Ronnie Phizacklea Horseshoe Cottage Holmrook CUMBRIA CA19 1TD 25/10/2022

TO: Mr Graeme Morgan

SUBJECT: – Tree Survey to support outline planning permission regarding proposed residential development on land adjacent to School House, St. Bees, OS Grid ref NX969123.

Introduction

The survey was commissioned by Mr Graeme Morgan.

Mr Morgan has informed that the site does not fall within a conservation area and my own research supports this.

The survey was carried out on 16th October 2022 in line with the guidance contained within BS5837:2012 Trees in relation to Construction.

An inspection conducted as a Visual Tree Assessment from ground level was undertaken regarding the trees growing within the boundary of the proposed development site.

The two trees that may be retained (the Sitka Spruce Plot 1 and the Norway Maple Plot 3), located within the site boundary were assessed regarding species identity, estimated height, age class, crown spread and trunk diameter at 1.5m above ground level.

An assessment was also made of general tree health and structural integrity. These trees were then categorised using the BS5837 tree quality assessment chart and the appropriate root protection area was calculated.

The group of Ash (Fraxinus excelsior) and White Poplar (Populus alba) located in the middle of the site overlapping plots 2 and 3 identified as G1 on the site plan and larger individual specimens of White Poplar located in Plot 3 identified as T2 etc., will not be appropriate for retention if development takes place as they are situated either on the footprint of the proposed developments or prohibitively close. Please see further information provided within the sections dealing with each plot regarding further problems with retention of these species.

Trees immediately adjacent to the development site but not within the site boundaries or the client's ownership were assessed regarding stem diameter at 1.5m above ground level and the root protection areas calculated in line with BS5837 guidance but no detailed assessment was made regarding the structural integrity or tree health. It is assumed that the neighbouring landowners are aware of their responsibilities and liabilities regarding trees within their ownership, located in areas subject to high levels of human activity and the requirement to monitor and assess tree health and structural integrity at least every two years and after periods of high winds. It is advised that the neighbouring landowner seeks the advice of an arborist experienced in the field of soil hydrology.

Plot 1

Hedge identified as H1 on the site plan.

A hedge border of garden shrubs has been planted on the boundary with the highway this includes such species as Buddleia, Euonymus, Elaeagnus, Cornus, Berberis, Griselinia, plus some specimens of Goat Willow (Salix caprea). The hedge averages 3 metres in height and 3.5 metres in width, the prospective owner of Plot 1 has expressed the intention to retain this hedge. Also present in this group of planting are two specimens of Himalayan Birch probably the species Betula jacquemontii, these specimens have hardly reached tree stature and could be relocated if needed.

T1 Sitka spruce (Picea sitchensis)

Age Class Mature

Height approximately 18 metres.

Diameter @ 1.5m Above Ground Level 560 mm

Root protection radius 6.90 metres.

Root protection area 150m2.

Category C

General comments.

There were no visible signs of impaired structural integrity or root displacement, and general tree health was classed as fair.

Photo T1, H1



Plot 2

Hedge identified as H2 on the site plan.

The border of shrubs and the two small specimens of a Silver and a Himalayan Birch present on the Northwest boundary of this plot is a continuation of the border in Plot 1. The prospective owners of Plot 2 have indicated that they would want to remove this border to allow a view to the outside of their property, the specimens of Birch are small enough to translocate to an alternative location elsewhere on site if appropriate.

Plot 2 has a group of trees which overlaps both Plots 2 and 3 located in the central area of the site identified as G1 on the site plan. The tree species located in this group within Plot 2 are Common Ash 12 specimens and White Poplar 14 specimens. There is evidence of very early signs of infection of Ash Dieback affecting some of the Ash in this group, this disease is caused by the pathogen Hymenoscyphus fraxineus which the Forestry Commission Tree Pathology research officers advise kills most infected specimens within 10 years of the initial infection.

The White Poplar within this group are showing signs of crown dieback and poor structural integrity. White Poplars are not native, relatively short lived as trees go, (round about 50-60 years, it is estimated that the specimens in this group are probably 30-40 years old) and can produce large amounts of suckers which are very invasive and can create problems with drainage, foundations and quite prone to trespass onto neighbouring land leading to neighbourly disputes. All the Ash and White Poplar trees within Plot 2 have been categorised as U (trees to be removed).

Photo showing White Poplar suckers on site



Photo showing G1



Plot 3

This plot contains most of the large mature trees on site these are mostly White Poplar with a single specimen of Norway Maple identified as T7 on the site plan. The group of trees identified as G1 on the site plan overlaps into Plot 3 and consists of 6 White Poplar and 3 Common Ash in Plot 3. A privet hedge marks the Southern boundary of this plot approximately 1 metre high, 0.5 metre wide identified as H3 on the site plan.

As already stated, the retention of the Ash and the White Poplar is problematic therefore any specimens of these two species occurring in Plot 3 have been categorised as U (trees to be removed). It should also be noted that the root plates and stumps should be removed once felling has taken place.

The large mature specimens of White Poplar occurring in Plot 3 are identified on the site plan as T2, T3, T4, T5, T6, T8, T9. The specimen T6 is situated immediately adjacent to the Western boundary wall of the site which is also a retaining wall, and it was noted that there appears to be a pocket of decay at the base of this tree on the West side please see photo below.

Photo's T6,



T6 decay pocket



T2-T4



T7 Norway Maple (Acer platanoides).

Age class Mature

Height Approximately 14 metres

Crown Spread North approximately 6 metres, South 7 metres, East 10 metres, West 5 metres.

Diameter @ 1.5m Above Ground Level (taken below the point of stem swelling) 760mm.

Root Protection Radius 9.30 metres.

Root Protection Area 272m2

This specimen has been categorised as C.

General Comments

This tree is located immediately adjacent to the Western boundary wall which previously stated is a retaining wall. The tree has produced the first main branches at approximately 1.5 metres above ground level some of which extend out into the site and could well interfere with the access to the plot. General health and structural integrity were assessed and were classed as Fair. It was evident that there is some aerial deadwood contained within the crown, of such dimensions that its presence represents a hazard and should be dealt with before any work takes place within the vicinity. It should also be noted that belonging to the Acer family this specimen may not respond well to any major pruning of the main branches taking into consideration the fact that large pruning wounds on Acers often develop into seats for the entry of pathogens and onset of decay.

The Root Protection Area of T7 as shown on the site plan extends well into the area of Plot 3 that houses the footprint of the proposed development, the root system of this tree will most probably have developed asymmetrically due to its proximity to the boundary wall where ground levels alter suddenly and may well extend even further into Plot 3 than shown. This could prohibit the retention of this specimen if development takes place with mitigating replacement planting of new specimens taking place in an appropriate location.

Photo T7



Trees outside of the Site Boundary and under Third Party Ownership that could be affected by development.

There are 6 White Poplar, 5 Ash, 2 Sycamore (Acer psuedoplatanus), 2 Hawthorn (Crataegus monogyna), 1 Horse Chestnut (Aesculus hippocastanum) in this section. As stated in the introduction these specimens were measured at 1.5m Above Ground Level (AGL) to indicate the stem diameter at this point to allow the Root Protection Radius and Root Protection Area to be calculated, they were not assessed regarding general health or structural integrity.

Trees T10 to T25

Tree Identity	Species	Stem diameter	Root Protection	Root Protection
		@ 1.5 m	radius	area
T10	Ash	260mm	3.30m	34m ²
T11	Horse Chestnut	440mm	5.40m	92m ²
T12	Ash	Trunk 1- 470mm	10.50m	346m ²
		Trunk 2- 730mm		
T13	Sycamore	170mm	2.10m	14m ²
T14	Hawthorn	Trunk 1- 130mm	2.40m	18m ²
		Trunk 2- 120mm		
T15	Ash	Trunk 1- 250mm	9.60m	290m ²
		Trunk 2- 190mm		
		Trunk 3- 400mm		
		Trunk 4 - 414mm		
		Trunk 5 - 440mm		
T16	Hawthorn	210mm	2.70m	23m ²
T17	Ash	370mm	4.50m	64m ²
T18	White Poplar	230mm	3.00m	28m ²
T19	White Poplar	270mm	3.30m	34m ²
T20	White Poplar	390mm	4.80m	72m ²
T21	White Poplar	420mm	5.10m	81m ²
T22	White Poplar	240mm	3.00m	28m ²
T23	White Poplar	210mm	2.70m	23m ²
T24	Ash	Trunk 1,	3.60m	41m ²
		estimated –		
		210mm		
		Trunk 2 – 190mm		
T25	Sycamore	410mm	5.10m	81m ²
-				

General Comments.

Trees T10 - T17 are located immediately below the Southeastern boundary of Plots 2 and 3 situated on a steep bank sloping Northwest to Southeast.

Trees T18-T24 are located immediately adjacent to the retaining wall which acts as the Southwestern boundary of the site. T18-T23 are all White Poplars which could be the result of suckers produced by the larger mature White Poplars T2-T6 situated in Plot 3 and as such may have a linked root system. This means that any use of herbicide to kill the root systems of T2-T6 may translocate to T18-T23, it is advised that the root systems of T2-T6 are dug out rather than using herbicide.

Photo T18,T19,T20



Photo T21,T22,T23



T25 is situated adjacent to the Northeastern boundary wall of the site at the Northern extremity of the wall.



Ronnie Phizacklea

25/10/2022