

Biodiversity gain plan

Submit a biodiversity gain plan to show how your development will achieve biodiversity net gain.

When to use this form

A biodiversity gain plan shows how a development will achieve 10% biodiversity net gain (BNG). Submit this form to your local planning authority after they approve your planning application.

Unless your development is exempt, you cannot start the development until the LPA approves your biodiversity gain plan and biodiversity metric calculation tool.

1. Submission details

1.1 Date

For example, 3/11/2023

21 January 2022

1.2 Planning application reference number

C2/22/00251/CCC

1.3 Local planning authority (LPA)

North Yorkshire Council

1.4 Development site address

If the site does not have an address, enter the OS grid reference.

LAND WEST OF NOSTERFIELD QUARRY,
NOSTERFIELD,
NORTH YORKSHIRE, DL8 2PD

1.5 Describe the development

Tell us about the proposed development and any changes of use (250 words).

LATERAL EXTENSION TO ALLOW THE EXTRACTION OF AN ADDITIONAL 1 MILLION TONNES OF SAND AND GRAVEL, TOGETHER WITH THE REPHASING OF 471,000 TONNES OF PERMITTED RESERVES, TOGETHER WITH FINAL RESTORATION

2. Developer details

2.1 Applicant name

2.2 Company name

Tarmac Trading Limited

2.3 Address

Ground Floor, T3 Trinity Park, Bickenhill Lane,
Birmingham, BS7 7ES

2.4 Email address

c/o nbeale@wardell-armstrong.com

2.5 Telephone number

[REDACTED]

2.6 Declaration

By signing this declaration, you confirm that the information you give is complete and correct. Any opinions are your genuine opinions.

2.7 Signature

[REDACTED]

2.8 Date

06/03/2024

3. Responsible person details

Tell us about who is responsible for completing the biodiversity gain plan. For example, a consultancy ecologist or planning agent.

3.1 Name

Amy Donaldson

3.2 Company name

Wardell Armstrong LLP

3.3 Address

Wardell Armstrong LLP, 36 Park Row, Leeds LS1 5JL

3.4 Email address

adonaldson@wardell-armstrong.com

3.5 Telephone number

[REDACTED]

3.6 Declaration

By signing this declaration, you confirm that the information you give is complete and correct. Any opinions are your genuine opinions.

3.7 Signature

3.8 Date

05.03.24

4. Biodiversity net gain strategy

4.1 Is the relevant date for the pre-development biodiversity value the same date as the planning application?

- Yes
 No

4.2 If no, what earlier date did you agree with the LPA?

4.3 How have you met 'what counts towards your BNG'?

[Find out what you can count towards a development's BNG](#)

Habitat Creation and Enhancement.

Existing broadleaved and lowland mixed deciduous woodland will be partially retained and enhanced to good condition (1.4ha), as will the existing standing open water (4.03ha), other neutral grassland (5.38ha) and marginal/inundation vegetation (reedbed; 0.89ha). Parcels of each of these habitats will also be created in good condition (0.49ha lowland mixed deciduous woodland, 4.69ha reedbed, 7.33ha marginal vegetation; 7.56ha priority ponds, 4.01ha other neutral grassland)

Existing species-poor hedgerows will be partially retained and enhanced to good condition (0.83km). New species-rich native hedgerows with trees will be created (0.335km).

The majority of existing ditch will be retained (0.57km), and ditches are created in good condition as compensation (0.08km).

There is a loss in BNG in this assessment as the Langwith Extension restoration includes a high number of individual tree plantings and woodland, which are removed (or more likely not planted) to accommodate the Oaklands scheme. When using the baseline habitat value prior to the Langwith Extension, a BNG >10% is identified) Following consultations with Lower Ure Conservation Trust a desire was expressed to maintain an open landscape with an absence of tree cover as this is the target habitat for breeding bird species such as curlew.

4.4 How will you avoid or minimise impacts to habitats?

Tell us about the steps you've taken on-site, including to avoid or minimise the impact on irreplaceable habitats.

Habitat retention and enhancement has been proposed wherever possible, for habitats of principle importance and more widespread/common habitats. All peripheral

hedgerows are retained. Created habitats have been specifically designed to mitigate for the loss of habitats on site.

For the purpose of the BNG report, Fox Covert woodland has been considered as Ancient Woodland. The woodland has therefore been retained and a 15m buffer protection.

The Ings Goit will be largely retained, a small section will be lost under agreement with the Internal Drainage Board (IDB), with a retained section of Ings Goit to flow into the large lagoons created during extraction works. The water will flow through a series of lagoons before being discharged at Lady Bridge. In addition, a short length of new cut to a channel linking Flasks Lake and Lingham Water (via a small pond) is created, and the retained proposals from the Langwith Extension scheme include the remainder of this proposed new ditch. In total the new ditch will measure 421m.

4.5 Did you use your local nature recovery strategy to inform the strategic significance of habitats?

This includes other specified strategies if you do not have a local nature recovery strategy.

- Yes
 No

4.6 How will you achieve the target net gain percentage?

- On-site
 Off-site
 Both

4.7 Are any of your on-site enhancements considered 'significant'?

[Find out what counts as a significant on-site enhancement.](#)

- Yes
 No

4.8 If yes, tell us about the significant on-site enhancements

Include the appropriate planning condition or how you've secured the habitat.

Broadleaved and lowland mixed deciduous woodland will be enhanced to good condition. Reedbed will be retained and enhanced to good condition. Standing open water will be retained and enhanced to good condition. Other neutral grassland will be retained and enhanced to good condition. Species poor hedgerows will be retained and enhanced to good condition.

A detailed landscape and biodiversity maintenance and management plan (DLBMMP) will be supplied, secured via s.106 agreement.

4.9 If no, how many off-site biodiversity units do you need to meet 10% net gain?

4.10 Explain why you're using off-site biodiversity units

Only answer this question if you're planning to use off-site biodiversity units (250 words).

4.11 Explain why you're planning to use statutory biodiversity credits

Only answer this question if you're planning to use statutory biodiversity credits (250 words).

4.12 Do you have a habitat management and monitoring plan?

- Yes
- No

4.13 Have you used the statutory biodiversity metric tool?

- Yes
- No

4.14 Biodiversity metric calculation

Send your biodiversity metric calculation to the LPA and enter the file name.

Biodiversity Metric 3.1 Nosterfield Scenario B TP Update
27.03.23

4.15 Condition assessments

Send your condition assessments to the LPA and enter the file name.

Detailed condition assessment not undertaken.

4.16 Pre-development habitat survey report and map

Send your baseline habitat survey report and map to the LPA. Enter the file name.

Appendix 7.11 BNG Scenario B
NT14714 N051-00240 Figure 7.20 Biodiversity Net Gain
– Baseline Conditions (Scenario B)

4.17 Post-development habitat map or landscape plan

Send your post-development habitat survey report and map to the LPA. Enter the file name.

Appendix 7.11 BNG Scenario B
NT14714 N051-00240 Figure 7.20 Biodiversity Net Gain
– Habitat Creation (Scenario B)
NT14714 N051-00240 Figure 7.20 Biodiversity Net Gain
– Habitat Retention (Scenario B)

4.18 Have you included an approved habitat degradation in the baseline?

If yes, include the relevant consenting body and reference number.

- Yes
- No

Consenting body
Reference number

5. Irreplaceable habitats

5.1 Does the development impact any irreplaceable habitats?

If yes, tell us if you've submitted an approved compensation plan.

- Yes
- No

5.2 Have you submitted an approved compensation plan?

- Yes
- No

6. On-site habitat enhancements

Answer this section if your development includes on-site habitat enhancements.

6.1 Survey date

For example, 3/11/2023

14/10/21

6.2 Survey constraints

For example, access issues, weather, or seasonal constraints.

None.

6.3 Total pre-development biodiversity value

Enter the number from the headline results in your statutory biodiversity metric calculation.

Number of area habitat biodiversity units

418.27

Number of hedgerow biodiversity units

11.31

Number of watercourse biodiversity units

7.75

6.4 Total post-development biodiversity value

Enter the number from the headline results in your statutory biodiversity metric calculation.

Number of area habitat biodiversity units

392.49

Number of hedgerow biodiversity units

10.80

Number of watercourse biodiversity units

4.85

6.5 Total net change in biodiversity units

Enter the number from the headline results in your statutory biodiversity metric calculation.

Area habitat biodiversity units

-25.77

Area habitat biodiversity units % change

-6.16%

Hedgerow biodiversity units

-0.51

Hedgerow biodiversity units % change

-4.55%

Watercourse biodiversity units

-2.90

Watercourse biodiversity units % change

-37.43%

6.6 Will you register and allocate any biodiversity units from your site to other developments?

If yes or provisionally, give details.

Yes

No

6.7 Give details

Tell us about the amount of biodiversity units and the development location (250 words).

7. Off-site habitat enhancements

Answer this section if your development includes off-site habitat enhancements.

7.1 Tell us about the off-site habitat enhancements

Include whether you're delivering the off-site enhancements or buying biodiversity units.

7.2 Biodiversity gain site register reference number

7.3 How have you secured the off-site habitat enhancements?

Tell us about any responsible bodies and whether you've used an S106 or conservation covenant.

7.4 Total pre-development biodiversity value

Enter the number from the headline results in your statutory biodiversity metric calculation.

Number of area habitat biodiversity units

Number of hedgerow biodiversity units

Number of watercourse biodiversity units

7.5 Total post-development biodiversity value

Enter the number from the headline results in your statutory biodiversity metric calculation.

Number of area habitat biodiversity units

Number of hedgerow biodiversity units

Number of watercourse biodiversity units

7.6 Total net change in biodiversity units

Enter the number from the headline results in your statutory biodiversity metric calculation.

Area habitat biodiversity units

Area habitat biodiversity units % change

Hedgerow biodiversity units

Hedgerow biodiversity units % change

Watercourse biodiversity units

Watercourse biodiversity units % change

8. Statutory biodiversity credits

Answer this section if you need to use statutory biodiversity credits.

8.1 Do you need to use statutory biodiversity credits?

Yes

No

8.2 How many statutory biodiversity credits do you need?

Tell us the unit shortfall by tier, including the spatial risk multiplier. Enter the number from the headline results in your statutory biodiversity metric calculation.

A1

A2

A3

A4

A5

H

W

8.3 What evidence is there that no units are available through the market?

Send a message from at least 3 habitat providers, or a search result from online registers.

8.4 Proof of purchase

Send proof of purchase and enter the reference number.

9. Trading summary

9.1 Distinctiveness group

Tell us if the trading was satisfied for each distinctiveness group. If the trading was not satisfied, tell us if you agreed bespoke compensation.

Very high

Yes

High

No. Loss of Lowland Mixed Deciduous Woodland. BNG methodology agreed with LPA, losses attributable to conservation of farmland birds.

Medium

No. Loss of other neutral grassland and urban trees. BNG methodology agreed with LPA, losses attributable to conservation of farmland birds.

Low

No. Overall net loss.

10. Sharing data (optional)

10.1 Can we share your ecological survey data with the Local Environmental Records Centre or other bodies?

Yes

No

Technical Note



PROJECT:	Nosterfield Quarry Oakland Extension
SUBJECT:	Biodiversity Net Gain Report – Scenario B: Future Year Baseline
NOTE REF:	NT14714
DATE:	22.03.2023
PREPARED BY:	Tim Palmer (Technical Director)
REVIEWED BY:	Tim Palmer (Technical Director)

EXECUTIVE SUMMARY

This Technical Note provides a Biodiversity Net Gain (BNG) Assessment for Scenario B Future Year Baseline, which takes into consideration the consented Langwith extension restoration proposals that are assumed to be partially established or near maturity (Drawing N051-00078b Restoration Plan), baseline data collected during an updated Extended Phase 1 Habitat Survey by Wardell Armstrong in November 2021 (Drawing NT14714 N051-00240-55 Extended Phase 1 Habitat Survey) and further habitat proposals outlined within the Oaklands extension restoration proposals by Wardell Armstrong (Drawing NT14714 N051-00240-11 Figure 3.4 Indicative Landscape Framework). Where the Langwith extension scheme restoration proposals overlap with the habitats inside the Oaklands Extension planning application boundary, it is the restored (Langwith) habitats which have been ‘assumed to be present’. An alternative assessment based on the habitats baseline ‘as it stands’ at the time of the most recent habitat survey is presented in a separate Technical Note – Scenario A.

The works include a proposed extension of the existing sand and gravel workings at Nosterfield Quarry, North Yorkshire. The quarry extension area predominantly consists of grazed and improved pasture, boundary hedgerows, broadleaved semi-natural and plantation woodland. Several waterbodies are present within the site or immediately adjacent to it, with tall ruderal and mixed scrub around the peripheries. The Ings Goit (running water / ditch) is present in the northern part of the site.

New habitats proposals to be created as part of the Oaklands extension and restoration proposals are shown on Drawing NT14714 N051-00240-140 Figure 7.20 Biodiversity Net Gain - Baseline Conditions (Scenario B), which include habitats within the Langwith proposals.

New habitats proposed for the Oaklands restoration are shown on Drawing NT14714 N051-00240-141 Figure 7.21 Biodiversity Net Gain - Habitat Creation.

Retained habitats from the Langwith restoration proposals will be enhanced to maximise biodiversity, shown on NT14714 N051-00240-142 Figure 7.22 Biodiversity Net Gain - Habitat Retention (Scenario B).

The assessment demonstrates that the Oaklands Extension restoration proposals would result in habitat biodiversity of 392 habitat units, resulting in a change of **c.-28 habitat units (-6.16% total net loss in habitat units)**, **c.-1 hedgerow units (-4.55% total net loss in hedgerow units)** and **-2.90 river units (-37.34% total net loss in river/stream units)**. The 'Trading Rules' are not satisfied due to the loss of 'Lowland Mixed Deciduous Woodland' from the boundaries of the current operational area and from the woodland that is proposed/included in the Langwith Extension restoration scheme.

1 INTRODUCTION

This Technical Note has been prepared by Wardell Armstrong LLP (WA) on behalf of Tarmac Ltd. The development proposals are for the Oaklands Extension of the existing Nosterfield quarry area, into an area of current arable land.

This Technical Note outlines the results of a BNG assessment, using Biodiversity Net Metric 3.1 (DEFRA, April 2022), developed by Natural England and informed by BNG guidance (Panks et al., 2020). The baseline terrestrial habitat information is outlined in a Preliminary Ecological Appraisal (PEA) Report completed by WA, 2021.

Drawings to be reviewed with this Technical Note are as follows:

- N051-00078b Restoration Plan (Langwith landscaping proposals).
- NT14714 N051-00240-11 Figure 3.4 Indicative Landscape Framework 12.01.23 (Oaklands Landscaping Proposals).
- NT14714 N051-00240-140 Figure 7.20 Biodiversity Net Gain - Baseline Conditions (Scenario B).
- NT14714 N051-00240-141 Figure 7.21 Biodiversity Net Gain - Habitat Creation (Scenario B).
- NT14714 N051-00240-142 Figure 7.22 Biodiversity Net Gain - Habitat Retention (Scenario B).

The baseline habitats are displayed on Drawing NT14714 N051-00240-140 Figure 7.20 Biodiversity Net Gain - Baseline Conditions (Scenario B), showing habitats proposed within the Langwith extension proposals and the baseline habitats recorded during the Extended Phase 1 Habitat survey undertaken by WA in 2021.

Baseline habitats and the proposed restoration landscaping for the Langwith proposals (Drawing N051-00078b Restoration Plan) and the future Oaklands restoration proposals (NT14714 N051-00240-11 Figure 3.4 Indicative Landscape Framework 23.02.23) were converted from Phase 1 Habitat Classification (JNCC, 2010) into UKHab 'Professional Edition' (Butcher et al., 2020a, b), for the purpose of completing the BNG assessment¹.

Habitats displayed on the 'Habitat Creation' drawing (NT14714 N051-00240-141 Figure 7.21 Biodiversity Net Gain - Habitat Creation) include habitats that form the Langwith extension restoration proposals, which are considered to be established or establishing and future habitat proposals that form the new Oaklands Extension and 'future' baseline. Habitats that

¹ See limitations Section 3 for limitations to the methodology.

are to be retained and enhanced from the Langwith extension proposals are shown on Drawing NT14714 N051-00240-142 Figure 7.22 Biodiversity Net Gain - Habitat Retention (Scenario B).

Summary extracts from the DEFRA Metric 3.1 are provided in Section 5.

This Technical Note provides a provisional BNG Assessment for the site to demonstrate its approximate ecological value under the Langwith extension, and the likely ecological value following the future Oaklands extension proposals (Scenario B). It is recommended that the assessment is updated following receipt of planning consent, to consider any changes to the scheme that may arise during the planning process. It will also be necessary to produce a Habitat Management Plan so that recommended habitat creation and enhancement proposals can be appropriately managed and / or achieved, in-line with the measures suggested within this Technical Note and the DEFRA Metric 3.1 calculation tool.

2 BIODIVERSITY NET GAIN ASSESSMENT

The Langwith restoration scheme proposals and future habitat proposals for the Oaklands extension are assumed to be final at the time of writing. The calculations have been made in order to determine the BNG, based on the following assumptions:

Pre-development (baseline)

The extent of habitats within the Langwith post development proposals and those recorded during the Phase 1 Habitat survey in October 2021, shown on Drawing NT14714 N051-00240-140 Figure 7.20 Biodiversity Net Gain - Baseline Conditions (Scenario B). Conditions post-change, are assumed² to be:

- Neutral grassland (other neutral grassland) is of 'moderate' condition.
- Dense scrub (mixed scrub) is of 'moderate' condition.
- Broadleaved semi-natural woodland (lowland mixed deciduous woodland) is 'moderate' condition.
- Broadleaved plantation woodland (other woodland; broadleaved) is of 'moderate' condition.
- Marginal and inundation - inundation vegetation (reedbed) is of a 'moderate' condition.
- Tall ruderal (other neutral grassland) is of 'moderate' condition.
- Improved grassland (modified grassland) is of 'moderate' condition.
- Standing water (ponds (priority habitat)) are 'moderate' condition.

² Please see Section 3 for limitations to survey methodology.

- Urban trees are in 'moderate' condition.
- River / stream (ditch) habitat is 'moderate' condition.
- Bare ground habitat (vacant / derelict land / bare ground) is of 'moderate' condition.
- Hedgerows (native hedgerow, native hedgerow with trees) are of 'moderate' condition.

Taking these assumptions into account, the ecological baseline for the site is 373.77 habitat units, 10.18 hedgerow units and 7.75 river units.

Post-development scenario

Habitats will be either retained and enhanced or new habitats will be created. Created and retained habitats are shown on Drawing NT14714 N051-00240-141 Figure 7.21 Biodiversity Net Gain - Habitat Creation (Scenario B) and NT14714 N051-00240-142 Figure 7.22 Biodiversity Net Gain - Habitat Retention (Scenario B). Post-development habitats are as follows:

Area habitats:

- 0.57 ha of quarry (actively worked sand pit quarry or open cast mine) will be lost.
- 4.25 ha of scattered trees (urban trees) will be lost.
- 1.91 ha of broadleaved and mixed semi-natural woodland (lowland mixed deciduous woodland) will be lost, 1.35 ha broadleaved and mixed semi-natural woodland (lowland mixed deciduous woodland, W3, W6, W7, W10, W11, W15) will be retained and enhanced to 'good' condition.
- 0.49 ha of new broadleaved semi-natural woodland will be created (lowland mixed deciduous woodland, W17, W18, W19), in 'good' condition.
- 0.05 ha plantation woodland (other broadleaved woodland, W1, W8, W9) will be retained and enhanced to 'good' condition.
- 2.63 ha of marginal and inundation vegetation (reedbed) proposed in the Langwith restoration scheme will be lost to the new landform and habitats created as part of the Oaklands scheme.
- 0.89 ha of marginal and inundation - inundation vegetation / mature fringe reeds / marginal shallow water as described on Drawing NT14714 N051-00240-11 Figure 3.4 Indicative Landscape Framework) (reedbed, M1, M2, M3) will be retained and enhanced to 'good' condition.
- 4.69 ha of marginal and inundation - inundation vegetation (reedbed) will be created (reedbed, M4-M7) in 'good' condition.

- 4.28 ha of standing open water (ponds (priority habitat)) will be lost, with 4.03 ha of standing open water (ponds (priority habitat, P1, P2) retained and enhanced to 'good' condition.
- 7.56 ha of new standing open water (ponds (priority habitat, P4, P5) will be created in 'good' condition.
- 0.29 ha of bare ground (vacant/derelict land/ bare ground) retained.
- 7.33 ha of marginal and inundation - inundation vegetation//marginal fringe reeds (as described on Drawing NT14714 N051-00240-11 Figure 3.4 Indicative Landscape Framework) (reedbed, RB1-RB5) will be created in 'good' condition.
- 0.23 ha of tall ruderal (other neutral grassland) will be lost to the development proposals.
- 4.1 ha of semi-improved neutral grassland (other neutral grassland) will be lost, with 3.60 ha semi-improved neutral grassland (other neutral grassland, G2) retained and enhanced to 'good' condition.
- 1.98 ha of neutral grassland (other neutral grassland) will be lost, 5.38 ha of neutral grassland (other neutral grassland, G1) will be retained and enhanced (to 'good').
- 4.01 ha of neutral grassland (other neutral grassland, G6, G7, G8) will be created, in 'good' condition.
- 8.86 ha of improved grassland (modified grassland) will be lost.

Hedgerows:

- 1.16 km of species-poor hedgerows (native hedgerow and native hedgerow with trees) will be lost, 0.83 km of species-poor hedgerows (native hedgerow and native hedgerow with trees, H1, H4, H5) will be retained and enhanced to 'good' condition.
- 0.335 Km of new species-rich hedgerow with trees will be created.

Rivers / streams:

- 0.03 km of running water (river / stream - ditch) will be lost and 0.57 km of river / stream (ditch) will be retained (S1 and S2).
- 0.08 km of running water (river / stream - ditch, S3) will be created in 'good' condition.

3 LIMITATIONS TO ASSESSMENT

A condition assessment was not undertaken as part of the Langwith proposals, which are considered to be established or establishing, so an assumption of baseline conditions has been assumed to be of a 'moderate' condition.

The Phase 1 Habitat within the baseline and Langwith proposals were converted into UKHab Classification using a precautionary approach. In addition, this includes the use of the Oaklands restoration masterplan species lists and general knowledge of the site's management to make an overall assessment of the likely habitat codes to enable the assessment.

4 ECOLOGICAL ENHANCEMENTS AND RECOMMENDATIONS

The following mitigation and enhancement measures and recommendations have been suggested and are considered proportionate and practical for the site. The following measures have been suggested but full management prescriptions should be outlined in a Habitat Management Plan once detailed landscape designs are available:

- Existing neutral grassland could be enhanced by supplementary wildflower plug / turf planting and seeding. If the grassland is managed as a species-rich wildflower meadow and an appropriate cutting regime, this would increase the condition from 'moderate' to 'good'.
- Existing woodlands can be managed to increase scores from 'moderate' to 'good' via enhancement of the existing woodland to include a diverse mix of native species, prioritising retention of native species, standing / lying dead wood.
- Existing hedgerows will be enhanced from a 'moderate' to 'good' condition. General management will include planting up of hedgerow base gaps with local native species, creating species-rich grassland margins. Hedgerows that are defunct will be re-planted.
- Retained standing water habitat will be enhanced from 'moderate' to 'good' condition. Measures could include management through supplementary planting, removing overgrown scrub and trees and the provision of an annual maintenance programme.
- Running water (river / stream ditch) habitat should also be enhanced from a 'moderate' to 'good' condition, with specific habitat management prescriptions to promote the growth of emergent, submergent and floating vegetation coverage, maintain water levels and planting of marginal and bank vegetation to increase bank species diversity.

5 CONCLUSION

With these measures in place, the site post-development baseline would be c.393 habitat units, resulting in a change of c.-26 habitat units (-6.16% total net loss in habitat units). Enhancement of retained and creation of hedgerows onsite would deliver a total of c.10 hedgerow units, resulting in a change of -1 hedgerow units (-4.55% total net loss in hedgerow

units). The development will deliver 4.85 river/stream units, resulting in a change of -2.90 river units (-37.34% total net loss in river/stream units).

The 'Trading Rules' are not satisfied due to the loss of 'Lowland Mixed Deciduous Woodland' from the boundaries of the current operational area and from the woodland that is proposed/included in the Langwith Extension restoration scheme.

The reason for the loss in BNG in this assessment scenario is because the Langwith Extension restoration includes a high number of individual tree plantings and woodland, which are removed (or more likely not planted) to accommodate the Oaklands scheme. Following consultations with Lower Ure Conservation Trust a desire was expressed to maintain an open landscape with an absence of tree cover as this is the target habitat for breeding bird species such as curlew. This has resulted in a loss of replacement trees proposed in the overlapping parts of the Oaklands Extension restoration areas. It is recognised that this latter scenario would potentially be beneficial to breeding wading birds due to reduced predator cover. This is despite the valuable contribution to BNG made by a number of the proposed habitats including species rich grassland and marginal/inundation habitats including fen type habitats.

6 REFERENCES

BSBI (2021) BS 8683:2021 Process for designing and implementing Biodiversity Net Gain.

Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020)a. The UK Habitat Classification Version 1.1 at <http://www.ukhab.org/>.

Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020)b. The UK Habitat Classification User Manual Version 1.1 at <http://www.ukhab.org/>.

CIEEM (2021). Biodiversity Net Gain Report and Audit Templates Chartered Institute of Ecology and Environmental Management, Winchester, UK.

JNCC. (2010). Handbook for Phase 1 habitat survey: A technique for environmental audit. English Field Unit, Nature Conservancy Council.

Stephen Panks A, Nick White A, Amanda Newsome A, Mungo Nash A, Jack Potter A, Matt Heydon A, Edward Mayhew A, Maria Alvarez A, Trudy Russell A, Clare Cashon A, Finn Goddard A, Sarah J. Scott B, Max Heaver C, Sarah H. Scott C, Jo Treweek D, Bill Butcher E And Dave Stone A 2022. Biodiversity Metric 3.1: Auditing And Accounting For Biodiversity – User Guide. Natural England.

APPENDIX 1

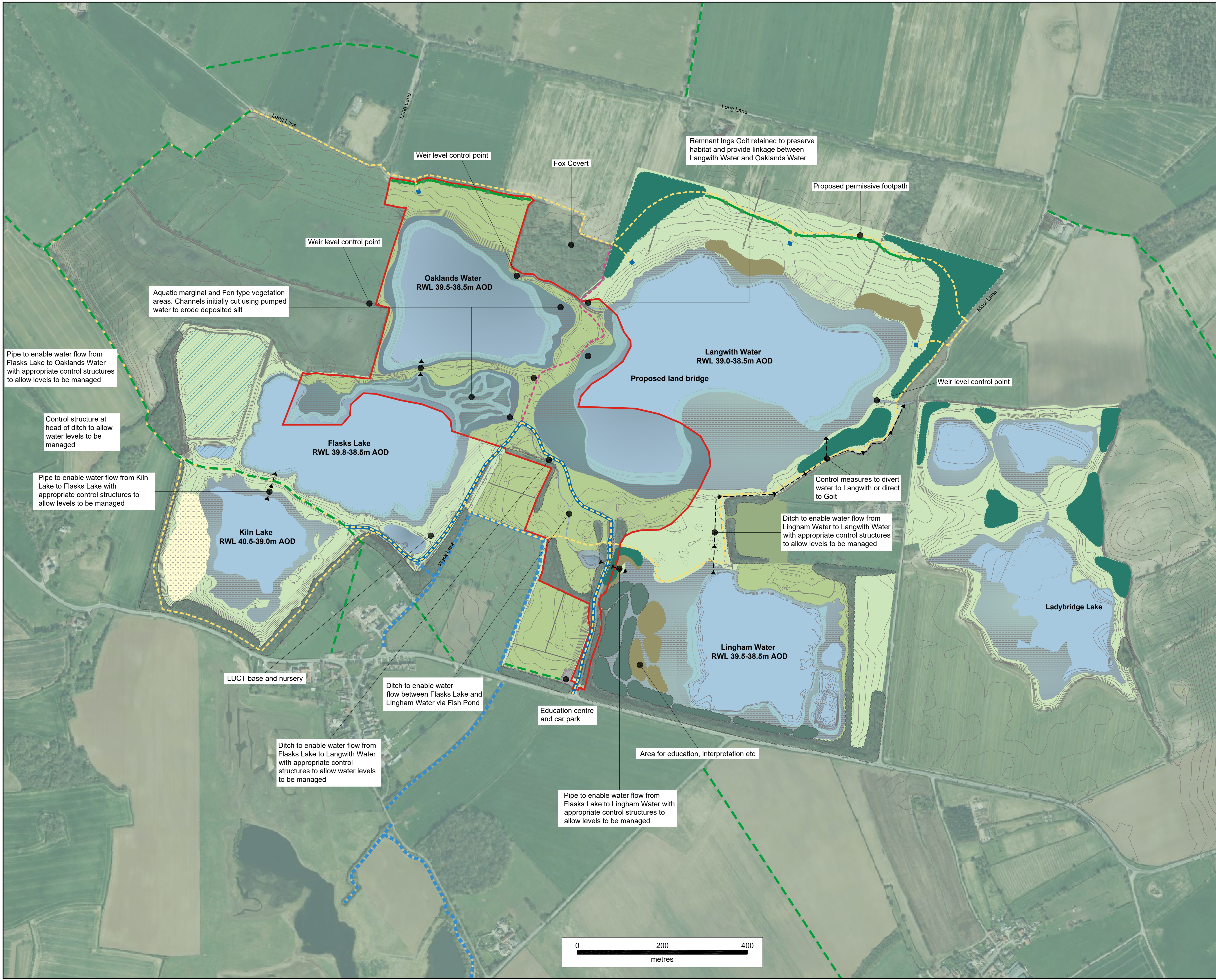
Technical Note



APPENDIX 1

Nosterfield Scenario 2		Return to results menu	
Headline Results			
On-site baseline	<i>Habitat units</i>	418.27	
	<i>Hedgerow units</i>	11.31	
	<i>River units</i>	7.75	
On-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	392.49	
	<i>Hedgerow units</i>	10.80	
	<i>River units</i>	4.85	
On-site net % change <small>(Including habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	-6.16%	
	<i>Hedgerow units</i>	-4.55%	
	<i>River units</i>	-37.43%	
Off-site baseline	<i>Habitat units</i>	0.00	
	<i>Hedgerow units</i>	0.00	
	<i>River units</i>	0.00	
Off-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	0.00	
	<i>Hedgerow units</i>	0.00	
	<i>River units</i>	0.00	
Total net unit change <small>(including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	-25.77	
	<i>Hedgerow units</i>	-0.51	
	<i>River units</i>	-2.90	
Total on-site net % change plus off-site surplus <small>(including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	-6.16%	
	<i>Hedgerow units</i>	-4.55%	
	<i>River units</i>	-37.43%	
Trading rules Satisfied?	No - Check Trading Summary ▲		

DRAWINGS



Legend

Oaklands Extension Proposed Restoration

- Site boundary
- Water scrapes
- Species-rich grassland
- Waterbody
- Marginal shallow water
- Aquatic marginal and Fen type vegetation
- Access road
- Permissive footpath
- Educational access only in control of appropriate conservation body
- Bridleway - route for machinery
- Viewing points
- Hedgerow with occasional trees

Restored - complete or ongoing

- Woodland
- Native mixed broadleaved woodland (natural progression - not formalised)
- Hedgerow with occasional trees
- Wet carr woodland
- Species-rich grassland
- Waterbody
- Aquatic marginal and Fen type vegetation
- Reedbeds
- Marginal shallow water
- Magnesium limestone grassland
- Agricultural field
- Woodland excluded via the appropriate process (Strategic Management Group and Planning Authority)

Existing

- Woodland
- Public right of way
- Permissive footpaths

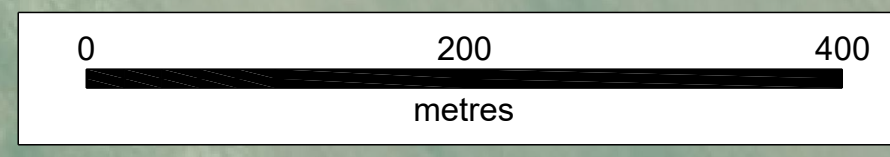
Note:
 Water levels shown are indicative of the range within which it is proposed they be controlled. The higher levels are target levels, the lower levels will be used for short periods to enable nature conservation management.
 Ditches and subsurface pipes linking the lakes, will be fitted with appropriate control structures to enable the management of both the flow of water between lakes and the water levels within the lakes.
 Footpaths subject to landowner approval.

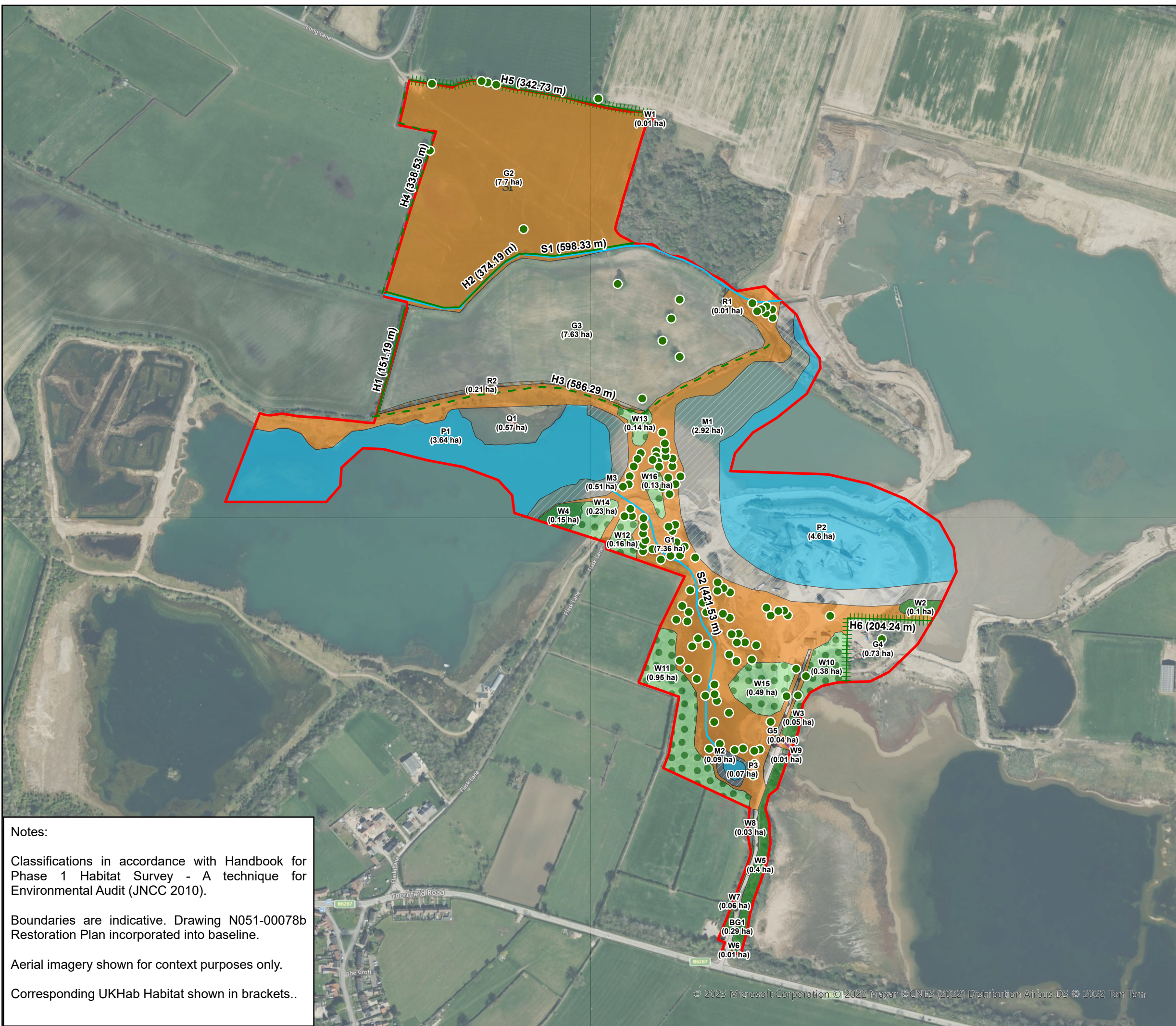


Site Name:
NO51 Nosterfield Quarry

Drawing Name:
Oaklands Extension ES
Figure 3.4
Indicative Landscape Framework

Drawn By: A.Bailey	Scale @ A1: 1:4,000	
Date: 04/04/2023	Drawing Number: NO51_00240_11	





Legend

- Site Boundary
- Broadleaved woodland - semi-natural (W) (Lowland mixed deciduous woodland)
- Broadleaved woodland - plantation (W) (Other woodland; broadleaved)
- Mixed woodland - semi-natural (W) (Lowland mixed deciduous woodland)
- Neutral grassland (G) (Other neutral grassland)
- Neutral grassland - semi-improved (G) (Other neutral grassland)
- Improved grassland (G) (Modified grassland)
- Marsh/marshy grassland (MG) (Other neutral grassland)
- Other tall herb and fern - ruderal (R) (Other neutral grassland)
- Marginal and inundation - inundation vegetation (M) (Reedbed)
- Pond (P) (Ponds (Priority Habitat))
- Quarry (Q) (Actively worked sand pit quarry or open cast mine)
- Bare ground (BG) (Vacant/derelict land/ bareground)
- Running water (S) (Ditch)
- Intact hedge - species-poor (H) (Native hedgerow)
- Defunct hedge - species-poor (H) (Native hedgerow)
- Hedge with trees - species-poor (H) (Native hedgerow with trees)
- Scattered trees (Urban trees)



Notes:

Classifications in accordance with Handbook for Phase 1 Habitat Survey - A technique for Environmental Audit (JNCC 2010).

Boundaries are indicative. Drawing N051-00078b Restoration Plan incorporated into baseline.

Aerial imagery shown for context purposes only.

Corresponding UKHab Habitat shown in brackets..

Site Name:
N051 Nosterfield Quarry

Drawing Name:
Figure 7.20
Biodiversity Net Gain - Baseline Conditions (Scenario B)

Drawn By: S.Williams	Scale @ A3: 1:5,000
Date: 06/02/2023	Drawing No: N051_00240-140-A



Legend

- Site Boundary
- Mixed woodland - semi-natural (W) (Lowland mixed deciduous woodland)
- Neutral grassland (G) (Other neutral grassland)
- Marginal and inundation - inundation vegetation (RB) (Reedbed)
- Marginal and inundation - inundation vegetation (M) (Reedbed)
- Pond (P) (Ponds (Priority Habitat))
- Hard standing (Sealed surface)
- Running water (S) (Ditch)
- Hedge with trees - species-poor (Native hedgerow with trees)

Notes:

Classifications in accordance with Handbook for Phase 1 Habitat Survey - A technique for Environmental Audit (JNCC 2010).

Boundaries are indicative. Habitat information taken from drawing NT14714 N051-00240-12 Figure 3.4 Indicative Landscape Framework Rev C.

Aerial imagery shown for context purposes only.

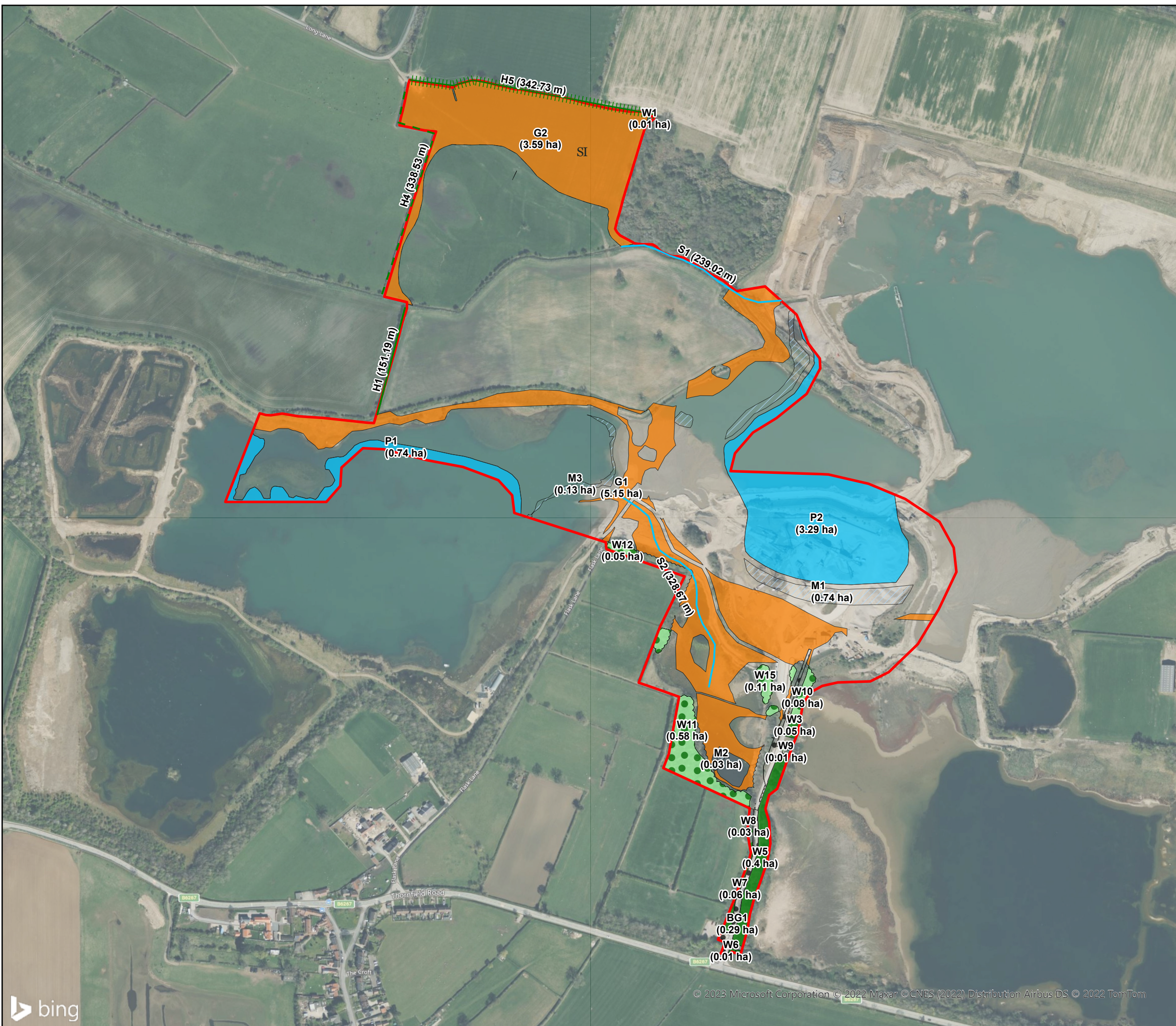
Corresponding UKHab Habitat shown in brackets.



Site Name:
N051 Nosterfield Quarry

Drawing Name:
**Figure 7.21
 Biodiversity Net Gain - Habitat Creation
 (Scenario B)**

Drawn By: S.Williams	Scale @ A3: 1:5,000	
Date: 16/03/2023	Drawing No: N051_00240-141-B	



Legend

- Site Boundary
- Broadleaved woodland - semi-natural (W) (Lowland mixed deciduous woodland)
- Broadleaved woodland - plantation (W) (Other woodland; broadleaved)
- Mixed woodland - semi-natural (W) (Lowland mixed deciduous woodland)
- Neutral grassland (G) (Other neutral grassland)
- SI Neutral grassland - semi-improved (G) (Other neutral grassland)
- Marginal and inundation - inundation vegetation (M) (Reedbed)
- Pond (P) (Ponds (Priority Habitat))
- Bare ground (BG) (Vacant/derelict land/ bareground)
- Running water (S) (Ditch)
- Intact hedge - species-poor (H) (Native hedgerow)
- Defunct hedge - species-poor (H) (Native hedgerow)
- Hedge with trees - species-poor (H) (Native hedgerow with trees)

Notes:

Classifications in accordance with Handbook for Phase 1 Habitat Survey - A technique for Environmental Audit (JNCC 2010). Boundaries are indicative. Habitat information taken from drawing NT14714 N051-00240-12 Figure 3.4 Indicative Landscape Framework Rev C. Aerial imagery shown for context purposes only.

Corresponding UKHab Habitat shown in brackets.



Site Name:
N051 Nosterfield Quarry

Drawing Name:
Figure 7.22 Biodiversity Net Gain - Habitat Retention (Scenario B)

Drawn By: S.Williams	Scale @ A3: 1:5,000	
Date: 16/03/2023	Drawing No: N051_00240-142-B	