TIM MOYA ASSOCIATES

Biodiversity Net Gain Assessment

Land on the south-east side of A12
Old Ipswich Road
Ardleigh
Essex
CO7 7QW

January 2024

230961-ED-03a

Limitations and Copyright

Project	Land on the south-east side of A12, Ardleigh
Report Type	Biodiversity Net Gain Assessment
Author	Charlie Torr, Assistant Ecologist
Reviewed by	Brooke Waites ACIEEM, Principal Ecologist
Original Report Date	21/12/2023
Updates	16/01/2024 Version A – amendments referring to enhancements which protect the ditch east of site, and mention of mandatory BNG schedules, and other minor changes.

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NON-TECHNICAL SUMMARY

This report assesses the Biodiversity Net Gain or loss anticipated as a result of the proposed development at Land on the south-east side of A12, Ardleigh. The proposed development involves the construction of a storage warehouse alongside associated development, following the demolition of the existing industrial units.

The baseline habitat calculations are based on site habitat data collected prior to development-related activities (see report for details). The post-development habitat calculations are based on proposed landscape plans (see report for details).

The Biodiversity Net Gain Assessment relies on a number of assumptions which are detailed within this report. The Biodiversity Metric calculator spreadsheet (Microsoft excel format) contains full details of the calculations and results. As such, the Biodiversity Metric calculator spreadsheet should always accompany this report and vice versa.

Key results:

The development is estimated to result in a Biodiversity Net Loss of **-0.11 habitat units (-2.52%)**, compared with the baseline habitats present. This is largely due to the reduction in coverage of bramble scrub, and removal of one individual tree. The proposed landscaping includes the creation of new areas of mixed scrub, modified grassland, introduced shrub, and individual trees.

The development is estimated to result in a Biodiversity Net Gain of **+0.11 hedgerow units (+178.94%)**, compared with the baseline habitats present. This is due to the proposed addition of a native hedgerow in the new development.

No net change in watercourse units is anticipated in relation to the on-site ditch.

The current proposals do not satisfy the BNG ‘trading rules’ due to be a loss of individual tree coverage, a medium distinctiveness habitat type.

Although there is major encroachment on the western bank of the vegetated ditch east of the site due to being within close proximity to hardstanding, this encroachment existed prior to the proposed development. No additional encroachment will take place and vegetated banks will be retained. Furthermore, additional enhancements are included in the scheme which will protect the ditch, e.g., hedgerow planting on the eastern boundary of the site.

Recommendations (see report for details):

- This report includes suggestions of measures that may be taken to achieve the required Biodiversity Net Gain scores and trading rules.
- Assessment of Biodiversity Net Gain should be an iterative process, guiding the design of development and being recalculated as adjustments are made or as more detailed information becomes available.
- Once biodiversity gains have been maximised within the design of the development site itself, if further biodiversity gains are still required, opportunities for enhancement of off-site land may be considered.

1 INTRODUCTION

Background

1.1 This report has been instructed by Elmhurst.

1.2 The proposed development involves the construction of a storage warehouse alongside associated development, following the demolition of the existing industrial units.

Purpose of the report

1.3 This report assesses the biodiversity value of the existing habitats on site and the proposed changes to the development site. This report provides an overview of the change in Biodiversity Value (Biodiversity Net Gain/Loss) generated by the proposals.

Site description and location

1.4 The central grid reference for the site is TM 02459 29527. The surveyed site covers approximately 0.94 hectares, or 1.3 hectares when accounting for tree cover as additional coverage.

1.5 The site is dominated by hardstanding, buildings, trees, and scrub vegetation.

1.6 The location of the site is rural, surrounded by arable fields, trees, scrub, woodland, water bodies, and landscaped areas. The A12 road runs adjacent to the west of the site. Crown Quarry is located 60 m to the east of the site.

Limitations

1.7 As the attributes of the site and its habitats may change over time, this report is broadly considered valid for a duration of **18 months**, after which time it is recommended that an update site assessment is undertaken.

1.8 Biodiversity Net Gain assessments and calculations can only provide a proxy measure for the real long-term biodiversity changes that occur on any given site.

1.9 This assessment has been produced using the information available at this stage. As such, the assessment is based on a number of important assumptions. This report aims to make any such assumptions explicit so that they can be reviewed or updated as appropriate.

1.10 Whilst the Biodiversity Metric tool assesses the numerical losses and gains of habitats affected as part of the development, it does not include certain other important outcomes or benefits which cannot be assessed numerically.

1.11 The site was accessed during November, a time when some plant species may not be evident. Although the survey was not undertaken during the core season for botanical surveys, given the common habitats present, this is not considered to constitute a limitation to this Biodiversity Net Gain Assessment. Where further botanical or invasive species surveys are considered necessary, these have been recommended within this report.

1.12 Access around the back of the vegetated mound to the south-west of the site was not possible. All other areas of the site were accessed fully.

Planning Policy

1.13 The National Planning Policy Framework (NPPF, 2023) section 180d states that planning policies and decisions should contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity. NPPF section 185b states that plans should identify and pursue opportunities for securing measurable net gains for biodiversity.

2 METHODOLOGY

Pre-development habitat information

2.1 The baseline habitat calculations are based on site habitat data collected during a Preliminary Ecological Assessment Habitat Survey undertaken on 1st November 2023 by Tim Moya Associates. Full details can be found in the separate survey report (TMA, 2023).

2.2 For reference, the pre-development habitat plan is included in Appendix 1 of this report.

Post-development habitat information

2.3 The post-development habitat calculations are based on the following supplied plans, showing the proposed development layout and landscaping (at this stage):

- Landscape Proposals Plan, TMA, 11/12/2023 (Ref. 230961-TMA-XX-DR-L-3001, Rev. P02).

2.4 For reference, the post-development habitat plan is included in Appendix 2 of this report. Please note, this plan may be superseded or updated without warranting an update of this report, if the changes are insignificant to the impact of the development on biodiversity.

Condition Assessment

2.5 Part of the Biodiversity Net Gain Assessment process requires an estimate for the 'condition' of existing habitats, as defined by the Biodiversity Metric Technical Supplement (Natural England, 2023).

2.6 The pre-development site survey described above has included an on-site assessment of each habitat type in accordance with the condition criteria. The survey was undertaken at an appropriate time of year to be able to sufficiently assess the condition of the habitat types present within the site. The condition categories for each habitat type are detailed in Appendix 3.

Biodiversity Net Gain calculations

2.7 The value of the on-site habitats is calculated using the Biodiversity Metric calculation tool (Natural England, 2023). Once the biodiversity value of the baseline and

proposed habitats is calculated, this tool is then used to measure the anticipated overall Biodiversity Net Gain or loss of the proposed development.

2.8 The value for biodiversity of a habitat is measured using 'biodiversity units'. These are calculated based on the type of habitat (based on the UK Habitat Classification ("UKHab") and the size and condition of each habitat parcel. The metric also considers whether the habitat and/or its location is identified locally, typically in a relevant policy or plan, as being of strategic significance for nature.

2.9 Habitats which are to be created, restored, or enhanced during the development are calculated with additional consideration given for 'risk'. The risk components of this include the difficulty of creating or restoring the habitat and the risk associated with the length of time it takes for a habitat to establish. This means that if a high-quality habitat is removed from the site and re-established elsewhere on the site, it is likely to result in a biodiversity net loss due to the length of time it will take to establish the new habitat and the risk that the habitat will never fully establish.

Assumptions, Limitations and Exclusions

2.10 Due to the predictive nature of Biodiversity Net Gain estimates, it is always necessary to make certain assumptions and judgements about the habitats present within the site currently and the land-use types and habitats that will be present within and around the developed site. Such assumptions and judgements are detailed below.

2.11 The calculations do not take into account areas outside the site footprint, which are assumed not to be affected by the development. If areas outside the footprint are to be affected, they should also be taken into account in the calculations.

2.12 It is assumed that the 11 proposed trees to be planted within the proposed development will achieve moderate condition by passing the following three criteria: trees will be native species, the tree canopy is predominantly continuous (individual trees automatically pass this criteria), and more than 20% of the tree canopy area is oversailing vegetation beneath (see condition assessments attached in accompanying metric).

2.13 It is assumed that modified grassland habitat to be created within the proposed development will comply with the definition as described in the UK Habitat Classification Handbook (UkHab, 2023). Furthermore, it is assumed that modified grassland will achieve good condition by passing six criteria including criterion A within the relevant condition assessment (see condition assessments attached in accompanying metric).

2.14 It is assumed that mixed scrub habitat to be created within the proposed development will comply with the definition as described in the UK Habitat Classification Handbook (UkHab, 2023). Furthermore, it is assumed that mixed scrub will achieve moderate condition by passing three criteria within the relevant condition assessment (see condition assessments attached in accompanying metric).

2.15 It is assumed that native hedgerow habitat to be created within the proposed development will comply with the definition as described in the UK Habitat Classification Handbook (UkHab, 2023). Furthermore, it is assumed that native hedgerow will achieve moderate condition by passing the appropriate criteria within the relevant condition assessment (see condition assessments attached in accompanying metric).

2.16 It is assumed that the vegetated ditch on the eastern boundary of the site will be retained, and no additional encroachment will take place.

Strategic Significance

2.17 The Biodiversity Metric User Guide (Natural England, 2023) states that "*Assessors must provide evidence by referencing relevant documents. If published, the relevant strategy is the Local Nature Recovery Strategy (LNRS). If an LNRS has not been published, the relevant consenting body or planning authority may specify alternative plans, policies or strategies to use*".

2.18 The categories (4.0) are as follows:

- High – Where the location has been identified within a local plan, strategy or policy as being ecologically important for the specific habitat type or where that habitat has been identified as being locally ecologically important.
- Medium – Where there is no relevant plan, strategy or policy in place, professional judgement may be used to justify the use of the medium strategic significance category. This judgement should consider the importance of that habitat in providing a linkage between other strategic locations.
- Low – If the habitat is not included in local plans, strategy or policy, and there is no evidence to suggest that the habitat is of medium strategic significance.

2.19 It is understood that Essex does not currently have a published Local Nature Recovery Strategy (LNRS). TMA are also not aware of alternative plans, policies or strategies currently specified by the Local Planning Authority for the assessment of Strategic Importance for Biodiversity Net Gain assessment within the area of Ardleigh.

2.20 Other plans, policies and strategies considered for the assessment of Strategic Significance include the following: Local Plans and Neighbourhood Plans, Local Planning Authority Local Ecological Networks, Tree Strategies, Area of Outstanding Natural Beauty Management Plans, Biodiversity Action Plans, Species and protected sites conservation strategies, Woodland strategies, Green Infrastructure Strategies, River Basin Management Plans, Catchment Plans and Catchment Planning Systems, Shoreline management plans, Estuary Strategies.

2.21 All habitat types have been classed as 'Area/compensation not in local strategy/ no local strategy'.

Limitations

2.22 Biodiversity Net Gain estimates have various limitations as covered within this report. The following limitations are notable with respect to the accuracy of figures produced from the Biodiversity Metric calculator:

2.23 The Habitat Survey can only provide a snapshot of habitat classifications present at the time of the survey. Some habitats may be in a process of change, including natural succession of habitats or areas under sporadic management or clearance.

3 THE MITIGATION HIERARCHY

3.1 The NPPF paragraph 180a requires that the mitigation hierarchy has been implemented to avoid, mitigate or compensate for significant harm to biodiversity resulting from a development.

3.2 This principle is also integral to *Biodiversity Net Gain – Good Practice Principles for Development* (CIEEM, 2019).

Avoid

3.3 Impacts on key ecological features within the site have been avoided as follows:

3.4 The vegetated ditch on the eastern boundary of the site is to be retained and no further encroachment is expected to take place. This was achieved predominantly by relocating the proposed building to the south-east of the site away from the ditch.

Minimise

3.5 The impact of the development has been minimised by retaining the majority of trees within the proposed development site. Tree T8 within the site is to be felled due to risk of failure.

Remediate

3.6 The are no notable habitats due to be damaged and then restored.

Compensate

3.7 Replacement tree planting is proposed for Tree T8 due to be removed, with a ratio of 1:11. Hard and soft landscaping will also replace much of the scrub habitat present in the existing site which is due to be removed.

4 VALUE OF CURRENT HABITATS

Existing Habitats

Table 1. Value of existing on-site habitats

Broad Habitat	Habitat Type	Area (ha)	Condition	Biodiversity units
Urban	Developed land; sealed surface	0.728	N/A - Other	0.00
Heathland and scrub	Bramble scrub	0.151	N/A - Other	0.60
Sparsely vegetated land	Ruderal/Ephemeral	0.047	Good	0.28
Sparsely vegetated land	Ruderal/Ephemeral	0.012	Moderate	0.05
Urban	Bare ground	0.002	Poor	0.00
Individual trees	Urban tree	0.1945	Moderate	1.56
Individual trees	Urban tree	0.1629	Good	1.95
	TOTAL	**0.940** (trees not included)		**4.45**

4.1 Further habitat descriptions are included in the Preliminary Ecological Appraisal (TMA, 2023).

4.2 In the table above, trees are not included in the overall site area as they occupy a separate plane overlapping other habitat types.

Existing Hedges

Table 2. Value of existing on-site hedges

Hedge type	Length (km)	Condition	Biodiversity units
Line of trees	0.030	Poor	0.06
TOTAL	**0.030**		**0.06**

Existing Watercourses

Table 3. Value of existing on-site watercourses

Watercourse type	Length (km)	Condition	Biodiversity units
Ditches	0.086	Poor	0.15
TOTAL	**0.086**		**0.15**

5 VALUE OF RETAINED/PROPOSED HABITATS

Retained Habitat Areas

5.1 The following habitats are due to be retained and protected within the proposed development.

Table 4. Value of retained on-site habitats

Broad Habitat	Habitat Type	Area (ha)	Condition	Biodiversity units
Sparsely vegetated land	Ruderal/Ephemeral	0.025	Good	0.15
Individual trees	Urban tree	0.1579	Moderate	1.26
Individual trees	Urban tree	01629	Good	1.95
	TOTAL	**0.025** (trees not included)		**3.37**

5.2 In the table above, trees are not included in the overall site area as they occupy a separate plane overlapping other habitat types.

Retained Watercourses

Table 5. Value of retained on-site watercourses

Watercourse type	Length (km)	Condition	Biodiversity units
Ditches	0.086	Poor	0.15
TOTAL	**0.086**		**0.15**

New Proposed Habitat Areas

5.3 All habitats included in Table 1 not shown in Table 4, above, are due to be removed to accommodate the development, and replaced with the habitats shown in Table 6, below.

Table 6. Value of proposed new on-site habitats

Broad Habitat	Habitat Type	Area (ha)	Condition	Biodiversity units
Heathland and shrub	Mixed scrub	0.093	Moderate	0.62

Broad Habitat	Habitat Type	Area (ha)	Condition	Biodiversity units
Grassland	Modified grassland	0.022	Good	0.10
Individual trees	Urban tree	0.0448	Moderate	0.14
Urban	Introduced shrub	0.055	N/A - Other	0.11
Urban	Developed land; sealed surface	0.750	N/A - Other	0.00
	TOTAL	**0.920** (trees not included)		**0.97**

5.4 In the table above, trees are not included in the overall site area as they occupy a separate plane overlapping other habitat types.

New Proposed Hedges

Table 7. Value of proposed new on-site hedges

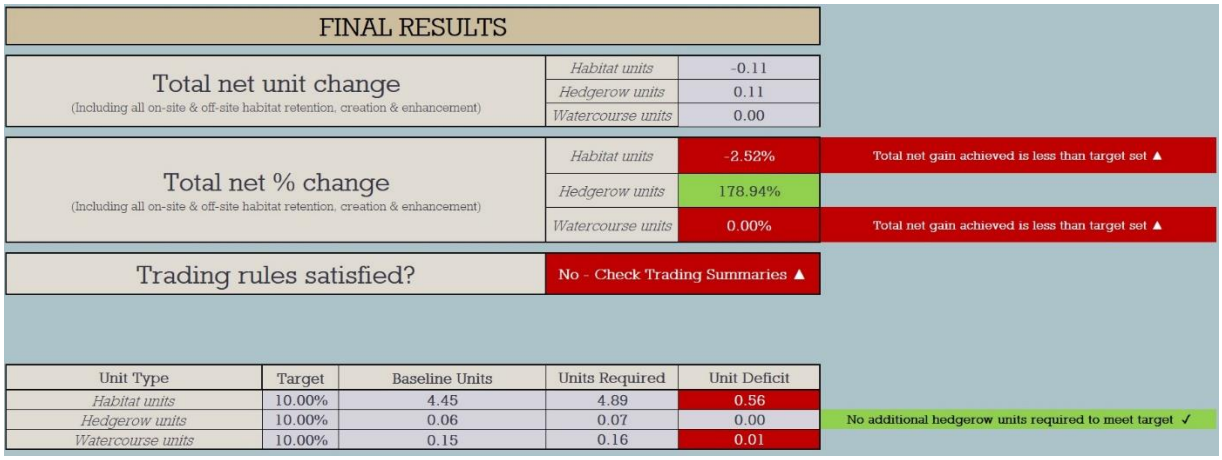
Hedge type	Length (km)	Condition	Biodiversity units
Native hedgerow	0.050	Moderate	0.17
TOTAL	**0.050**		**0.17**

6 BIODIVERSITY NET GAIN ESTIMATE - RESULTS

Headline Results

6.1 The Biodiversity Metric calculator spreadsheet (Microsoft excel format) prepared for the proposed development contains full details of the calculations and results. As such, the Biodiversity Metric calculator spreadsheet should always accompany this report and vice versa. The figures given below provide an overview of key results only.

Table 8. Headline results



FINAL RESULTS			
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-0.11	
	Hedgerow units	0.11	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-2.52%	Total net gain achieved is less than target set ▲
	Hedgerow units	178.94%	
	Watercourse units	0.00%	Total net gain achieved is less than target set ▲
Trading rules satisfied?	No - Check Trading Summaries ▲		

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	4.45	4.89	0.56	
Hedgerow units	10.00%	0.06	0.07	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	0.15	0.16	0.01	

Assessment

6.2 As shown above, the Biodiversity Metric calculator concludes that the development is due to result in a 2.52% decrease in habitat units compared with the existing site prior to development activities. As can be seen in the tables in sections 4 and 5 above, this is largely due to the reduction in coverage of bramble scrub, and individual trees.

6.3 Additionally, the Biodiversity Metric calculator concludes that the development is due to result in a 178.94% gain in hedgerow units compared with the existing site prior to development activities. As can be seen in the tables in sections 4 and 5 above, this is due to the proposed addition of a native hedgerow in the new development.

6.4 No net change in watercourse units is anticipated within the development. As can be seen in the tables in sections 4 and 5 above, this is due to the retention of the existing on-site ditch.

Trading Rules

6.5 The current proposals do not yet satisfy the BNG 'trading rules'. As outlined in the BNG User Guide (Natural England, 2023), 'Trading down' must be avoided. Losses of habitat are to be compensated for on a 'like for like or better' basis. New or restored habitats must achieve a higher distinctiveness and/or condition than those lost. High distinctiveness habitat must be replaced with biodiversity units of the same habitat type. In this case, the trading rules are not satisfied, as there is due to be a loss of individual tree coverage, a medium distinctiveness habitat type. It is not possible to retain Tree T8 due to a risk of failure, therefore it is recommended that new areas of tree coverage or a higher distinctiveness habitat should be created. Once any changes to the proposals are made, the Biodiversity Net Gain assessment should be recalculated.

Achieving Biodiversity Net Gain

6.6 Despite ecologically sensitive landscape design and enhancements, the Biodiversity Metric calculator concludes that the development of the site is due to result in a net loss of biodiversity value.

6.7 In order to achieve a Biodiversity Net Gain of 10% above the baseline habitat value, based on the calculations informing this report, an **additional 0.56 biodiversity units** must be generated in addition to the 0.11 units due to be lost by the proposed landscaping.

6.8 It should be noted that due to the time of submission of the full planning application, the 10% national biodiversity net gain requirement is not yet mandatory.

6.9 The following measures should be considered to achieve increases in the biodiversity units achieved by the proposed development:

- Review site layout to retain/reduce the loss of habitats of higher value.
- Provision of higher value habitats such as additional tree planting and creation of more scrub vegetation.

6.10 Once biodiversity gains have been maximised within the design of the development site itself, it may be acceptable to compensate any outstanding shortfall in biodiversity units through identification of a suitable off-site enhancement site or provision of a financial contribution to the council or another established off-setting project to achieve biodiversity gains off-site. The proposed strategy should be agreed with the local planning authority.

7 OTHER ECOLOGICAL ENHANCEMENTS

Introduction

7.1 Assessment of the Biodiversity Impact of a development proposal comprises two aspects. The Defra/Natural England Biodiversity Metric Calculation Tool is used to give a quantitative analysis of the habitats present before and after the development and related activities are undertaken. This gives numerical figures for the losses and gains of the habitat types present, expressed in biodiversity units. As well as this, consideration should be given to qualitative aspects which are not incorporated into the calculator. Such elements may play an important role in the 'functional' ecological value of the site, for instance in supporting the conservation of notable species known to be present locally, or in supplementing off-site habitats in ways not expressed in the Biodiversity Metric.

Ecological Enhancements

7.2 The Preliminary Ecological Appraisal (TMA, 2023) makes recommendations for enhancement measures that may be included within the site, including the following:

- Bat, bird, hedgehog, and invertebrate boxes
- Wildlife-friendly planting, e.g., tree, shrub, and grassland planting
- Log and stone piles

7.3 The majority of these features are not taken into account in the Biodiversity Metric, although their inclusion within the proposed development adds to the biodiversity value of the site.

9 REFERENCES

- Baker, J., Hoskin, R. & Butterworth, T. (2019). Biodiversity net gain. Good practice principles for development. CIRIA.
- British Standards Institution (2013). BS42020 – Biodiversity – Code of practice for planning and development.
- Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020a). The UK Habitat Classification User Manual Version 1.1 at http://www.ukhab.org/
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- Department for Environment Food and Rural Affairs (2019). Net gain. Summary of responses and government responses.
- Department for Levelling Up, Housing and Communities (2023). National Planning Policy Framework (NPPF).
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- Royal Horticultural Society (no date). Plants for Pollinators – Garden Plants. rhs.org.uk/plantsforpollinators.
- TMA (2023) 230961-ED-01 Land on the south-east side of A12, Ardleigh – Preliminary Ecological Appraisal
- UKHab Ltd. (2023). UK Habitat Classification Version 2.0 (at https://ukhab.org).

10 APPENDICES

Appendix 1- Existing Habitat Plan

Appendix 2– Proposed Site Layout

Appendix 3– Condition Assessments

Appendix 4- Photographs

Appendix 1 - Existing Habitat Plan

Legend

NORTH

- Site Boundary
- Target Note
- w1g6 - Line of trees
- s - sparsely vegetated land
- u1b - developed land, sealed surface
- 17 - Ruderal/ ephemeral
- 73 - Bare ground
- h3d - Bramble scrub
- 350 - Abandoned ruderal and derelict areas
- Building
- Water Body

Tree/Tree Group Bat Potential

- Moderate/High Roost Potential or Confirmed Roost
- Low potential

Title: Habitat Plan		
Client: Elmhurst		
Project: Ardleigh Oaks, Ardleigh		
Date 15/12/2023	Drawn by JCF	Authorised BW
Drawing No 230961-EC-01	Rev -	Scale 1:750

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Appendix 2 – Proposed Site Layout

Key:

- Redline Boundary
- Extent of Existing Hardstanding

NORTH

Soft Landscape

- Existing Tree to be Retained
- Proposed Tree
- Existing Tree Groups to be Retained
- Proposed Canopy Removal to be Confirmed with Project Arborist
- Proposed Native Hedge Planting
- Proposed Boundary Planting
- Proposed EG9 Hedgerows and Woodland Grass Mixture Available From: Emorsgate or Equivalent Approved
- Proposed A18 Road Verge and Embankements Available From: Germinal Amenity or Equivalent Approved
- Proposed Ornamental Planting
- Ditch Area to Remain Undisturbed

Hard Landscape

- Proposed Pedestrian and Cycling Tarmac
- Proposed Tarmac to Engineers Specification
- Proposed Vehicular Tarmac
- Proposed Pedestrian Path Demarcated with High Performance Parking Paint
- Proposed DDI Compliant Parking Spaces Demarcated with High Performance Parking Paint

Furniture and features

- Proposed Sheffield Cycle Stands Galvanised Mild Steel, Powder Coated
- Existing Security Fence
- Proposed Security Fence to Match Existing
- Existing Post and Rail Fence to be Retained
- Proposed Pedestrian and Cycle Gate
- Proposed Vehicular Gate

REV	Date	Description	Drawn by
P03	17/01/2024	Updated Layout	LJ

Base drawing: FRNT_23.536_Old Ipswich Road_PLANNING PACKAGE V4

Title: Landscape Proposals Plan

Stage: Planning

Client: Elmhurst

Project: Ardleigh Oaks, Ardleigh

Date:	Drawn by:	Authorised:
17/01/2024	LJ	MR

Drawing Number: 230961-TMA-XX-DR-L-3001

REV: P03

Scale: 1:200 @A1

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Appendix 3 – Condition Assessments

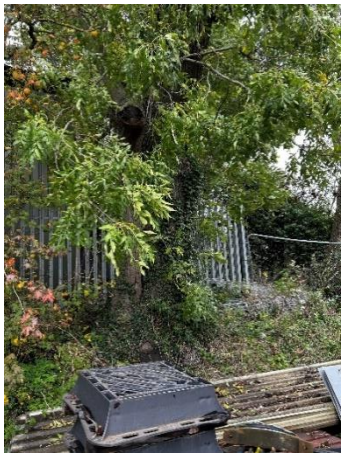
Habitat: Urban Trees Not.			
Condition Assessment Criteria		**Criterion passed (Yes or No)**	**Notes (such as justification)**
A	The tree is a native species (or at least 70% within the block are native species).	Yes	All individual trees within the site are native
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Yes	Individual trees automatically pass this criteria.
C	The tree is mature (or more than 50% within the block are mature)[1].	Yes	All trees are considered mature.
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Various	Trees along the northern boundary are impacted by compaction and significant encroachment of concrete surrounding trees.
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Yes	
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Various	11 trees do not meet this requirement. 5 trees do meet the criteria. notably the trees along the western boundary
Total number of criteria met:		4 and 6	
Condition:		Moderate and Good	

Habitat Type: Ruderal and Bare Ground				
Condition Assessment Criteria		**Criterion passed (Yes or No)**		
		Area 1 (East and North) Ruderal Vegetation	**Area 2 (west of site) Ruderal Vegetation**	**Area 3 (Bare Ground)**
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	Yes	No - Lacks varied structure and species diversity.	No – No variation present.
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	Yes	Yes	No
C	Invasive non-native plant species (listed on Schedule 9 of WCA[1]) and others which are to the detriment of native wildlife (using professional judgement)[2] cover less than 5% of the total vegetated area[3]. **Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).**	Yes	Yes	Yes – no plant species noted, bare earth.
Total Criteria Met:		3	2	1
Condition:		Good	Moderate	Poor

Habitat Type: Line of Trees			
Condition Assessment Criteria		**Criterion passed (Yes or No)**	**Notes (such as justification)**
A	At least 70% of trees are native species.	No	All trees non-native
B	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.	Yes	No significant gaps present
C	One or more trees has veteran features and or natural ecological niches for vertebrates and invertebrates, such as presence of standing and attached deadwood, cavities, ivy or loose bark.	No	
D	There is an undisturbed naturally-vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other human activities (excluding grazing). Where veteran trees are present, root protection areas should follow standing advice[2].	No	Small strip of sparsely vegetated land, only 2-3m wide.
E	At least 95% of the trees are in a healthy condition (deadwood or veteran features valuable for wildlife are excluded from this). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Yes	Trees appear healthy.
	Number of criteria passed		2
	Condition		Poor

Habitat Type: Ditch			
Condition Assessment Criteria		**Criterion passed (Yes or No)**	**Notes (such as justification)**
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	No	Water is turbid
B	A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.	No	No aquatic vegetation is present
C	There is less than 10% cover of filamentous algae and or duckweed *Lemna* spp. (these are signs of eutrophication).	Yes	No algae cover
D	A fringe of aquatic marginal vegetation is present along more than 75% of the ditch.	No	No aquatic vegetation is present
E	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities.	No	One side of the ditch is very close to existing compound with significant encroachment.
F	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	No	Water depth is low, even after heavy rain. Unlikely to hold water all year round.
G	Less than 10% of the ditch is heavily shaded.	No	Approx 80% tree cover on western side will shade the ditch significantly.
H	There is an absence of non-native plant and animal species[1].	Yes	No non-natives recorded.
Number of criteria passed		2	
Condition		Poor	

Appendix 4 - Photographs

Photo 1 – Earth bank with scrub vegetation west and south of site.	Photo 2 – Line of trees west of site.
	
Photo 3 – Ditch, scrub vegetation, and trees, east of site.	Photo 4 – View from north-west of site.
	
Photo 5 – Building B4.	Photo 6 – Tree T8.
	

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