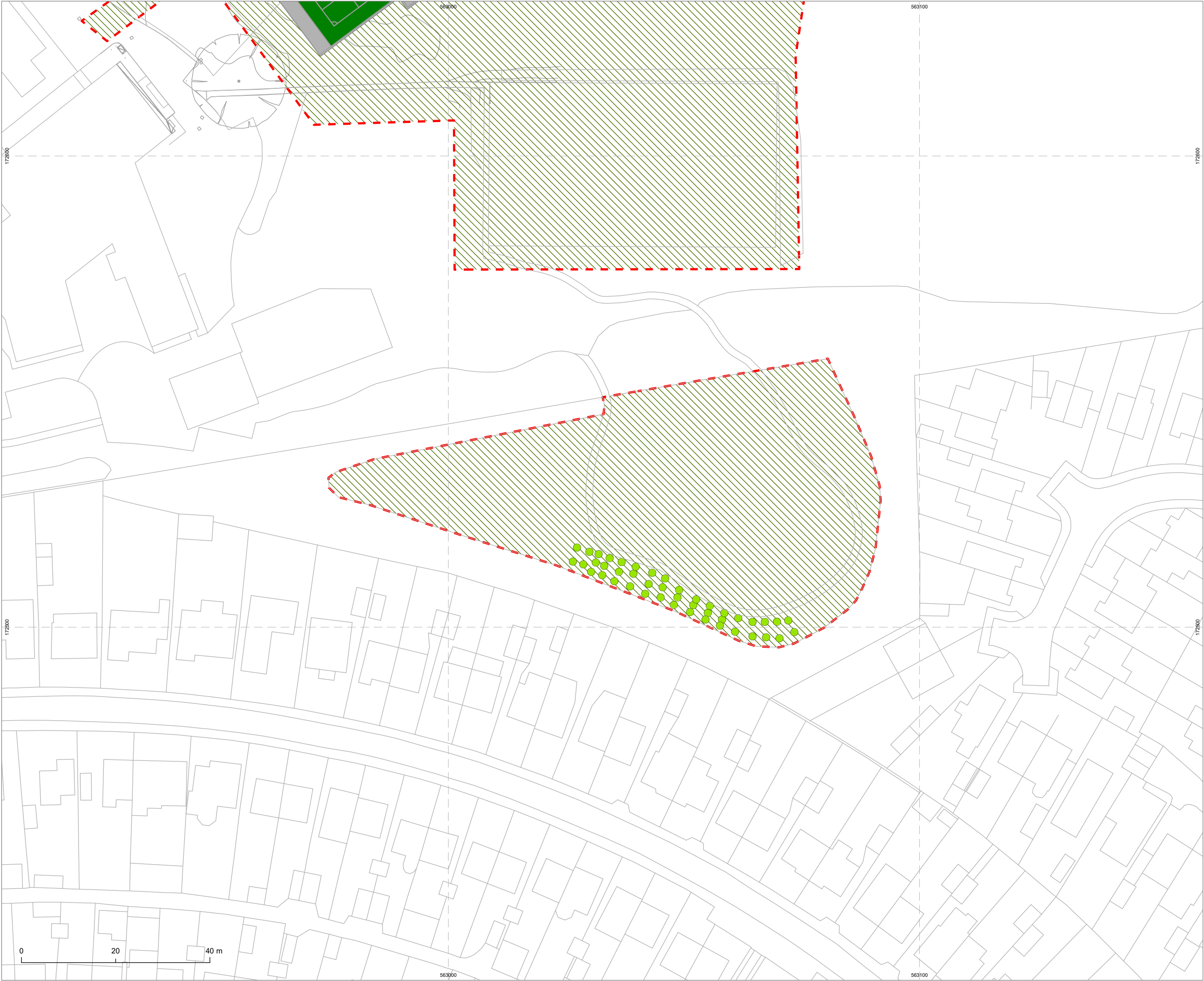
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C180683-05-01-RevA

Legend

Site boundary

Proposed tree

Hardstanding and buildings

Proposed bund

Proposed sports pitch

Retained habitat

Project

Northfleet School for Girls, Gravesend, Kent

Drawing

Biodiversity Metric Assessment

Client

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Drawing Number

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Scale @ A3

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Appendix 2

Habitat Condition Assessment

Area Habitat				Condition Sheet Criteria Score																
Polygon / Line Ref.	Phase 1 Habitat Type	UK Hab Habitat Equivalent	Habitat Description	Condition Sheet Used	A	B	C	D	E	F	G	H	I	J	K	L	M	Total Score	Condition Assessment	
TN1	Amenity Grassland	Modified Grassland g4	Dominant habitat on site comprising of a large sports playing field to the north and smaller enclosed amenity space to the south. The grassland was managed to a short sward height (average approximately < 50 mm). Small sections of bare ground present. Species comprised of: - D – perennial rye grass - A – yarrow, ribwort plantain and dandelion - F – daisy and wall barley - O – poppy, Yorkshire fog, dock, sow thistle, hoary mustard, black medick and mallow - R – small-flowered crane’s bill, red clover, golden ragwort and Dyer’s weed.	Grassland Low	F	F	P	P	P	P	P	-	-	-	-	-	-	5	Poor	
TN2	Dense Scrub	Bramble Scrub	Small expanses of bramble scrub present in NE corner of the site.	Heathland and Scrub	F	F	P	F	F	-	-	-	-	-	-	-	-	1	Poor	
TN3	Dense Scrub	Mixed Scrub	A narrow belt of mixed scrub abutted the edge of the boundary woodland	Heathland and Scrub	P	F	P	P	F	-	-	-	-	-	-	-	-	3	Moderate	
TN4	Hardstanding	Developed Land; Sealed Surface	Tennis court and footpath present within the southern section of the site. Area devoid of vegetation and of no ecological value.	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A	
TN5	Hardstanding	Developed Land; Sealed Surface	Long trackway with connected sand pit. Area devoid of vegetation and of no ecological value.	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A	
Key: P – Criteria passed F – Criteria failed																				

Appendix 3

Statutory Biodiversity Metric Calculation

PDF output of the Statutory Metric is attached below with the Excel Spreadsheet included separately as a read-only document.

The Statutory Biodiversity Metric

Start page

Project details			
Planning authority:	Gravesham Borough Council		
Project name:	Northfleet School for Girls, Gravesend, Kent		
Applicant:	Labosport		
Application type:	Full		
Planning application reference:			
Completed by:	Richard Sainsbury BSc (Hons); Senior Ecological Consultant; Middlemarch		
Date of metric completion:	13 December 2024		
Reviewer:	Sian Comlay; Senior Biodiversity Consultant; Middlemarch		
Calculation iteration:			
Planning authority reviewer:			
Date of planning authority review:			
Target % net gain:	10%		
Irreplaceable habitat present at baseline:	No ✓		
Total site area - including irreplaceable habitat area (hectares):	1.93	Irreplaceable habitat site area (hectares):	0.00
Total off-site area - including irreplaceable habitat area (hectares):	N/A	Irreplaceable habitat area off-site (hectares):	N/A

Cell style conventions	
⚠	Attention required
▲	Input error/rules and principles not met
	Use of this cell is not appropriate
	Enter data
	Automatic lookup
	Result

On-site baseline map

Insert

On-site baseline map reference number

Off-site baseline map

Insert

Off-site baseline map reference number

On-site post intervention map

Insert

On-site post-intervention map reference number

Off-site post intervention map

Insert

Off-site post-intervention reference number

Main menu

Results

View all

Reset view

Northfleet School for Girls, Gravesend, Kent
Headline Results
Scroll down for final results ▲

Return to results menu

On-site baseline	Habitat units	3.39		
	Hedgerow units	0.00		
	Watercourse units	0.00		
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	2.70		
	Hedgerow units	0.00		
	Watercourse units	0.00		
On-site net change (units & percentage)	Habitat units	-0.68	-20.16%	On-site net gain is less than target set ▲
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	

Off-site baseline	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site net change (units & percentage)	Habitat units	0.00	0.00%	
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	

Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.68		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Spatial risk multiplier (SRM) deductions	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		

FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.68	Total net gain achieved is less than target set ▲
	Hedgerow units	0.00	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-20.16%	
	Hedgerow units	0.00%	
	Watercourse units	0.00%	
Trading rules satisfied?	No - Check Trading Summaries ▲		

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	3.39	3.73	1.02	No additional hedgerow units required to meet target ✓ No additional watercourse units required to meet target ✓
Hedgerow units	10.00%	0.00	0.00	0.00	
Watercourse units	10.00%	0.00	0.00	0.00	

Input errors/rule breaks present in metric ▲

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Not using high-discrepancy units

Combined habitat retention and enhancements			
	Habitats	Herpetofauna	Watercourses
Total on-site and off-site baseline areas / length	130	0.00	0.00
Total on-site and off-site baseline area	130	0.00	0.00
Total on-site and off-site baseline areas / length retained	130	0.00	0.00
Total on-site and off-site baseline area retained	130	0.00	0.00
Total on-site and off-site areas / length proposed for enhancement	000	0.00	0.00
Total on-site and off-site baseline area proposed for enhancement	000	0.00	0.00
Total on-site and off-site baseline areas / length lost	000	0.00	0.00
Total on-site and off-site baseline area lost	000	0.00	0.00

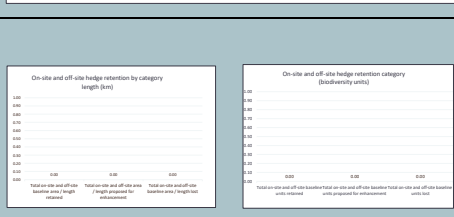
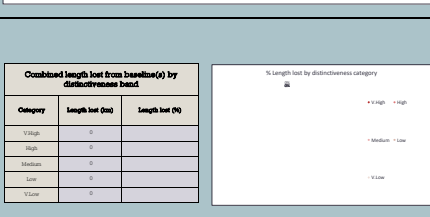
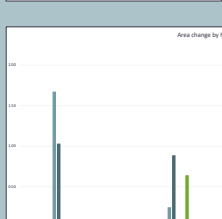
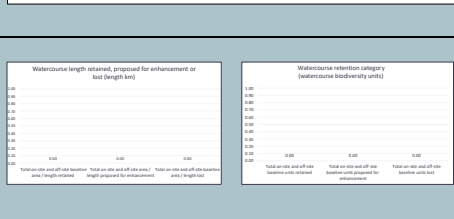
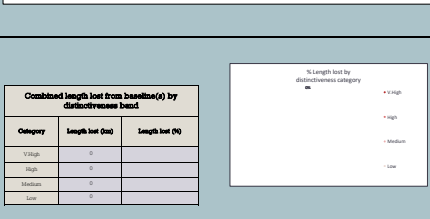
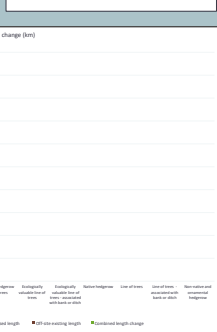
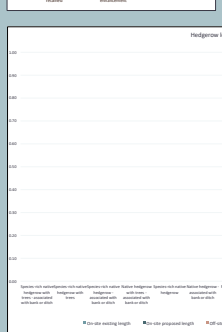
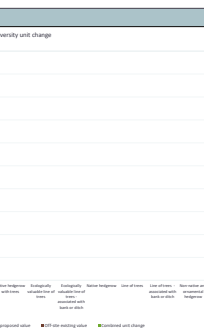
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Watercourses						
On-site change by watercourse type						
Watercourse type	Inundated		Post-developed on site		On-site Change	
	On-site existing length	On-site existing length	On-site proposed length	On-site proposed length	On-site length increase	On-site net change
Private drainage	0.0	0.0	0.0	0.0	0.0	0.0
Other drains and ditches	0.0	0.0	0.0	0.0	0.0	0.0
Canals	0.0	0.0	0.0	0.0	0.0	0.0
Drains	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0

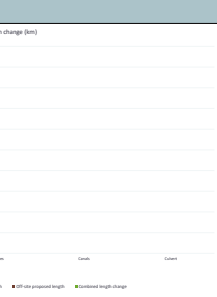
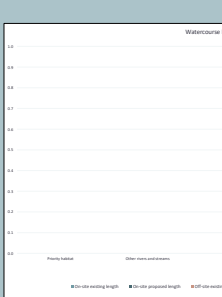
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Category	Biodiversity
2.00	~2.05
3.00	~3.25

[illegible]

Section	On-time existing value	On-time proposed value
Priority Section	0.85	0.75
Other times and classes	0.75	0.65



Return to results menu Trading Summary hedgerows	Trading Summary		
	Disturbance Group	Trading Rule	Trading Status?
	Very High	Same habitat required + Sensitive compensation option A	Yes ✓
	High	Same habitat required +	Yes ✓
	Medium	Same habitat required + Sensitive compensation option B	Yes ✓
Low	Same disturbance or buffer habitat required 2	No ✗	

[illegible]

Very High Distinctiveness Summary	
Very High Distinctiveness Units available to offset lower distinctiveness deficit	0.00
Remaining losses: Like for like not satisfied	0.00

[illegible]

High Distinctiveness Summary	
High Distinctiveness Units available to offset lower distinctiveness deficit	0.00
Remaining losses: Like for like not satisfied	0.00

[illegible]

Medium Distinctiveness Summary		
Medium Distinctiveness Units available to offset Lower Distinctiveness Deficit	0.60	✓
Medium Distinctiveness Broad Habitat losses to be offset by adding up	0.00	
Higher Distinctiveness Surplus Units minus Medium Distinctiveness Broad Habitat Deficit	0.00	
Correlation surplus of units	0.60	

[illegible]

Low Distinctiveness Summary		
Low Distinctiveness not change in units	-1.29	⚠️
Cumulative surplus of units	-0.68	⬆️

Project Name: Northfleet School for Girls, Gravesend, KentMap Reference:

A-1 On-Site Habitat Baseline

Condense / Show Columns

Condense / Show Rows

Main Menu

Area habitat summary

Total Net Unit Change

-0.68

Total Net % Change

-20.19%

Trading Rules Satisfied

No - check trading summaries ▲

Existing area habitats					Distinctiveness		Condition		Strategic significance			Required Action to Meet Trading Rules	Ecological baseline	
Ref	Broad Habitat	Habitat Type	Irreplaceable habitat	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier		Total habitat units	
1	Grassland	Modified grassland	No	1.672	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	3.35	
2	Heathland and shrub	Bramble scrub	No	0.010334	Medium	4	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required ≥	0.04	
3	Urban	Developed land; sealed surface	No	0.246	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00	
4														
5														
6														
7														
8														
				Total habitat area	1.93									3.39
				Site Area (Excluding area of individual trees, green walls, intertidal hard structures)	1.93									

M² to hectares conversion tool:

Select a unit

Hectares

M²

						Bespoke compensation agreed for losses of VHDH or Irreplaceable habitat		Comments		
Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost		User comments	Planning authority comments	Habitat reference number	
0.999		2.00	0.00	0.67	1.35		Area of modified grassland in poor condition. To be partially retained.			
0.010334		0.04	0.00	0.00	0.00		Area of bramble scrub in poor condition. To be retained.			
0.246		0.00	0.00	0.00	0.00		Area of existing hardstanding.			
1.28	0.00	2.04	0.00	0.67	1.35					

Total area lost (excluding area of individual trees, green walls and intertidal hard structures)

0.67

Condense / Show Columns

Condense / Show Rows

Main Menu

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