



# Patrick Stileman Ltd

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## Arboricultural Consultancy



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## ARBORICULTURAL IMPACT ASSESSMENT & ARBORICULTURAL METHOD STATEMENT

### Project

Hempland Primary School, Whitby Avenue, York, YO31 1ET

### Client

ISG

### Prepared by

Patrick Stileman BSc(Hons), MICFor, MRICS, Dip. Arb (RFS), RC.Arbor.A

### Date

30<sup>th</sup> June 2023

### Project reference

DS05102101

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# 1 INTRODUCTION

1.1 I am Patrick Stileman, Director of Patrick Stileman Ltd. I am acting on instruction of the client, ISG. I have qualifications and experience in arboricultural consultancy and I have given details of this in Appendix 3.

1.2 **Brief:** Patrick Stileman Ltd is instructed by the client to provide a written appraisal of the impact to trees by development proposals at Hempland Primary School, Whitby Avenue, York, YO31 1ET. In addition, we are instructed to prepare an Arboricultural Method Statement and Tree Protection Plan setting out how retained trees shall be protected during the construction process.

1.3 **Tree survey:** I surveyed trees at Hempland School on 1<sup>st</sup> December 2021 in accordance with guidelines set out in British Standard 5837: 2012 '*Trees in relation to design, demolition and construction – Recommendations*' (hereafter referred to as BS5837). The tree survey is less than two years' old and is valid for this planning application.

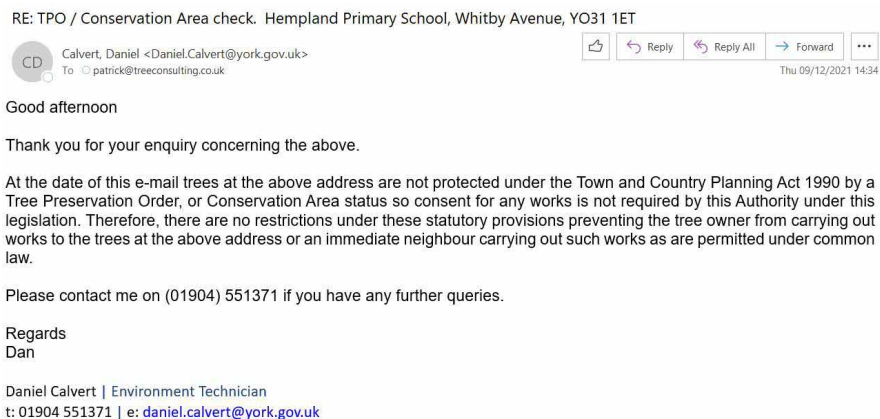
The Tree Survey Data is included as Appendix 1 of this report. The locations of trees, tree groups and hedges are based on the topographic survey, and are shown on the Arboricultural Impact Plan (AIP), included on Page 14 of this report.

## 1.4 Legal status of trees:

1.4.1 The City of York Council does not have a GIS map on its website showing the position of trees which are protected by a tree preservation order (TPO).

1.4.2 On 9<sup>th</sup> December 2021 I received an email from Daniel Calvert of City of York Council confirming that there are no trees at the site protected by a TPO, and that the site is not located within a conservation area (which would impose statutory protection to trees, if applicable). See Figure 1 below.

*Figure 1. Email received from City of York Council on 9<sup>th</sup> December 2021*



- 1.5 **Proposed development:** The proposed development comprises a new build two-storey block for 2FE Primary with additional soft and hard landscaping and relocation of sports pitch (followed by demolition of existing school).

## 2 BRIEF SITE DESCRIPTION

- 2.1 Hempland School is situated approximately 1.5km to the north-east of the centre of York, within a residential area.
- 2.2 The school is accessed from Whitby Avenue to its north with a driveway, a single primary building at the northern end, and a playing field to the south, including a multi-use games area (MUGA) at the eastern side of the southern end.
- 2.3 Excluding the driveway, the site is very roughly rectangular in shape with an average length of approximately 170m, and width of approximately 130m. The site is essentially flat.

## 3 VETERAN TREES AND ANCIENT WOODLAND

- 3.1 Veteran trees and ancient woodland are described by the National Planning Policy Framework (NPPF) as 'irreplaceable habitat' and it states that planning applications causing loss or deterioration to them should be refused unless wholly exceptional reasons exist and a suitable compensation strategy is provided.
- 3.2 The NPPF defines veteran (and ancient) trees as '*A tree which, because of its age size and condition, is of exceptional biodiversity, cultural or heritage value*'. The NPPF describes ancient woodland as '*An area that has been wooded continuously since at least 1600 AD. It includes ancient semi-natural woodland and plantations on ancient woodland (PAWS)*'.
- 3.3 There are no veteran trees present at Hempland School. The government's publicly available multi-agency geographic information map for the countryside (MAGIC) shows the location and shape of Natural England's provisional identification of ancient woodland. This does not indicate the presence of ancient woodland in or adjacent to the site.

## 4 RELEVANT POLICY

### 4.1 National Planning Policy Framework (July 2021)

4.1.1 The National Planning Policy Framework (NPPF) has at its heart, a presumption in favour of sustainable development that is set out in Paragraph 11.

4.1.2 At 170 b) the NPPF requires that policies and decision should contribute to and enhance the natural environment by recognizing the benefits and ecosystem services provided by (amongst other things) trees and woodland.

4.1.3 The NPPF refers specifically to trees at 131 and at 180 c). These state as follows:

**131.** Trees make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined <sup>50</sup>, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.

*180 (c) 'development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists'*

### 4.2 Local plan policies

4.2.1 The City of York Local Plan ('*City of York Draft Local Plan Incorporating the 4<sup>th</sup> set of changes Development Control Local Plan*' 2005) includes a policy relating to trees—Policy NE1.

#### 4.2.2 Policy NE1 states as follows:

##### NE1: Trees, Woodlands and Hedgerows

Trees, woodlands and hedgerows, which are of landscape, amenity, nature conservation or historical value, will be protected by:

- a) refusing development proposals which will result in their loss or damage; and
- b) requiring trees or hedgerows which are being retained on development sites to be adequately protected during any site works; and
- c) making tree preservation orders for individual trees and groups of trees which contribute to the landscape or local amenity; and
- d) making hedgerow retention notices where appropriate to protect important hedgerows and;
- e) ensuring the continuation of green/wildlife corridors

All proposals to remove trees or hedgerows will be required to include a site survey indicating the relative merits of individual specimens. An undertaking will also be required that appropriate replacement planting with locally indigenous species will take place to mitigate against the loss of any existing trees or hedgerows. Developments should make proper provision for the planting of new trees and other vegetation including significant highway verges as part of any landscaping scheme. In addition, other proposals to bring forward such provision will be actively encouraged.

## 5 THE TREES

- 5.1 **Condition:** In total 78 individual trees, 11 tree groups, and 4 hedges were included in the survey. Their condition has been classified in line with BS 5837, and the survey data has been included as Appendix 1.

The grading system is as follows:

**U = Trees unsuitable for retention.** Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. These trees are shown on the tree plans with dark red centres.

**A = Trees of high quality.** Trees of high quality with an estimated remaining life expectancy of at least 40 years. These trees are shown on the tree plans with green centres.

**B = Trees of moderate quality.** Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. These trees are shown on the tree plans with blue centres.

**C = Trees of low quality.** Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm. These trees are shown on the tree plans with grey centres.

- 5.2 Category A and Category B trees are divided further into sub-categories. Sub-category 1 is allocated where it is assessed that the tree has significant arboricultural value. Sub-category 2 is allocated where it is assessed that the tree has significant landscaping or screening value. Sub-category 3 is allocated where it is assessed that the tree has significant cultural or conservation value.
- 5.3 Trees may be allocated more than one sub-category. All sub-categories carry equal weight, with for example an A3 tree being of the same importance and priority as an A1 tree.
- 5.4 I do not allocate sub-categories to Category C trees.
- 5.5 The number of trees or groups of trees, and hedges included in the survey under each BS5837 classification is as follows:

Classification (BS5837)	Number
U	4
A	2
B	42
C	45

## 6 PRINCIPAL IMPACTS TO TREES

- 6.1 **Root Protection Areas:** The Arboricultural Impact Plan shows the position of the Root Protection Area (RPA) for trees being retained. BS5837 (section 3.7) defines the RPA as a '*layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority*'. The RPA is an area based on a circle with a radial distance of 12x the stem diameter at 1.5 metres in the case of single-stemmed trees, or 12x the combined stem diameter (calculated in accordance with a formula set out in BS5837) in the case of multi-stemmed trees.

- 6.2 In situations where the site conditions clearly prevent consistent rooting around the tree (for example the presence of roads or buildings within the notional RPA circle) I modify the shape of the RPA to take this into account. At this site I have not adjusted the RPA shape for any tree, and RPAs shown are all based on circles.
- 6.3 For a visual overview of the arboricultural impacts across the site refer to the Arboricultural Impact Plan (AIP) included on Page 14 of this report.

*Specific impacts of the scheme on trees which I consider warrant further discussion are as follows:*

#### 6.4 **Trees for removal**

- 6.4.1 The project architects have used tree constraints information derived from the tree survey to retain trees where reasonably possible to do so. The two Category A beech trees to the front of the school building (Trees 61 and 68) are to be retained, as are ten other trees to the front and western side of the existing school building which includes four Category B trees.
- 6.4.2 The comprehensive re-design of the school's layout necessitates the removal of several trees internally. These comprise trees which typically are relatively small and youthful, of low and moderate quality, planted in locations which are compatible with the current school layout which is to be comprehensively changed.
- 6.4.3 In total there are 28 individual trees proposed for removal comprising 17 Category C and 11 Category B individuals, plus three small Category C tree groups.



Images of the Category B trees proposed for removal to facilitate development are included below

**Photograph 1:** *Trees 3, 4, & 5: Silver birch, pear and whitebeam respectively*



**Photograph 2:** *Trees 8, 10, & 11: Silver birch, silver birch and downy birch respectively*



*Photograph 3: Tree 16: Silver birch*



*Photograph 4: Tree 18: Silver birch*



*Photograph 5: Tree 72: Hawthorn*



*Photograph 6: Tree 73: Apple*



*Photograph 7: Tree 78: Weeping willow*



## 6.5 No-dig hard surface construction

- 6.5.1 In two locations in the north-east side of the site the proposed parking spaces extend over the RPAs of retained trees (Trees 66 & 67, and G11). In these locations the new hard surface shall be constructed over the existing ground with no excavation into it, using a three-dimensional cellular confinement system (such as Geosynthetics 'cellweld'). This will necessitate a localised raising of levels.
- 6.5.2 The locations where the no-dig surfacing is required are shown on the TPP by dark blue hatching.

## 6.6 Services and drainage

- 6.6.1 Details of incoming services and foul drainage have not been worked up at this stage. However, there are no arboricultural restrictions in connecting these to the road beneath the driveway, and through the site.
- 6.6.2 **There shall strictly be no excavation for service installation within the RPA of retained trees unless approved and supervised by the project arboriculturist.** Services shall be installed in accordance with guidelines set out in National Joint Utilities Group (NJUG) Volume 4 (2007). This can be downloaded at no charge from the following website: <http://www.njug.org.uk/publication/51>

## 7. SUMMARY OF TREE WORK PROPOSED

7.1 The following tree work is proposed (refer also to the Arboricultural Impact Plan):

Tree No	Species	BS5837 Cat	Work proposed
2	Elm (dead)	U	Remove for reasons of sound management
3	Silver birch	B1	Remove to facilitate development
4	Pear	B1	Remove to facilitate development
5	Whitebeam	B1	Remove to facilitate development
6	Maidenhair tree	C	Remove to facilitate development
7	Maidenhair tree	C	Remove to facilitate development
8	Silver birch	B2	Remove to facilitate development
9	Downy birch	C	Remove to facilitate development
10	Silver birch	B2	Remove to facilitate development
11	Downy birch	B2	Remove to facilitate development
15	Rowan	C	Remove to facilitate development
16	Silver birch	B1	Remove to facilitate development
17	Fastigate hornbeam	C	Remove to facilitate development
18	Silver birch	B1	Remove to facilitate development
19	Maple sp.	C	Remove to facilitate development
20	Himalayan birch	C	Remove to facilitate development
21	Fastigate hornbeam	C	Remove to facilitate development
22	Hornbeam	C	Remove to facilitate development
35	Ash	U	Remove for reasons of sound management
52	Hawthorn	U	Remove for reasons of sound management
62	Goat willow 'Kilmarnock'	C	Remove to facilitate development
63	Cherry	C	Remove to facilitate development
66	Rowan 'Kashmiriani'	C	Remove to facilitate development
67	Snowy mespilus	C	Remove to facilitate development
70	Ornamental apple	C	Remove to facilitate development
71	Unidentified	C	Remove to facilitate development
72	Hawthorn	B1	Remove to facilitate development
73	Apple	B1	Remove to facilitate development
74	Flowering cherry	C	Remove to facilitate development
75	Flowering cherry	C	Remove to facilitate development
78	Weeping willow	B1	Remove to facilitate development
G4	Beech	C	Remove to facilitate development
G5	Cherry-plum, pear	C	Remove to facilitate development
G7	Elder	U	Remove for reasons of sound management
G10	Pear, apple, cherry-plum	C	Remove to facilitate development

7.2 All work specified must be undertaken in accordance with BS3998 (2010).

### 7.3 **Wildlife**

- 7.3.1 Nesting birds, bats and bat roosts are protected by law. It is the duty of the contractors to satisfy themselves prior to commencement that neither these, nor any protected species shall be adversely affected by the proposed work. Work should be undertaken in accordance with BS8596:2015: *Surveying for bats in trees and woodland – Guide*.

## 8 **STORAGE OF MATERIALS, WELFARE CABINS, AND CONSTRUCTION DETAILS**

- 8.1 At this stage full construction details have not been worked up and the methodology for construction, location of site welfare cabins and areas for material storage have not been provided. However, it appears that there is ample space for this across the site without impacting on retained trees, and details can reasonably be provided as part of a comprehensive Construction Management Plan via planning condition if required, prior to work commencing on site.

## 9 **PROTECTION OF RETAINED TREES**

- 9.1 Trees are to be protected from the outset of work commencing on site. Details of measures required for the protection of trees are set out in the Arboricultural Method Statement and Tree Protection Plan, included at the end of this report.
- 9.2 Providing the recommendations set out on the Tree Protection Plan are adhered to, I am satisfied that the trees to be retained will be adequately protected during the development process.

## 10 **CONCLUSIONS**

- 10.1 Trees were surveyed prior to the site's layout being designed, and the constraints that they pose have informed the design process.

- 10.2 The majority of trees on site are to be retained, including those of the highest quality which have been designed around. In total 28 individual trees of poor to moderate quality and value and three small tree groups are to be removed to facilitate development – this is unavoidable to enable the site’s comprehensive re-development, and I consider that their loss is justifiable for this purpose.
- 10.3 There is ample scope for replacement tree planting around the school’s new layout, and at this stage 45 new trees are proposed for planting across the site which, with time, will provide mitigation for the trees lost.
- 10.4 I am satisfied that all trees for retention can be protected during the construction process, providing work is undertaken in accordance with the Arboricultural Method Statement and Tree Protection Plan provided.
- 10.5 I consider that the scheme is compliant with national and local policy in relation to trees, as set out in Section 4 of this document. I do not consider that there are reasonable grounds for planning consent to be refused for tree-related reasons.

## 11 REFERENCES

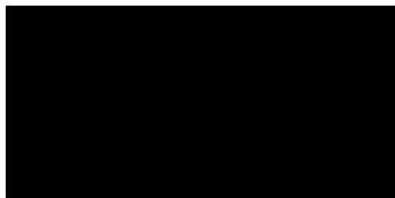
BSI BS5837:2012: *Trees in relation to design, demolition and construction – Recommendations*

BSI BS3998:2010: *Tree Work - Recommendations*

BSI BS8596:2015: *Surveying for bats in trees and woodland – Guide.*

National Planning Policy Framework 2021.

NJUG (2007): Publication no. 10 *Guidelines for the planning, installation and maintenance of utility services in proximity to trees.* National Joint Utilities Group, London



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This drawing must be viewed in colour

### ARBORICULTURAL IMPACT PLAN

**PROJECT**  
Hempland Primary School, Whitby Avenue, York, YO31 1ET

**CLIENT**  
ISG

**JOB REF**  
DS05102101

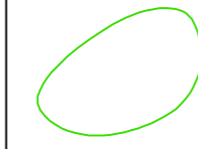



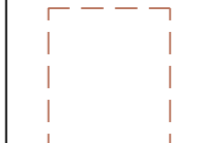
**DRAWING NO**  
DS05102101.03

**DATE**  
29/06/2023





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### KEY

-  Tree / tree group for retention
-  Tree / tree group for removal to facilitate development
-  Tree / tree group for removal for reasons of sound management
-  Root Protection Area (RPA) for retained tree / tree group
-  Existing structure or landscape feature for removal

### BS 5837 category key

-  Category U tree
-  Category A tree
-  Category B tree
-  Category C tree

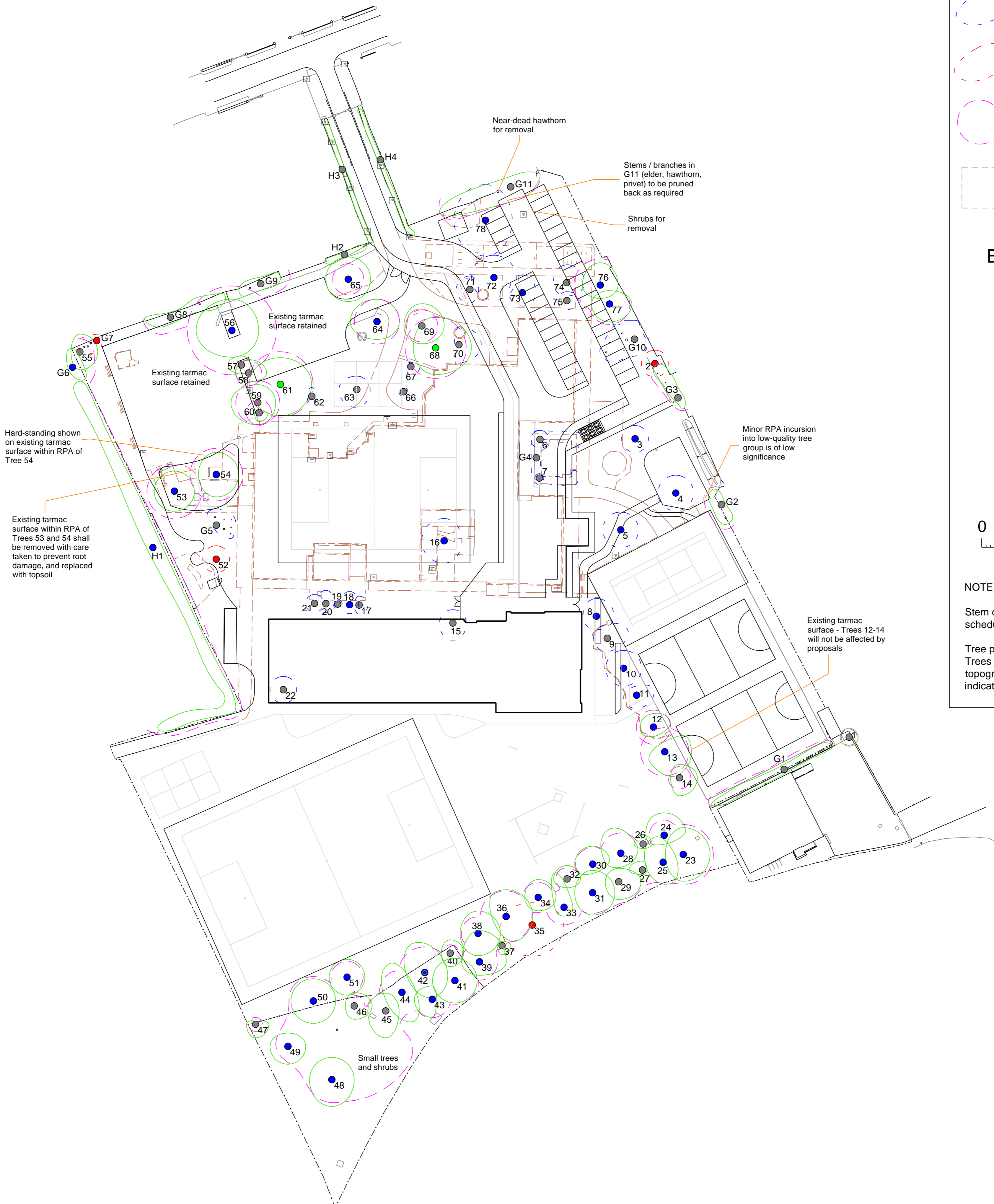
**SCALE**  
1:500 @ A1

0 10m 20m 30m 40m

### NOTE:

Stem diameters are not drawn to scale. See schedule for dimensions

Tree positions are based on the topographic survey. Trees marked with a \* were not included in the topographic survey and their locations shown are indicative only.





# APPENDIX 1

## TREE SURVEY DATA AND KEY

NOTE: For the schedule of tree work proposed to facilitate the development, refer to Section 7 of this document, not the 'preliminary management recommendations' column of the tree survey data

## KEY TO TREE SURVEY DATA

**Tree / Group reference:** Tree numbers as shown on the Tree Survey Plan. Where trees form a coherent group, they have been assessed as a group, and are shown in the survey and on the plan prefixed with the letter G.

**Species:** These are listed in the schedule by their common name. The botanical names of the principal species present are as follows:

Elder: *Sambucus nigra*  
English elm: *Ulmus procera*  
Silver birch: *Betula pendula*  
Pear: *Pyrus communis*  
Whitebeam: *Sorbus aria*  
Maidenhair tree: *Ginkgo biloba*  
Downy birch: *Betula pubescens*  
Rowan: *Sorbus aucuparia*  
Fastigate hornbeam: *Carpinus betulus* 'Fastigiata'  
Maple sp: *Acer sp*  
Himalayan birch: *Betula utilis*  
Hornbeam: *Carpinus betulus*  
Italian cypress: *Cupressus sempervirens*  
Cherry: *Prunus avium*  
Ash: *Fraxinus excelsior*  
Italian alder: *Alnus cordata*  
Pedunculate oak: *Quercus robur*  
Common lime: *Tilia x europaea*  
Orchard apple: *Malus domestica*  
Hawthorn: *Crataegus monogyna*  
Weeping willow: *Salix x sepulcralis* 'Chrysocoma'  
Beech: *Fagus sylvatica*  
Goat willow 'Kilmarnock': *Salix caprea*  
Bird cherry: *Prunus padus*  
Snowy mespilus: *Amelanchier lamarckii*  
Flowering cherry: *Prunus sp*  
Ornamental apple: *Malus sp.*  
Norway maple: *Acer platanoides*  
Leyland cypress: *x Cupressocyparis leylandii*  
Elder: *Sambucus nigra*  
Cherry-Plum: *Prunus cerasifera*  
Privet: *Ligustrum vulgare*  
Field maple: *Acer campestre*  
Pyracantha sp

**Ht. (m):** The height of the tree is measured or estimated to the nearest metre.

**Crown spread –NSWE:** Radial crown spread measured or estimated, rounded up to the nearest metre, for north, south, west and east.

**Crown base:** The height above ground level and orientation of the lowest permanent crown base (excluding basal, and small epicormic growth).

**Stem count:** For trees recorded as individuals, the number of stems recorded for the purpose of RPA calculation (where stem numbers exceed 5 an average diameter is assessed).

**Stem dia:** In the first column the stem diameter is recorded for trees with a single stem, or the first measured stem where there are fewer than five, or the average stem diameter for trees with more than 5 stems. The diameter of individual stems for trees with up to five stems is recorded in columns 2-5. Measurements are shown in mm, rounded to the nearest 10. In some situations it is not possible to measure the diameter of stems, and for these estimates are made. When stem diameters have been estimated they are written in *italics*. Measurements are taken in accordance with BS5837 Annex C. For tree groups, stem measurements are recorded for the largest tree in the group.

**RPA Rad:** This shows the radius of the notional RPA circle in metres to be centered on the tree, based on the calculation made using the stem diameter.

**RPA Area:** This shows the calculated RPA in m<sup>2</sup> for each tree (as individuals or within groups). If the notional RPA circle is adjusted (see 4.6) the area must be maintained. The RPA area is capped at 707 m<sup>2</sup>, equivalent to a circle with a radius of 15m.

**Life Stage:** An assessment of the tree's stage of life, where: Y = young, SM = semi-mature, EM = early-mature, M = mature, and OM = over-mature.

**Phys. Condition:** The physiological condition of the tree, reflecting the condition of the vascular system as indicated by leaf and shoot vitality. The physiological condition is not a comment on the tree's structural condition. The physiological condition codes used are G = good; F = fair; P = poor; D = dead.

**Condition and observations:** Description of general tree condition, including structural integrity, the presence of hazards, pests and diseases which may affect the tree's retention span.

**Preliminary management recommendations:** Work required to trees for reasons of sound arboricultural management only, **not for development facilitation** (for this refer to Section 6 of AIA). This is not to be taken as a list of tree work required prior to development activity, but provides management recommendations for trees in their current context.

**Ret span:** Estimated remaining likely retention span based on species, condition & context. The following longevity bands are used: <10; 10-20; 20-40; >40. The retention span assessment is based on trees in their current context.

**Grade:** Quality & Value classification in accordance with BS 5837:2012.

TREE SURVEY DATA : HEMPLAND SCHOOL, YORK

Tree / Group reference	Species	Ht. (m)	Crown Spread (m)				Crown base (m)	Stem Count	Stem Dia. (mm)					RPA Rad (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Condition and observations	Preliminary management recommendations	Ret. Span <10, 10+20+, >40	Grade U-A-B-C
			N	S	W	E			1 / mean	2	3	4	5								
1	Elder	3	2	2	2	2	1m N	1	150					1.80	10	SM	P	Small, suppressed tree. Appears to be off-site.	No action required at time of survey	10+	C
2	Elm	8	3	3	3	3	2m W	1	150					1.80	10	SM	D	Dead tree with ever-increasing failure hazard.	Remove for reasons of sound arboricultural management	< 10	U
3	Silver birch	12	3	3	3	3	2m S	1	270					3.24	33	EM	G	Good form. No defects seen of apparent structural significance. Tree of moderate quality and value.	No action required at time of survey	20+	B1
4	Pear	10	4	4	4	4	1.5m N	1	370					4.44	62	M	G	Multi-stemmed from 2 metres. Tight unions developing which might restrict long-term retention span. Attractive, well-balanced tree.	No action required at time of survey	20+	B1
5	Whitebeam	7	4	4	4	4	2m W	1	300					3.60	41	M	G	Multi-stemmed from 2 metres. Tight unions developing which might restrict long-term retention span. Attractive, well-balanced tree.	No action required at time of survey	20+	B1
6	Maidenhair tree	13	2	2	2	2	2m W	1	200					2.40	18	SM	F	Slender, upright form. Tree of relatively low significance.	No action required at time of survey	> 40	C
7	Maidenhair tree	7	1	1	1	1	2.5m W	1	100					1.20	5	SM	F	Slender, upright form. Tree of relatively low significance.	No action required at time of survey	>40	C
8	Silver birch	12	4	3	3	4	2m S	1	350					4.20	55	EM	G	Component of linear group. Reasonable form. No defects seen of apparent structural significance.	No action required at time of survey	20+	B2
9	Downy birch	9	3	3	3	5	1m W	1	260					3.12	31	EM	F	Component of linear group. Suppressed tree with stunted form.	No action required at time of survey	20+	C

Tree / Group reference	Species	Ht. (m)	Crown Spread (m)				Crown base (m)	Stem Count	Stem Dia. (mm)					RPA Rad (m)	RPA Area (m2)	Life Stage	Phys. Condition	Condition and observations	Preliminary management recommendations	Ret. Span	Grade
			N	S	W	E			1 / mean	2	3	4	5								
10	Silver birch	15	4	4	4	4	2m W	1	470					5.64	100	EM	G	Component of linear group. Dominant tree with good form.	No action required at time of survey	20+	B2
11	Downy birch	11	2	3	3	4	2m E	1	300					3.60	41	EM	F	Component of linear group. Reasonable form. No defects seen of apparent structural significance.	No action required at time of survey	20+	B2
12	Silver birch	10	3	2	3	4	2m W	1	320					3.84	46	EM	F	Component of linear group. Reasonable form. No defects seen of apparent structural significance.	No action required at time of survey	20+	B2
13	Silver birch	14	2	6	4	6	2m W	1	450					5.40	92	EM	G	Component of linear group. Dominant tree with good form. Broken hanging branch in crown.	Remove broken hanging branch	20+	B2
14	Rowan	6	3	4	2	4	2m E	1	210					2.52	20	EM	F	Small, partially suppressed tree of relatively low significance.	No action required at time of survey	20+	C
15	Rowan	6	3	4	3	3	1m E	1	270					3.24	33	EM	F	Compact form. Tree of relatively low significance.	No action required at time of survey	20+	C
16	Silver birch	13	5	5	5	4	3m S	1	410					4.92	76	EM	F	Located in courtyard area with buildings in close proximity on three sides. Prominent tree of moderate quality and value.	No action required at time of survey	20+	B1
17	Fastigate hornbeam	6	2	2	1	2	0.5m S	1	180					2.16	15	SM	G	Component of linear group. Slight crown asymmetry from competition. Small tree of relatively low significance.	No action required at time of survey	>40	C
18	Silver birch	8	3	2	2	2	1m S	1	230					2.76	24	SM	G	Component of linear group. Tree of moderate quality and value just crossing B grade threshold.	No action required at time of survey	20+	B1
19	Maple sp	2.5	0.5	0.5	0.5	0.5	1.5m S	1	30					0.36	0	Y	F	Component of linear group. Very small tree (below size threshold for inclusion). Significant wound at base likely to limit retention span.	No action required at time of survey	10+	C

Tree / Group reference	Species	Ht. (m)	Crown Spread (m)				Crown base (m)	Stem Count	Stem Dia. (mm)					RPA Rad. (m)	RPA Area (m2)	Life Stage	Phys. Condition	Condition and observations	Preliminary management recommendations	Ret. Span	Grade
			N	S	W	E			1 / mean	2	3	4	5								
20	Himalayn birch	5	3	2	2	2	1m N	1	110					1.32	5	SM	F	Component of linear group. Small tree of relatively low significance.	No action required at time of survey	20+	C
21	Fastigate hornbeam	4	2	2	2	2	1m S	1	130					1.56	8	SM	G	Component of linear group. Small tree of relatively low significance.	No action required at time of survey	>40	C
22	Hornbeam	4	3	3	3	3	1m N	1	250					3.00	28	SM	G	Wide, spreading form with no central leading stem. Good vitality.	No action required at time of survey	>40	C
23	Italian alder	18	6	6	4	6	2m N	1	560					6.72	142	EM	G	Component of linear group. Dominant tree. Twin-stemmed from 4 metres - union could become hazardous in future.	No action required at time of survey	20+	B2
24	Whitebeam	9	5	2	4	5	1m N	1	280					3.36	35	EM	F	Component of linear group. Partially suppressed tree. No defects seen of apparent structural significance.	No action required at time of survey	20+	B2
25	Cherry	16	6	5	4	3	2m E	1	380					4.56	65	EM	G	Component of linear group. Dominant tree. No defects seen of apparent structural significance.	No action required at time of survey	> 40	B2
26	Rowan	5	2	1	2	2	1m N	1	100					1.20	5	EM	F	Component of linear group. Small, suppressed and stunted tree.	No action required at time of survey	10+	C
27	Cherry	13	2	1	3	1	2m W	1	180					2.16	15	EM	F	Component of linear group. Small, suppressed and stunted tree.	No action required at time of survey	10+	C
28	Ash	12	6	3	4	4	2m N	1	380					4.56	65	EM	F	Component of linear group. No indication of ash die-back. Moderate-sized dead wood on south side.	Remove dead wood	20+	B2
29	Italian alder	17	3	4	3	5	5m W	1	400					4.80	72	EM	F	Component of linear group. Numerous low dead branches. Major stem wound at 9 metres likely to limit retention span.	Remove dead wood	10+	C

Tree / Group reference	Species	Ht. (m)	Crown Spread (m)				Crown base (m)	Stem Count	Stem Dia. (mm)					RPA Rad. (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Condition and observations	Preliminary management recommendations	Ret. Span <10, 10+ 20+, >40	Grade U-A-B-C
			N	S	W	E			1 / mean	2	3	4	5								
			30	Cherry	12	4			2	4	4	2m N	1								
31	Ash	16	5	5	4	5	5m N	1	390					4.68	69	EM	F	Component of linear group. Numerous low dead branches. No signs of ash die-back.	No action required at time of survey	20+	B2
32	Rowan	7	3	2	3	3	1m N	1	210					2.52	20	EM	F	Component of linear group. Suppressed tree with distorted form. Major stem wound likely to limit retention span.	No action required at time of survey	10+	C
33	Pedunculate oak	15	8	2	2	2	3m N	1	330					3.96	49	EM	F	Component of linear group. Partially suppressed with crown asymmetry from competition. No defects seen of apparent structural significance.	No action required at time of survey	> 40	B2
34	Whitebeam	10	4	3	3	4	1m N	1	280					3.36	35	EM	F	Component of linear group. Suppressed tree. Leaning lower stem.	No action required at time of survey	20+	B2
35	Ash	18	5	7	7	7	6m N	1	500					6.00	113	EM	F	Component of linear group. Multi-stemmed from 2 metres. Tight union with bark inclusion developing. Currently not considered unstable, but likely to become so soon.	Remove for reasons of sound arboricultural management	<10	U
36	Common lime	11	6	6	3	6	1m N	1	480					5.76	104	EM	F	Component of linear group. Leaning lower stem corrected by upright growth from 2 metres.	No action required at time of survey	> 40	B2
37	Rowan	4	1	2	1	2	2m S	1	80					0.96	3	EM	F	Component of linear group. Small, suppressed tree.	No action required at time of survey	10+	C
38	Hornbeam	11	5	5	4	5	1m N	1	310					3.72	43	EM	G	Component of linear group. Compact form. No defects seen of apparent structural significance.	No action required at time of survey	> 40	B2

Tree / Group reference	Species	Ht. (m)	Crown Spread (m)				Crown base (m)	Stem Count	Stem Dia. (mm)					RPA Rad (m)	RPA Area (m2)	Life Stage	Phys. Condition	Condition and observations	Preliminary management recommendations	Ret. Span <10, 10+ 20+, >40	Grade U-A-B-C
			N	S	W	E			1 / mean	2	3	4	5								
39	Pedunculate oak	17	7	3	4	6	2m E	1	340					4.08	52	EM	F	Component of linear group. Slight asymmetry from competition. No defects seen of apparent structural significance.	No action required at time of survey	> 40	B2
40	Rowan	7	3	3	2	3	1m N	1	160					1.92	12	EM	F	Component of linear group. Small, suppressed tree.	No action required at time of survey	10+	C
41	Ash	17	5	5	5	5	6m N	1	440					5.28	88	EM	F	Component of linear group. Low dead branches. No signs of ash die-back.	Remove dead wood	20+	B2
42	Cherry	14	7	6	4	5	3m N	1	480					5.76	104	EM	F	Component of linear group. Dominant tree.	No action required at time of survey	20+	B2
43	Hornbeam	10	3	4	4	1	2m N	1	340					4.08	52	EM	G	Component of linear group. Suppressed tree. No defects seen of apparent structural significance.	No action required at time of survey	> 40	B2
44	Pedunculate oak	14	7	7	4	3	2m N	1	420					5.04	80	EM	F	Component of linear group. Dominant tree. No defects seen of apparent structural significance.	No action required at time of survey	> 40	B2
45	Common lime	13	4	6	4	3	2m W	1	350					4.20	55	EM	F	Component of linear group. Tight forking developing which could limit future retention span.	No action required at time of survey	10+	C
46	Rowan	5	3	3	2	4	0m N	1	200					2.40	18	EM	F	Component of linear group. Small, suppressed tree. Multiple basal suckers.	No action required at time of survey	10+	C
47	Apple	5	1	3	2	3	2m N	1	130					1.56	8	EM	F	Small tree of relatively low significance.	No action required at time of survey	10+	C
48	Ash	12	5	6	5	5	3m S	1	420					5.04	80	EM	G	Good form. No defects seen of apparent structural significance. No sign of ash die-back yet.	No action required at time of survey	20+	B1
49	Ash	10	3	4	4	4	2m W	1	220					2.64	22	EM	G	Good form. No defects seen of apparent structural significance. No sign of ash die-back yet.	No action required at time of survey	20+	B1



Tree / Group reference	Species	Ht. (m)	Crown Spread (m)				Crown base (m)	Stem Count	Stem Dia. (mm)					RPA Rad (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Condition and observations	Preliminary management recommendations	Ret. Span <10, 10+20+, >40	Grade U-A-B-C
			N	S	W	E			1 / mean	2	3	4	5								
			50	Ash	13	5			5	5	5	2m E	1								
51	Italian alder	7	4	4	4	4	2m E	1	300					3.60	41	EM	G	Slightly compact form. No defects seen of apparent structural significance.	No action required at time of survey	> 40	B1
52	Hawthorn	3	3	3	3	3	2m W	1	200					2.40	18	M	D	Entirely dead.	Remove for reasons of sound arboricultural management	<10	U
53	Fastigate hornbeam	14	4.5	4.5	4.5	4.5	2m N	1	510					6.12	118	EM	G	Prominent tree with good form and no defects seen of apparent structural significance.	No action required at time of survey	> 40	B1
54	Italian alder	12	5	5	4	5	2m S	1	490					5.88	109	EM	G	Reasonable form. No defects seen of apparent structural significance.	No action required at time of survey	> 40	B1
55	Ash	11	4	4	2	4	2m N	1	250					3.00	28	SM	F	Distorted form from asymmetry. 3 metres from adjacent house.	No action required at time of survey	10+	C
56	Weeping willow	14	7	6	8	6	3m S	1	830					9.96	311	M	G	In raised planter - roots have visibly extended beneath surrounding tarmac with significant damage in places extending to 8 metres from tree. Large prominent tree re-growing from heaving past reduction.	No action required at time of survey	20+	B1
57	Hawthorn	5	2	2	3	2	2m N	4	100	80	80	80		2.06	13	EM	P	Small scrappy tree with low vitality.	No action required at time of survey	10+	C
58	Beech	7	3	2	3	4	3m W	1	240					2.88	26	SM	F	Small, suppressed tree of relatively low significance.	No action required at time of survey	20+	C
59	Beech	9	4	5	6	4	2m W	1	410					4.92	76	SM	F	Distorted form suppressed by Tree 61 which limits prospects.	No action required at time of survey	20+	C
60	Apple	2	0	2	1	2	1m S	3	150	150	100			2.82	25	M	P	Small, stunted tree with low vitality.	No action required at time of survey	10+	C

Tree / Group reference	Species	Ht. (m)	Crown Spread (m)				Crown base (m)	Stem Count	Stem Dia. (mm)					RPA Rad. (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Condition and observations	Preliminary management recommendations	Ret. Span <10, 10+20+, >40	Grade U-A-B-C
			N	S	W	E			1 / mean	2	3	4	5								
			61	Beech	13	6			7	7	7	2m S	1								
62	Goat willow 'Kilmarnock'	1.8	2	2	1	1	0.5m N	1	200					2.40	18	M	F	Weeping form. Previously collapsed, but re-rooted. Curiosity, but tree of relatively low significance.	No action required at time of survey	10+	C
63	Cherry	5	3	4	4	3	2m S	1	420					5.04	80	EM	G	Scraggy tree with low vitality.	No action required at time of survey	10+	C
64	Silver birch	14	5	4	6	5	2m S	1	420					5.04	80	EM	G	Good form. No defects seen of apparent structural significance.	No action required at time of survey	20+	B1
65	Bird cherry	9	5	5	5	5	2m N	1	290					3.48	38	EM	G	Reasonable form. No defects seen of apparent structural significance.	No action required at time of survey	> 40	B1
66	Rowan 'Kashmiriani'	2.5	0.5	1	1	0.5	1m S	2	100	80				1.54	7	SM	P	Small, scraggy tree with poor form.	No action required at time of survey	10+	C
67	Snowy mespilus	4	1	2	1	2	1.5m E	1	90					1.08	4	SM	F	Small tree of relatively low significance.	No action required at time of survey	20+	C
68	Beech	12	7	6	5	8	2m S	1	570					6.84	147	EM	G	Low height, spreading crown. No defects seen of apparent structural significance. Good future prospects.	No action required at time of survey	>40	A1
69	Flowering cherry	6	5	4	4	5	2m N	1	300					3.60	41	EM	F	Suppressed tree with relatively poor form..	No action required at time of survey	10+	C
70	Ornamental Apple	4	4	4	1	5	2m N	1	230					2.76	24	M	F	Suppressed tree with relatively poor form..	No action required at time of survey	20+	C
71	Unidentified	5	3	3	3	2	2m W	1	180					2.16	15	EM	P	Small, scraggy tree of relatively low significance. Numerous low dead branches.	No action required at time of survey	10+	C
72	Hawthorn	7	5	5	5	5	2m S	1	320					3.84	46	M	G	Growing as standard tree. Good form. No defects seen of apparent structural significance.	No action required at time of survey	> 40	B1

Tree / Group reference	Species	Ht. (m)	Crown Spread (m)				Crown base (m)	Stem Count	Stem Dia. (mm)					RPA Rad. (m)	RPA Area (m2)	Life Stage	Phys. Condition	Condition and observations	Preliminary management recommendations	Ret. Span <10, 10+20+, >40	Grade U-A-B-C
			N	S	W	E			1 / mean	2	3	4	5								
73	Apple	8	4	3	3	3	2m E	1	320					3.84	46	M	G	Upright habit. Good form, prolific crop. Tree of moderate quality and value.	No action required at time of survey	> 40	B1
74	Flowering cherry	7	4	3	3	4	2m S	1	250					3.00	28	M	F	Slightly low vitality. Tree of relatively low significance.	No action required at time of survey	10+	C
75	Flowering cherry	4	2	2	2	3	2m E	1	120					1.44	7	EM	P	Small, suppressed tree with low vitality.	No action required at time of survey	10+	C
76	Norway maple	14	5	3	4	4	2m N	1	490					5.88	109	EM	G	Growing as companion with Tree 77. No defects seen of apparent structural significance.	No action required at time of survey	> 40	B1
77	Norway maple	11	3	4	4	5	2m E	1	380					4.56	65	EM	G	Growing as companion with Tree 76. No defects seen of apparent structural significance.	No action required at time of survey	> 40	B1
78	Weeping willow	15	8	8	7	6	3m W	1	720					8.64	234	M	G	Reasonable form. Wide, spreading crown. Moderate-sized dead wood throughout.	Remove dead wood	20+	B1
G1	Leyland cypress, ash, elder	4	1.5	1.5	1.5	1.5	0m N	1	100					1.20	5	EM	F	Scrappy linear group growing as hedge with central gap.	Reduce height by 0.5 - 1 metre and maintain as hedge	20+	C
G2	Cherry-plum, cherry, elder	3	2	2	2	2	0m W	7	100					3.18	32	EM	F	Four trees either side of boundary. Scrappy form. Multi-stemmed from ground level. Trees of relatively low significance.	No action required at time of survey	20+	C
G3	Hawthorn, elm, leyland cypress, privet	3 to 6	3	3	3	3	2m W	1	120					1.44	7	SM	F	Scrappy group on boundary with vegetable area. Elm currently healthy, but likely to die in next few years.	No action required at time of survey	20+	C
G4	Beech	1.6	1	1	1	1	0m N	1	80					0.96	3	SM	F	Clipped hedge forming three sides of a square. Group of relatively low significance.	No action required at time of survey	>40	C
G5	Cherry-plum, pear	7	3	3	3	3	0m W	1	150					1.80	10	EM	F	Small scrappy tree group of relatively low significance.	No action required at time of survey	20+	C

Tree / Group reference	Species	Ht. (m)	Crown Spread (m)				Crown base (m)	Stem Count	Stem Dia. (mm)					RPA Rad. (m)	RPA Area (m2)	Life Stage	Phys. Condition	Condition and observations	Preliminary management recommendations	Ret. Span	Grade
			N	S	W	E			1 / mean	2	3	4	5								
G6	Hawthorn	7	3	3	3	3	2m E	1	300					3.60	41	M	F	Located off-site. Short linear group. Dense ivy.	No action required at time of survey	20+	B2
G7	Elder	3	1	3	1	3	1m S	2	120	120				2.04	13	EM	P	Multi-stemmed from ground level. Suppressed group of low quality and value. Short retention span.	Remove for reasons of sound arboricultural management	<10	U
G8	Hawthorn, privet	3 to 5	2	2	2	2	1m S	1	250					3.00	28	M	F	Small scrappy group of relatively low significance.	No action required at time of survey	10+	C
G9	Leyland cypress, hawthorn, ornamental apple	3	1	1	1	1	0m S	1	300					3.60	41	M	F	Managed as hedge with clipped side and top. Useful screening function.	No action required at time of survey	20+	B2
G10	Pear, apple, cherry-plum	6	3	3	3	3	0m W	1	200					2.40	18	SM	F	Small orchard area comprising generally small, scrappy trees.	No action required at time of survey	> 40	C
G11	Elder, hawthorn, privet	4 to 9	3	3	3	3	0m S	1	250					3.00	28	EM	F	Scrappy boundary vegetation on both sides of boundary fence. Group includes one near-dead hawthorn on school side recommended for removal.	Remove ivy-covered, near-dead hawthorn as indicated on plans	10+	C
H1	Elder, field maple, norway maple, hawthorn	1.8	0.5	0.5	0.5	0.5	0m E	1	150					1.80	10	M	G	Located off-site. Clipped hedge on boundary.	No action required at time of survey	> 40	B2
H2	Hawthorn	1.6	0.5	0.5	0.5	0.5	0m S	1	80					0.96	3	EM	G	Short clipped hedge section of relatively low significance.	No action required at time of survey	20+	C
H3	Pyracantha	1.8	0.5	0.5	0.5	0.5	0m E	1	80					0.96	3	M	F	Clipped hedge adjacent to entrance boundary.	No action required at time of survey	20+	C
H4	Pyracantha	1.8	0.5	0.5	0.5	0.5	0m E	1	80					0.96	3	M	F	Clipped hedge adjacent to entrance boundary.	No action required at time of survey	20+	C

## APPENDIX 2

### ARBORICULTURAL METHOD STATEMENT FOR TREE PROTECTION DURING DEVELOPMENT

#### SITE

Hempland Primary School, Whitby Avenue, York, YO31 1ET

29<sup>th</sup> June 2023

## 1 INTRODUCTION

- 1.1 **Brief:** Patrick Stileman Ltd is instructed by the client; ISG, to prepare an Arboricultural Method Statement (AMS) for the protection of trees during development at Hempland Primary School.
- 1.2 This Method Statement is to be made available to all operatives on site during the development process so that they understand the scope and importance of the measures set out for tree protection.
- 1.3 This Method Statement is to be read in conjunction with the Tree Protection Plan (TPP) dated 29<sup>th</sup> June 2023, drawing number DS05102101.04, included on Page 35 of this report.
- 1.4 This Method Statement has been written taking into account requirements set out in British Standard 5837:2012 '*Trees in relation to design, demolition and construction – Recommendations*' (hereafter referred to as BS5837).

## 2 TIMING OF OPERATIONS

- 2.1 The timing of operations is essential if trees are to be effectively protected. Figure 1 in BS 5837 provides guidance for the sequential order of events on development sites. At this site, operations are to occur in the following sequence:
1. Tree work contractors to be shown trees for removal and pruning, and the appropriate work subsequently undertaken.
  2. **Hold pre-commencement site meeting with project arboricultural consultant and site contractors prior to the commencement of any development work commencing on site. The purpose of this meeting is to ensure that the contractors are fully briefed and understand the requirements of this method statement.**
  3. Undertake preliminary enabling works to facilitate erection of the Tree Protection Fencing (TPF), to include removal of low fences across the site, and removal of the overhead canopy adjacent to Tree 76.
  4. Erect Tree Protection Fencing (TPF) in the locations shown on the TPP by the solid red lines. See Section 3.

5. Install temporary ground protection over areas shown on the TPP by dark blue and pale blue hatching. See Section 4.
6. Undertake demolition and construction.
7. Construct parking spaces in locations shown on the TPP by blue hatching using no-dig techniques on a three-dimensional cellular confinement system. See Section 5.
8. Install services and drainage –see Section 6.
9. Undertake landscaping work –see Section 7.

### 3 TREE PROTECTION FENCING (TPF)

- 3.1 **Before** the commencement of any work on-site (other than tree work and preliminary enabling work to facilitate the TPF), TPF is to be erected to protect the trees being retained in the positions shown on the TPP by the solid red lines.
  
- 3.2 Once erected, the protective fencing is to be regarded as sacrosanct. There is to be no access by pedestrians into the area protected by the TPF and no works carried out whatsoever in this zone including: the storage of materials, any form of excavation, or changes in levels. The protective fencing is to be maintained in good order so that it is fit for purpose throughout the construction process. The fencing will not be altered in any way, or prematurely removed without prior agreement from the project arboriculturalist.
  
- 3.3 **Specification of Tree Protection Fencing.**
  - 3.3.1 TPF is to be constructed of 2.2 metre height weldmesh (Herras type) panels, as set out on the insert on the TPP. The panels are to be fixed to a scaffold framework either with wire ties or with scaffold clamps. The scaffolding shall comprise a vertical and horizontal framework, well braced to resist impacts, with vertical tubes spaced at a maximum of 3 metres or alternatively at panel width, and driven into the ground by 0.6 metres. It is not sufficient to place the panels in rubber or concrete 'boots' alone.

*Photograph showing example of TPF*



#### **4 TEMPORARY GROUND PROTECTION**

- 4.1 In the locations shown on the TPP by the dark blue hatching and pale blue hatching, temporary ground protection shall be installed prior to work commencing. This shall be retained in situ for the duration of work within the relevant areas.
  
- 4.2 The ground protection shall comprise ply boarding fixed together over a 10cm depth woodchip layer.
  
- 4.3 In the locations shown on the dark blue hatching, the temporary ground protection shall be removed and concurrently replaced with new hard surfacing constructed using no-dig techniques (see Section 5).



## 5 NO-DIG HARD SURFACING

5.1 Where the proposed new parking area extends over the RPA of Trees 76, 77 and G11, it shall be constructed over the existing surface using no-dig techniques with a three-dimensional cellular confinement system.

5.2 The construction shall comprise:

- A geotextile membrane (such as *Terram*) laid over the surface
- 3-dimensional cellular confinement (such as Geosynthetics *cellweb*) filled with clean, angular 20-40mm stone, containing no fines
- Edge constraints above ground to comprise (for example) timber sleepers or pinned kerb stones in concrete haunching
- Porous wearing course

5.3 No-dig means that there shall be no excavation during the driveway construction in the relevant areas.

## 6 SERVICES AND DRAINAGE

6.1 Details of incoming services and foul drainage have not been worked up at this stage. However, there are no arboricultural restrictions in connecting these to the road beneath the driveway, and through the site.

6.2 There shall be no excavation for new trenches on the raised ground between the proposed building and the eastern boundary.

6.3 **There shall strictly be no excavation for service installation within the RPA of retained trees unless approved and supervised by the project arboriculturist.** Services shall be installed in accordance with guidelines set out in National Joint Utilities Group (NJUG) Volume 4 (2007). This can be downloaded at no charge from the following website: <http://www.njug.org.uk/publication/51>

## 7 LANDSCAPING WITHIN THE RPA OF RETAINED TREES

7.1 Landscaping shall be undertaken after all other development work has been completed. **Prior to landscaping commencing the project arboriculturist shall meet the landscape contractors on site to discuss what is proposed and precautions required around trees.** TPF shall be removed prior to landscape work commencing to enable access across the site.

7.2 The following principles shall be followed where work is proposed within the RPA of retained trees:

- No machinery shall pass over the ground unless protected by ground protection
- If excavation is required this shall be localised and undertaken with hand tools only ensuring that roots are preserved
- There shall be no changes in levels unless agreed by the project arboriculturist
- Where the removal of existing hard surfacing is required within the RPA of Trees 53, 54, 64, and 69, excavation shall proceed carefully with a small excavator and banksman, ensuring that **there is no excavation below the sub-base of the existing surface.** The excavator shall be positioned on the hard surface at all times working back, and new soil shall replace the old surface on the same day as its removal.

## 8 GENERAL PRECAUTIONS

8.1 **Storage of materials:** No materials or spoil are to be stored over the RPA of trees unless the ground is protected either with the existing hard surfacing, or temporary ground protection.

8.2 **Levels:** There is to be no alteration of ground levels within the RPA of trees unless previously specified.

8.3 **Excavation:** There shall be no excavation within the RPA of trees unless previously specified.

- 8.4 **Above ground damage to trees:** Care must be taken in planning the location and operation of machinery to avoid above ground damage to trees. BS5837 (2012) Section 6.2.4.1 states ‘*Planning of site operations should take sufficient account of wide loads, tall loads and plant with booms, jibs and counterweights (including drilling rigs) in order that they can operate without coming into contact with retained trees. Such contact can result in serious damage to trees and might make their safe retention impossible. Consequently, any transit or traverse of plant in proximity to trees should be conducted under the supervision of a banksman, to ensure that adequate clearance of trees is maintained at all times. Access facilitation pruning should be undertaken where necessary to maintain this clearance.*

## 9 ARBORICULTURAL SUPERVISION

- 9.1 A project arboriculturist shall be appointed to oversee work and to ensure that contractors fully understand the requirements for the protection of retained trees, as set out in this document.
- 9.2 All work shall be undertaken in accordance with details shown on the Tree Protection Plan, included in this document.
- 9.3 **Pre-commencement site meeting.** Prior to any work commencing on the site (other than tree work) there shall be a pre-commencement site meeting between the project arboriculturist and the site contractors.

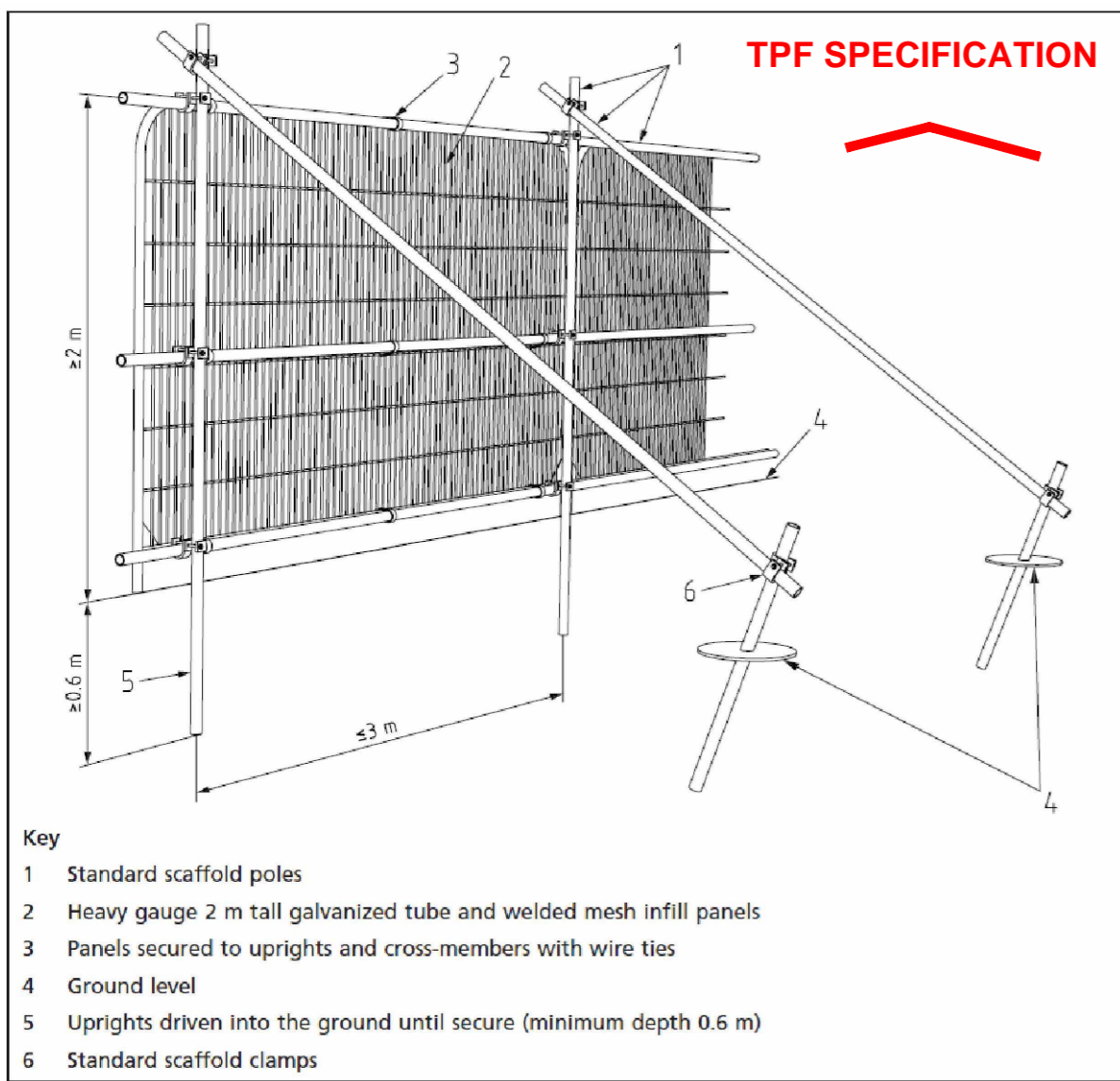
During this meeting the following shall be established and discussed:

- A person (who shall attend the pre-commencement meeting) shall take personal responsibility to ensure that all workers on the site understand the requirements for tree protection as set out on the Tree Protection Plan and Arboricultural Method Statement. This person is likely to be the site foreman.
- The position and specification of the Tree Protection Fencing, and ground protection.
- The prohibitions associated with land protected by TPF and ground protection, general principles for tree protection during work, and the requirement to maintain communication with the project arboriculturist.

- 9.4 **Supervision schedule.** Following the initial pre-commencement meeting the project arboriculturist shall attend the site at the following times:
- Following installation of the Tree Protection Fencing and ground protection.
  - Immediately prior to the installation of hard surfacing using no-dig techniques (in the locations shown by dark blue hatching on the TPP).
  - Immediately prior to the commencement of landscaping work.
  - As required during the construction process, and no less frequently than once every two months.
- 9.5 **Procedure for dealing with variations / incidents.** In the event that there are breaches in the tree protection procedure these shall be reported back to the project arboriculturist by the appointed person immediately on becoming apparent.
- 9.6 **Reporting.** Following each site visit a site monitoring report shall be prepared, describing what was seen and discussed with regards to tree protection measures. The site monitoring report shall include any breaches and mitigation specified.



**PATRICK STILEMAN** BSc(Hons), MICFor, MRICS Dip.Arb(RFS), RC.Arbor.A  
**Chartered Arboriculturist. Arboricultural Association Registered Consultant**



**NO-DIG HARD SURFACING PRELIMINARY SPECIFICATION**

In the positions shown on this plan by dark blue hatching where new hard surfacing is proposed over the RPA of retained trees it shall be constructed above ground level using a no-dig three-dimensional cellular confinement system. Construction shall comprise:

- A geotextile membrane (eg *Terram*) laid on the ground
- 3 dimensional cellular confinement such as Geosynthetics *cellweb* filled with clean, angular 20-40mm stone containing no fines
- Edge constraints above ground to comprise, for example timber sleepers or pinned kerb-stones in concrete haunching
- Porous wearing course

The ground protection must provide adequate support for access while minimising ground compaction to an acceptable level. There shall be no vehicular access permitted over this area until the ground has been protected

**No-dig means that, with the exception of turf removal, there shall be no excavation during its construction**

**DETAILED SITE-SPECIFIC CONSTRUCTION DESIGN SHALL BE PREPARED BY AN ENGINEER OR PRODUCT MANUFACTURER PRIOR TO INSTALLATION**

**IN THESE LOCATIONS, TEMPORARY GROUND PROTECTION SHALL BE INSTALLED INITIALLY TO PROVIDE PROTECTION UNTIL THE NO-DIG SURFACING IS LAID**

**TEMPORARY GROUND PROTECTION SPECIFICATION**

Temporary ground protection shall be located in the positions shown on this plan by pale blue hatching (and dark blue hatching initially), and installed prior to the commencement of groundworks. Temporary ground protection shall comprise:

- A geotextile membrane (eg *Terram*) laid on the ground
- A minimum depth of 100mm compressible fill such as woodchip laid on the membrane
- Ply boarding for pedestrian access only, or proprietary suitably rated ground protection boards if vehicular access is intended, over the surface

The ground protection shall be maintained in good order, and the compressible fill topped up if necessary.

Ground protection shall be installed prior to the commencement of work and retained for the duration of the construction process

**TREE PROTECTION PLAN**

**PROJECT**  
Hemland Primary School, Whitby Avenue, York, YO31 1ET

**CLIENT**  
ISG

**JOB REF**  
DS05102101

**DRAWING NO**  
DS05102101.04

**DATE**  
29/06/2023

Patrick Stileman Ltd  
9 Chestnut Drive, Berkhamsted, Herts,  
HP4 2JL 01442 866112



This drawing must be viewed in colour

**NOTE:**

The construction exclusion zone (CEZ) is the area protected by tree protection fencing, and temporary ground protection. Within the CEZ the following exclusions shall apply:

- No excavation
- No storage of materials or equipment over unprotected ground
- No changes in levels
- No access within area protected by tree protection fencing

The fencing and ground protection shall be maintained in a condition fit for purpose throughout the construction process

**NOTE:**

No work shall commence on site until an arboricultural pre-commencement meeting has taken place

**KEY**

- Tree / tree group for retention
- Root Protection Area (RPA) for retained tree / tree group
- Existing structure or landscape feature for removal
- Position of Tree Protection Fencing (TPF) to be erected prior to the commencement of any work on site
- Temporary ground protection
- No-dig hard surfacing construction

**BS 5837 category key**

- Category U tree
- Category A tree
- Category B tree
- Category C tree

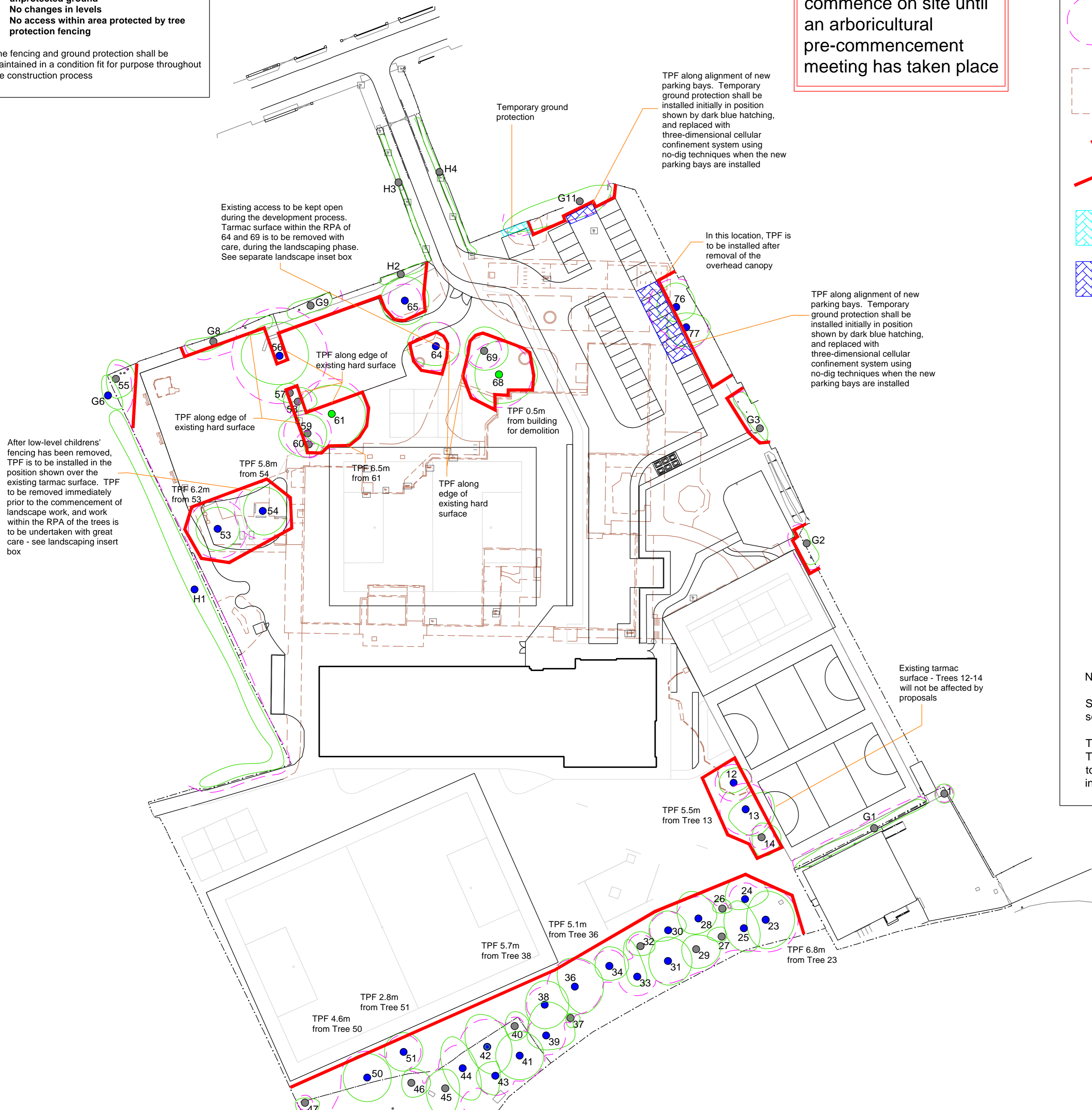
**SCALE**  
1:500 @ A1

0 10m 20m 30m 40m

**NOTE:**

Stem diameters are not drawn to scale. See schedule for dimensions

Tree positions are based on the topographic survey. Trees marked with a \* were not included in the topographic survey and their locations shown are indicative only.



**LANDSCAPING WITHIN RPAs**

After construction has been completed the tree protection fencing and ground protection shall be removed to allow landscaping to take place.

Prior to landscaping commencing the project arboriculturalist shall meet the landscape contractors to discuss what is proposed and precautions required.

The following principles shall be followed within the RPA of retained trees:

- No machinery shall pass over the ground unless protected by temporary ground protection, or pre-existing tarmac
- If excavation is required, this shall be localised and undertaken carefully by hand tools only ensuring that roots are preserved
- No changes in levels, unless agreed by the project arboriculturalist
- Where the removal of existing hard surfacing is required within the RPA of trees 53, 54, 64 and 69, excavation shall proceed carefully with a small excavator and banksman, ensuring that there is no excavation below the sub-base of the existing surface. The excavator shall be positioned on the hard surface at all times working back, and new soil shall replace the old surface on the same day as its removal.

**ARBORICULTURAL SUPERVISION**

A qualified arboriculturalist shall provide on-going site supervision during work at this site.

The critical times when site supervision is required are:

- Prior to construction work commencing, hold a pre-commencement site meeting. This meeting shall be attended by site managers and contractors to discuss what is required to ensure that retained trees are protected throughout the construction process. During this meeting a site supervisor will be appointed to take responsibility for tree protection and to report any breaches.
- Following installation of TPF (solid red lines), and ground protection (pale blue & dark blue hatching)
- Immediately prior to the installation of hard surfacing using three-dimensional cellular confinement (dark blue hatching)
- Immediately prior to the commencement of landscaping works to meet the landscape contractors and discuss precautions required around trees (see inset box)
- During the development process no less frequently than once every two months

# APPENDIX 3

## Qualifications and experience of Patrick Stileman *BSc(Hons), MICFor, Dip.Arb(RFS), RC.Arbor.A*

I am Patrick Stileman, Director of Patrick Stileman Ltd Arboricultural Consultancy.

My qualifications in arboriculture are as follows:

National Certificate in Arboriculture *Nch(arb)*

The Arboricultural Associations Technicians Certificate *Tech.Cert(Arbor.A)*

The Royal Forestry Society's Professional Diploma in Arboriculture *Dip.Arb(RFS)*

In addition to the qualifications listed above which are specific to the field of arboriculture, I also hold an Honours degree in Environmental Science *BSc(Hons)*.

I hold chartered status, being a Chartered Arboriculturist and professional member of the Institute of Chartered Foresters *MICFor*. I am a professional member of the Royal Institution of Chartered Surveyors *MRICS*.

I am a Registered Consultant with the Arboricultural Association, a scheme for which I am also an assessor.

I am a trained expert witness, and hold the Cardiff University Bond Solon Expert Witness Certificate.

I am a member of the Royal Forestry Society.

I have been working in the arboricultural industry since 1994 and as a consultant since 2001. I am frequently instructed by professionals to provide advice and assistance relating to trees within the planning process; I have a wide client base in this field including developers, architects, planning consultants, and Local Planning Authorities. I am experienced with providing arboricultural input in planning appeals as written representation, informal hearing and public local inquiry.

I am regularly instructed to assist with tree risk assessments, and to provide guidance relating to tree safety. Past clients for this work include local authorities, schools, residents' associations, large organisations including zoos and estates, and private individuals.

I provide advice in relation to alleged tree-related damage to buildings. Clients for this work are typically domestic homeowners, but have also included local authorities. Other work that I undertake involves the provision of tree planting schemes; and advice relating to the general management of trees.

I have worked as an arboricultural expert witness for public and private sector clients in both civil and criminal cases.

Prior to running my current consulting practice, I was a partner in an arboricultural contracting business in which I was involved with the practical aspect of organising, and execution of contract tree work.