

TRU W1 – Clayton Vale

Biodiversity Net Gain Assessment

Date: September 2022
Client Name: Network Rail
Document Reference: WIE15642-199-TN-1-2-4-BNG

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

Issue	Prepared by	Checked by	Approved by
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1. Introduction

Waterman Infrastructure & Environment Ltd (Waterman IE) has been instructed by Network Rail (via Atkins) to undertake a Biodiversity Net Gain (BNG) assessment of a land parcel adjacent to the railway corridor in Clayton Vale Park, Clayton, Manchester (hereafter referred to as the 'Site') which forms part of the Transpennine Rail Upgrade (TRU) West 1 (W1) project (Manchester Victoria – Stalybridge.)

The proposed works are part of the wider Transpennine Route Upgrade (TRU) Scheme (W1 section) and comprise a wider scheme of works to improve drainage of the railway line for an approximately 300m stretch adjacent to the northern boundary of Clayton Vale Park, which is currently prone to surface water flooding. The proposed development comprises:

- An underground drain which will convey surface water from the railway line into an attenuation tank;
- An underground attenuation tank to receive and temporarily store surface water;
- Two pre-cast concrete catch-pits;
- A further underground drain from the attenuation tank to an outfall / headwall;
- An outfall/headwall to an existing watercourse which feeds into the River Medlock.

The planning application for Site has been approved subject to the discharge of a suit of planning conditions.

This BNG assessment has been prepared to inform a strategy to achieve an overall 10% net gain in biodiversity for the development as required by Planning Condition 5 which is outlined below:

“Prior to the commencement of development hereby approved, details demonstrating how 10% Biodiversity Net Gain will be secured as part of the wider scheme (Manchester Victoria - Stalybridge Transpennine Route Upgrade), shall be submitted to and agreed in writing by the local planning authority. Reason-To enhance the biodiversity and ecology of the site and re-create habitat lost as part of the proposals pursuant to policy EN15 of the Manchester Core Strategy.”

2. Site Setting

The Site forms part of the wider TRU W1 Manchester Victoria – Stalybridge and is approximately 0.08ha in size, located immediately adjacent to the railway line. It is centred on Ordnance Survey Grid Reference SJ 8893 9958, in the southern outskirts of Newton Heath. It is located wholly within the administrative authority of Manchester City Council.

The Site is within Clayton Vale Local Nature Reserve (LNR), abutting the north-eastern boundary of the LNR. The operational railway borders the Site to the north. The Site currently contains woodland and grassland habitat with a small watercourse to the south.

The Site and existing habitats are shown in Habitat Features Plan (Figure Ref WIE15642-174-GIS-BNG-1A).

3. Relevant Legislation and Policies

The following legislation and policies are considered relevant to this assessment:

- Environment Act (2021)
- National Planning Policy
 - National Planning Policy Framework, 2019¹
- Local Planning Policy
 - Local Planning Policy (Manchester City Council Core Strategy²);

Biodiversity Action Plans

- UK Post-2010 Biodiversity Framework
- Biodiversity 2020: A strategy for England's wildlife and ecosystem services
- BS 42020: 2013 Biodiversity: Code of Practice for Planning and Development

Refer to **Appendix A** for full details of the above planning policies.

4. Methodology

Baseline survey

A UK Habitat Classification (UKHab) survey of the Site was undertaken on 30th June 2021 by Waterman Senior Ecologists Dermot McKee to inform the Ecological Impact Assessment (EclA) of the Site (ref: **151667-TSA-00-TRU-REP-W-EN-000884**). Habitat Features Plan (Figure Ref WIE15642-174-GIS-BNG-1A) details those habitats recorded on Site.

¹ Department of Communities and Local Government. (2012). *National Planning Policy Framework*.

² [Core Strategy | Manchester City Council](#)

To inform the BNG assessment the EcIA habitat data was reviewed by Joel Giordano (Waterman Ecologist FISC level 5, author of this report) to check the spatial extent of mapped polygons and relevant attributes with regards to habitat categories in the BNG calculator and current best practice³.

The assessment found the Site to comprise of the following baseline habitats:

Habitats

- Urban – Developed land; sealed surface (u1b) – 0.010ha;
- Grassland – Other neutral grassland (g3c) –0.003ha⁴; and
- Woodland and forest – Other broadleaved woodland (w1g) –0.064ha⁵

Linear features

- Other rivers and streams (r1b) – 0.004km

Condition assessment

Baseline Habitats

A condition assessment of those habitats present on Site has been undertaken using the Biodiversity Metric 3.0 – Technical Supplement⁶. This document sets out criteria and characteristics for each habitat and provides guidance on an assessment of habitat condition (which can be 'good', 'fairly good', 'moderate', 'fairly poor' and 'poor', depending on the habitat type). The assessment criteria considered is varied for each habitat but includes criteria such as the presence of undesirable species, habitat extent, habitat health and vegetation structure.

Post-construction Habitat Conditions

Proposed habitat conditions have been assigned to newly created and retained habitats. This has been achieved by reviewing the criteria characteristics for each habitat, set out in the Biodiversity Metric 3.0 – Technical Supplement and the proposed soft landscaping plans to determine a likely achievable condition once the habitats have established and been subject to appropriate management.

The Landscape Soft Planting Plan (**Appendix C** Ref: WIE15642-174-ZZ-XX-DR-L-741000) produced by Waterman to inform the Landscape Ecological Management Plan (LEMP) was used to identify the post-construction habitat types. These CAD drawings were converted into ArcGIS Shapefiles. The Site Contractor verified the extent of the proposed de-vegetation work on Site, and provided Shapefile, clearly identifying the extent of loss of each habitat polygon presented in the

³ Baker, J., Hoskin, R., Butterworth, T., (2019) Biodiversity net gain. Good practice principals for development. Part A: A practical guide (CIRIA C776b); CIRIA, CIEEM, IEMA, London, UK. ISBN 978-0-86017-791-3

⁴ The EcIA identifies the grassland area within the Site as Arrhenatherum neutral grassland (g3c5), dominated by false oat grass. As a best fit for the metric other neutral grassland has been assigned.

⁵ The EcIA identifies the woodland as other lowland mixed deciduous woodland (w1f7) comprising young and semi mature trees. This woodland is generally lacking in a great diversity of species composition in canopy and ground flora (key characteristic of w1f) thus best aligning with the UK habitat definition of 'other woodland; broadleaved' (w1g)

⁶ Panks et al (2021) Biodiversity metric 3.0: Auditing and accounting for biodiversity – Technical Supplement, Natural England (JP029).

baseline. The new habitats were translated in the best-fit UKHab classification equivalents and most appropriate assumed conditions (see Section 6).

BNG calculations

The baseline Biodiversity Net Gain calculations were undertaken using the Biodiversity Metric 3.0 Calculation Tool⁷.

Baseline biodiversity units were established using:

- The results of the 2021 UKHab Survey;
- The accurate measurement of on-Site habitats in accordance with current topographical survey information; and
- Professional judgement.

Post-development biodiversity units have been established using:

- Information provided by the Landscape Architect;
- The de-vegetation information provided by the Client and Site Contractor;
- Assumptions on condition as a result of ongoing future management; and
- Professional judgement.

Limitations and Assumptions

There are no hedgerows within the pre-development plans or the proposed landscaping plans, therefore no hedgerow assessment has been undertaken.

In addition, one small (0.004km) section of watercourse is present within the Site boundary with no impacts predicted. As such a detailed river morphology assessment was not undertaken on this small watercourse. A precautionary approach has been adopted for the purpose of the BNG river assessment with regards to the condition assessment (it was assigned 'good condition' in the absence a MoRPh Rivers – Modular River Survey).

As the Site is less than 0.5ha, with no priority habitat present on site, it is appropriate for the Small Site Metric 3.1 to be used for this BNG assessment. However, to maintain consistent with other BNG assessments across the TRU project, the Biodiversity Metric 3.0 has been used for this assessment.

It is assumed that habitats presented in this document will be established to meet their target habitat category and condition. For more information see Section 6.

5. Assessment

Baseline Habitat Value

Table 1 below details the pre-development habitats and their corresponding biodiversity value.

Table 1: Pre-development habitats

⁷ Panks et al (2021) Biodiversity metric 3.0: Auditing and accounting for biodiversity – Calculation Tool, Natural England (JP029)

Habitat Type	Area (ha)	Habitat Distinctiveness	Condition	Strategic Significance	Total habitat units
Urban - Developed land; sealed surface	0.010	V.Low	N/A – Other*	No strategic significance.	0.00
Woodland and forest - Other woodland; broadleaved	0.064	Medium	Poor	High Strategic Significance	0.29
Grassland – Other Neutral Grassland	0.003	Medium	Poor	High Strategic Significance	0.05
Total	0.077**	-	-	-	0.34

* These habitats are assigned a default condition of 'N/A – Other' in the Metric.

** Overall Value equates to 0.077. The metric rounds to two decimal places providing a final value of 0.08

Baseline River Value

Table 2 below details the pre-development River metric biodiversity value.

Table 2: Pre-Development River

Habitat Type	Length (km)	Habitat Distinctiveness	Condition	Strategic Significance	Total habitat units
Other rivers and streams	0.004	High	Good	High Strategic Significance	0.06
Total	0.004*	-	-	-	0.06

* Overall Value equates to 0.004. The metric rounds to two decimal places providing a final value of 0.00

Post-development Biodiversity Value

The Soft Landscaping Plans for the Site, comprised the following habitats:

- WF3 seed Mixture - this has been assigned 'Other neutral grassland' as a best-fit UKHab category;
- Native Shrub Mixture - this has been assigned 'Mixed Scrub' as a best-fit UKHab category;
- Native Woodland Mix - this has been assigned 'Other woodland; broadleaved' as a best-fit UKHab category.

Given this is a drainage proposal a new culvert is being proposed to tie into the existing watercourse. This does not result in losses of existing riparian habitat.

Habitat Creation

Table 3 below details the habitats to be created post-development and the corresponding biodiversity values.

Table 3: Post-development habitat creation

Habitat	Area (ha)	Habitat Distinctiveness	Habitat Condition	Habitat units delivered
Heathland and shrub – Mixed scrub	0.017	Medium	Moderate	0.13
Grassland – Other neutral grassland	0.013	Medium	Moderate	0.10
Woodland and Forest – Other woodland; broadleaved	0.045	Medium	Poor	0.17
Urban - Developed land; sealed surface	0.003	V.Low	N/A – Other*	0.00
Total	0.077**	-	-	0.40

* These habitats are assigned a default condition of 'N/A – Other' in the Metric.

** Overall Value equates to 0.077. The metric rounds to two decimal places providing a final value of 0.08

River Creation

Table 4 below details the proposals for river habitat creation post-development and corresponding biodiversity values.

The units delivered relate to the proposals for the creation of a new culvert. There are no losses of biodiversity units associated with the existing riparian habitats.

Table 4: Post-development River creation

Habitat	Length (km)	Habitat Distinctiveness	Habitat Condition	Habitat units delivered
Culvert	0.066	Low	Poor	0.13
Total	0.066	-	-	0.13

Biodiversity Net Gain Assessment

Following its completion, the Metric⁸ confirms that the proposed Development would result in a **net gain of 0.06 habitat units (18.74%) and 0.13 River units (202.42%)**. A screenshot of the headline results is provided within **Appendix B**. The full Metric can be provided upon request.

Trading rules which are applied by the metric require that any loss of habitat is replaced on a 'like for like' or 'like for better' principle. The trading rules applied for individual habitats are based on their distinctiveness. The Trading Rules for this BNG Assessments have currently not been met (**Table 5**), as all the habitats lost related to 'other woodland; broadleaved' of medium distinctiveness, which is not being compensated by the same broad habitat or a higher distinctiveness habitat (mixed scrub). There is a minor on-site biodiversity unit change of -0.12 relating to 'other woodland; broadleaved'.

Table 5: Trading Rule Summary

Distinctiveness Group	Trading Rule	Trading Satisfied?
Very High	Bespoke compensation likely to be required	Yes

⁸ Waterman (2022), Clayon Vale, Biodiversity Metric 3.0 Calculation Tool, Ref. WIE15642-100-XLS-8-1-1-BNGMetric

High	Same habitat required	Yes
Medium	Same broad habitat or a higher distinctiveness habitat required	No
Low	Same distinctiveness or better habitat required	Yes

6. Long-term Management of Habitats

A LEMP (WIE15642-174-R4-1-5-Clayton Vale LEMP) has been produced covering the establishment period of the proposed new habitats for an initial five-year period.

In line with current guidance⁹ the lifetime of the BNG commitment and therefore Habitat Management and Monitoring requirements is taken to be 30 years. Broader management aims for the duration of this period (i.e. years 6 – 30) will be comprise the same management specifications detailed in the LEMP but with one visit every 3 years (i.e. a total of 8 additional visits for the 30 year period). In addition the management visit will confirm whether the target habitats are meeting the target conditions outlined below with additional measures to be implemented if required.

Proposed Habitats

To meet the target conditions of the Proposed Habitats, it is assumed that the following habitats are managed long-term to meet their targeted condition, as detailed in the LEMP.

Heathland and shrub – Mixed scrub in Moderate Condition

This habitat will be managed in line with the LEMP, which means that the habitat will be kept free of invasive species, and un-desirable species will make up less than 5% of the ground cover. There will be least three woody species of scrub present, with no one species comprising more than 75% of the cover with a good age-range present comprising all of the following present: seedlings, young shrubs and mature shrubs. The scrub will have a well-developed edge between the scrub and adjacent habitat. If the above criteria will be met by the proposed new planting, the habitat will meet 'Moderate' condition.

Grassland – Other neutral grassland- Moderate Condition

This habitat will be managed in such a way that the species composition closely matches the characteristics of this habitat type¹⁰, with an absence of invasive non-native species and un-desired species make up less than 5% of the ground cover. The sward height will be varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm). The cover of bracken will be less than 20%, and the cover of scrub less than 5%. If above criteria will be met by the proposed planting, the habitat will be in 'Moderate' condition.

Woodland and Forest – Other woodland; broadleaved.

This habitat will be managed in line with the LEMP and will aim to create a diverse woodland of a recognisable UKHab category, free from invasive species with some glades and open spaces with

⁹ CIEEM (2021) Biodiversity Net Gain Report and Audit Templates at [CIEEM-BNG-Report-and-Audit-templates2.pdf](#)

¹⁰ Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020). The UK Habitat Classification User Manual Version 1.1 at <http://www.ukhab.org/>

some deadwood located throughout. Due to the difficulty in woodland creation and time to target condition, the post intervention condition is assumed as 'poor'.

7. Conclusion

Current Site proposals will result in a **net gain of 0.06 habitat units (18.74%)** and **0.13 River units (202.42%)**. No linear hedgerow assessment was made due to no hedgerows being present on Site or are proposed.

It should be noted that the Trading Rules for this BNG Assessments have currently not been met, as all the habitats lost related to 'other woodland; broadleaved' of medium distinctiveness, which is not being compensated by the same broad habitat or a higher distinctiveness habitat (mixed scrub). There is a minor on-site biodiversity unit change of -0.12 relating to 'other woodland; broadleaved'. Within the context of connectivity to adjacent woodland this is not considered significant as scrub will eventually develop into woodland.

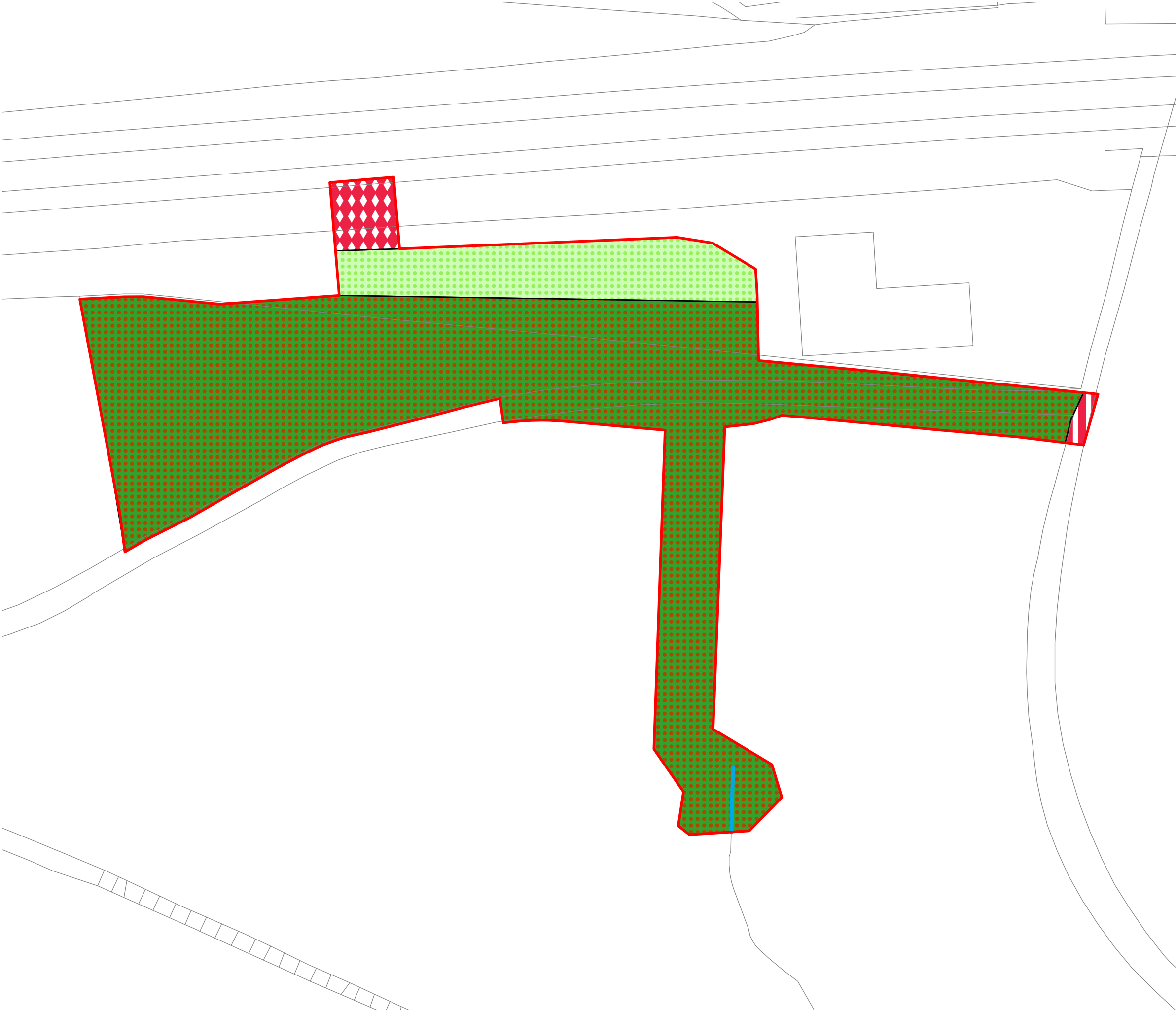
Assumptions have been made on the target condition of proposed habitats such as scrub (moderate), grassland (moderate) and woodland (poor). It should be noted that if the criteria outlined in Section 6 cannot be met the target condition would be 'Poor' and therefore the net loss of habitats would be greater.

In the event that landscape proposals are updated at a later stage, this BNG assessment should be updated as necessary to reflect the BNG provision at the Site as a result of any updated landscape plans.

FIGURES

Figure 1: Baseline Habitats (Ref. WIE15642-174_GIS_BNG_1A)

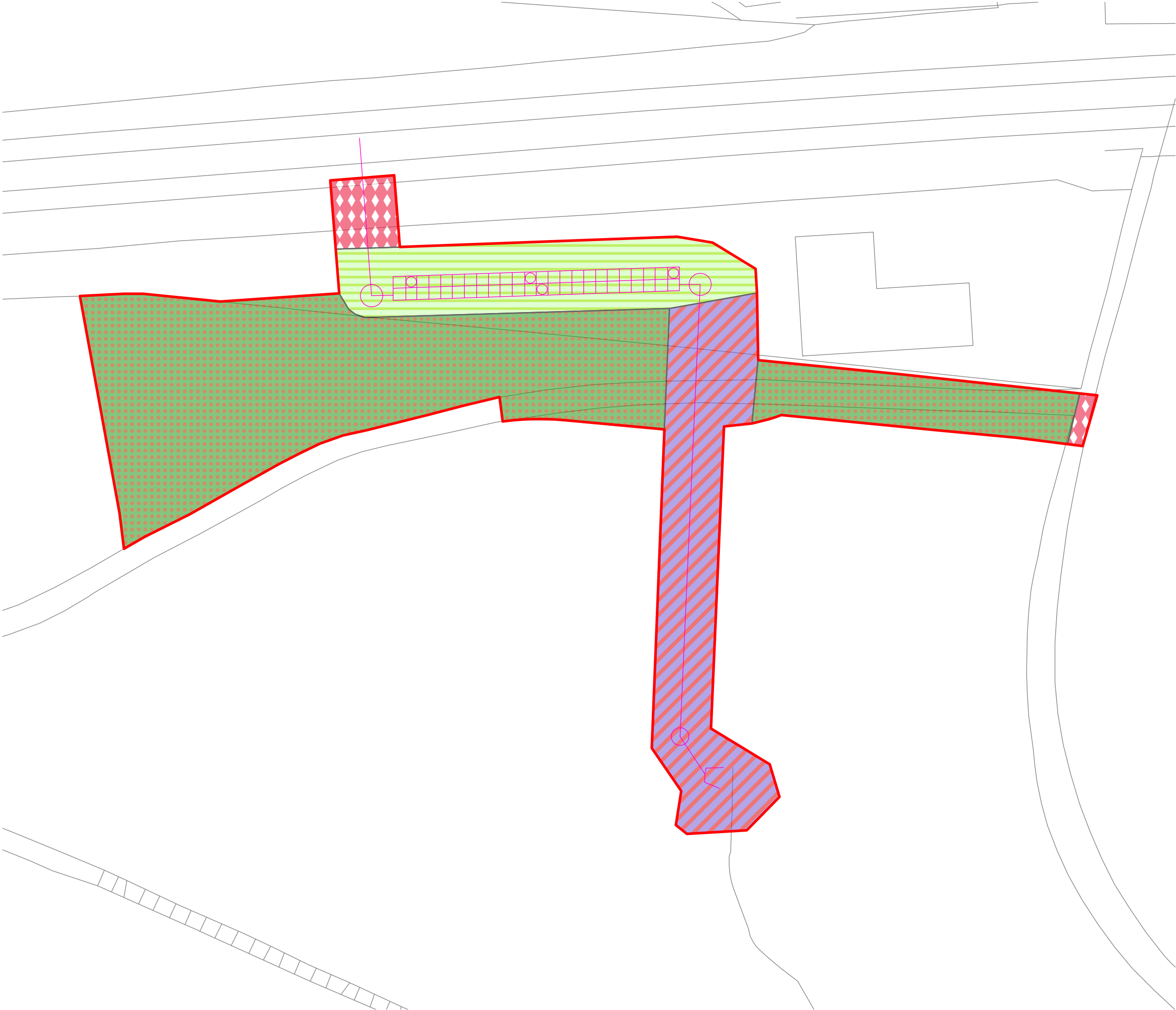
Figure 2: Post-development Habitat Map (Ref. WIE15642-174_GIS_BNG_2A)



-  Site Boundary (0.077Ha)
-  g3c5 - Arrhenatherum Neutral Grassland with Scattered Trees and Scattered Scrub (0.010Ha)
-  w1f7 - Other Lowland Mixed Deciduous Woodland (0.064Ha)
-  u1b - Urban, Developed Land, Sealed Surface (0.001Ha)
-  u1b6 - Other Urban Developed Land, Railway Ballast (0.002Ha)
-  r2b - Other Rivers and Streams (4.3m)



Project Details	WIE15642-174: Clayton Vale Park
Figure Title	Habitat Features Plan
Figure Ref	WIE15642-174-GIS-BNG-1A
Date	August 2022
File Location	\\s-rf\wiel-projects\wie15642\174\gis\ec



-  Site Boundary (0.077Ha)
-  Clayton Vale Drainage Scheme (66m)
-  g3c - Other Neutral Grassland (0.013Ha)
-  h3h - Mixed Scrub (0.017Ha)
-  w1g - Other Woodland; Broadleaved (0.045Ha)
-  u1b6 - Other Developed Land (0.002Ha)



Project Details	WIE15642-174: Clayton Vale Park
Figure Title	Habitat Creation Plan
Figure Ref	WIE15642-174-GIS-BNG-2A
Date	September 2022
File Location	\\s-rl\wiel-projects\wie15642\174\gis\ec



APPENDICES

A. Relevant Legislation and Policies

Environment Act (2021)

The Environment Bill was given Royal Assent in November 2021 and is now the Environment Act 2021. The Act establishes a framework for several new policies and targets, of which many of the details will be set in secondary legislation as a Statutory Instrument (SI). The Act includes a target to halt the decline of nature by 2030 and to strengthen the existing biodiversity duty through the introduction of a mandatory requirement to achieve at least 10% biodiversity net gain (BNG) for new developments in England. These requirements are expected to come into force in the autumn of 2023. It is understood that the BNG requirement is framed as a pre-commencement condition and that BNG information will need to be provided by the applicant as part of the planning application submission. The details of the forthcoming Regulations are subject to consultation which closed on the 5th April 2022.

National Planning Policy

National Planning Policy Framework, 2021

The National Planning Policy Framework (NPPF) was published in 2012 and last updated on 20th July 2021¹¹. Section 15 (outlined below) of the NPPF, 'Conserving and Enhancing the Natural Environment', replaces Section 11 of the previous NPPF 2012 revision and NPPF 2018¹². No significant changes to Section 15 are noted between the 2019¹³ and 2021 update. The Government Circular 06/2005¹⁴ - Biodiversity and Geological Conservation: Statutory Obligations and Their Impact within the Planning System, remains valid and is still referenced within the NPPF.

Of particular significance with respect to biodiversity in the NPPF revision, is the amendment to para 175(d) of the NPPF 2019 (now para 180(d) of the NPPF 2021), which now requires opportunities to incorporate biodiversity improvements in and around development, rather than simply making it optional. This demonstrates further steps taken by the government towards achieving the 25 Year Environment Plan (2018). Otherwise there have been no further changes to the wording of "Conserving and enhancing the natural environment" Chapter of the NPPF.

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

- *"Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
- *recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*
- *maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*
- *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*

¹¹ Ministry of Housing, Communities and Local Government (2021): National Planning Policy Framework.

¹² Ministry of Housing, Communities and Local Government (2018): National Planning Policy Framework.

¹³ Ministry of Housing, Communities and Local Government. (2019): National Planning Policy Framework

¹⁴ Department of Communities and Local Government (2005): Circular 06/05: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System.

- *preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*
- *Remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate”.*

The NPPF also stipulates that Local Planning Authorities (LPAs), when determining planning applications, should apply the following principles:

- *“If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- *development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*
- *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.”*

National Planning Practice Guidance, 2019

The Government's National Planning Practice Guidance¹⁵ (NPPG) is intended to provide guidance to local planning authorities and developers on the implementation of the planning policies set out within the NPPF. The guidance of most relevance to ecology and biodiversity is the Natural Environment Chapter, which explains key issues in implementing policy to protect biodiversity, including local requirements.

Local Planning Policy

Local Planning Policy (Manchester City Council)

Manchester City Council Core Strategy 2012 to 2027

Manchester as a City recognises the importance placed on biodiversity and its role in delivering urban renaissance. The conservation and enhancement of our natural resources is a key factor in the building and delivery of safe and sustainable communities. Manchester seeks to protect, enhance and manage existing identified biodiversity resources.

Developers will be expected to identify and implement reasonable opportunities to enhance, restore or create new biodiversity, either on-site or adjacent to the site, contributing to linkages between valuable or potentially valuable habitat areas where appropriate, with reference to:

¹⁵ Department for Communities and Local Government (2019): National Planning Practice Guidance. DCLG, London.

- *the Manchester Biodiversity Strategy, which provides further details of priority habitats within Manchester and opportunities for biodiversity enhancement including corridors such as the Mersey, Medlock and Irk river valleys, the canals and disused railway lines and areas of managed greenspace particularly in parks;*
- *the Green Infrastructure Framework for Greater Manchester, which encompasses an ecological framework that seeks to guide and inform habitat creation and repair, 200 12 Objective 6 Environment Manchester City Council | Manchester Core Strategy 2012 to 2027 including identifying large 'biodiversity opportunity areas' including the Moston Brook Corridor and Nutsford Vale;*
- *the Open Space, Sport & Recreation Study, which identifies areas where there is a deficit of natural and semi-natural greenspace, opportunities for green corridors and other linkages;*
- *Manchester's Climate Change Action Plan; the Strategic Flood Risk Assessment (SFRA) for Manchester;*
- *the Habitats Regulations Assessment (HRA) for Manchester, which gives detailed consideration to Special Areas of Conservation (SACs), including the Rochdale Canal SAC just outside the district boundary; the River Basin Management Plan for the North West; and*
- *the Manchester Tree Strategy.*

Any adverse impacts on biodiversity will need to be justified against the wider benefits of the proposal, assessed against other LDF policies. Where adverse impacts are unavoidable, developers will be required to provide appropriate mitigation and/or compensation.

Biodiversity Action Plans

UK Post-2010 Biodiversity Framework

The Environment Departments of all four governments in the UK work together through the Four Countries Biodiversity Group. Together they have agreed, and Ministers have signed, a framework of priorities for UK-level work for the Convention on Biological Diversity. Published on 17 July 2012, the 'UK Post-2010 Biodiversity Framework'¹⁶ covers the period from 2011 to 2020. This now supersedes the UK Biodiversity Action Plan (UK BAP)¹⁷. However, many of the tools developed under UK BAP remain of use, for example, background information about the lists of priority habitats and species. The lists of priority species and habitats agreed under UK BAP still form the basis of much biodiversity work in the countries.

Although the UK Post-2010 Biodiversity Framework does not confer any statutory legal protection, in practice many of the species listed already receive statutory legal protection under UK and / or European legislation. In addition, the majority of Priority national (English) BAP habitats and species are now those listed as Habitats of Principal Importance (HoPI) and Species of Principal Importance (SoPI) in England listed under Section 41 (S41) of the NERC Act 2006. For the purpose of this report, habitats and species listed under S41 of the NERC Act are referred to as having superseded the UK BAP. All public bodies have a legal obligation or 'biodiversity duty' under Section 40 of the NERC Act 2006 to conserve biodiversity by having particular regard to those species and habitats listed under S41. The strategy for Kirklees is laid out in the Kirklees Biodiversity Action Plan.

¹⁶ JNCC and DEFRA (on behalf of the Four Countries' Biodiversity Group). (2012). *UK Post-2010 Biodiversity Framework*.

¹⁷ HMSO. (1994) *Biodiversity The UK Action Plan*.

Guidance

Biodiversity 2020: A strategy for England's wildlife and ecosystem services

In October 2010, over 190 countries signed an historic global agreement in Nagoya, Japan to take urgent and effective action to halt the alarming global declines in biodiversity. This agreement recognised just how important it is to look after the natural world. It established a new global vision for biodiversity, including a set of strategic goals and targets to drive action. England's response to this agreement was the publication of 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services'¹⁸. The mission for this strategy is:

- *“to halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people.”*

BS 42020: 2013 Biodiversity: Code of Practice for Planning and Development

The UK commitment to halt overall loss of biodiversity by 2020 in line with the European Biodiversity Strategy and UN Aichi targets¹⁹, is passed down to local authorities to implement, mainly through planning policy. To assist organizations affected by these commitments, BSI has published BS 42020 which offers a coherent methodology for biodiversity management.

This British Standard sets out to assist those concerned with ecological issues as they arise through the planning process in matters relating to permitted development and activities involved in the management of land outside the scope of land use planning, which could have site-specific ecological implications.

The standard has been produced with input from a number of organisations including the Chartered Institute of Ecology and Environmental Management (CIEEM) and the Association of Local Government Ecologists (ALGE) and provides:

Guidance on how to produce clear and concise ecological information to accompany planning applications; recommendations on professional ethics, conduct, competence and judgement to give confidence that proposals for biodiversity conservation, and consequent decisions/actions taken, are sound and appropriate; and

direction on effective decision-making in biodiversity management a framework to demonstrate how biodiversity has been managed during the development process to minimize impact.

¹⁸ Defra. (2011) *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*.

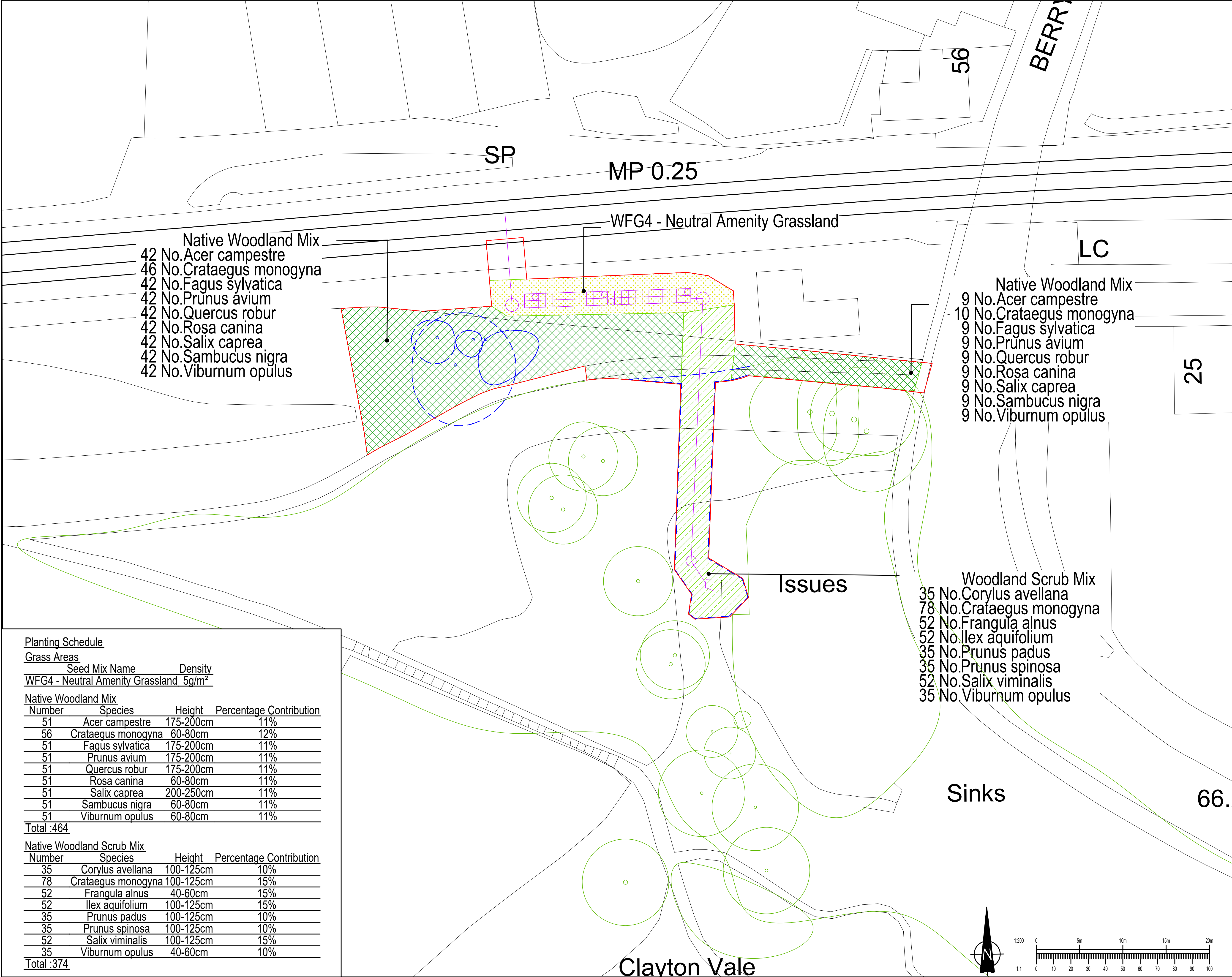
¹⁹ <https://www.cbd.int/sp/targets/>

B. Completed Biodiversity Metric 3.0 Calculation Tool Headline Results

Headline Results		Return to results menu
On-site baseline	Habitat units	0.34
	Hedgerow units	0.00
	River units	0.06
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.40
	Hedgerow units	0.00
	River units	0.19
On-site net % change (Including habitat retention, creation & enhancement)	Habitat units	18.74%
	Hedgerow units	0.00%
	River units	202.42%
Off-site baseline	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.06
	Hedgerow units	0.00
	River units	0.13
Total on-site net % change plus off-site surplus (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	18.74%
	Hedgerow units	0.00%
	River units	202.42%



C. Landscape Soft Planting Plan



KEY

RED LINE BOUNDARY

RETAINED TREES AND GROUPS

TREES TO BE REMOVED

PROPOSED NATIVE WOODLAND MIX

PROPOSED NATIVE SHRUB MIX

PROPOSED NEUTRAL GRASSLAND REINSTATED

NOTES

FOR TREES RETAINED, REMOVED AND PROTECTED PLANS REFER TO ARBORICULTURAL DRAWINGS:

- 15642-156-WIE-ZZ-XX-DR-V-77-007
- 15642-156-WIE-ZZ-XX-DR-V-77-008

FOR ARBORICULTURAL IMPACT ASSESSMENT REFER TO:

- 151667-TSA-00-TRU-REP-W-LP-000054

FOR LANDSCAPE & ECOLOGICAL MANAGEMENT PLAN REFER TO:

- WIE1562-174-R4-1-1-Clayton Vale LEMP

PS01	16.09.22	ISSUED FOR PLANNING	AB	TH	
Status	Date	Description	By	CHK	
Amendments					
Project CLAYTON VALE					
Title LANDSCAPE SOFT PLANTING PLAN					
Client NETWORK RAIL					
Waterman					
Merchants House Wapping Road Bristol BS1 4RW 1 0117 937 8200 mail@watermangroup.com www.watermangroup.com					

Status PLANNING					
Designed By AB		Director TH		Waterman Ref WIE15642	
Drawn By AB		Date 2022		Scales @ A1 1:200	
Project - Originator - Volume - Level - Type - Role - Number				Revision	
WIE15642-174-ZZ-XX-DR-L-741000				PS01	

Planting Schedule

Grass Areas

Seed Mix Name	Density
WFG4 - Neutral Amenity Grassland	5g/m ²

Native Woodland Mix

Number	Species	Height	Percentage Contribution
51	Acer campestre	175-200cm	11%
56	Crataegus monogyna	60-80cm	12%
51	Fagus sylvatica	175-200cm	11%
51	Prunus avium	175-200cm	11%
51	Quercus robur	175-200cm	11%
51	Rosa canina	60-80cm	11%
51	Salix caprea	200-250cm	11%
51	Sambucus nigra	60-80cm	11%
51	Viburnum opulus	60-80cm	11%

Total :464

Native Woodland Scrub Mix

Number	Species	Height	Percentage Contribution
35	Corylus avellana	100-125cm	10%
78	Crataegus monogyna	100-125cm	15%
52	Frangula alnus	40-60cm	15%
52	Ilex aquifolium	100-125cm	15%
35	Prunus padus	100-125cm	10%
35	Prunus spinosa	100-125cm	10%
52	Salix viminalis	100-125cm	15%
35	Viburnum opulus	40-60cm	10%

Total :374

- Woodland Scrub Mix
- 35 No.Corylus avellana
 - 78 No.Crataegus monogyna
 - 52 No.Frangula alnus
 - 52 No.Ilex aquifolium
 - 35 No.Prunus padus
 - 35 No.Prunus spinosa
 - 52 No.Salix viminalis
 - 35 No.Viburnum opulus

Sinks

66.

Clayton Vale

