

BREEAM Ecology Credits – Hyde Park, Hayes HPH4 and HPH5

BREEAM ECOLOGY REPORT

■ FINAL

August 2012

Document history and status

Revision	Date issued	Reviewed by	Approved by	Date approved	Revision type
Draft	24/07/12	Paul Clack	Paul Clack	25/07/12	
Final	30/07/12	Paul Clack	Paul Clack	01/08/12	

Prepared under the Management of:	Richard Pollard
Reviewed by:	Paul Clack
Approved by:	Paul Clack
Date:	1 st August 2012
File name:	BREEAM Ecology Report HPH4-5
Author:	Tawny Clark
Name of organisation:	HPHA Ltd
Organisation Address:	C/O Melford Capital Partners LLP, 2 Eaton Gate, London, SW1W 9BJ
Client Contact:	Ludo McKenzie
Name of project:	Hyde Park, Hayes BREEAM Assessment
Name of document:	BREEAM Ecology Report HPH4-5.doc
Document version:	Final
Project number:	JL30529

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1. Introduction

1.1. Background

This report has been prepared by SKM Enviro (SKM), on behalf of HPHA Ltd, in relation to the proposed development of two multi-story office buildings at plots HPH4 and HPH5 within the Hyde Park Development site, located in the West London Borough of Hayes.

The report and associated documentation provides an evidence base intended to assist with the achievement of Land Use and Ecology credits for the proposed development.

1.2. Land Use and Ecology Credits

This ecological assessment report outlines the areas where credits can be awarded based upon the evidence gathered during the assessment. All work has been carried out in accordance with the BREEAM Guidance for *New Construction - Non-Domestic Buildings 2011*.

All work has been completed by T. Clark (MIEEM) of SKM, who is deemed a 'Suitably Qualified Ecologist' (SQE) under the BREEAM assessment definition.

BREEAM Land Use and Ecology credits are being sought for this development under headings *LE01, LE 02, LE 03, LE04 and LE 05*. The criteria for each of these credits, and the justification for awarding them are discussed in further detail in the sections below.

The site description below (Section 1.3) has been prepared following the ecological site assessment, carried out by T. Clark of SKM Enviro on the 4th July 2012.

For the purposes of this assessment and accreditation for *Land Use and Ecology* it has been deemed acceptable between the SQE and Stuart Barlow, of SPB Sustainability Ltd, the BREEAM Assessor, that the baseline for the assessment will be taken from the post-demolition footprint of the site, in 2008. Justification for this decision is provided throughout this report and associated documentation and evidence is provided in attached appendices including site photographs, aerial images and site plans.

For the purposes of this report, the term 'the site' refers to both plots when being discussed together. Where a single plot is being discussed, this will be referred to as HPH4 or HPH5, as appropriate.

1.3. Site Description and History

Plots HPH4 and HPH5 are adjacent plots located within the wider Hyde Park Hayes development which comprises three further office buildings and a multi-story car park constructed between the 1970s to the mid-1990s. The site has been developed on previously industrialised land that comprised a series of large factory buildings and warehouses, built in the 1920s, and associated hardstanding.

Redundant buildings on plots HPH4 and HPH5 were demolished in 2008-2009 in order to create opportunities for further development within the business park.

Prior to demolition both plots comprised large industrial buildings with associated hardstanding areas. Post-demolition both plots comprised predominantly hardstanding considered to be of no ecological value.

A single-species coniferous hedge was shown to be present on previous plans, along the west boundary of plot HPH5. This hedge was removed during demolition. Due to time lapse since removal, the likely limited value of a single-species non-native (thought to be Leyland Cypress *Cupressus x leylandii*) coniferous hedge and its isolation within the previous development this feature has not been considered as a feature of ecological value and has therefore been excluded from the assessment baseline.

Since demolition the current landowner has introduced temporary landscaping to both plots in order to improve their appearance for potential investors. Areas of hardstanding/disturbed ground that comprise a large proportion of the site areas have been seeded with a wildflower seed mix. At the time of survey, wild flowers had begun to sparsely colonise both units on the site providing some limited opportunities for wildlife, although these areas were not considered to currently be of significant ecological value. Further description of the current baseline of each of the plots is provided below.

It should be noted that this is provided for information only and does not form the baseline condition for the assessment as landscaping has been purposely introduced on a temporary basis.

HPH4: BREEAM-0046-6029

A temporary bank of amenity grassland has been developed around the north and west boundaries of plot HPH4. The grassland was noted as being rich in wildflower species that have colonised the area, likely from the seeding of the adjacent disturbed ground, through wind dispersal and potentially from introduced topsoil brought onto the site. A number of London plane saplings have also been planted within this area, although they are not sufficiently mature to classify as features of ecological value in accordance with BREEAM criteria. (Refer to Plate 7 in Appendix A).

HPH5: BREEAM-0046-6011

The north of plot HPH5 has been developed into a court yard garden area, to the south of plot HPH2. The garden comprises regularly managed amenity grassland areas, with a number of silver birch (*Betula pendula*) saplings planted in beds and large containers across the garden. Saplings are not currently sufficiently mature to be classified as features of ecological value in accordance with BREEAM criteria (Within the guidance manual *Table 11.1: BREEAM checklist for defining land of low ecological value* states that trees should be over 10 years old to be deemed as being ecologically valuable). Hardstanding paths cross the gardens and are lined with narrow beds of ornamental grasses approximately one metre in width. In the south of the plot is a further area of managed amenity grassland. These areas were noted as comprising few non-vigorous grass species with some patches of white clover. (Refer to Plates 8-10 in Appendix A).

1.4. Surrounding Land Use

The wider Hyde Park Hayes development includes some newly planted vegetation comprising tree and shrub borders and areas of managed amenity grassland are also present within the wider HPH development site.

The site is located within the West London Borough of Hayes. The surrounding urbanised area comprises residential, commercial and industrial developments and is predominantly hardstanding. Hayes and Harlington railway station is located approximately 0.5km to the north east of the site with the railway line running east to west approximately 0.2km to the north of the site. The M4 motorway is located approximately 0.8km to the south of the site, with Heathrow International Airport located approximately 2.5km to the south of the site.

There is little ecological interest within the area immediately surrounding the development; however there are a number of large recreation areas and country estates within the wider landscape including Stokely Park, Cranford Park, Harmondsworth Manor, and Lake Farm Country Park. These areas comprise large green spaces with areas of woodland, lakes and ponds and other habitats of high ecological value. An ecological desk study was outside the scope of these works and no search was therefore made to confirm the presence of ecologically designated sites within the local area.

2. LE 01 Site Selection

Number of Credits Available	1	Number of Credits Claimed	1
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Aim	To encourage the use of previously developed land and avoid land which has not been previously disturbed.
Assessment Criteria	1- At least 75% of the proposed development's footprint is on an area of land which has previously been developed for use by industrial, commercial or domestic purposes in the last 50 years.

Relevant Definitions

Previously developed land: For the purposes of this issue BREEAM defines previously developed land as that which is or was occupied by a permanent structure, including the cartilage of the developed land and any associated fixed surface infrastructure.

Justification

The proposed development is within an area that can be defined as previously developed land and therefore **1 Credit** should be awarded for LE01.

Schedule of Evidence

Site plans, photographs and aerial images are provided within Appendices A and B.

3. LE 02 Ecological value of site and protection of ecological features

Number of Credits Available	1	Number of Credits Claimed	1
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Aim	To encourage development on land that already has limited value to wildlife and to protect existing ecological features from substantial damage during site preparation and completion of construction works.
Assessment Criteria	1 This credit can be awarded if the land within the construction zone is defined as 'land of low ecological value' and where the surrounding site contains no features of ecological value. As defined by either the BREEAM checklist for defining land of low ecological value (refer to additional information section below), or by a Suitability Qualified Ecologist who has identified the land as being of low ecological value within an ecological assessment report, based on a site survey. 2 All existing features of ecological value surrounding the construction zone and site boundary are adequately protected from damage during clearance, site preparation and construction activities. (Refer to page 293 of BREEAM Guidance for full details)

Compliance Notes

In accordance with BREEAM requirements, the site visit should be carried out at the appropriate time of year (April-September) and prior to the commencement of site preparation works.

Justification for Non-Compliance

The site visit was carried out in 4th July 2012, which is within the appropriate time of year according to the BREEAM definition. However, following the completion of the survey it was considered acceptable by the SQE and BREEAM Assessor not to take the current site condition as the baseline for the assessment, due to temporary landscaping works having been carried out to improve the appearance of the site prior to further development. If temporary works had not been carried out the site would be exclusively hardstanding and it was therefore considered acceptable to use this post-construction condition as the baseline for the BREEAM assessment.

The client has provided photographs, aerial images and plans of the site prior to temporary landscaping works being carried out and the SQE is satisfied that the site can be deemed to have been of low ecological value prior to works. It is therefore felt justifiable that this credit can be awarded.

Prior to demolition, both plots comprised a single large industrial warehouse building and associated hardstanding. Both habitat types attract a species richness of zero under BREEAM definitions.

It is understood that a single-species coniferous hedge was present on the west boundary of plot HPH5 prior to demolition; however, this was removed along with the buildings in 2008. It is considered that due to the removal of this feature over four years prior to the preparation of this BREEAM assessment, its isolated context and the likelihood of it being non-native (possibly

Leyland Cypress *Cupressus x leylandii*) it should not be included as a feature of ecological importance and has therefore been excluded from the assessment.

It is considered justifiable that **1 Credit** can be awarded under LE02.

Schedule of Evidence

Please refer to Appendix F 'Relating Ecology reports to BREEAM' for the completed schedule of evidence for LE 02.

Previous site photographs, plans and aerial images are provided in Appendices A and B attached.

4. LE 03 Mitigating Ecological Impact

Number of Credits Available	2	Number of Credits Claimed	2
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Aim	To minimise the impact of a building development on existing site ecology
Assessment Criteria	The change in ecological value of the site is less than zero but equal to or greater than minus nine i.e. minimal change. Where a SQE has been appointed and, based on their site survey they confirm the following and either the assessor or ecologist inputs this data into the BREEAM LE 03 calculator: I. The broad habitat types that define the landscape of the assessed site in its existing pre-developed state and proposed state. II. Area (m²) of the existing and proposed broad habitat plot types III. Average total taxon (plant species) richness within each habitat type. Two credits can be awarded where the change in ecological value of the site is equal to or greater than zero i.e. no negative change, using the methods outlined above.

Compliance Notes

The ecological site visit was carried out prior to any development works on site and provides the baseline ecological conditions for the site.

The plant species list compiled during the ecological site assessment enables the calculation of the change in ecological value of the site, in terms of species richness, to be assessed directly and thus provide an accurate and site-specific assessment.

The SQE has used the actual number of surveyed and specified plant species (before and after construction) to calculate the change in ecological value (using the BREEAM LE 03 calculator).

Justification for non-compliance

The SQE visited site prior to development works and surveyed all the habitats on site, including compiling species lists for each habitat type identified. Following the completion of the site survey and upon discussion with the BREEAM Assessor it was considered acceptable not to use the existing condition as the baseline for the assessment due to temporary landscaping works having been undertaken.

Temporary works have altered the baseline condition of the site, which would otherwise have remained as hardstanding; this has therefore been taken as the baseline for the assessment. The site has been assessed based on site plans, aerial images and site photographs provided by the client, architects and site manager.

In addition to assessing the current site condition (as is normal for BREEAM accreditation), the site visit served to confirm the post-demolition footprint of the site and habitats present prior to landscaping works. The SQE is satisfied that this former baseline can be adequately determined, and deemed to be of low ecological value as hardstanding attracts an ecological value of zero.

It is considered justifiable that **2 Credits** can be awarded under LE03.

Schedule of Evidence

HPH4

- The calculator indicates that a total change in plant species diversity of 0.89 will result from the development of HPH4. A score of 2 credits should therefore be assigned.
- A copy of the completed calculator spreadsheet is included in the *Appendix F Relating ecological reports to BREEAM* document, attached to this report.

HPH5

- The calculator indicates that a total change in plant species diversity of 0.98 will result from the development of HPH5. A score of 2 credits should therefore be assigned.
- A copy of the completed calculator spreadsheet is included in the *Appendix F Relating ecological reports to BREEAM* document, attached to this report.

The above calculations are based on habitat areas provided by 3DReid Architects. Current landscape plans provided by 3DReid indicate the planting of a single native species of tree (silver birch), although there may be scope to increase the number of native tree species planted in the final plan (refer to Landscape Masterplan in Appendix B). In addition, the calculation of species richness for amenity grassland areas has included six grass species, which is consistent with the number of species planted in the temporary landscaped areas (refer to Appendix C for list of grass species included).

This assessment has therefore taken a conservative approach and utilised the figures from the current plans. The planting of additional native species into habitat areas would be of benefit to wildlife and recommendations for further enhancements are provided in Section 6.

Site photographs, aerial images and site plans are also provided in Appendices A and B.

5. LE 04 Enhancing Site Ecology

Number of Credits Available	3	Number of Credits Claimed	2
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Aim	To recognise and encourage actions taken to maintain and enhance the ecological value of the site as a result of development.
Assessment Criteria	One credit 1. A suitable qualified ecologist (SQE) has been appointed to report on enhancing and protecting the ecology of the site and: a. The SQE provides an Ecology Report with appropriate recommendations for protection and enhancement of the site's ecology b. The report is based on a site visit/survey by the SQE. 2. The general recommendations of the Ecology Report for enhancement and protection of site ecology have been, or will be, implemented. Two credits 3. Criteria 1 and 2 are achieved 4. The recommendations of the Ecology Report for enhancement and protection of site ecology have been implemented, and the SQE confirms that this will result in an increase in ecological value of the site up to (but not including) 6 plant species. 5. The increase in plant species has been calculated using the BREEAM LE03/04 calculator, using actual plant species numbers. Three credits 6. The requirements of the first credits are achieved. 7. The recommendations of the Ecology Report for enhancement and protection of site ecology have been implemented, and the SQE confirms that this will result in an increase in ecological value of the site of 6 plant species or greater. 8. The increase in plant species has been calculated using the BREEAM LE03/04 calculator, using actual plant species numbers.

Compliance Notes

The SQE must be appointed to carry out sites surveys of existing site ecology, on which their report is based at the design brief stage (RIBA Stage B or equivalent) in order to facilitate and maximise potential ecological enhancement.

Only native floral species and/or those contributing to a local or UK Biodiversity Action Plan or those known to attract or benefit local fauna can be considered for the purpose of increasing the number of species on site, as well as general enhancement. The planting area, density and mixture of different species must be specified on advice from the SQE, to give the best possible chance of long term establishment and survival of the species within the habitat.

Where it is not possible to determine 'actual' number of species per vegetation plot type, either because an on-site ecological survey has not been conducted, or, because construction works have already commenced, the second and third credits cannot be achieved.

Justification for non-compliance

The baseline used for this assessment had an ecological value of zero (in accordance with the BREEAM definition) and no features of ecological value were present on site. Therefore no protection measures are required.

The site has an existing Landscape Management Plan which includes the schedule of works to be undertaken to enhance the ecological value of the site. The management plan covers the whole Hyde Park Hayes development and is regularly updated to reflect changes to the required management of landscape areas as appropriate. The SQE has reviewed the Landscape Management Plan and made recommendations to be incorporated into the plan following the development of HPH4 and HPH5 in order to enhance the ecological value of the site. The client has made a commitment to including the SQE's recommendations into the Landscape Management Plan.

Schedule of Evidence

The SQE has been appointed prior to the commencement of development works on site. The appointment was made at the design brief stage (RIBA Stage B or equivalent)

The SQE has completed the ecology report which is based upon a survey of the site undertaken within the accepted season for habitat assessment.

The SQE has completed the Calculator in order to apply for credits under LE03 and LE04. Calculators for both HPH4 and HPH5 can be found in *Appendix F Relating Ecologists reports to BREEAM*.

According to the calculators, the proposed development of both plots HPH4 and HPH5 will result in an increase in ecological value of up to (but not including) 6 plant species and therefore **2 Credits** should be awarded under LE04.

Lists of species included within the proposed Landscape Management Plan for the site are included within Appendix C.

6. LE 05 Long Term Impact on Biodiversity

Number of Credits Available	2	Number of Credits Claimed	2
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Aim	To minimise the long term impact of the development on the site's and surrounding area's biodiversity
	1. There is client commitment to achieve mandatory criteria and appropriate number of additional criteria. Mandatory Criteria 2. A SQE has been appointed prior to commencement of activities on site. 3. The SQE confirms that all relevant UK and EU legislation relating to protection and enhancement of ecology has been complied with during the design and construction process. 4. A landscape and habitat management plan, appropriate to the site, is produced covering at least the first five years after project completion. This includes a) Management of any protected features on site b) Management of any new, existing or enhanced habitats c) A reference to the current or future site level or local Biodiversity Action Plan. Additional Criteria* 5. The principal contractor nominates a 'Biodiversity Champion' 6. The principal contractor trains the site workforce on how to protect site ecology during the project 7. The principal contractor records actions taken to protect biodiversity and monitor their effectiveness throughout key stages of the construction process. 8. Where a new ecologically valuable habitat is created, this should support nationally, regionally or locally important biodiversity. 9. Where flora and/or fauna habitats exist on site, the contractor programmes site works to minimise disturbance to wildlife.
Assessment Criteria	

*A summary of additional criteria is provided here; please refer to the BREEAM Guidance for *New Construction - Non-Domestic Buildings 2011* for full details

Compliance Notes

Where additional criteria are not applicable:

In all cases it is necessary to employ a Suitably Qualified Ecologist to achieve these credits. As a minimum the SQE must provide the following in writing;

- Confirmation that mandatory criteria 2 and 3 have been achieved
- Clarification on whether mandatory criterion 4 is applicable and if so that it has been achieved
- Clarification on how many of the additional criteria are applicable and have been achieved
- Guidance on how to achieve additional criterion 8 (where possible).

Where the suitably qualified ecologist confirms that mandatory criteria 4 and all additional criteria are not applicable (due to the nature of the site and its surroundings) full credits can be awarded for demonstrating compliance with mandatory criteria 2 and 3.

Schedule of Evidence

Under LE5 the Compliance Notes state that 'Where the optional items and the mandatory item 3, the management plan, are deemed, in writing, by the appointed SQE not to be applicable, all credits can be awarded.'

Having taken due consideration of the site and nature of the development, the SQE considers these items not to be applicable. It should therefore be possible to gain all available credits under LE 05.

Justification for this decision is provided below and within the *Appendix F Relating ecological reports to BREEAM* document, attached to this report.

Mandatory Criteria 2

The ecological assessment of the site was commissioned by the client, and undertaken by the SQE prior to the commencement of activities on site.

Mandatory Criteria 3

This report has been written by a SQE, under the BREEAM definition.

In order to obtain credits for this section, HPHA Ltd has made a commitment to comply with all relevant UK and EU legislation relating to protection and enhancement of ecology during the construction process.

I, T.Clark MIEEM, can confirm that, to the best of my knowledge, this has been, and will continue to be, adhered to.

Additional Requirements

As set out above, the SQE confirms that mandatory requirements 2 and 3 have been met.

Due to the nature of the development the majority of the site area will comprise buildings and hardstanding and space available for ecological enhancements is limited. However, wherever possible landscaped areas will incorporate features and habitats of value to wildlife. These will be maintained and enhanced on an ongoing basis through the existing Landscape Management Plan, which will be reviewed by the client on a regular basis. The SQE has reviewed the existing plan which is appropriate for the development and it is not considered necessary for an additional habitat management plan to be completed within this assessment.

The Landscape Management Plan for Hyde Park Hayes includes a detailed program of works aimed at maintaining and enhancing the ecological value of the site over the next three years, at which time the plan will be reviewed and updated. Any alterations to the site (i.e. new developments) will be taken into account within the plan and the program will be adapted as appropriate. The land owner has already demonstrated that they are committed to enhancing the

ecological value of the site, through the existence of temporary habitat enhancements that they have carried out voluntarily with advice from a landscape contractor.

From discussion with Simon Cheetham, Estate Manager during the site visit it is understood that the current landscape contractors are keen to enhance the ecological value of the site and the SQE considers it appropriate that they work with the Estate Manager to determine the most beneficial management for wildlife on site. Recommendations for further enhancement to site ecology to provide a long term positive impact upon biodiversity have been provided to the client by the SQE and will be incorporated into the existing management plan by the landscape contractors, as appropriate.

Suggested recommendations to be incorporated into the existing Landscape Management Plan in order to enhance the ecological value of the site include:

- Native tree planting to include a variety of species, rather than current single-species (silver birch) planting.
- Seeding/planting of wildflowers and a reduction in mowing frequency of some areas of amenity grassland in order to develop wildflower borders. It is recommended that these areas be developed around trees and along linear features such as footpaths where feasible.
- Native, species-diverse hedgerow/shrub planting to replace non-native planting.
- Native border species, known to attract invertebrates to be planted along pathways.
- A mosaic of habitats should be created, with a variety of heights introduced. Networks of linear, connecting habitat should be encouraged in order to form wildlife corridors, allowing fauna to move around the site.

Due to the existing landscape management arrangements on site the additional criteria relating to LE05 are not considered required as many are already in place.

It is considered justifiable that **2 Credits** can be awarded under LE05.

7. Discussion and Recommendations

A total of **8 BREEAM Credits** are claimed for Land Use and Ecology based upon the rationale and evidence outlined above. Further supporting evidence is provided within the attached appendices.

It is recommended that, in addition to existing plans, the Landscape Management Plan should include the following measures in order to enhance the ecological value of the site and to ensure a long term positive impact upon site ecology.

- Native species-rich wildflower borders, to be included in areas planned for amenity grassland, where feasible, such as surrounding trees.
- Native species-diverse hedgerow/shrub planting to replace non-native planting.
- Native border species known to attract invertebrates to be planted along pathways.
- Native tree planting to include a variety of species, rather than current single-species (silver birch) planting.

A mosaic of habitats should be created, with a variety of heights introduced. Networks of linear, connecting habitat should be encouraged in order to form wildlife corridors, allowing fauna to move around the site.

Appendices

Appendix A Site Photographs and Aerial Images

Plate 1 – HPH5 pre-demolition



Plate 2 – HPH5 pre-demolition



Plate 3 – HPH4 pre-demolition



Plate 4 – HPH4 pre-demolition



Note: Plates 1-4 supplied by Simon Cheetam, Site Manager

Plate 5 –Hyde Park Hayes development, HPH5 at centre



Plate 6 –Previous buildings at HPH4 and HPH5 shown to right of photograph



Note: Aerial photographs supplied by 3DReid Architects

Plate 7 – HPH4



Plate 8 – HPH5, temporary landscaped grassland area (HPH1-2 behind)



Plate 9 – HPH5, temporary landscaped gravel area



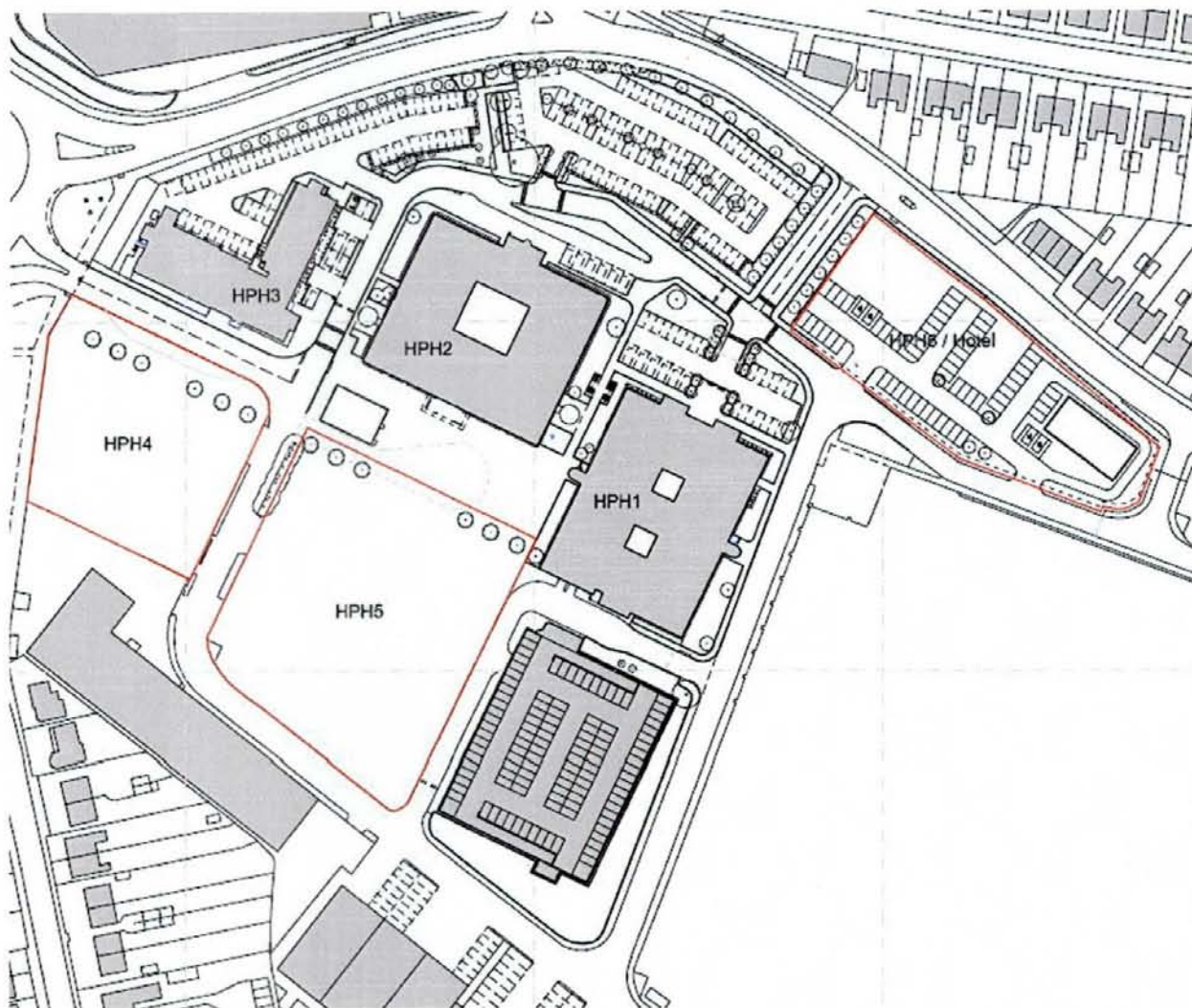
Plate 10 – HPH5, hardstanding with wildflower seed mix (HPH3 behind)

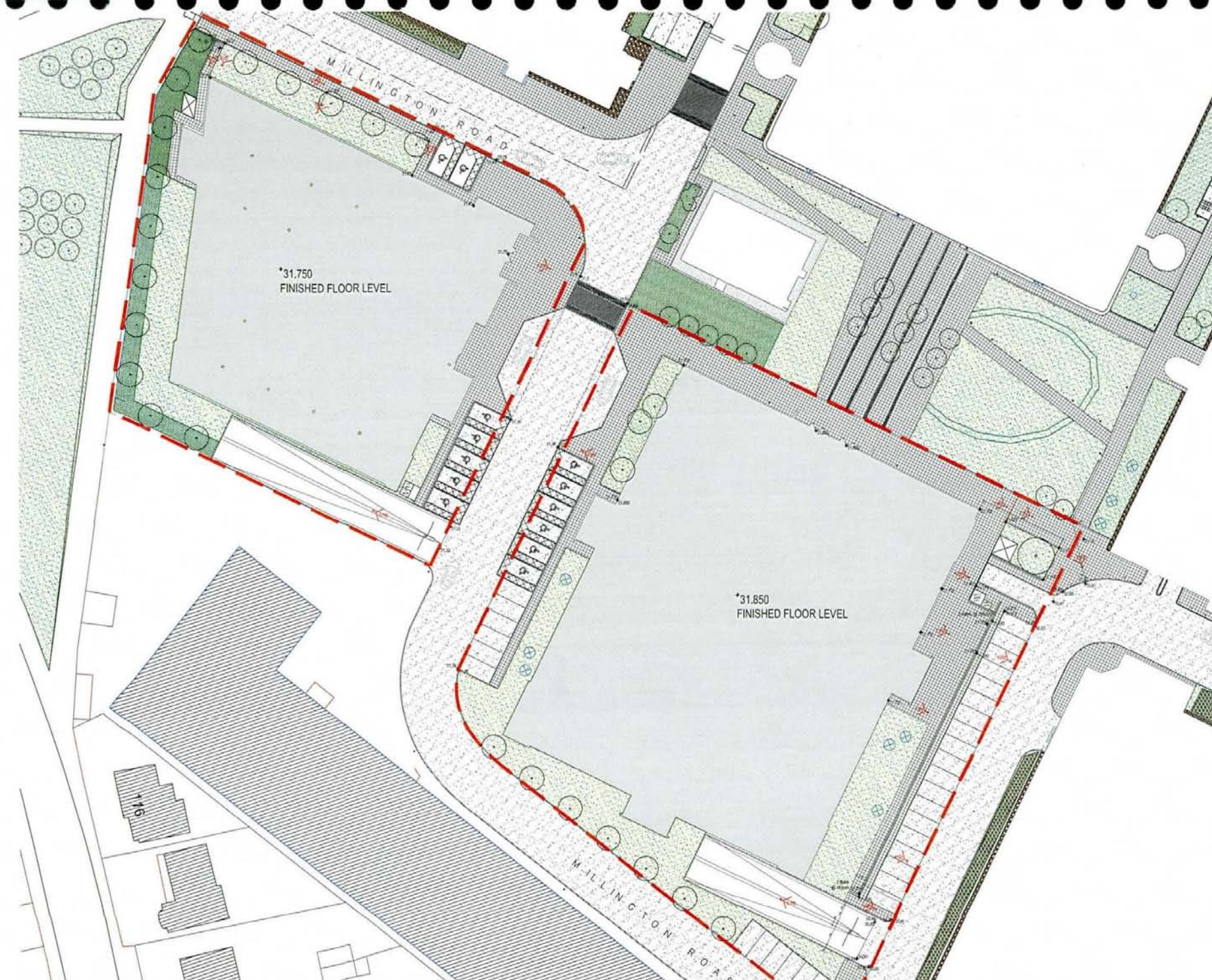


Note: Site Photos taken by T Clark of SKM Enviros during ecology survey June 2012

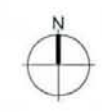
Appendix B Site Plans

Post Demolition Site Plan showing HPH4 and HPH5





Notes:
Do not scale from this drawing. All dimensions to be checked on site prior to construction and any discrepancies reported to the architect. Copyright reserved.



3D REID			
PLANNING			
HPHA Ltd			
HYDE PARK HAYES 4 & 5			
SITE PLAN LAYOUT			
Scale	Rev	Date	Drawn / Checked
1:250	A1	200512	AF / JM
83 Fountain Street Manchester, M2 2PL T: +44 (0)161 234 1070 F: +44 (0)161 234 1077 or 1702 Green Street, London Manchester, Cheshire, M1 1BB 0800 000 0000			
Project No.	Drawing No.	Rev.	
110475	D-004		



KEY



REV C - Red & blue lines updated 120622
 REV B - Red line amended, walls/steps added 120606
 REV A - Planning Issue Draft 120522

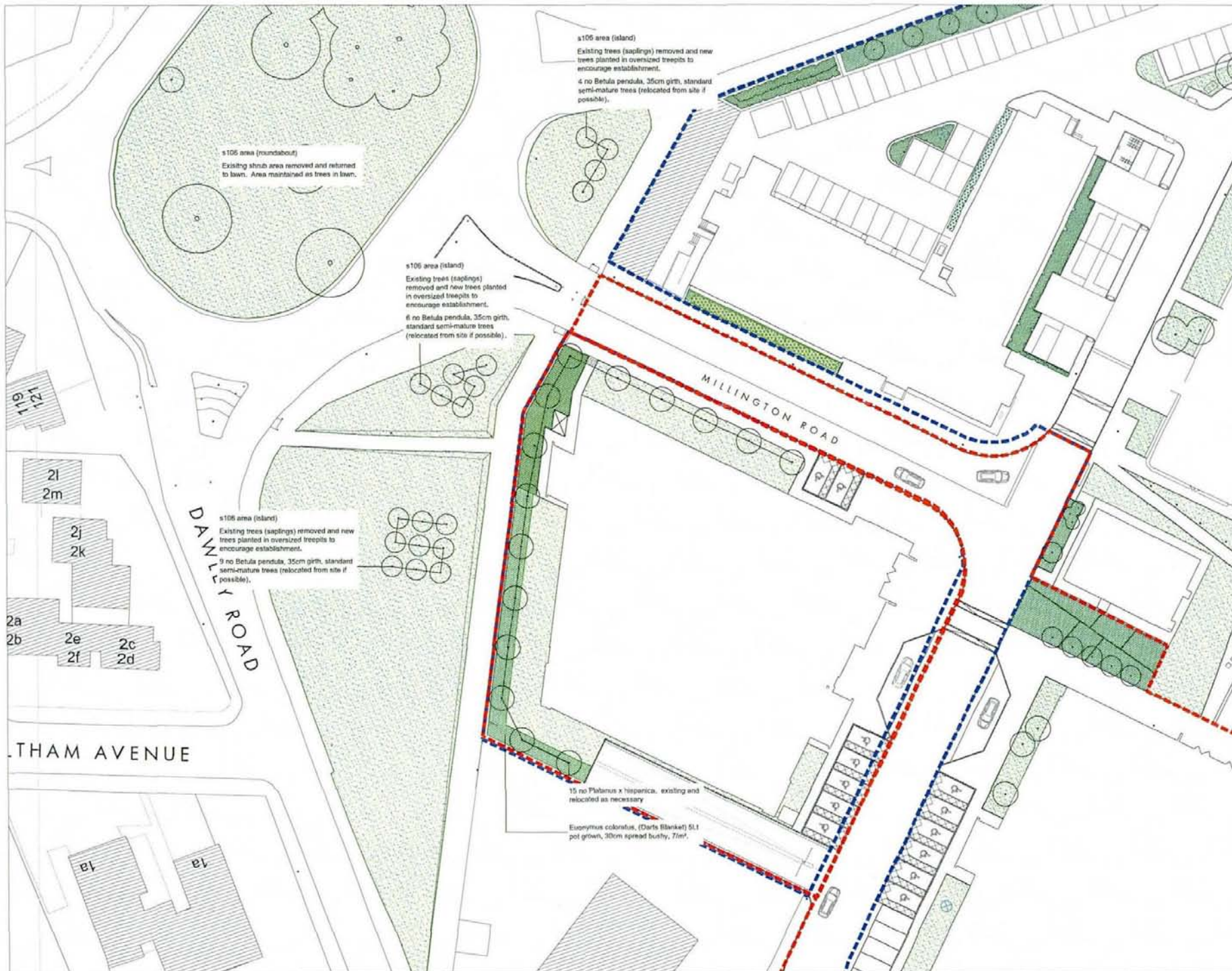
H E D Hyland Edgar Driver

Landscape Architects and Urban Designers

HYDE PARK_HAYES

LANDSCAPE_ILLUSTRATIVE_MASTERPLAN

MAY12	J5
1:5000A1	DP
HED.903.101	C
B	



KEY

- Ground Cover
- Lawn
- Specimen Shrub
- Tree

Maintenance and management specification :

Trees
Provide sufficient water to establish the newly planted trees. Provide limited formative pruning, and tightening of underground guying (after heavy winds). Maintain in a weed and disease free condition through the 5 year establishment period.

Shrubs and groundcover
Provide sufficient water to establish the newly planted shrubs.
Maintain in a weed free and disease free condition during the 5 year establishment period. Clip back from path edges to maintain in natural and tidy shapes. Remove all arisings offsite.

Lawns
Maintain in a weed and disease free condition during the establishment period. Mow regularly to create a dense short sward. Remove all arisings offsite.

REV B - Rev B & New Prices updated 120622
REV A - Planning Issue Draft 120522

REVISIONS

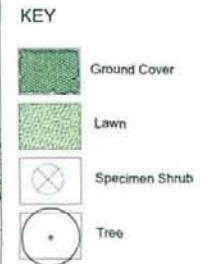
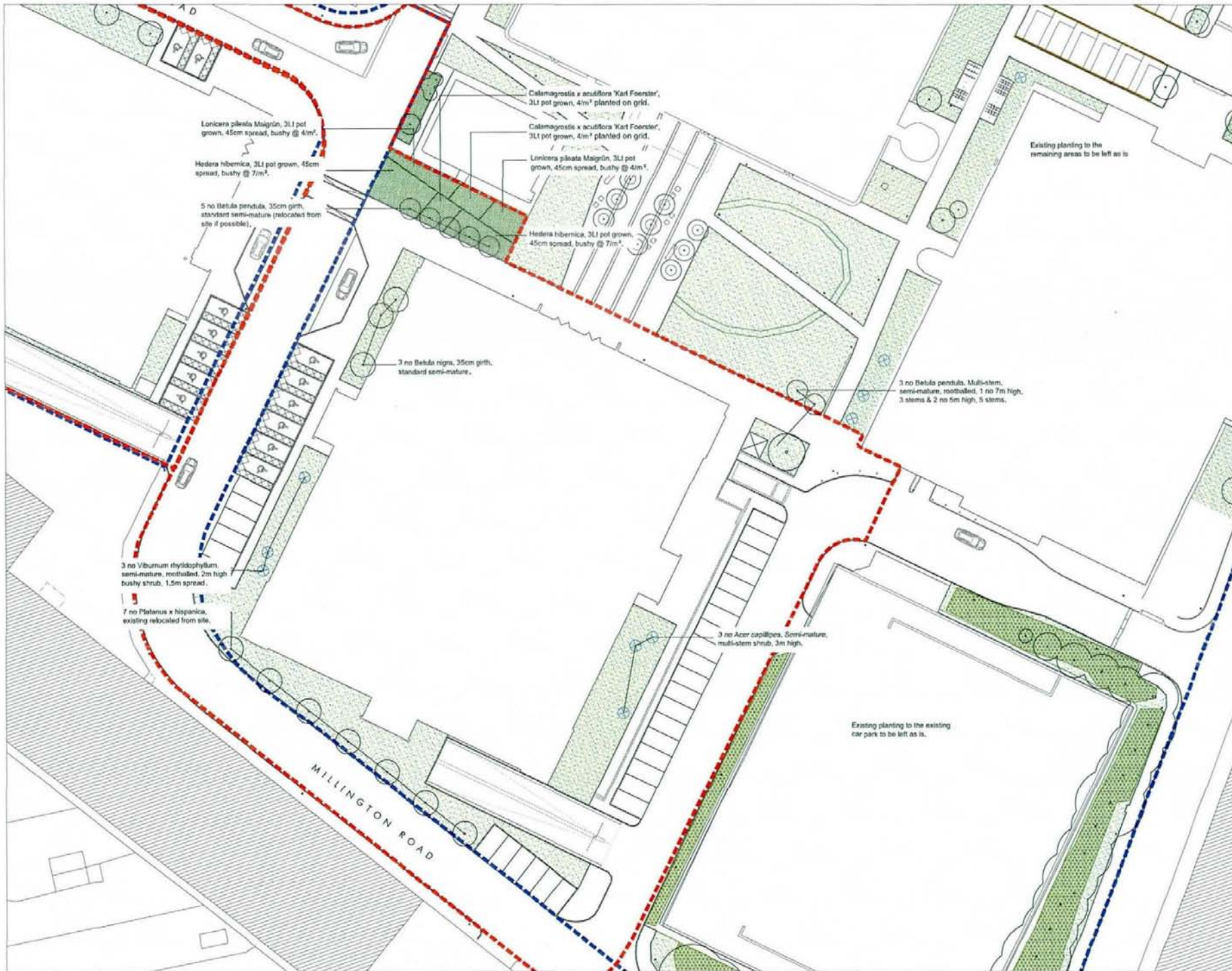
H E D
Hyland Edgar Driver
Landscape Architects and Urban Designers
(The Avenue Way) Colton Common Worcester Worcestershire WR2 1AD
Telephone 01902 719001 Fax 01902 719045

PROJECT
HYDE PARK HAYES

SUBJECT
PLANTING_PLAN_(WEST)_10F2

DATE MAY2012 Drawn BY JS
SCALE 1:250@A1 CHECKED BY DP
DRAWING NUMBER HED.983.107 REVISION B
DRAWING STATUS B

A - Preliminary B - Issued for Planning C - Issued for on site installation D - Issued for approval
E - Issued for approval F - Issued for approval G - As Noted



Maintenance and management specification :

Trees
Provide sufficient water to establish the newly planted trees. Provide limited formative pruning, and tightening of underground guying (after heavy winds). Maintain in a weed and disease free condition through the 5 year establishment period.

Shrubs and groundcover
Provide sufficient water to establish the newly planted shrubs.
Maintain in a weed free and disease free condition during the 5 year establishment period. Clip back from path edges to maintain in natural and tidy shapes. Remove all arisings offsite.

Lawns
Maintain in a weed and disease free condition during the establishment period. Mow regularly to create a dense short sward. Remove all arisings offsite.

REV B - Red & blue lines updated 120622
REV A - Planning Issue Draft 120522

REVISIONS

H E D
Hyland Edger Driver

Landscape Architects and Urban Designers

One Western Way, Dublin Common, Winchester, Hampshire, SO21 1HG
Telephone: 01962 371600 | Facsimile: 01962 373445

PROJECT

HYDE PARK HAYES

SUBJECT

PLANTING PLAN (EAST) 20F2

DATE	MAY2012	DRAWN BY	JS
SCALE	1:250@A1	CHECKED BY	DP
DRAWING NUMBER	HED.983.108	REVISION	B
DRAWING STATUS	B		
A - PRELIMINARY	B - ISSUED FOR PLANNING	C - ISSUED FOR TENDERS	D - ISSUED FOR TENDER
E - ISSUED FOR APPROVAL	F - ISSUED FOR CONSTRUCTION	G - AS BUILT	

Appendix C List of Species in Landscape Management Plan

List of the species in the seed mix for HPH4 and HPH5:

1. Cornfield flowers

Not sown at high rate but should appear next June, rain permitting.

Name	Annual	Perennial	Biennials
Cornflower			
Common Poppy			
Corn Marigold			
Corn Cockle			
Corn Chamomile			

2. Meadow species

Most of these are perennials, other than Yellow Rattle (an annual) and the biennials, Dark Mullein and Viper's Bugloss.

Name	Annual	Perennial	Biennials
Birdsfoot Trefoil			
Common Knapweed			
Common Sorrel			
Cowslip			
Dark Mullein			
Field Scabious			
Greater Knapweed			
Hedge Bedstraw			
Hoary Plantain			
Ladies Bedstraw			
Meadow Buttercup			
Oxeye Daisy			
Perforate St John's Wort			
Red Campion			
Red Clover			
Rough Hawkbit			
Salad Burnet			
Sanfoin			
Self-heal			
Vipers Bugloss			
Wild Carrot			
Wild Mignonette			
Yarrow			
Yellow Rattle			

3. Grasses:

Only a low quantity of grass was sown. This will probably struggle, but it will give something for the Yellow Rattle to parasitise.

Common Bent
Crested Dog's Tail
Quaking Grass
Slender Creeping Red Fescue
Smaller Cat'stail
Upright Brome

Appendix D Landscape Management Plan



HYDE
PARK
HAYES

**Soft Landscape Maintenance
Schedule and Specification**



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- 2. Main areas (HPH 1, 2 and 3)
- 3. HPH2 Courtyard Garden
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- 7. Maintenance Specification
- 8. Schedule

1. Overview and general requirements

Hyde Park Hayes is a prestigious 10 acre West London office development completed in 2008, and provides 216,844 sq ft of high quality accommodation in three buildings arranged as a courtyard development, in addition to three cleared development sites of 3.6 acres. Hyde Park Hayes is strategically located between Central London and the M25, facilitating easy access to a significant educated labour force and an exceptional communications network via road, rail and air. The park is located just 24 km (15miles) west of Central London and less than 5.6 km (3.5miles) east of the M25/M4 interchange. A 696 space multi-storey car park and circa 300 surface parking spaces provide an excellent parking, while care has been taken to create an environmentally sustainable workplace to minimise running costs and further appeal to the occupier market.

This document should be considered in conjunction with the specification and schedule chart in appendix i).

Knight Frank, on behalf of the client HPH A Ltd, require landscaping and grounds maintenance services to be delivered to the Hyde Park Hayes site in order to promote a professional and well kept image for the external area of the site. Knight Frank expect a quality service to be delivered which at least meets or ideally exceeds the specification implicit in this document. In line with our environmental policy we wish to reduce the impact of any works on the environment.

2. Main areas (HPH1, 2, 3 and M.S.C.P.)

The main area consists of a series of ground level planted areas, raised beds, shrubs and lawns.

3. HPH2 Courtyard Garden

The interior courtyard garden of building HPH2 is an area planted with 16 silver birch trees and a series of ground cover planting with a seating area with ground level up-lights for the use by tenants of HPH2.

4. HPH2 Green Roof

The roof of HPH2 is laid with two sections of sedum vegetation on 30mm substrate aggregate laid on a protective fleece. This area needs to be kept weed free throughout the year

5. Proposed Hotel Site

The proposed hotel site is approximately 60,000sq ft is located at the north eastern corner of the HPH site and is surrounded by hoarding. This plot has been set aside for future development but requires a weed control programme

6. HPH4 and HPH5 sites

Comprise of two plots to the south west corner of the HPH site. The old footprint of previous structures has been seeded with meadow/wild flowers. The outer areas will be laid to lawns, trees, hard landscaping with seating for the use of tenants. Completion due 1st May 2012 - See appendix

7. Maintenance Specification

The Contractor shall make no less than 50 visits to the site per annum for Grounds maintenance and 150 visits for litter picking to fulfil the requirements of the Maintenance Specification.

The Contractor shall produce a detailed Grounds Status Report including maintenance operations carried out during the visit, the number of operatives in attendance and make recommendations for future visits.

On each visit the Contractor must register their presence with the Estate manager. The Estate Manager or his/her representative must sign the Grounds Status Report on completion of each maintenance visit.

Ornamental Shrub Beds

All planted trees, including flower, shrub beds and beds at the bases of trees, shall at all times be kept free of weeds, litter and other extraneous material.

Pruning

Pruning will fall into two broad categories, with some exceptions. Pruning of species that flower between January and June is to be carried out immediately or soon after flowering. Most species flowering after June do so on growth formed in the current year and are pruned in April/March of the following year.

All pruning of shrubs is to be carried out using secateurs or when necessary, heavy duty loppers.

Under no circumstances will the use of mechanical hedge trimmers or similar equipment be allowed for this work.

Shrub growth shall be pruned where there is an encroaching or overhang upon the following areas: Car parks, drives, footpaths, entrances or windows.

Dead, diseased or broken branches shall be pruned out and over-vigorous shrubs shall be pruned to prevent suppression of smaller species.

Climbing shrubs shall be tied in and wires frames or supports inspected and repaired as necessary.

This is to be carried out at each routine maintenance visit or within the contractor's schedule of works.

Maintenance of hedges and planted areas.

- 1) All arisings from any pruning, trimming or tidying operation, including fallen leaves, shall be collected and placed in the on-site compost area located at the southern elevation of the Multi-Storey Car Park (MSCP). All litter collected will be placed in the 8 yard FEL (Front End Loading) bin to the rear of building HPH3.
- 2) The Contractor shall cut all established hedges back to the previous year's growth. This activity shall be carried out by a skilled operative and the Contractor must ensure that all shears, hand or mechanical are sharp. The finished cut face shall be "square" with a slight taper from the bottom of the hedge to the top. Any clippings lodging in the top or sides of hedges shall be removed by hand picking as required. Flail type cutters shall not be used.
- 3) The cutting of hedges will be undertaken as required, but typically, this would be at least twice per year. Growth limit not to exceed 150 mm.

- 4) Hedge maintenance includes cutting, clearing arisings together with litter from the base of the hedge.
 - i) The Contractor will be required to leave the base of the hedge clean, tidy and weed free on every occasion that the hedge is cut
 - ii) Where hedge bases meet grass, the Contractor must leave this edge neat, vertical and tidy. The Contractor will ensure that this rate quoted for hedge cutting in this contract covers this aspect of work.
 - iii) The width of hedge bases will equal the width of the hedge bottom unless otherwise stated.
- 5) Any additional operations such as the treatment of disease or pest infestation will be instructed by the Estate Manager.
- 6) When the cutting of a hedge has been completed or the cutting operation is to cease for the day, all the cut material together with accumulated litter is to be removed from the base of the hedge and taken to the on-site compost area.

Additional cuts may be required to hedges that abut footpaths or otherwise present a hazard to pedestrian traffic. These shall be allowed for by the Contractor in his tender.

Maintenance of grassed areas.

- 1). The Contractor shall carry out all necessary preliminary inspections of areas to be cut on each occasion and shall report and dispose of all litter, stones and other debris which might damage plant or create a possible hazard to persons and property.
- 2). The Contractor is expected to undertake a full cut of all grassed areas over the entire site during each visit.
- 3). Grass cutting machines shall be appropriate for the size of the area, condition of the ground, length of grass at the time of cutting, being maintained and the standard specified. Inaccessible margins, corners and the like shall be cut by other suitable machines or by hand at the same time.
Cutters of all mowers shall be sharp, properly set and shall cut the sward cleanly and evenly.
- 4). Grass shall be maintained at a height of 35 mm and shall at no time be higher than 50 mm. Mowers shall have their height of cut so adjusted that at no time does 'scalping' take place.

- 5). All arisings from any form of grass cutting shall be collected and deposited in the Hyde Park Hayes compost area. The responsibility for the correct management of composted material lies with the contractor.
- 6). Grass against walls and fences around obstructions and overhanging vertical edges of beds, steps and the like shall be cut on each occasion that the grass is cut. Where the grass abuts a hard horizontal surface the Contractor shall cut it back to the inside of the hard surface without forming a channel, using approved edging shears following original lines.
- 7). In the event of damage to plants, or the grounds, by careless handling or use of unproved equipment, the Contractor will be required to make good any loss at their own cost.
- 8). Grass on banks, traverses and to sides and bottoms of ditches shall be maintained to the standards as specified for areas immediately adjacent. All mown areas shall be kept free of flowering stalks of grass and weed by cutting with a machine fitted with horizontal rotary or reciprocating blade. This operation shall be carried out in addition to general cutting and as often as necessary.
- 9). During the period of the contract no growth regulators of any form shall be applied to any area of turf without the Estate Manager sanctioning such an operation.
- 10). All work shall be carried out without unreasonable noise and disturbance.
- 11). Grassed areas containing naturalised bulbs i.e. daffodils, crocus and the like, shall be cut and tidied and all arisings removed once all the foliage die back has occurred, or at earlier moment if so instructed.
- 12). All arisings are to be swept or removed from hard surfaces/paths, notwithstanding local arising removal requirements.
- 13). Grass shall be cut by means of pedestrian guided motor rotary or cylinder mowers; all cuttings to be deposited in the Hyde Park Hayes compost area.
- 14). Frequency of cutting shall be regulated so that the grass, including any flowering stalks, does not exceed 50 mm in height at any time unless otherwise agreed. Machines shall be so adjusted to cut no lower than 35 mm.

- 15). When cut, the turf must not show any corrugated or 'wash-boarding' effect caused by travelling at excessive speed, incorrect gear selection or by the use of cutting reels having insufficient blades.
- 16). There must be no uncut grass due to failure to overlap adjacent passes on straight runs or at the turning points.
- 17). This specification refers to the hand-held machines which utilise horizontally revolving strips of nylon to cut grass and other herbage obstacles.
Particular care must be exercised when cutting grass and weed growth close to trees and shrubs.
No damage is to be caused to the bark of such trees and shrubs by the nylon cutting line.
The nylon line is not to be allowed to touch the ground, thereby creating the danger of throwing soil and stones into the air.
- 18) Irrigation systems. The contractor will be responsible for the Spring time commissioning and Autumn decommissioning of the irrigation systems on site. Remedial works, if required, are not covered in the price of this contract.

Maintenance schedules

Grass cutting:	Schedule for cuts will be affected by rainfall and temperature although it will typically/probably be/up to, four cuts in April, five in May, four in June, five in July, five in August, four in September, and possibly two in October and one in November – total 30 cuts.
Edging Lawns:	As per grass cutting above.
Disease Control:	As required throughout the year.
Scarification and reseedling.	Typically during April/May and September
Feed	Typically in April and then as required
Aerate	Typically April but additionally, if required, once during the autumn season
Top Dress	Typically monthly between April and October
Moss Control	Typically April and September

Leaf clearance.	Typically September, October, November and December.
Litter Picking	Three times per week, every week throughout the entire year
Watering	The area to the south of HPH2 has an irrigation system for lawns and low level planting which also includes the silver birch trees in pots. The areas known as HPH4 and HPH5 will have an irrigation system to the new trees and grassed areas (completion due April/May 2012). The contractor is responsible for the Spring commissioning and Autumn decommissioning of these systems. All other areas do not benefit from irrigation systems but are served by four external watering points. Consideration should be given to water these areas within the contract. However, in unseasonably dry periods extra watering days need to be considered subject to any watering restrictions that may be in place, which is additional to the contract at your stated day rate.
Weed control	Application of chemical spray between March and October as required. Contractor to comply with all COSHH requirements and advise estate manager in advance of treatment Hand weeding is, typically, required except for the winter months.
Shrubs and Borders	
Pruning	As required by species.
Litter Picking	Three times per week, every week throughout the entire year
Soil	Fork shrubberies and borders twice yearly in Spring and Autumn.
Fertilizer:	As required but typically weekly except for Autumn and winter.
Top up Bark/Mulch	Typically January and February
Pest/Disease Control	As required throughout the year.
Watering	As required throughout the year on non irrigated areas
Leaf removal	Typically weekly between from September to December
Replacements	Cost of shrub not included in contract. However, contractor should note item 7 in general comments

Hedges

Pruning As required by species type

Pest/Disease Control As required throughout the year.

Litter Picking Three times per week, every week throughout the entire year

Trees

Reshaping/Surgery Not included in this contract but will be considered as required

Ties and stakes Checked every month throughout the year

Replacements Cost of replacement trees will be covered either by existing warranty (areas HPH4 and HPH5) or by purchase order.

Pest/Disease Control As required throughout the year.

Watering As required throughout the year

Hard Landscaping

Moss control As required on pathways and kerbs throughout the site

Weed control As required on pathways and kerbs throughout the site

Litter Picking Three times per week, every week throughout the entire year on all pathways, car parks (not Multi-storey car park) and all other hard surface areas

Hyde Park Hayes - Grounds Maintenance 2012/13

	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
GRASS												
Grass Cutting - Turfed Areas	4	5	4	5	5	4	2	1			1	2
Edge Trimming	4	5	4	5	5	4	2	1			1	2
Disease Control	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
Scarification and re seeding	1	1				1						
Feed	1	AR	AR	AR	AR	AR	AR					
Aerate	1							AR				
Top Dress	1	1	1	1	1	1	1					
Moss Control	1					1						
Leaf Removal						4	4	4	4			
Litter Picking	4	5	4	5	5	4	5	4	4	5	4	4
Watering (non irrigated areas)	AR	AR	AR	AR	AR	AR	AR	AR				AR
WEED CONTROL												
Spot Treatment (Chemical spray)	1	1	1	1	1	1	1					1
Hand Weeding	4	5	4	5	5	4	2				1	2
SHRUBS & BORDERS												
Pruning by Species	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
Litter pick	4	5	4	5	5	4	5	4	4	5	4	4
Fertiliser	4	5	4	5	5	4						1
Top up Bark Mulch										1	1	
Pests & Diseases	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
Watering (non irrigated areas)	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
Leaf Removal						4	4	4	4			
Replacements (cost of shrub not included in contract)	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
HEDGES												
Pruning by Species	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
Pests & Diseases	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
Litter pick	4	5	4	5	5	4	5	4	4	5	4	4
TREES												
Reshaping/surgery	NIC	NIC	NIC	NIC	NIC	NIC	NIC	NIC	NIC	NIC	NIC	NIC
Ties and Stakes Checked	1	1	1	1	1	1	1	1	1	1	1	1
Replacements *	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
Pests & Diseases	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
Watering ** (non irrigated areas)	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
Hard landscaping												
Moss control (pathways)	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
Weed control (pathways)	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
Litter Picking	4	5	4	5	5	4	5	4	4	5	4	4

Key Code	AR = As Required	NIC = Not Included in Contract
*	* Cost of any replacement trees will be covered either by existing warranty (areas HPH4 and HPH5) or by purchase order	
**	** An element of watering should be included in contract. However, if the weather is unseasonably dry the extra watering will be considered at a day rate (subject to watering restrictions imposed by Government).	

Appendix E Appendix F Guidance for Relating Ecologist's Reports to BREEAM

Appendix F – Guidance for relating ecologist's report to BREEAM

Before using this guidance and completing the form please read the following:

1. This document is to be used for BREEAM 2011 assessments, where an ecologist has been appointed and produced an ecology report as part of a proposed development.
2. As an ecologist may have been appointed to carry out ecological site surveys and produced an ecology report without being aware that a BREEAM assessment has been, or is to be conducted, the purpose of this document is to help assist BREEAM assessors relate the contents of such a report to the land use and ecology criteria of BREEAM.
3. The assessor is to request that the appointed ecologist complete all sections of this guidance and return it to the BREEAM assessor along with all relevant documentation required to demonstrate compliance with the BREEAM criteria.
4. The assessor is to use this completed document in conjunction with the latest issue of the BREEAM 2011 New Construction Scheme Document and information provided by the developer / client to carry out the assessment of the land use and ecology BREEAM issues.

There are 6 sections (sections A - F) in this document.

1. Section A requires contact details for the ecologist and developer / client.
2. Section B1 determines whether the appointed ecologist is 'suitably qualified' (under BREEAM); and if not, section B2 determines whether the report has been verified by an ecologist who is 'suitably qualified'.
3. Section C determines whether the findings of the report have been based on data collected from site surveys conducted at appropriate times of the year to determine whether different species are evident.
4. If 'no' is recorded for either Section B or C then the contents of the ecology report cannot be used to determine compliance with the BREEAM criteria.
5. Section D provides the BREEAM assessor with the necessary information to complete the assessment of the ecology related BREEAM issues.
6. Section E provides details of the documentation / information required by BREEAM as evidence of compliance.
7. Section F requires the signature of the appointed ecologist who has completed this document.

Please note: it is only the appointed qualified and licensed BREEAM assessor who can award or withhold a credit for a BREEAM assessment.

Section A: Contact Details

Ecologist's Details	
Company name:	SKM Enviros
Company address:	10 Ty Nant Court Morganstown Cardiff CF24 3LR
Contact name:	Tawny Clark MIEEM
Contact telephone number:	02920 814 213
Ecology report reference:	JL30529/BREEAM Ecology Report HPH4-5.doc
Developer / Client Details	
Company name:	HPHA Ltd
Company address:	C/O Melford Capital Partners LLP 2 Eaton Gate London SW1W 9BJ
Contact name:	Ludo McKenzie
Contact telephone number:	020 3008 6515
Development details	
BRE reference number (if known):	HPH4: BREEAM-0046-6029
Development name:	Hyde Park Hayes
Development address:	11 Millington Road Hayes UB3 4AZ

Section B1: Ecologist's Qualifications

1. Do you hold a degree (or equivalent qualification, e.g. N/SVQ level 5) in an ecology related subject? Yes

If yes, please provide details

BSc (Hons) Environmental Quality and Resource Management, UWE Bristol.

Note: Depending on the ecological content (minimum 60%), the following degrees might be considered relevant: Ecology, Biological Sciences, Zoology, Botany, Countryside

Management, Environmental Sciences, Marine and Freshwater Management, Earth Sciences, Agriculture, Forestry, Geography, Landscape Management.

2. Are you a practising ecologist with a minimum of 3 years relevant experience within the last 5 years?

Yes

If yes, please provide details

Seven years of relevant experience held. Including BREEAM and Code for Sustainable Homes ecology site assessment, desk study, and report writing. Completion of numerous extended Phase 1 habitat surveys (including both field work and report writing), preparation of EclAs including both field work and reporting. European Protected Species (EPS) surveying and design of mitigation. Natural England and CCW great crested newt licence holder.

Note: Relevant experience must clearly demonstrate a practical understanding of factors affecting ecology in relation to construction and the built environment; including, acting in an advisory capacity to provide recommendations for ecological protection, enhancement and mitigation measures. Examples of relevant experience are: ecological impact assessments; Phase 1 and 2 habitat surveys and habitat restoration.

3. Are you bound by a professional code of conduct and subject to peer review*?

Yes

If yes, please provide details

Full member of IEEM, as such I am required to submit annual statements of my continued professional development.

Note: a full member of one of the following organisations will be deemed suitable: Chartered Institution of Water and Environmental Management (CIWEM); Institute of Ecology and Environmental Management (IEEM); Institute of Environmental Management and Assessment (IEMA); Landscape Institute (LI).

Note: Peer review is defined as the process employed by a professional body to demonstrate that potential or current full members maintain a standard of knowledge and experience required to ensure compliance with a code of conduct and professional ethics.

If 'no' has been answered for any question in Section B1 then the BREEAM requirement for a 'suitably qualified ecologist' has not been met. The ecology report CANNOT be used to assess the BREEAM Ecology issues unless it is verified by an individual who is 'suitably qualified' (see section B2 below).

Section B2: Report Verification

Details on verifying an ecology report for a BREEAM assessment:

1. The individual verifying the report must provide written confirmation that they comply with the definition of a 'suitably qualified ecologist' (as detailed in Section B1 above).
2. The verifier of the report must confirm in writing they have read and reviewed the report and found it to:
 - a. represent sound industry practice
 - b. report and recommend correctly, truthfully, and objectively
 - c. be appropriate given the local site conditions and scope of works proposed
 - d. avoid invalid, biased, and exaggerated statements.

Written confirmation from the third party verifier on all the points detailed under 1 and 2 above (for section B2) must be included in an appendix to this guidance (see section E).

If the appointed ecologist does not meet the criteria of a 'suitably qualified ecologist' and the report has not been verified by an individual who does meet these criteria, then the report CANNOT be used as evidence of compliance with the ecology related BREEAM.

Section C: Site Survey

1. Have the findings of the ecology report been based on data collected from a site survey(s)?

Yes

If yes, please provide details to justify this (e.g. date(s) and scope of site survey(s))

The ecological site assessment was undertaken on 4th July 2012 by T. Clark MIEEM of SKM Enviros, which is within the optimal survey season for vegetation. The site was walked over to identify features of ecological value; where present these were surveyed and recorded. A list of species for each habitat type identified on site was also completed during the visit. Notes were also made of the site's potential to support protected species of fauna and presence of any notable supporting habitat.

Note: The site visit(s) and survey(s) must be conducted at appropriate times of the year when it is possible to determine the presence, or evidence of the presence, of different plant and animal species.

Note: the contents of the ecology report must be representative of the site's existing ecology prior to the commencement of initial site preparation works, i.e. before RIBA stage K, Construction to Practical Completion, and after RIBA stage B, Design Brief.

If 'no' has been answered to question 1 of Section C then the ecology report CANNOT be used to determine compliance with the criteria of the relevant BREEAM ecology issues.

Section D: Site Survey Details

LE 02 Ecological value of land and protection of ecological features

1. Is the land within the 'construction zone' deemed by the suitably qualified ecologist to be of low ecological value?

Yes

If yes, please provide a brief statement explaining how it has been deemed to be of low ecological value:

Note: The construction zone is defined as any land on the site which is being developed (and therefore disturbed) for buildings, hard standing, landscaping, site access, plus a 3m boundary in either direction around these areas. It also includes any areas used for temporary site storage and buildings.

2. Are there any features / areas of ecological value that fall within the site, but outside the construction zone?

No

Note: If you have deemed this area to be of low ecological value then there will be no features of ecological value to protect. However, if there is a feature(s) or area(s) of low ecological value you wish to advise be retained and enhanced, e.g. a species-poor hedgerow to a species-rich hedgerow, then full details of the protection and enhancement advice should be entered under LE 04 Enhancing site ecology.

If yes, please provide a brief statement outlining the advice / recommendations given for protecting all existing features and areas of ecological value:

LE 03 Mitigating ecological impact

3. Are you able to provide the following information for before and after construction:

- Broad habitat types
- An estimate of the number of floral species present per broad habitat type (based on appropriate census techniques and confirmed planting regimes)?

Yes

a. If yes, please give a brief description of the landscapes and broad habitats surrounding the development site

The site comprises hard standing and temporary landscaping that sits within the commercial business park of Hyde Park Hayes, located within the West London Borough of Hayes. The surrounding area is urban in nature, comprising residential, commercial and industrial properties and is dominated by hard standing, roads, and buildings. In the immediate vicinity there is little green space, which is restricted to private gardens and small parks. Further details of the surrounding land use are provided within the SQE assessment report.

b. The total site area (in m²). This will be the same before and after development.

3,634m²

c. Please fill in Table 19-1 below with site details before and after development:

Table 19-1: Site details before and after development¹

Broad habitat type ²	Area of broad habitat type (m ²)	Average total taxon richness per broad habitat type
Hardstanding	3634	0
Broad habitat type ²	Area of broad habitat type (m ²)	Average total taxon richness per broad habitat type
Building	1966	0
Hardstanding	960	0
Amenity Grassland	506	6
Ground cover with trees	202	1

1. Note to assessor (and ecologist where requested to carry out calculations); the information contained in these tables can be used to calculate both LE 03 Mitigating ecological impact and LE 04 Enhancing site ecology issues.

2. Broad habitat types will include natural areas, e.g. various grasslands and woodlands; as well as areas of the built environment, e.g. buildings, hard landscaping. The area of each habitat type when added together must always equal the total area of the development site.

4. Has the client / developer requested you to carry out the calculation for LE 03 Mitigating ecological impact and /or LE 04 Enhancing site ecology (where relevant)?

Yes

Note: The calculations must be carried out in line with the methodology provided in the current version of the BREEAM 2011 Scheme Document.

If yes, please complete Table 19-2 and Table 19-3 below:

Table 19-2: Calculation of the Ecological Value of the Site Before Development

Broad habitat type	Area of broad habitat type [m ²]		Average total taxon richness (see BREEAM issue LE 03 or a SQE*)		Average total taxon richness x Area of broad habitat type
Building	0	X	0	=	0
Hardstanding	3634	X	0	=	0
(1) Total site area =	3634		(2) Total =		0
Average total taxon richness before development =					0
Average total taxon richness x area of habitat type / Total site area = (2)/(1) =					0

* SQE = Suitably Qualified Ecologist

Table 19-3: Calculation of the Ecological Value of the Site After Development

Broad habitat type	Area of broad habitat type [m ²]		Average total taxon richness (see BREEAM issue LE 03 or a SQE*)		Average total taxon richness x Area of broad habitat type
Building	1966	X	0	=	0
Hardstanding	960	X	0	=	0
Amenity Grassland	506	X	6*	=	3036
Borders with trees	202	X	1**	=	202
(1) Total site area =	3634		(2) Total =		3238
Average total taxon richness x area of habitat type / Total site area = (2)/(1) =					0.89

*6 grass species

**1 tree species

LE 04 Enhancing site ecology

5. Has the client / developer required you to provide advice and make recommendations for enhancing site ecology?

Yes

If yes, please provide a brief statement outlining the advice / recommendations given on enhancing and protecting the ecological value of the site:

Please refer to Section 7 of Ecologist's report.

Note: Such advice is to include, and go beyond, compliance with all current EU and UK legislation relating to protected species and habitats.

LE 05 Long term impact on biodiversity

6. Were you appointed prior to commencement of development work activities on site?

Yes

7. Has the client / developer given you the responsibility to confirm whether all current EU and UK legislation relating to protection and enhancement of ecology has been (or will be) complied with during the design and construction process?

I have not been given the responsibility to confirm if legislation has been or will be complied with, however, to the best of my knowledge, this has been, and will continue to be, adhered to throughout the design and construction process.

If yes, please provide details on all current EU and UK legislation that relates to the site:

8. Has the developer / client appointed you to produce an appropriate landscape/site ecology management plan covering at least the first 5 years after project completion?

A Landscape Management Plan currently exists for the site. The plan has been reviewed and approved by the Ecologist. Please refer to Section 6 of Ecologist's report for further details relating to the management plan.

EITHER:

a. If yes, and the management plan has already been produced does it include the following:

- i. management of any protected features on site
- ii. management of any new, existing, or enhanced habitats
- iii. a reference to the current or future site level Biodiversity Action Plan?

OR

b. If yes, but the management plan is still to be produced (due to it being too early in the design/construction phase), have you provided the following information to the developer / client:

- i. scope of management plan
- ii. key responsibilities, and with whom these responsibilities lie, e.g. owner, landlord, occupier?

If you have answered 'yes' to either question 8a or 8b please provide a brief explanation outlining the details

9. Has the client / developer required you, as part of your responsibilities, to provide recommendations and advice to minimise detrimental impacts on site biodiversity?

No

If yes, or not applicable, please briefly explain your reasoning:

The site is currently of low ecological value, comprising predominantly hard standing. The development is therefore not considered to have a detrimental impact upon biodiversity. The objectives of the Landscape Management Plan will be beneficial rather than detrimental to site ecology.

10. Do your responsibilities to the client / developer include providing advice and recommendations for the protection of ecological features?

Not applicable

If yes, or not applicable, please briefly explain your reasoning:

There are no features on site that require protection during development works.

11. Do your responsibilities to the client / developer include providing advice on the creation of a new ecologically valuable habitat, which is appropriate to the local area and is either nationally, regionally, or locally important, or supports nationally, regionally, or locally important biodiversity?

Yes

If yes, or not applicable, please briefly explain your reasoning:

12. Do your responsibilities to the client / developer include providing advice and recommendations on when site works are to be avoided so as to minimise the disturbance to wildlife?

Yes

If yes, or not applicable, please briefly explain your reasoning

Appropriate timing of works is included within the Landscape Management Plan for the site. Further information is provided within the Ecologist's report.

Section E: Schedule of Evidence

Copies of the following documentation are required to support the above statements and act as evidence of compliance with the BREEAM Land Use and Ecology criteria:

1. The suitably qualified ecologists site/project specific report
2. Written confirmation from the verifier of the ecology report (where necessary)
3. Any supplementary documentation e.g. maps, plans, drawings, letters / emails of correspondence, etc.

Please include these details along with the appropriate reference to each document in the table below:

Document	Reference
SQE Site Report and Appendices	JL30529/BREEAM Ecology Report HpH4-5.doc

Section F: Signature of Validation

I confirm the information provided in this document is truthful and accurate at the time of completion.

Name of ecologist: Tawny Clark

Signature of ecologist: 

Date: 24th July 2012

Appendix F – Guidance for relating ecologist's report to BREEAM

Before using this guidance and completing the form please read the following:

1. This document is to be used for BREEAM 2011 assessments, where an ecologist has been appointed and produced an ecology report as part of a proposed development.
2. As an ecologist may have been appointed to carry out ecological site surveys and produced an ecology report without being aware that a BREEAM assessment has been, or is to be conducted, the purpose of this document is to help assist BREEAM assessors relate the contents of such a report to the land use and ecology criteria of BREEAM.
3. The assessor is to request that the appointed ecologist complete all sections of this guidance and return it to the BREEAM assessor along with all relevant documentation required to demonstrate compliance with the BREEAM criteria.
4. The assessor is to use this completed document in conjunction with the latest issue of the BREEAM 2011 New Construction Scheme Document and information provided by the developer / client to carry out the assessment of the land use and ecology BREEAM issues.

There are 6 sections (sections A - F) in this document.

1. Section A requires contact details for the ecologist and developer / client.
2. Section B1 determines whether the appointed ecologist is 'suitably qualified' (under BREEAM); and if not, section B2 determines whether the report has been verified by an ecologist who is 'suitably qualified'.
3. Section C determines whether the findings of the report have been based on data collected from site surveys conducted at appropriate times of the year to determine whether different species are evident.
4. If 'no' is recorded for either Section B or C then the contents of the ecology report cannot be used to determine compliance with the BREEAM criteria.
5. Section D provides the BREEAM assessor with the necessary information to complete the assessment of the ecology related BREEAM issues.
6. Section E provides details of the documentation / information required by BREEAM as evidence of compliance.
7. Section F requires the signature of the appointed ecologist who has completed this document.

Please note: it is only the appointed qualified and licensed BREEAM assessor who can award or withhold a credit for a BREEAM assessment.

Section A: Contact Details

Ecologist's Details	
Company name:	SKM Enviros
Company address:	10 Ty Nant Court Morganstown Cardiff CF24 3LR
Contact name:	Tawny Clark MIEEM
Contact telephone number:	02920 814 213
Ecology report reference:	JL30529/BREEAM Ecology Report Hph4-5.doc
Developer / Client Details	
Company name:	HPHA Ltd
Company address:	C/O Melford Capital Partners LLP 2 Eaton Gate London SW1W 9BJ
Contact name:	Ludo McKenzie
Contact telephone number:	020 3008 6515
Development details	
BRE reference number (if known):	HPH4: BREEAM-0046-6029
Development name:	Hyde Park Hayes
Development address:	11 Millington Road Hayes UB3 4AZ

Section B1: Ecologist's Qualifications

1. Do you hold a degree (or equivalent qualification, e.g. N/SVQ level 5) in an ecology related subject? Yes

If yes, please provide details

BSc (Hons) Environmental Quality and Resource Management, UWE Bristol.

Note: Depending on the ecological content (minimum 60%), the following degrees might be considered relevant: Ecology, Biological Sciences, Zoology, Botany, Countryside

Management, Environmental Sciences, Marine and Freshwater Management, Earth Sciences, Agriculture, Forestry, Geography, Landscape Management.

2. Are you a practising ecologist with a minimum of 3 years relevant experience within the last 5 years?

Yes

If yes, please provide details

Seven years of relevant experience held. Including BREEAM and Code for Sustainable Homes ecology site assessment, desk study, and report writing. Completion of numerous extended Phase 1 habitat surveys (including both field work and report writing), preparation of EclAs including both field work and reporting. European Protected Species (EPS) surveying and design of mitigation. Natural England and CCW great crested newt licence holder.

Note: Relevant experience must clearly demonstrate a practical understanding of factors affecting ecology in relation to construction and the built environment; including, acting in an advisory capacity to provide recommendations for ecological protection, enhancement and mitigation measures. Examples of relevant experience are: ecological impact assessments; Phase 1 and 2 habitat surveys and habitat restoration.

3. Are you bound by a professional code of conduct and subject to peer review*?

Yes

If yes, please provide details

Full member of IEEM, as such I am required to submit annual statements of my continued professional development.

Note: a full member of one of the following organisations will be deemed suitable: Chartered Institution of Water and Environmental Management (CIWEM); Institute of Ecology and Environmental Management (IEEM); Institute of Environmental Management and Assessment (IEMA); Landscape Institute (LI).

Note: Peer review is defined as the process employed by a professional body to demonstrate that potential or current full members maintain a standard of knowledge and experience required to ensure compliance with a code of conduct and professional ethics.

If 'no' has been answered for any question in Section B1 then the BREEAM requirement for a 'suitably qualified ecologist' has not been met. The ecology report CANNOT be used to assess the BREEAM Ecology issues unless it is verified by an individual who is 'suitably qualified' (see section B2 below).

Section B2: Report Verification

Details on verifying an ecology report for a BREEAM assessment:

1. The individual verifying the report must provide written confirmation that they comply with the definition of a 'suitably qualified ecologist' (as detailed in Section B1 above).
2. The verifier of the report must confirm in writing they have read and reviewed the report and found it to:
 - a. represent sound industry practice
 - b. report and recommend correctly, truthfully, and objectively
 - c. be appropriate given the local site conditions and scope of works proposed
 - d. avoid invalid, biased, and exaggerated statements.

Written confirmation from the third party verifier on all the points detailed under 1 and 2 above (for section B2) must be included in an appendix to this guidance (see section E).

If the appointed ecologist does not meet the criteria of a 'suitably qualified ecologist' and the report has not been verified by an individual who does meet these criteria, then the report CANNOT be used as evidence of compliance with the ecology related BREEAM.

Section C: Site Survey

1. Have the findings of the ecology report been based on data collected from a site survey(s)?

Yes

If yes, please provide details to justify this (e.g. date(s) and scope of site survey(s))

The ecological site assessment was undertaken on 4th July 2012 by T. Clark MIEEM of SKM Enviros, which is within the optimal survey season for vegetation. The site was walked over to identify features of ecological value, were present these were surveyed and recorded. A list of species for each habitat type identified on site was also completed during the visit. Notes were also made of the site's potential to support protected species of fauna and presence of any notable supporting habitat.

Note: The site visit(s) and survey(s) must be conducted at appropriate times of the year when it is possible to determine the presence, or evidence of the presence, of different plant and animal species.

Note: the contents of the ecology report must be representative of the site's existing ecology prior to the commencement of initial site preparation works, i.e. before RIBA stage K, Construction to Practical Completion, and after RIBA stage B, Design Brief.

If 'no' has been answered to question 1 of Section C then the ecology report CANNOT be used to determine compliance with the criteria of the relevant BREEAM ecology issues.

Section D: Site Survey Details

LE 02 Ecological value of land and protection of ecological features

1. Is the land within the 'construction zone' deemed by the suitably qualified ecologist to be of low ecological value?

Yes

If yes, please provide a brief statement explaining how it has been deemed to be of low ecological value:

Note: The construction zone is defined as any land on the site which is being developed (and therefore disturbed) for buildings, hard standing, landscaping, site access, plus a 3m boundary in either direction around these areas. It also includes any areas used for temporary site storage and buildings.

2. Are there any features / areas of ecological value that fall within the site, but outside the construction zone?

No

Note: If you have deemed this area to be of low ecological value then there will be no features of ecological value to protect. However, if there is a feature(s) or area(s) of low ecological value you wish to advise be retained and enhanced, e.g. a species-poor hedgerow to a species-rich hedgerow, then full details of the protection and enhancement advice should be entered under LE 04 Enhancing site ecology.

If yes, please provide a brief statement outlining the advice / recommendations given for protecting all existing features and areas of ecological value:

LE 03 Mitigating ecological impact

3. Are you able to provide the following information for before and after construction:

- Broad habitat types
- An estimate of the number of floral species present per broad habitat type (based on appropriate census techniques and confirmed planting regimes)?

Yes

a. If yes, please give a brief description of the landscapes and broad habitats surrounding the development site

The site comprises hard standing and temporary landscaping that sits within the commercial business park of Hyde Park Hayes, located within the West London Borough of Hayes. The surrounding area is urban in nature, comprising residential, commercial and industrial properties and is dominated by hard standing, roads, and buildings. In the immediate vicinity there is little green space, which is restricted to private gardens and small parks. Further details of surrounding land use are provided within the SQE assessment report.

b. The total site area (in m²). This will be the same before and after development.

5,572m²

c. Please fill in Table 19-1 below with site details before and after development:

Table 19-1: Site details before and after development¹

Broad habitat type ²	Area of broad habitat type (m ²)	Average total taxon richness per broad habitat type
Hardstanding	5572	0
Broad habitat type ²	Area of broad habitat type (m ²)	Average total taxon richness per broad habitat type
Building	3048	0
Hardstanding	1741	0
Amenity Grassland	783	6
1. Note to assessor (and ecologist where requested to carry out calculations); the information contained in these tables can be used to calculate both LE 03 Mitigating ecological impact		

and LE 04 Enhancing site ecology issues.

2. Broad habitat types will include natural areas, e.g. various grasslands and woodlands; as well as areas of the built environment, e.g. buildings, hard landscaping. The area of each habitat type when added together must always equal the total area of the development site.

4. Has the client / developer requested you to carry out the calculation for LE 03 Mitigating ecological impact and /or LE 04 Enhancing site ecology (where relevant)?

Yes

Note: The calculations must be carried out in line with the methodology provided in the current version of the BREEAM 2011 Scheme Document.

If yes, please complete Table 19-2 and Table 19-3 below:

Table 19-2: Calculation of the Ecological Value of the Site Before Development

Broad habitat type	Area of broad habitat type [m ²]		Average total taxon richness (see BREEAM issue LE 03 or a SQE*)		Average total taxon richness x Area of broad habitat type
Hardstanding	5572	X	0	=	0
(1) Total site area =	5572		(2) Total =		0
Average total taxon richness before development =					0
Average total taxon richness x area of habitat type / Total site area = (2)/(1) =					0

* SQE = Suitably Qualified Ecologist

Table 19-3: Calculation of the Ecological Value of the Site After Development

Broad habitat type	Area of broad habitat type [m ²]		Average total taxon richness (see BREEAM issue LE 03 or a SQE*)		Average total taxon richness x Area of broad habitat type
Building	3048	X	0	=	0
Hardstanding	1741	X	0	=	0
Amenity Grassland	783	X	7*	=	5481
(1) Total site	5572		(2) Total =		5481

area =					
Average total taxon richness x area of habitat type / Total site area = (2)/(1) =					0.98

*6 grass species and 1 tree species

LE 04 Enhancing site ecology

5. Has the client / developer required you to provide advice and make recommendations for enhancing site ecology?

Yes

If yes, please provide a brief statement outlining the advice / recommendations given on enhancing and protecting the ecological value of the site:

Please refer to Section 7 of Ecologist's report.

Note: Such advice is to include, and go beyond, compliance with all current EU and UK legislation relating to protected species and habitats.

LE 05 Long term impact on biodiversity

6. Were you appointed prior to commencement of development work activities on site?

Yes

7. Has the client / developer given you the responsibility to confirm whether all current EU and UK legislation relating to protection and enhancement of ecology has been (or will be) complied with during the design and construction process?

I have not been given the responsibility to confirm if legislation has been or will be complied with, however, to the best of my knowledge, this has been, and will continue to be, adhered to throughout the design and construction process.

If yes, please provide details on all current EU and UK legislation that relates to the site:

8. Has the developer / client appointed you to produce an appropriate landscape/site ecology management plan covering at least the first 5 years after project completion?

A Landscape Management Plan currently exists for the site. The plan has been reviewed and approved by the Ecologist. Please refer to Section 6 of Ecologist's report for further details relating to the management plan.

EITHER:

a. If yes, and the management plan has already been produced does it include the following:

- i. management of any protected features on site
- ii. management of any new, existing, or enhanced habitats
- iii. a reference to the current or future site level Biodiversity Action Plan?

OR

b. If yes, but the management plan is still to be produced (due to it being too early in the design/construction phase), have you provided the following information to the developer / client:

- i. scope of management plan
- ii. key responsibilities, and with whom these responsibilities lie, e.g. owner, landlord, occupier?

If you have answered 'yes' to either question 8a or 8b please provide a brief explanation outlining the details

9. Has the client / developer required you, as part of your responsibilities, to provide recommendations and advice to minimise detrimental impacts on site biodiversity?

No

If yes, or not applicable, please briefly explain your reasoning:

The site is currently of low ecological value, comprising predominantly hard standing. The development is therefore not considered to have a detrimental impact upon biodiversity. The objectives of the Landscape Management Plan will be beneficial rather than detrimental to site ecology.

10. Do your responsibilities to the client / developer include providing advice and recommendations for the protection of ecological features?

Not Applicable

If yes, or not applicable, please briefly explain your reasoning:

There are no features on site that require protection during development works.

11. Do your responsibilities to the client / developer include providing advice on the creation of a new ecologically valuable habitat, which is appropriate to the local area and is either nationally, regionally, or locally important, or supports nationally, regionally, or locally important biodiversity?

Yes

If yes, or not applicable, please briefly explain your reasoning:

12. Do your responsibilities to the client / developer include providing advice and recommendations on when site works are to be avoided so as to minimise the disturbance to wildlife?

Yes

If yes, or not applicable, please briefly explain your reasoning

Appropriate timing of works is included within the landscape management plan for the site. Further information is provided within the ecologists report.

Section E: Schedule of Evidence

Copies of the following documentation are required to support the above statements and act as evidence of compliance with the BREEAM Land Use and Ecology criteria:

1. The suitably qualified ecologists site/project specific report
2. Written confirmation from the verifier of the ecology report (where necessary)
3. Any supplementary documentation e.g. maps, plans, drawings, letters / emails of correspondence, etc.

Please include these details along with the appropriate reference to each document in the table below:

Document	Reference
SQE Site Report and Appendices	JL30529/BREEAM Ecology Report HpH4-5.doc

Section F: Signature of Validation

I confirm the information provided in this document is truthful and accurate at the time of completion.

Name of ecologist: Tawny Clark

Signature of ecologist:



Date: 24th July 2012