Biodiversity Net Gain Assessment

Stoney Wood Quarter

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Stoney Wood Quarter

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1. Introduction

Project Background

1.1 Phlorum Limited was commissioned by Stoney Wood Property Developments Ltd to compile a Biodiversity Net Gain Assessment in relation to the proposed development of Stoney Wood Quarter (hereafter referred to as "the site"). The site address is Stoney Wood Quarter, The Fairway, NW7 3HP.

1.2 Version (V2) was produced to update the client details and the proposed development description.

1.3 Version (V3) was produced to amend the metric following redesign of the scheme to reduce the total development footprint, retain areas of woodland and include a river condition assessment of the two small streams within the woodland at the north of the site boundary.

1.4 Version (V4) was produced to amend the proposed development description.

1.5 Version (V5) was produced to update the BNG final score after updates to the landscaping and following an updated condition assessment of the onsite woodland, which was undertaken on the 14th April 2026.

1.6 Version (V6) was produced to amend the linear based habitat predevelopment measurements.

1.7 Version (V7) was produced to amend the length of linear based habitats post development and their score within the metric.

1.8 Version (V8) has been produced to record the changes made to the baseline since the submitted assessment (November 2025), which is presented in section 2.51. The metric and results are unchanged from V7.

1.9 Version 8.1 has been produced to amend minor typos in the text.

Site Description and Context

1.10 The site comprised lowland mixed deciduous woodland, other neutral grassland, modified grassland, individual urban trees, artificial unvegetated, unsealed surface, developed land, sealed surface, native hedgerow, line of trees and non-native and ornamental hedgerow. The site is located in the London Borough of Barnet. The site is located adjacent to The Fairway and east of the M1. A large part of the site is dedicated to a car park. Within the site and immediately adjacent to the north is woodland, with several waterbodies present in the immediate and wider surroundings and greenspaces including golf courses. The site is bound to the east by a school and its grounds and residential and urban areas to the south and west, and major and minor roads. The northern end of the site is adjacent to the Mill Hill golf club SINC. In the wider surroundings is urban land, fragmented woodland and greenspaces, and the wider city of London.

1.11 The closest statutory national and/or local designated site is Scratchwood and Moat Mount Open Spaces Local Nature Reserve (LNR) which is located 400m to the east. The site is adjacent to the Mill Hill Golf Course Site of Importance for Nature Conservation (SINC), this is a non-statutory site.

1.12 The National Grid Reference for the centre of the site is TQ 20590 93480. The survey area extended over approximately 1.7hectares (ha).

Description of Development

1.13 It is understood that the development proposals are for *"Redevelopment of the site for residential use (Class C3), in buildings up to 5 storeys with ancillary flexible commercial spaces (Use Class E) uses at ground floor level. Together with plant, play space, car and cycle parking, hard and soft landscaping and all other works associated with the development."*

Documentation Provided

1.14 This document has been developed with reference to the findings contained within the previous ecological report:

- Preliminary Ecological Appraisal Stoney Wood Quarter (PEA) (May 2025).

2. Methodology

Establishing the Baseline Habitat

2.1 The desktop study involved conducting database searches for statutory and non-statutory designated sites, legally protected species and features of interest within a 1km radius of the site. This was carried out by John Norris (May 2025).

2.2 Phlorum carried out a Preliminary Ecological Appraisal (May 2025) of the site, following the guidance set by the Joint Nature Conservation Committee, handbook for Phase 1 surveys (CIEEM 2017; JNCC 2010) for survey methodology.

Calculating Biodiversity Net Gain/Loss

2.3 A Biodiversity Net Gain (BNG) assessment involves making a comparison between the biodiversity value of the present habitat, prior to development (i.e. the baseline) and the predicted biodiversity value of the habitats following completion of the development (i.e. post-development). The comparison is made in terms of 'biodiversity units', with a 'biodiversity metric' providing the mechanism to allow biodiversity values to be calculated and compared.

2.4 If the baseline habitat has recently been disturbed/cleared then the baseline is taken as 30th January 2020.

2.5 The calculation of Biodiversity Net Gain (BNG) was undertaken using The Statutory Biodiversity Metric (DEFRA 2023, as amended). The metric uses site habitats, as areas and linear lengths, to calculate a score for the site. Each habitat is scored according to its relative biodiversity value. This value is then adjusted depending on various factors, to calculate the 'biodiversity units' for each habitat.

Baseline Calculation

2.6 Site baseline habitats are assessed based on the following:

- Terrestrial areas;
- Terrestrial linear lengths; and
- Aquatic linear lengths.

2.7 The baseline habitat map from the Preliminary Ecological Appraisal is used to calculate the individual parcels of habitats on the site, such as terrestrial areas (e.g. woodland, grassland), terrestrial lengths (e.g. hedgerows) and aquatic lengths (e.g. streams, rivers). Each area is measured in *hectares* and each linear feature in *kilometres*.

2.8 The Statutory Biodiversity Metric calculator requires habitats present on site to be described using the UKHabs Classification System. As a result, the calculator in the technical data section includes a tool to translate Phase 1 habitats into UKHabs habitats.

2.9 Once the UKHabs habitat names, and areas/lengths have been measured the parcels need to be assessed against the following criteria:

- Habitat Distinctiveness – The calculator creates an automated score based on the type of habitat present. Highly diverse habitats, particularly those habitats of Principal Importance under the NERC Act (2006) or Annex 1 habitats in the Habitats Directive (1992) score 'high', whilst sites with low diversity such as arable crops have 'low' scores.
- Habitat Condition – An assessment of the quality of the habitat parcel assessed during the baseline surveys.
- Strategic Significance – An assessment based on the information set out in local plans or policies.

2.10 The calculator realises the importance of individual trees but there is no UKHabs habitat for these in the area calculation. As a result, the 'Street tree helper', which allows numbers of trees to be converted to an area in hectares is used, regardless of if the tree is a street tree or isolated tree in another habitat. Trees are categorised as 'small', 'medium', 'large' or 'very large' depending on their diameter at breast height, as shown below:

- Small: greater than 7.5cm and less than or equal to 30cm;
- Medium: greater than 30cm and less than or equal to 60cm;
- Large: greater than 60cm and less than or equal to 90cm; and
- Very large: greater than 90cm.

2.11 The condition of the tree can then be assessed as 'poor', 'moderate' or 'good'.

Post Development Calculation

2.12 The post development areas are calculated by initially assessing the areas/length of habitats retained, enhanced, and created plus any offsite areas created or enhanced.

2.13 A 'Habitat Condition' and 'Strategic Significance' assessment are carried out on the post-development habitats. Where habitats have been created or enhanced, additional factors are considered, such as time taken for each of these habitats to reach target condition (temporal multiplier) and the difficulty of recreating these habitats (difficulty multiplier).

2.14 The baseline biodiversity score and post-development score are then calculated and compared the biodiversity impact loss or gain is calculated for each habitat (e.g. terrestrial habitat, terrestrial linear and /or linear aquatic habitat).

2.15 If needed offsite enhancement and/or creation of habitats can be carried out and assessed.

2.16 The site, and if needed the offsite enhancement, are then managed for at least 30 years via legal agreements, such as planning obligations or conservation covenants.

Caveats

2.17 The BNG calculates habitats and only provide a score to represent the biodiversity on site. As a result, compensation and mitigation should be designed using appropriate expertise and common sense.

2.18 As only habitats are calculated an increase in biodiversity due to increase in fauna (e.g. birds, bats, insects, reptiles, amphibians, or other mammals) is not included. The creation of bird/bat/insect boxes, log piles, and/or hibernacula's can significantly enhance the ecosystems on a site, but these enhancement are not calculated by the BNG calculator. The BNG calculator is a good guide to help increase biodiversity but habitats need both flora (plants) and fauna (animals) enhanced to ensure healthy and sustainable ecosystems.

2.19 The existing levels of protection provided to certain habitats or protected species are not changed by this calculator. The impact on protected species are not considered by the calculator, and must be assessed separately.

2.20 In nature the boundaries between ecological habitats are not usually an easily defined line, unless human impact such a hard surface (e.g. buildings/roads), fences, ploughing, and/or felling has occurred. As a result, the habitat areas used are based on best judgement and therefore are subjective.

2.21 The calculator requires area measurements in *hectares* and linear measurements in *kilometres*, which for small sites can result in smaller areas/lengths not being recorded when only 2 decimals places area used.

2.22 As isolated trees are measured separately the overall area of all the habitat parcels can be greater than the actual site area.

2.23 The calculator cannot take account of all site-specific features and circumstances that may affect the true value of certain habitats or dictate the nature of habitat creation and enhancement. Such features and circumstances may make it impossible to satisfy trading rules for medium and high distinctiveness habitats, even where a clear net gain for biodiversity is being delivered. Under The Statutory Biodiversity Metric meeting the Trading Rules is a requirement and irreplaceable habitats cannot be lost on site.

2.24 Whilst the calculator provides a valuable guide as to how a development will affect biodiversity, it should be considered as a guide to be used in combination with pragmatic and knowledge-based judgement when reaching conclusions as to how effective biodiversity enhancement will be delivered.

River Condition Assessment (RCA)

2.25 The River Condition Assessment (RCA) survey followed the field study and desk study surveys set out by the Modular River Physical Survey guidelines (MoRPH) (Shuker et al., 2017 and Gunnel 2021).

MoRPH 5 Field Survey

2.26 The RCA survey comprises the MoRPH 5 field survey. The MoRPH 5 survey characterises short sections (subreaches) of a river by the morphology, sediments, physical, natural and artificial features, and vegetation structure of the river channel, margins, banks within 10m of the bank top.

2.27 MoRPH 5 field surveys are undertaken at low flow between spring/early summer, with the optimum months for assessment being mid-April-June and September when water levels are low and vegetation does not obscure assessment of the river banks and channel margins. Surveys should, not be undertaken during adverse conditions such as elevated water levels which may obscure the channel bed features. In the event that surveys must be undertaken during winter or sub-optimum survey months, then the observations of remnant and decaying vegetation should be taken to estimate the likely species present and abundance of terrestrial and aquatic vegetation.

2.28 Morph 5 surveys are conducted on representative sections of each subreach and cover >20% of the watercourse length that falls within the site boundary.

2.29 The MoRPH 5 survey comprises a subreach of a minimum 5 continuous survey modules. Each MoRPH module is defined in length by the width of the river. Channel dimensions including cross section GPS, river width, left and right bank height (m), bank full width, water width and water depth are taken for each MoRPH 5 module.

2.30 In each MoRPH module, the type and abundance of all physical features (both natural and artificial) are recorded. Abundance is defined as absent, trace (<5%), present (5%-<33%) and extensive (>33%). Abundance of specific features, including bank top artificial/managed ground cover, bank face profile, bank face natural materials and reinforcement is recorded by dominance, where a sub-dominant type may be recorded if it occupies >20% of an area within 10m of the bank top.

2.31 The assessment of the bank top includes measuring artificial/managed ground cover, natural/lightly managed ground and terrestrial vegetation, non-native invasive plant species and bank top water related features.

2.32 The assessment of the bank face and channel margins includes measuring bank face profile, bank face natural and artificial materials, bank face/channel margin natural and artificial materials and bank face/channel margin terrestrial, aquatic and invasive non-native vegetation and plant species.

2.33 The assessment of the channel bed includes measurement of the channel bed natural materials and any artificial re-enforcement, water surface flow patterns, channel bed natural and artificial features and channel bed aquatic, terrestrial and invasive non-native vegetation and plant species.

MoRPH 5 River Type Desk Study

2.34 A desk study is conducted using the Cartographer software to determine the indicative hydro morphological MoRPH River Type for an extended river reach (Cartographer, 2025). The river type is characterised by determining a river reach which is defined during the desk study by a physical or natural feature at upstream and downstream markers, such as large weirs, and natural or artificial obstacles/features which are likely to alter the condition of the river downstream.

2.35 The Cartographer software uses the upstream and downstream reach locations, braiding index reach river length, reach valley length, sinuosity, anabranching index, level of confinement, upstream and downstream elevations and bed materials to calculate an overall MoRPH River Type.

2.36 A total of 15 indicative river types have been classified for England, which includes 13 rivers classed by riverbed material types, canals/navigable rivers and large rivers (>30m wide). Each river type comprises a range of positive indicator scores that represent the natural functioning of the river.

MoRPH Final Condition Score

2.37 River condition is assessed using 32 condition indicators that are automatically extracted from MoRPh5 field surveys once the data have been uploaded into the information system, Cartographer. Each river condition indicator is assigned a score of 0 to +4 (positive indicators) or 0 to -4 (negative indicators). Positive indicators represent the diversity (richness) and abundance (extent) of physical habitats offered by vegetation, sediment, vegetation-sediment-related physical features, and hydraulic habitats that can be observed at low flow. Negative indicators represent the extent and severity of local human interventions or pressures (Gurnell et al. 2021).

2.38 Preliminary condition scores are given for each aspect of the river surveyed on the bank top, bank face and channel margins and channel bed, and are calculated by the sum of the average of both the positive and negative indicator scores for each subreach. The final condition score is taken from the preliminary score and given as either: 5-good; 4-fairly good; 3-moderate; 2- fairly poor; or 1-poor, based upon the river type.

2.39 If a river is considered overdeep- i.e. a river channel whose depth relative to its width suggests that the bed has been incised/dredged and/or the bank tops have been raised with the result that flood flows are less likely to connect with the bank tops and floodplain than if the channel cross-profile were unmodified (Gurnell et al. 2021), then the final condition score is reduced by one category.

2.40 Target notes highlighting a particular feature of ecological interest are provided in Appendix B, with associated photographs.

2.41 Scientific names are given after the first mention of a species, thereafter, common names only are used. Nomenclature follows Stace (2019) for vascular plant species.

Personnel

2.42 Phlorum Limited carried out a River Corridor Survey and River Condition Assessment of the site on 18th September 2025. The survey was carried out by Amber Howie, an accredited RCA Modular River Assessor (Royal Geological Society-RGS & Cartographer), BSc (Hons), FISC Level 3, qualifying member CIEEM (QCIEEM), who holds a Bat Level 1 Survey Class Licence CL17 (Ref:2025-12638-CL17-BAT), Great Crested Newt Level 1 Survey Class Licence CL17 (Ref:2025-80368-SCI-CL08) and has over 3 years' experience in undertaking a range of ecological surveys.

2.43 The survey results and assessment was reviewed by Paul Carter (BSc (Hons), MBA, MCIEEM), an ecologist with over twenty years of experience of managing ecological and landscaping projects, and by the project director Richard Schofield (BSc (Hons), MSc, CSJK, MCIEEM, MISEP (formerly MIEMA), CEnv), who is also an accredited RCA Modular River Assessor (RGS & Cartographer), and has over twenty years of experience in managing projects. The weather conditions during the survey were sunny and dry.

Caveat

Data Search Constraints

2.44 It is important to note that, even where data is held, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest; the area may be simply under-recorded.

Survey Constraints

2.45 Ecological surveys are limited by factors that affect presence of plants and animals such as seasonality. Whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation of the environment.

2.46 The survey was carried out late in the growing season and therefore most species would be expected to be visible and identifiable.

2.47 River condition assessments using MoRPH modular river surveys can only be undertaken on rivers under 30m in width (Table 1, MoRPH Manual version 1, 2019).

2.48 The appraisal does not constitute a full botanical survey, or a Phase 2 pre-construction survey that would include accurate GIS mapping for invasive or protected plant species. This survey provides a preliminary view of the condition of accessible sections of the river within 10m of the site boundary.

2.49 Some lengths of river may be inaccessible to survey, this may be due to access restrictions, health and safety or due to the vegetation structure limiting access. In this case, where possible surveys may be undertaken from vantage points using high powered binoculars to survey the features from opposite banks or further up/downstream, however in some cases surveying these sections of river may not be possible.

Limitations

2.50 This appraisal also does not constitute as a full invasive species survey. All surveys are subject to the conditions on site at the time of the survey. Site surveys are non-intrusive and rely on the visual identification of aboveground growth. If parts of a site are inaccessible, then these areas can often not be surveyed unless they can be viewed from other areas. If any aboveground growth is being managed or has been disturbed or covered, or the below ground growth is dormant, then it may be impossible for us to identify plants, including invasive plants, in these areas during our non-intrusive survey.

Review of Changes Since the Submitted Assessment

2.51 This section describes the changes made to the BNG and landscaping since the submission of V3. Since V3, there have been amendments to the baseline, where areas were re-measured and recalculated, trees counted and linear features re-measured. There have also been enhancements to the proposed post development landscaping resulting in the new V7.

2.52 The assessment submitted with the application in November 2025 reported a net change of -16.12% in area habitat units, -46.62% in hedgerow units and 0.00% in watercourse units. Table 1 compares the submitted and current positions.

Table 1: Comparison of V3 and V7 BNG Results

Units	Submitted (V3)	New (V7)	Change
Area habitat baseline	14.20	6.39	-7.81
Area habitat post development	11.91	7.72	-4.19
Area habitat net change	-16.12%	+20.87%	
Hedgerow baseline	1.47	0.43	-1.03
Hedgerow post development	0.78	0.49	-0.30
Hedgerow net change	-46.62%	+12.31%	
Watercourse baseline	9.83	1.68	-8.15
Watercourse post development	9.83	1.87	-7.96
Watercourse net change	0.00%	+11.55%	

2.53 The baseline habitat map is unchanged. The changes arise from corrections to the measurements and inputs taken from it, an updated woodland condition survey and the entry of new trees at planting size as requested by the GLA. Table 2 sets out each change and its basis.

2.54 The corrections to individual trees, woodland condition, grassland areas and watercourse length, and the changes to new trees and landscaping, were made in V5.

2.55 Two discrete tree groups were reassigned as lines of trees in V5, and the hedgerow and tree line lengths were corrected in V6 in consistency with the arboriculture report (Quiafe Woodlands, 2025) and the numbered tree retention plan (London Placemaking, 2025), the tree retention plan can be seen in the appendices of this report. The proposed hedgerow was amended in V6 and V7.

2.56 A summary of the changes between the metrics is presented in table 2 below.

Table 2: Changes to inputs

Input	Submitted (V3)	New (V7)	Basis for change
Individual trees (baseline)	34 trees: • 16 large, • 1 medium, • 17 small (7.04 units)	16 trees: • 1 large, • 8 medium • 7 small (1.51 units)	Corrected from the submitted metric. Trees within the woodland parcels were double counted as woodland and have been removed from the revised count. Some tree groups have been reassigned as lines of trees, consistent with the arboricultural report. The remaining trees are sized by measured stem diameter consistent with the arboricultural report.
New trees (post development)	• 16 large, 81 medium, 19 small (6.56 units)	• 126 small (1.57 units)	Entered at planting size, as requested by the GLA. This accounts for the fall in post-development area habitat value. Excluding this, the revised landscaping adds about 2.25 units, replacing the low value amenity planting in the submitted scheme with mixed scrub, species-rich grassland, riparian buffer planting and biodiverse green roofs.
Woodland (baseline)	• 0.21 ha, good (4.39 units)	• 0.21 ha, moderate (2.93 units)	Condition resurveyed on 14 April 2026. Area unchanged.
Grassland and tall forbs (baseline)	• Neutral grassland 0.27 ha • tall forbs 0.07 ha, • modified grassland 0.16 ha (2.78 units)	• 0.19 ha • 0.02 ha • 0.19 ha • (1.95 units)	Areas checked and remeasured against the habitat map, onsite and desktop review.

Hedgerows and tree lines (baseline)	• 0.89 km (1.47 units)	• 0.19 km (0.43 units)	Southern boundary cypress hedge and tree line overstated. Remeasured against the plan following review on site.
Watercourse (baseline)	• 0.87 km (9.83 units)	• 0.13 km (1.68 units)	The full surveyed reaches were entered previously. Only the length of stream whose 10 m riparian zone falls within the site is now entered in accordance with revised methodology for assessing watercourses within site boundaries.

3. River Condition Assessment (RCA)

3.1 A River Condition Assessment has been carried out for the proposed development of Land at Stoney Wood Quarter. The development boundary falls within the 10m riparian buffer of an unnamed stream running of from the Mill Hill SINC at the northeast and a small corner of Deans Brook which runs off from Stoney Wood Lake at the northeast on one bank side. There is no direct impact on the actual river.

Desk Study

MoRPH River Type Survey

3.2 The MoRPH River Type survey covered 50m of the small unnamed stream which appears to run off from an area in the Mill Hill SINC at the northeast, within the woodland adjacent to the northern site boundary. The site boundary is within the 10m riparian buffer of the unnamed stream. Another 50m of Deans Brook which runs off from Stoney wood lake was also surveyed as a small section of the site boundary is within the 10m riparian buffer of a small section of Deans Brook.

Unnamed stream in Stoney Wood: Modules 1-5: MoRPH River Type Survey

3.3 The MoRPH River Type for the small unnamed stream in the woodland at the north of the site modules 1-5 has been calculated as 1.7 which equate to a **final condition score of fairly good**.

3.4 In summary the subreach is in fairly good condition. The bank top is dominated by woodland which is producing good scores for bank top vegetation structure but may be reducing the scores for the channel bed vegetation due to overshading. Overall, the bank face has some fairly good scores with vegetation structure and bank profile, however vegetation present was generally low in species diversity. The sediment and erosion on the bank face could be improved, and the channel margin is relatively good with room for improvement in the physical features and vegetation richness. The channel bed score is low due to low variation in hydraulic features, flow types, and low extents of natural features. The channel margin could be improved by removing the large rubbish items present and in some areas downstream it was noted that the channel was choked with vegetation.

3.5 The MoRPH River Type for the section of Deans Brook in the woodland at the north of the site modules 1-5 has been calculated as 1.15 which equate to a **final condition score of moderate**.

3.6 In summary the subreach is in moderate condition. The bank top is dominated by woodland which is producing good scores for bank top vegetation structure but may be reducing the scores for the channel bed vegetation due to overshading. Overall, the bank face has some fairly good scores with a varied vegetation structure and bank profile. However, the sediment and erosion on the bank face could be improved. The channel margin is relatively good due to varied vegetation with room for improvement in the physical features and vegetation richness. The channel bed score is low due to low variation in hydraulic features, flow types, and low extents of natural features. The channel margin could be improved by removing the large rubbish items present. Other factors reducing the score are artificial reinforcement areas present in the module 1.

3.7 Recommendations for the RCA are to retain the tree and woodland habitats along the southern edge of the river which is adjacent to the site boundary or within the 10m riparian buffer zone of the stream. Woodland borders improve water quality by reducing the amount of pollutants and run off from urban activities, and increases shading which regulates water temperature and nutrient levels, and creates structure on the bank top, face and channel bed. Consider improving the water channel structure by planting native aquatic herbs and species on bank faces and water margins such as common reed, purple loosestrife and valerian- these are beneficial species which can restore bank faces by holding bank sediment in place and reduces soil erosion. Remove rubbish from the channel and consider adding some features to the channel bed such as large, vegetated boulders to the channel- these improve flow diversity, sediment transfer/transport, prevent accumulation of silt and create varied habitats for aquatic species. Improve the bank face profile by replacing the damaged brick wall with a natural material artificial bank face. Some of the channel was heavily overshaded by terrestrial plants on the bank tops such as dense pendulous sedge, consider thinning some areas in order to create more diversity of species and reduce overshading. Additionally replacing the artificial bank re-enforcement materials with natural materials could improve the overall score by creating more naturalised re-enforcement areas.

Overview

3.8 The watercourse habitats include the small streams at the north within Stoney Wood. The site boundary currently falls within two discrete areas of the riparian zones of the unnamed stream in Stoney Wood and Deans Brook in Stoney Wood. The total area of the riparian zone within the site boundary equates to approximately 748m^2 and the area of this which will be developed is approximately 35m^2 (approximately 5% of the total area).

3.9 It is noted that the river and its bank face do not fall within the site boundary.

3.10 Under the proposed landscaping plans the discrete areas within the river buffer will be replaced with permeable sealed surface to create public footpaths and new tree planting.

Results

3.11 The MoRPH River Type for the small unnamed stream in the woodland at the north of the site modules 1-5 has been calculated as 1.7 which equate to a **final condition score of fairly good**. A Post Development Scenario created based on the proposed landscaping produced a predicted score for this stream, which has been calculated as 2.45 which equates to a **final condition score of good.**

3.12 Post development, with the proposed landscaping implemented the river is predicted to reach a score of good condition. The enhancement is to the riverbank adjacent to the site boundary, but the impacts of the enhancement have the scope to influence and create positive enhancement on the bank faces and water channel. This will be by replacement tree planting, retention of dead wood arising from the tree replacement along the river corridor, new bank top planting of diverse aquatic species and native herbs to encourage species diversity, structural benefits and foraging opportunities for wildlife. Bank top planting has the scope to enhance the bank face and channel via natural propagation enabled by the proposed management. Furthermore, the river channel will be improved by removal of fly tipping and litter.

3.13 The MoRPH River Type for the section of Deans Brook in the woodland at the north of the site modules 1-5 has been calculated as 1.15 which equate to a **final condition score of moderate**. There will be no change to this watercourse as the riparian zone within the site boundary is small and no meaningful enhancement that will change the score is possible within the scope of the site boundary. There will be native planting in the buffer zone, however it does not cover a large enough area to contribute meaningfully to the BNG enhancements.

3.14 The existing watercourse habitats on the site are considered by the Biodiversity Net Gain assessment to have a value of **1.68** units. The post-development area habitats are considered by the Biodiversity Net Gain Assessment to have a value of **1.87 units**. This is a **+0.19 net change** in habitat units which equates to a **+11.55% net gain**.

3.15 **Trading Rules for the site are satisfied for the watercourse habitats**.

3.16 The net gain reflects the bank top enhancements proposed as part of the development.

3.17 The full RCA results sheet, condition assessment and criteria can be seen in Appendix B.

4. Biodiversity Net Gain Assessment

Existing Habitats

4.1 The existing habitats identified on site during the Preliminary Ecological Appraisal were lowland mixed deciduous woodland, other neutral grassland, modified grassland, individual urban trees, artificial unvegetated, unsealed surface, developed land, sealed surface, native hedgerow, line of trees and non-native and ornamental hedgerow. The habitat map can be seen in Appendix A.

4.2 The landscape scheme can be seen in Appendix C.

4.3 Where relevant, the following habitats will be referred to using the UK Habitat Classification[1] to help inform the Biodiversity Net Gain (BNG) for the site.

4.4 The following habitats will be lost:

- **Lowland Mixed Deciduous Woodland:** An extent of the woodland on the east and west woodland areas will be lost.
- **Other Neutral Grassland:** All of the other neutral grassland at the northwest of the site will be removed.
- **Modified Grassland:** The children's playground comprised of modified grassland will be removed.
- **Individual Urban Trees:** 16 Individual trees will be removed. This includes 1 native large trees, 5 native medium trees, 3 non-native medium trees and 7 native small trees.
- **Artificial Unvegetated, Unsealed Surface:** Sealed surface will be removed
- **Developed Land, Sealed Surface:** Developed land will be removed
- **Native Hedgerow:** The hedgerow on the south boundary will be removed
- **Line of trees**: The lines of trees around the site will be removed.
- **Non-native and Ornamental Hedgerow**: The hedgerow on the southern boundary of the site will be removed.

4.5 The following habitats will be enhanced:

- **Lowland Mixed Deciduous Woodland:** An area of the woodland will be enhanced. Enhancements include ground flora planting to create a diverse assemblage within the woodland and includes Bluebell (*Hyacinthoides non-scripta*), wood anemone (*Anemone nemorosa*), primrose (*Primula vulgaris*), red campion (*Silene dioica*), greater stitchwort (*Stellaria holostea*), common dog-violet (*Viola riviniana*), wood avens (*Geum urbanum*), foxglove (*Digitalis purpurea*), ramsons (*Allium*

[1] UKHab Ltd (2023) The UK Habitat Classification Version 2.0 (at https://www.ukhab.org)

ursinum), hart's tongue fern (*Asplenium scolopendrium*), male fern (*Dryopteris filix-mas*), broad buckler fern (*Dryopteris dilatata*).

4.6 The following habitats will be created:

- **Developed Land, Sealed surface:** New buildings and associated hardstanding will be created.
- **Artificial Unvegetated, Unsealed Surface:** Areas of permeable paving will be created around the site to create public walkways and parking areas.
- **Green roof:** Areas of green roof will be created across the site. Proposals are for biodiverse green roofs with substrate of Bauder BioSolar green roof over blue roof attenuation; substrate to minimum settled depth 150 mm seeded with Bauder Flora 3 seed mix with supplementary wildflower plugs, 80-150 mm GRO Code 2014 compliant growing medium over warm roof build-up seeded with Native wildflower and sedum seed mix with plugs (Flora 5 London mix) and a lightweight sedum mat system seeded with Native sedum mix (*Sedum acre, S. album, S. anglicum*).
- **Modified Grassland:** Public greenspaces will be created around the site. The areas will be planted with wildflowers and other native grasses.
- **Other Neutral Grassland:** Species rich flowering grassland will be created around the site. Seeding mixes proposed are for varied sward and native planting to include common knapweed (*Centaurea nigra*), oxeye daisy (*Leucanthemum vulgare*), yarrow (*Achillea millefolium*), bird's-foot trefoil *(Lotus corniculatus*), red clover (*Trifolium pratense*), self-heal (*Prunella vulgaris*), lady's bedstraw (*Galium verum*), field scabious (*Knautia arvensis*), cowslip (*Primula veris*), musk mallow (*Malva moschata*), wild carrot (*Daucus carota*), meadow buttercup (*Ranunculus acris*), ribwort plantain (*Plantago lanceolata*), yellow rattle (*Rhinanthus minor*), crested dog's-tail (*Cynosurus cristatus*), common bent *(Agrostis capillaris*), sheep's fescue (*Festuca ovina*), smaller cat's-tail (*Phleum bertolonii*), sweet vernal-grass (*Anthoxanthum odoratum*).
- **Individual Urban Trees:** There will be significant tree planting around the site, a total of 126 proposed native species for the site. These species include silver birch (*Betula pendula*), hornbeam (*Carpinus betulus*), cherry *(Prunus sp.),* apple *(Malvus sp.),* beech *(Fagus sylvatica),* lime *(Tilius sp.),* yew *(Taxus baccata)* and field maple *(Acer campestre).*
- **Mixed Scrub:** New native scrub planting proposed to include hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), hazel (*Corylus avellana),* field maple (*Acer campestre*), dogwood (*Cornus sanguinea*), guelder rose (*Viburnum opulus*), holly (*Ilex aquifolium*), spindle (*Euonymus europaeus*), wayfaring tree (*Viburnum lantana*), elder (*Sambucus nigra*), dog rose (*Rosa canina*), field rose (*Rosa arvensis*).
- **Native Hedgerow:** New native hedge planting is proposed along the northern boundary to create a natural buffer to the woodland at the north. Species proposed include Hawthorn, blackthorn, hazel, field

maple, dogwood, guelder rose, holly, dog rose, spindle, with standard trees at intervals. Minimum five woody species per 30 m to meet the species-rich native hedgerow definition.

- **Riparian buffer planting (Other Neutral Grassland):** riparian enhancements to include: Bank face and damp bank top: tall-herb and damp grassland including meadowsweet (*Filipendula ulmaria*), purple loosestrife *(Lythrum salicaria*), hemp agrimony (*Eupatorium cannabinum*), wild angelica (*Angelica sylvestris*), ragged robin (*Silene flos-cuculi*), greater bird's-foot trefoil (*Lotus pedunculatus)*, common fleabane (*Pulicaria dysenterica*), water avens (*Geum rivale*), tufted hair-grass (*Deschampsia cespitosa*), wood sedge (*Carex sylvatica*), red campion (Silene dioica). Riparian shrub layer planting to include grey willow (*Salix cinerea*), goat willow (Salix caprea), guelder rose (*Viburnum opulus*), alder buckthorn (*Frangula alnus*), dogwood (*Cornus sanguinea*), hazel (*Corylus avellana*), hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), dog rose (*Rosa canina*).

Headline Results

4.7 The headline results, including total unit and percentage change are shown in Table 3 below.

Table 3: Results

	Habitat Area Units (Terrestrial area)	Habitat Length Units (Terrestrial linear length)	Water course Units
On-site Baseline	6.39	0.43	1.68
On-site post-intervention	7.72	0.49	1.87
Total net unit change	1.33	0.05	0.19
Total net % change	+20.87%	+12.31%	+11.55%

4.8 The Trading Rules requirement of the BNG assessment are not satisfied for the site due to loss of lowland mixed deciduous woodland, and grassland habitats.

Results Summary

4.9 The existing area habitats on the site are considered by the Biodiversity Net Gain assessment to have a value of **6.39 units**. The post-development area habitats are considered by the Biodiversity Net Gain Assessment to have a value of **7.72 units**. This is a **1.33 change** in habitat units which equates to a **+20.87% net gain**.

4.10 The existing linear habitats on the site are considered by the Biodiversity Net Gain assessment to have a value of **0.43 units**. The post-development area habitats are considered by the Biodiversity Net Gain Assessment to have a value of **0.49 units**. This is a **0.05 net change** in habitat units which equates to a **+12.31% net gain.**

4.11 The existing watercourse habitats on the site are considered by the Biodiversity Net Gain assessment to have a value of **1.68** units. The post-development area habitats are considered by the Biodiversity Net Gain Assessment to have a value of **1.87 units**. This is a **0.19 net change** in habitat units which equates to a **+11.55% net gain**.

4.12 This reflects the retention and replacement of areas of lowland mixed deciduous woodland, other neutral and modified grassland, individual urban trees, native and non-native ornamental and line of trees with developed land, artificial unvegetated, unsealed surface, grassland creation, riparian planting, scrub planting biodiverse green roofs and new hedge and tree planting.

4.13 Trading rules for the site **are not** satisfied for area habitats.

4.14 Trading rules for the site **are** satisfied for linear habitats.

4.15 Trading rules for the site **are** satisfied for watercourse habitats.

5. Discussion

5.1 A Biodiversity Net Gain Assessment has been carried out for the proposed development of Stoney Wood Quarter The site was comprised of lowland mixed deciduous woodland, other neutral grassland, modified grassland, individual urban trees, artificial unvegetated, unsealed surface, developed land, sealed surface, native hedgerow, line of trees and non-native and ornamental hedgerow

5.2 It is understood that development proposals are for *"Redevelopment of the site for residential use (Class C3), in buildings up to 5 storeys with ancillary flexible commercial spaces (Use Class E) uses at ground floor level. Together with plant, play space, car and cycle parking, hard and soft landscaping and all other works associated with the development."*

5.3 An overall net gain of +20.87% in habitat units, +12.31% in linear units and +11.55% in watercourse units from the existing baseline has been calculated. This reflects the retention and replacement of areas of lowland mixed deciduous woodland, other neutral and modified grassland, individual urban trees, native and non-native ornamental and line of trees with developed land, artificial unvegetated, unsealed surface, grassland creation, riparian planting, scrub planting biodiverse green roofs and new hedge and tree planting.

5.4 The trading Rule requirements of the BNG assessment are not satisfied for area habitat units. Trading rules have not been met for high distinctiveness area habitat due to the loss of lowland mixed, deciduous woodland.

5.5 Trading rules have not been met for medium distinctiveness area habitat due to the loss of the woodland and grassland habitats.

5.6 Trading Rule requirements of the BNG assessment are satisfied for linear and watercourse habitat units.

5.7 Under the BNG assessment, the BNG mitigation hierarchy must be met. We understand from the client that;

> *"The scheme has been subject to considerable design development in which biodiversity, urban greening and tree retention have been treated as core design considerations rather than residual matters. In accordance with the mitigation hierarchy, the design has first sought to avoid and reduce habitat loss on site before any reliance is placed on off-site compensation. The layout was amended during the planning process to reduce the development footprint, pulling built form away from the most sensitive northern and western edges to retain more of the existing woodland and tree structure in situ, and integrate the northern watercourse and riparian corridor into the ecological strategy.*

The extent of woodland loss has been minimised as far as reasonably practicable within the constraints of delivering the consented quantum of development. The retention strategy keeps trees in meaningful, defensible groups rather than isolated specimens: all Category A trees and all but two Category B trees are retained, principally within the woodland group at the north-west of the site, and the trees proposed for removal are predominantly internal Category C and U specimens. Retained woodland and trees will be protected during construction through a BS5837-compliant tree protection strategy with arboricultural supervision, and buffered and managed in the long term through the woodland edge management measures and estate management controls set out in the Green Infrastructure Note.

On-site green infrastructure has been maximised across the whole of the developable area. The scheme provides 126 new native trees of a twelve-species, climate-resilient palette, increasing the on-site tree stock from 150 to approximately 197 (a net increase of around 31%) and reinforcing the transition from the urban southern edge to the woodland character to the north and west. Beyond tree planting, the scheme incorporates green roofs specified as ecological infrastructure, native mixed-species shrub and hedgerow planting, woodland edge enhancement (including deadwood retention, log piles and hibernacula), riparian buffer enhancement along the retained northern watercourse, and species-specific measures such as bat and bird boxes and invertebrate habitat. Even the road around the site is proposed in grasscrete rather than conventional hard surfacing so that circulation space contributes to greening and permeability.

These measures will be secured through the detailed landscape strategy and the LEMP / HMMP, with habitat specifications, target conditions, monitoring and adaptive management, so that the assessed value of the on-site green infrastructure is delivered and maintained in the long term.

Having first avoided, minimised and compensated on site to the extent reasonably practicable, the trading rules will be addressed through off-site biodiversity units / credits secured for a minimum 30-year period, in accordance with the trading rules and Policy G6 of the London Plan."

5.8 There may also be significant gains for ecology on the site that are not captured by the BNG Assessment, such as species-specific enhancements including bird and bat boxes.

5.9 A Habitat Management and Monitoring Plan (HMMP) will be required to demonstrate how the post development habitat will be maintained, who is responsible for creating and enhancing it, and who is responsible for its maintenance, management and monitoring over a 30-year period.

6. Conclusions and Recommendations

Conclusions

6.1 A Biodiversity Net Gain Assessment has been carried out for the proposed development of the Stoney Wood Quarter. An overall net gain of +20.87% in habitat units, +12.31% in linear units and +11.55% in watercourse units from the existing baseline has been calculated.

6.2 It should be noted that the BNG assessment does not capture other methods of ecological enhancement such as the inclusion of bat and bird boxes.

Recommendations

6.3 To satisfy the trading rules on the site, the following recommendation are made:

- Purchase of off-site biodiversity units to satisfy the trading rules for the loss of medium and high distinctiveness habitats. Under the current BNG metric score, this results in an -0.65 deficit in high distinctiveness units and -0.58 deficit in medium distinctiveness units.

6.4 It is understood that the client will purchase credits in order to meet the requirements for the trading rules requirement.

6.5 It is recommended that a Habitat Management and Monitoring Plan (HMMP) is produced for the site.

7. References

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Figures and Appendices

Appendix A

Habitat Map

Figure 1 - PEA map for Land at Stoney Wood Quarter

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Job No: 13786
Author: A.Howie
Date: 11/09/2026
www.Phlorum.com

Appendix B.a-

River Condition Assessment Results Calculator

HATCHED AREA DENOTES RIPARIAN ZONE WITHIN THE SITE BOUNDARY- 748 m^2

10 METRE RIPARIAN BUFFER

AREA WITHIN RIPARIAN ZONE ON WHICH DEVELOPMENT IS PROPOSED -35 m^2

SITE BOUNDARY

LONDON PLACEMAKING
Street-based Architecture • Development • Construction

STONEY WOOD QUARTER
LONDON BOROUGH OF BARNET

Figured dimensions must be taken in preference to scaled dimensions and any discrepancies or errors are to be referred to the designers. Contractors, sub-contractors, and suppliers must verify all dimensions on site before commencing any work or production of shop drawings

Positions or details of windows, doors or building fabric to adjoining properties are indicative only. They may not have been surveyed accurately due to limited access.

NOTES:

ALL DIMENSIONS GIVEN ARE FOR COSTING PURPOSES ONLY. SITE DIMENSIONS MUST BE TAKEN PRIOR TO ANY ORDERING. CONTRACTOR TO BE RESPONSIBLE FOR SIGNING OFF ON ALL ORDERS.

KEY PLAN:

SCALE 1:500 @ A1
0m 5.0m 10.0m 15.0m 20.0m 25.0m

REVISION:

DATE	REVISION	DESCRIPTION

PROJECT ADDRESS:	Stoney Wood Quarter, The Fairway, London NW7 3HJ
CLIENT:	Fairway Barnet LTD
DRAWING NAME:	River zone
PURPOSE:	Planning issue
DRAWN BY:	SK
DRAWING NO_ ISSUE NO:	SWQ _ SK407
SCALE:	1 : 500 @ A1

Condition + Encroachment Reporting Sheet: RIVERS and STREAMS

River Condition Assessment (RCA) + Encroachment results for: Priority rivers, Other rivers and streams, Canals

Site name/location:	Stream off Deans Brook, Stoney Wood	**Unique river section reference:**	Subreach NWSWQ, Stream off Deans Brook, Modules 1 to 5
GPS of MoRPh5	GPS: TQ 20588 93552	**River section length:**	0.35km

Rivers and streams form naturally draining networks within the wider landscape.
A long history of channel modification and artificial water body creation has led to widespread loss of naturally formed and functioning habitats.

The River Condition Assessment (RCA) method requires one or more MoRPh5 sub-reach sample(s) for a longer length of channel, the river(or canal) section, that has consistent condition throughout and is represented by a single line within the Biodiversity Metric tool.

This sheet provides information about the full river (or canal) section length based on a site walkover plus representative RCA (MoRPh5) results for this section.

RCA River Type and Habitat Description for full river section (from walkover survey)

Small stream in the woodland. The woodland is mapped on mapping sites as priority deciduous woodland habitat. The stream appears to start out of the woodland in the Mill Hill SINC at the northeast. There are several streams and run offs from the lakes within the Mill Hill SINC however it is not clear if this stream is a run off of these. Main woodland area is oak, ash, silver birch, hawthorn, maple, sycamore and elder with lots of fern and pendulous sedge. Holly saplings and shrubs are present and dead wood across the woodland bank tops and ivy and leaf litter dominating the understorey. The stream is small and surrounded by woodland and heavily overgrown in places, with shallow mostly unvegetated banks with some small scrubby trees present. Most species are dominant on the bank tops rather than the bank face and the channel was mostly narrow with shallow, clear, slow moving water. Values keys are 0,1,2 = room for improvement 3,4s are the ones we want to keep/protect in the design

indicators with values of 0,1,2 (+ve) or -4,-3 (-ve) = these will lower the preliminary condition score

Condition Assessment Criteria		RCA Index values	Notes / Justification
RCA INDEX ID	**RCA INDEX NAME**	**Insert values -4 to 0 OR 0 to 4; Highlight those >2 OR <-2**	**Explain where significant, the influence of high/low RCA indices on overall river condition**
BANK TOP			
B1	Bank top vegetation structure	4	Good quality woodland on the bank tops present
B2	Bank top tree feature richness	3	Good, additional tree planting along the bank top could further improve
B3	Bank top water-related features	0	could be improved- no features present
B4	*Bank top NNIPS cover*	0	good no invasives
B5	*Bank top managed ground cover*	0	good none present
3			
C1	Bank face riparian vegetation structure	3	good but could be improved with more varied planting structure which would in turn improve the bank face structure
C2	Bank face tree feature richness	4	good
C3	Bank face natural bank profile extent	3	good
C4	Bank face natural bank profile richness	4	good
C5	Bank face natural bank material richness	1	room for improvement- new tree planting on bank top could impove material richness by introducing woody materials
C6	Bank face bare sediment extent	1	could be improved with more varied planting structure which would in turn improve the bank face structure
C7	*Bank face artificial bank profile extent*	0	good
C8	*Bank face reinforcement extent*	0	good
C9	*Bank face reinforcement material severity*	0	good

C10	*Bank face NNIPS cover*	0	good no invasives
CHANNEL MARGIN			
D1	Channel margin aquatic vegetation extent	0	good but could be improved with some aquatic planting including emergent aquatic and emergent broad leaved species
D2	Channel margin aquatic morphotype richness	0	could be improved with planting. Vegetation type could be improved with introducing mosses and liverworts.
D3	Channel margin physical feature extent	2	could be improved- features present such as side bars or toes which could affect the downstream flow.
D4	Channel margin physical feature richness	2	good
D5	*Channel margin artificial features*	0	good
CHANNEL BED			
E1	Channel aquatic morphotype richness	0	room for improvement, could be improved with some aquatic planting
E2	Channel bed tree features richness	3	good
E3	Channel bed hydraulic features richness	2	room for improvement- consider introdcuing vegetated boulders to create different hydraulic fetaures
E4	Channel bed natural features extent	2	room for improvement- consider introdcuing vegetated boulders to create different hydraulic fetaures
E5	Channel bed natural features richness	1	room for improvement- consider introdcuing vegetated boulders to create different hydraulic fetaures
E6	Channel bed material richness	3	good
E7	*Channel bed siltation*	0	good
E8	*Channel bed reinforcement extent*	0	good
E9	*Channel bed reinforcement severity*	0	good
E10	*Channel bed artificial features severity*	-2	Room for improvement- remove flytipping/rubbish from channel
E11	*Channel bed NNIPS extent*	0	good none present
E12	*Channel bed filamentous algae extent*	0	none present

Overview of RCA and river section assessment

River Condition Assessment PRELIMINARY SCORE:	**1.85**	**River Type and class bands:**	**K**
River Shape index:	**1.9**	**Is the river channel OVERDEEP?** *If yes, what supporting evidence is provided?*	**no**
River Condition Assessment FINAL CLASS:	**Fairly Good**	**IS THE RCA FINAL CLASS MODIFIED ?** *If yes, why and what supporting evidence is provided?*	**no**

Summary of RCA results (and Encroachment where applicable) with recommendations for improvements

In summary the subreach is in fairly good condition. The bank top is dominated by woodland which is producing good scores for bank top vegetation structure but may be reducing the scores for the channel bed vegetation due to overshading. Overall the bank face has some fairly good scores with a varied vegetation structure and bank profile, however the sediment and erosion on the bank face could be improved. The channel margin is relatively good due to varied vegetation with room for improvement in the physical features and vegetation richness. The channel bed is scoring low due to low variation in hydraulic features and flow types, and low extents of natural features. The channel margin could be improved by removing the large rubbish items present.

Recommendations for the RCA are to retain the tree and woodland habitats along the southern edge of the river which is adjacent to the site boundary or within the 10m riparian buffer zone of the stream. Woodland borders improve water quality by reducing the amount of pollutants and run off from urban activities, and increases shading which regulates water temperature and nutrient levels, and creates structure on the bank top, face and channel bed. Consider improving the water channel structure by planting native aquatic herbs and species on bank faces and water margins such as common reed, purple loosestrife and valerian- these are beneficial species which can restore bank faces by holding bank sediment in place and reduces soil erosion. Remove rubbish from the channel and consider adding some features to the channel bed such as large, vegetated boulders to the channel- these improve flow diversity, sediment transfer/transport, prevent accumulation of silt and create varied habitats for aquatic species. Improve the bank face profile by replacing the

Condition + Encroachment Reporting Sheet: RIVERS and STREAMS

River Condition Assessment (RCA) + Encroachment results for: Priority rivers, Other rivers and streams, Canals

Site name/location:	Deans Brook off Stoney Wood Lake	**Unique river section reference:**	Subreach DBNESWQ,Deans Brook off Stoney Wood Lake, Modules 1 to 5
GPS of MoRPh5	GPS: TQ 20503 93509	**River section length:**	0.17km

Rivers and streams form naturally draining networks within the wider landscape.
A long history of channel modification and artificial water body creation has led to widespread loss of naturally formed and functioning habitats.

The River Condition Assessment (RCA) method requires one or more MoRPh5 sub-reach sample(s) for a longer length of channel, the river(or canal) section, that has consistent condition throughout and is represented by a single line within the Biodiversity Metric tool.

This sheet provides information about the full river (or canal) section length based on a site walkover plus representative RCA (MoRPh5) results for this section.

RCA River Type and Habitat Description for full river section (from walkover survey)

The river is a small stream in the woodland which runs off from the culvert at Stoney Wood lake. The surrounding woodland is mapped on mapping sites as priority deciduous woodland habitat. The stream is small and surrounded by woodland and heavily overgrown in places. Main woodland area is oak, ash, silver birch, hawthorn, maple, sycamore and elder with lots of fern and pendulous sedge. Holly saplings and shrubs are present and dead wood across the woodland bank tops and ivy and leaf litter dominating the understorey. Around the bank top toward the north where the woodland is at the edge the ground flora includes short herbs including primrose, sorrel and bittercress. The stream is small with shallow mostly unvegetated banks with some small scrubby trees present. Most species dominant on bank top rather than bank face. The channel has shallow clear slow moving water, with several large pools occuring across the surveyed area.There was no aquatic vegetation in the channel, likely due to the shading from the woodland on either side. The culvert from the Stoney wood lake is at the start of the module but only accounts for approximately 5% of module 1.
Values keys are 0,1,2 = room for improvement 3,4s are the ones we want to keep/protect in the design

indicators with values of 0,1,2 (+ve) or -4,-3 (-ve) = these will lower the preliminary condition score

Condition Assessment Criteria		RCA Index values	Notes / Justification
RCA INDEX ID	**RCA INDEX NAME**	**Insert values -4 to 0 OR 0 to 4; Highlight those >2 OR <-2**	**Explain where significant, the influence of high/low RCA indices on overall river condition**
BANK TOP			
B1	Bank top vegetation structure	4	Good quality woodland on the bank tops present
B2	Bank top tree feature richness	3	Good, additional tree planting along the bank top could further improve
B3	Bank top water-related features	0	good
B4	*Bank top NNIPS cover*	0	good no invasives
B5	*Bank top managed ground cover*	0	Good quality woodland on the bank tops present
BANK FACE			
C1	Bank face riparian vegetation structure	2	good but could be improved with more varied planting structure which would in turn improve the bank face structure, and improve diversity and habitat features
C2	Bank face tree feature richness	2	could be improved with tree planting
C3	Bank face natural bank profile extent	3	good
C4	Bank face natural bank profile richness	2	good
C5	Bank face natural bank material richness	1	room for improvement- new tree planting on bank top could impove material richness by introducing woody materials

C6	Bank face bare sediment extent	4	room for improvement- new planting on banks could impove sediment extent by introducing plant species with benefits such as stabilisng bank structure and holding sediment (ie native waterdropwort)
C7	*Bank face artificial bank profile extent*	0	good
C8	*Bank face reinforcement extent*	-2	room for improvement replace reinforcement wth natural materials - unlikley due to urban nature
C9	*Bank face reinforcement material severity*	0	could be improved
C10	*Bank face NNIPS cover*	0	good no invasives
CHANNEL MARGIN			
D1	Channel margin aquatic vegetation extent	1	good but could be improved with some aquatic planting including emergent aquatic and emergent broad leaved species
D2	Channel margin aquatic morphotype richness	1	could be improved-vegetation type could be improved with introducing mosses and liverworts.
D3	Channel margin physical feature extent	1	could be improved- no features present such as side bars or toes which could affect the downstream flow.
D4	Channel margin physical feature richness	2	as above for D3
D5	*Channel margin artificial features*	-1	room for improvement replace reinforcement wth natural materials - unlikley due to urban nature
CHANNEL BED			
E1	Channel aquatic morphotype richness	1	good but could be improved with some aquatic planting
E2	Channel bed tree features richness	2	could be improved by planting
E3	Channel bed hydraulic features richness	2	room for improvement- consider introdcuing vegetated boulders to create different hydraulic fetaures
E4	Channel bed natural features extent	2	as above for E3
E5	Channel bed natural features richness	2	as above for E3
E6	Channel bed material richness	4	good
E7	*Channel bed siltation*	0	good
E8	*Channel bed reinforcement extent*	-1	room for improvement
E9	*Channel bed reinforcement severity*	-2	could be improvd by replacing the reinforcement with natural materials
E10	*Channel bed artificial features severity*	-4	room for improvement- as above
E11	*Channel bed NNIPS extent*	0	good none present
E12	*Channel bed filamentous algae extent*	0	good- none present

Overview of RCA and river section assessment

River Condition Assessment PRELIMINARY SCORE:	**1.15**	**River Type and class bands:**	**F**
River Shape index:	**1.28**	**Is the river channel OVERDEEP?** *If yes, what supporting evidence is provided?*	**no**

River Condition Assessment FINAL CLASS:	**Moderate**	**IS THE RCA FINAL CLASS MODIFIED ?** *If yes, why and what supporting evidence is provided?*	**no**

Summary of RCA results (and Encroachment where applicable) with recommendations for improvements

In summary the subreach is in fairly good condition. The bank top is dominated by woodland which is producing good scores for bank top vegetation structure but may be reducing the scores for the channel bed vegetation due to overshading. Overall, the bank face has some fairly good scores with a varied vegetation structure and bank profile, however the sediment and erosion on the bank face could be improved. The channel margin is relatively good due to varied vegetation with room for improvement in the physical features and vegetation richness. The channel bed is scoring low due to low variation in hydraulic features and flow types, and low extents of natural features. The channel margin could be improved by removing the large rubbish items present. Other factors reducing the score are artificial reinforcement areas present in the module 1.

Suggested enhancement interventions to improve the river condition score

3.13 Recommendations for the RCA are to retain the tree and woodland habitats along the southern edge of the river which is adjacent to the site boundary or within the 10m riparian buffer zone of the stream. Woodland borders improve water quality by reducing the amount of pollutants and run off from urban activities, and increases shading which regulates water temperature and nutrient levels, and creates structure on the bank top, face and channel bed. Consider improving the water channel structure by planting native aquatic herbs and species on bank faces and water margins such as common reed, purple loosestrife and valerian- these are beneficial species which can restore bank faces by holding bank sediment in place and reduces soil erosion. Remove rubbish from the channel and consider adding some features to the channel bed such as large, vegetated boulders to the channel- these improve flow diversity, sediment transfer/transport, prevent accumulation of silt and create varied habitats for aquatic species. Improve the bank face

Appendix B.b-

River Condition Assessment Results Calculator (Post Development Scenario)

Condition + Encroachment Reporting Sheet: RIVERS and STREAMS

River Condition Assessment (RCA) + Encroachment results for: Priority rivers, Other rivers and streams, Canals

Site name/location:	Stream off Deans Brook, Stoney Wood	**Unique river section reference:**	Subreach NWSWQ, Stream off Deans Brook, Modules 1 to 5
GPS of MoRPh5	GPS: TQ 20588 93552	**River section length:**	0.35km

Rivers and streams form naturally draining networks within the wider landscape.
A long history of channel modification and artificial water body creation has led to widespread loss of naturally formed and functioning habitats.

The River Condition Assessment (RCA) method requires one or more MoRPh5 sub-reach sample(s) for a longer length of channel, the river(or canal) section, that has consistent condition throughout and is represented by a single line within the Biodiversity Metric tool.

This sheet provides information about the full river (or canal) section length based on a site walkover plus representative RCA (MoRPh5) results for this section.

RCA River Type and Habitat Description for full river section (from walkover survey)

POST DEVELOPMENT SCENARIO Small stream in the woodland. The woodland is mapped on mapping sites as priority deciduous woodland habitat. The stream appears to start out of the woodland in the Mill Hill SINC at the northeast. There are several streams and run offs from the lakes within the Mill Hill SINC however it is not clear if this stream is a run off of these. Main woodland area is oak, ash, silver birch, hawthorn, maple, sycamore and elder with lots of fern and pendulous sedge. Holly saplings and shrubs are present and dead wood across the woodland bank tops and ivy and leaf litter dominating the understorey. The stream is small and surrounded by woodland and heavily overgrown in places, with shallow mostly unvegetated banks with some small scrubby trees present. Most species are dominant on the bank tops rather than the bank face and the channel was mostly narrow with shallow, clear, slow moving water. Values keys are 0,1,2 = room for improvement 3,4s are the ones we want to keep/protect in the design

indicators with values of 0,1,2 (+ve) or -4,-3 (-ve) = these will lower the preliminary condition score

Condition Assessment Criteria		RCA Index values	Notes / Justification
RCA INDEX ID	**RCA INDEX NAME**	**Insert values -4 to 0 OR 0 to 4; Highlight those >2 OR <-2**	**Explain where significant, the influence of high/low RCA indices on overall river condition**
BANK TOP			
B1	Bank top vegetation structure	4	Good quality woodland on the bank tops present - post development will replace removed tree groups around the woodland with new plating
B2	Bank top tree feature richness	3	Good, additional tree planting along the bank top could further improve - as above new tree planting to be introduced as part of the post dev landscaping
B3	Bank top water-related features	0	could be improved- no features present
B4	*Bank top NNIPS cover*	0	good no invasives
B5	*Bank top managed ground cover*	0	good none present
3			
C1	Bank face riparian vegetation structure	4	good but could be improved with more varied planting structure which would in turn improve the bank face structure - post dev landscaping includes riparian planting including diverse native species
C2	Bank face tree feature richness	4	good
C3	Bank face natural bank profile extent	3	good
C4	Bank face natural bank profile richness	4	good

C5	Bank face natural bank material richness	2	room for improvement- new tree planting on bank top could impove material richness by introducing woody materials - as above for B1 and B2- new tree planting proposed arisings from tree removal to be left in situ to provide material richness and habitat oppurtunitys
C6	Bank face bare sediment extent	2	could be improved with more varied planting structure which would in turn improve the bank face structure - as above
C7	*Bank face artificial bank profile extent*	0	good
C8	*Bank face reinforcement extent*	0	good
C9	*Bank face reinforcement material severity*	0	good
C10	*Bank face NNIPS cover*	0	good no invasives
CHANNEL MARGIN			
D1	Channel margin aquatic vegetation extent	2	good but could be improved with some aquatic planting including emergent aquatic and emergent broad leaved species- new planting on the bank top will naturally colonate the channel margin. Species proposed by the landscping designs include high value and diverse aquatic planting
D2	Channel margin aquatic morphotype richness	1	could be improved with planting. Vegetation type could be improved with introducing mosses and liverworts. - as above
D3	Channel margin physical feature extent	2	could be improved- features present such as side bars or toes which could affect the downstream flow.
D4	Channel margin physical feature richness	2	good
D5	*Channel margin artificial features*	0	good
CHANNEL BED			
E1	Channel aquatic morphotype richness	1	room for improvement, could be improved with some aquatic planting - as above for D1
E2	Channel bed tree features richness	3	good
E3	Channel bed hydraulic features richness	2	room for improvement- consider introdcuing vegetated boulders to create different hydraulic fetaures
E4	Channel bed natural features extent	2	room for improvement- consider introdcuing vegetated boulders to create different hydraulic fetaures
E5	Channel bed natural features richness	1	room for improvement- consider introdcuing vegetated boulders to create different hydraulic fetaures
E6	Channel bed material richness	3	good
E7	*Channel bed siltation*	0	good
E8	*Channel bed reinforcement extent*	0	good
E9	*Channel bed reinforcement severity*	0	good
E10	*Channel bed artificial features severity*	1	Room for improvement- remove flytipping/rubbish from channel- removed and maintained
E11	*Channel bed NNIPS extent*	0	good none present
E12	*Channel bed filamentous algae extent*	0	none present

Overview of RCA and river section assessment			
River Condition Assessment PRELIMINARY SCORE:	**2.45**	**River Type and class bands:**	**K**
River Shape index:	**1.9**	**Is the river channel OVERDEEP?** *If yes, what supporting evidence is provided?*	**no**
River Condition Assessment FINAL CLASS:	**Good**	**IS THE RCA FINAL CLASS MODIFIED ?** *If yes, why and what supporting evidence is provided?*	**no**

Summary of RCA results (and Encroachment where applicable) with recommendations for improvements

In summary the subreach is in fairly good condition. The bank top is dominated by woodland which is producing good scores for bank top vegetation structure but may be reducing the scores for the channel bed vegetation due to overshading. Overall the bank face has some fairly good scores with a varied vegetation structure and bank profile, however the sediment and erosion on the bank face could be improved. The channel margin is relatively good due to varied vegetation with room for improvement in the physical features and vegetation richness. The channel bed is scoring low due to low variation in hydraulic features and flow types, and low extents of natural features. The channel margin could be improved by removing the large rubbish items present. Post development, with the proposed landscaping impllemented the river is predicted to reach a score of good condition. The enhancement is to the river bank adjacent to the site boundary, but the impacts of the enhancemnet have the scope to influence and create positive enhancement to the bank faces and water channel. This will be by replacement tree planting, retention of dead

Post development, the river corridor and new planting should be monitored to ensure its targets are being met. Failed plants should be replaced and any unwanted species such as non-natives should be removed. The river should be kept free of litter or large rubbish/flytipping and as far as possible be free from public access to ensure its condition is maintained for wildlife.

Appendix C-

Post Development Landscape Plan

(Indicative)

LONDON PLACEMAKING
Street-based Architecture • Development • Construction

STONEY WOOD QUARTER
LONDON BOROUGH OF BARNET

SCALE_1:500 @ A1
0m 5.0m 10.0m 15.0m 20.0m 25.0m

REVISION:

DATE	REVISION	DESCRIPTION
24.11.25	1	Issued for Planning
05.01.26	P01	Issued for Coordination
10.07.26	2	Revised Planning

PROJECT ADDRESS:	Stoney Wood Quarter, The Fairway, London NW7 3HJ	
CLIENT:	Stoney Wood Property Developments Ltd	
DRAWING NAME:	Proposed masterplan 1-500	
PURPOSE:	Issued for Planning	
DRAWN BY:	SK	
DRAWING NO_ ISSUE NO:	SWQ-LPM-A-ZZ-DR-A-1045	Rev. 2
SCALE:	As indicated @ A1	

Appendix D-

Tree Strategy

LONDON PLACEMAKING
Architecture • Development • Construction

STONEY WOOD QUARTER
LONDON BOROUGH OF BARNET

This drawing is for planning purposes only.

Positions or details of windows, doors, or building fabric to adjoining properties are indicative only. They may not have been surveyed accurately due to limited access.

NOTES:

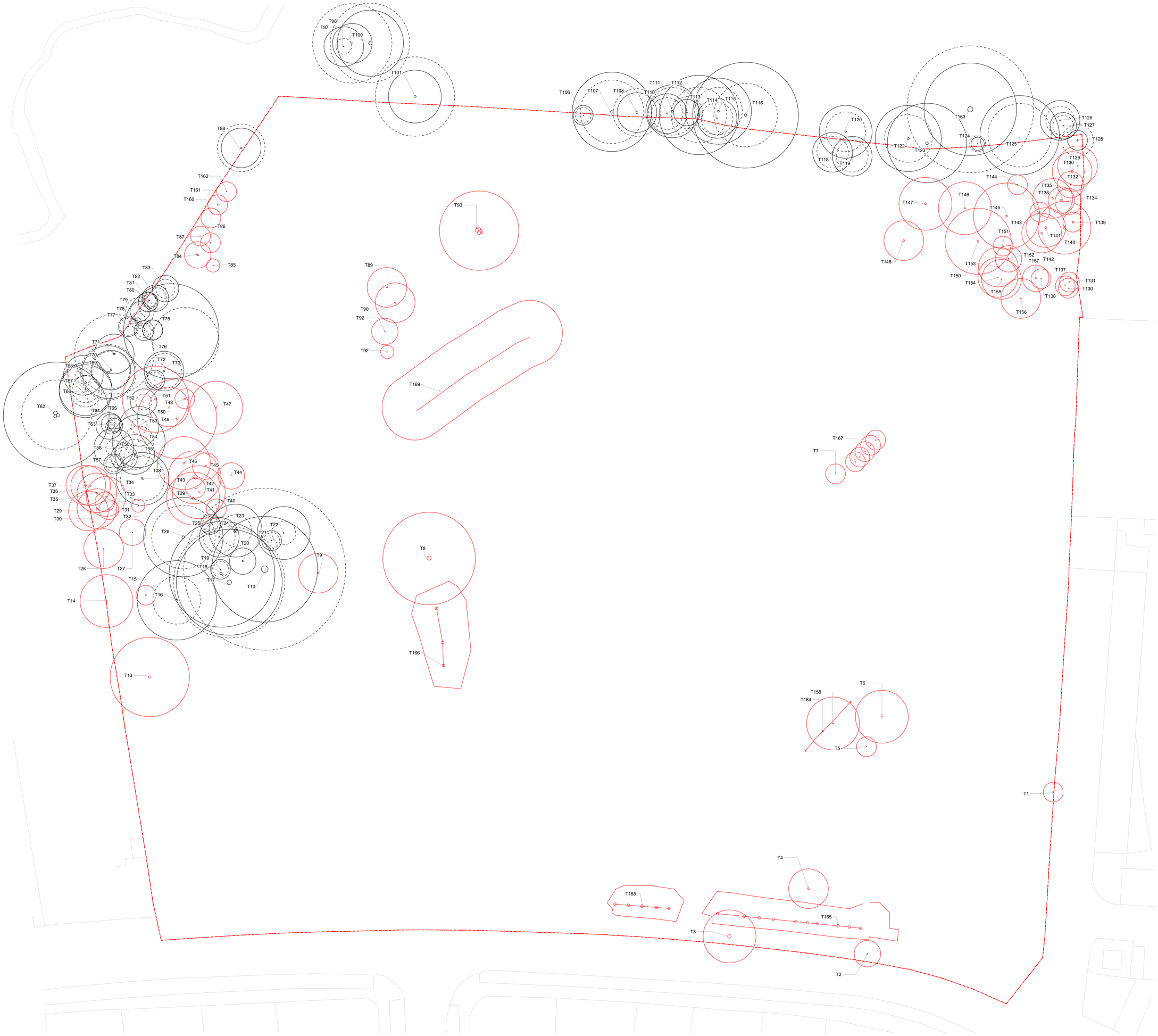
KEY PLAN:

REVISION:

DATE	REVISION	DESCRIPTION
28.08.25	1	Issued for information
29.10.25	2	Issued for Information

DRAFT

PROJECT ADDRESS:	Stoney Wood Quarter, The Fairway, London NW7 2HJ
CLIENT:	Fairway Barnet LTD
DRAWING NAME:	GA GF PLAN (tree protection plan)
PURPOSE:	Issued for information
DRAWING NO:	SWQ- LPM- ZZ- DR - A- ZZ- SK290
ISSUE NO:	2
SCALE:	As indicated @ A0+ (1202 x 914mm)



LONDON PLACEMAKING
Architecture • Development • Construction

STONEY WOOD QUARTER
LONDON BOROUGH OF BARNET

This drawing is for planning purposes only.

Positions or details of windows, doors, or building fabric to adjoining properties are indicative only. They may not have been surveyed accurately due to limited access.

NOTES:

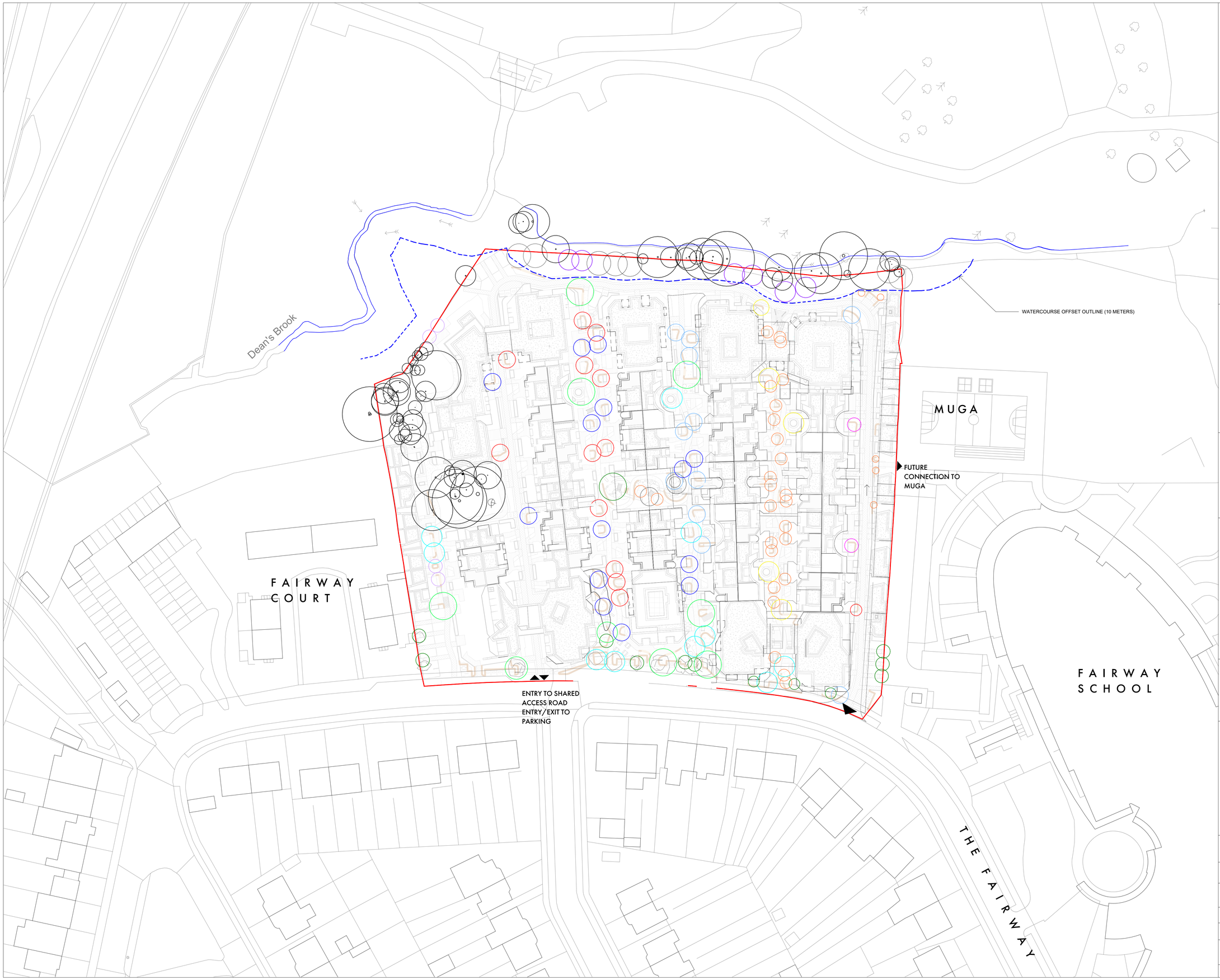
KEY PLAN:

REVISION:

DATE	REVISION	DESCRIPTION
28.08.25	1	Issued for information
28.10.25	2	Issued for Information
29.10.25	3	Issued for Information

DRAFT

PROJECT ADDRESS:	Stoney Wood Quarter, The Fairway, London NW7 2RJ 3
CLIENT:	Fairway Barnet LTD
DRAWING NAME:	GA GF PLAN (trees demolition plan)
PURPOSE:	Issued for information
DRAWING NO:	SWQ- LPM- ZZ- DR - A- ZZ- SK263
ISSUE NO:	
SCALE:	1 : 100 @ A0+ (1292 x 914mm)



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STONEY WOOD QUARTER
LONDON BOROUGH OF BARNET

EXISTING RETAINED TREES

PROPOSED TREES

WATERCOURSE OUTLINE

WATERCOURSE OFFSET OUTLINE (10 METERS)

Figured dimensions must be taken in preference to scaled dimensions and any discrepancies or errors are to be referred to the designers. Contractors, sub-contractors, and suppliers must verify all dimensions on site before commencing any work or production of shop drawings

Positions or details of windows, doors or building fabric to adjoining properties are indicative only. They may not have been surveyed accurately due to limited access.

NOTES:

ALL DIMENSIONS GIVEN ARE FOR COSTING PURPOSES ONLY. SITE DIMENSIONS MUST BE TAKEN PRIOR TO ANY ORDERING. CONTRACTOR TO BE RESPONSIBLE FOR SIGNING OFF ON ALL ORDERS.

KEY PLAN:

N

SCALE 1:500 @ A1
0m 5.0m 10.0m 15.0m 20.0m 25.0m

REVISION:

DATE	REVISION	DESCRIPTION
24.11.25	1	Issued for Planning
05.01.26	P01	Issued for Coordination
10.07.26	2	Revised Planning

PROJECT ADDRESS:	Stoney Wood Quarter, The Fairway, London NW7 3HJ
CLIENT:	Fairway Barnet Ltd
DRAWING NAME:	UGF Masterplan View 2
PURPOSE:	Revised Tender Issue
DRAWN BY:	SK
DRAWING NO:	SWQ-LPM-ZZ-LG-DR-A-2001
ISSUE NO:	Rev. 2
SCALE:	As indicated @ A1

KEY

- Wild Cherry (9)
- Beech (5)
- Crab Apple (14)
- Silver birch (31)
- Wild Pear (13)
- black poplar (5)
- Small leaved lime (10)
- field maple (13)
- Yew (2)
- hornbeam (13)
- Common Alder (7)
- holly (4)

LONDON PLACEMAKING
Street-based Architecture • Development • Construction

STONEY WOOD QUARTER
LONDON BOROUGH OF BARNET

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NOTES:

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KEY PLAN:

SCALE 1:750 @ A1
0m 7.5m 15m 22.5m 30m 37.5m

REVISION:

DATE	REVISION	DESCRIPTION
20.10.25	1	issued for Information
31.10.25	2	Issued for Information

PROJECT ADDRESS:	Stoney Wood Quarter, The Fairway, London NW7 3HJ	
CLIENT:	Fairway Barnet LTD	
DRAWING NAME:	Proposed Tree Types 1-500	
PURPOSE:	Planning issue	
DRAWN BY:	SK	
DRAWING NO_ ISSUE NO:	SWQ _ 1042	Rev. 2
SCALE:	As indicated @ A1	

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