Tree Survey Report

Coláiste Chilliain, Clondalkin, Dublin 22

Project No.	Project name	Date	Revision
TCOL001	Coláiste Chilliain Primary School	14/04/16	-

Report Prepared by

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CMK
Horticulture & Arboriculture

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1. Client brief & Methodology

CMK Horticulture + Arboriculture were commissioned by the Department of Education and Skills with the field work undertaken on the 6th of April 2016.
The survey methodology and supporting drawings and documentation follow the recommendations contained within BS 5837 (2012). The analysis of the trees was undertaken using the VTA methodology as developed by Mattheck and Breloer (1994).

2. General description of trees

The site is located off Old Nangor Road road in Clondalkin, Dublin 22. A total of 147 trees were identified on the site and surveyed for this report with the categorisation of the trees identified contained within table 1.
The trees on the site are contemporary with the school therefore there are no trees of great age or maturity present. The most prominent species is poplar which has been planted as screening both on boundaries and internally as a linear planting. The remaining trees are a mixture of mainly ornamental species such as cherry which for the most part were probably planted when the school was first developed and self-seeded poplar and willow on a mound near the northern boundary. There are boundary hedges of beech and Leyland cypress which for the most part have been well maintained though a section of the latter on the northern boundary has become very large and has developed into a number of individual trees.

Category	Number
A	0
B	111
C	19
U	17

Table 1. Tree Categories

In terms of tree health the condition of the planted trees is good however there are some exceptions amongst the poplar and these should be removed due to their poor condition. Limited management inputs has led to some of the ornamental trees developing basal suckers which undermine their vgour and visual qualities.
A bacterial canker is prevelant amongst the sef-seeded poplar and is leading to extensive decay development in those trees affected. Although this infection appears to be only present in a small numerof the original poplar planting it is likely that the infection will spread leading to the decline of these trees also.

3. Limitations of Survey

This survey should be regarded as a preliminary assessment of the trees and deals with the current condition as identified during this survey only.
Every attempt was made to identify hazardous trees in this report however this survey was carried out from the ground and therefore cannot be held to have identified elements of decay which may be hidden out of sight within the crown or beneath ivy or other obstructions. To counter this limitation in the survey process it is vital that during tree works any additional defects found by the climbing arborist are communicated to the consulting arborist to allow appropriate action to be taken.
The details within this survey are based on the condition of the trees during the survey period only. The findings in this survey cannot be held to be valid after any site disturbance, man-made or natural, which may have an adverse effect on any trees present.

Survey carried out by: Ciaran Keating (BSc. Pl.Sc./Pl.Ecol., H.N.D. Hort., A.A. Tech Cert.)

4. Relevant legislation

There are no Tree Protection Orders (TPOs) on any of the trees on this site however under Section 37 of the Forestry Act, 1946, it is illegal to uproot any tree over ten years old or to cut down any tree of any age (including trees which form part of a hedgerow), unless a Felling Notice has been lodged at the Garda Station nearest to the trees at least 21 days before felling commences.
The requirement for a felling licence for the uprooting or cutting down of trees does not apply where:

- The tree in question is a hazel, apple, plum, damson, pear, or cherry tree grown for the value of its fruit or any ozier;
- The tree in question is less than 100 feet from a dwelling other than a wall or temporary structure;
- The tree in question is standing in a County or other Borough or an urban district (that is, within the boundaries of a town council, or city council area).
- The tree is considered dangerous and hazardous.

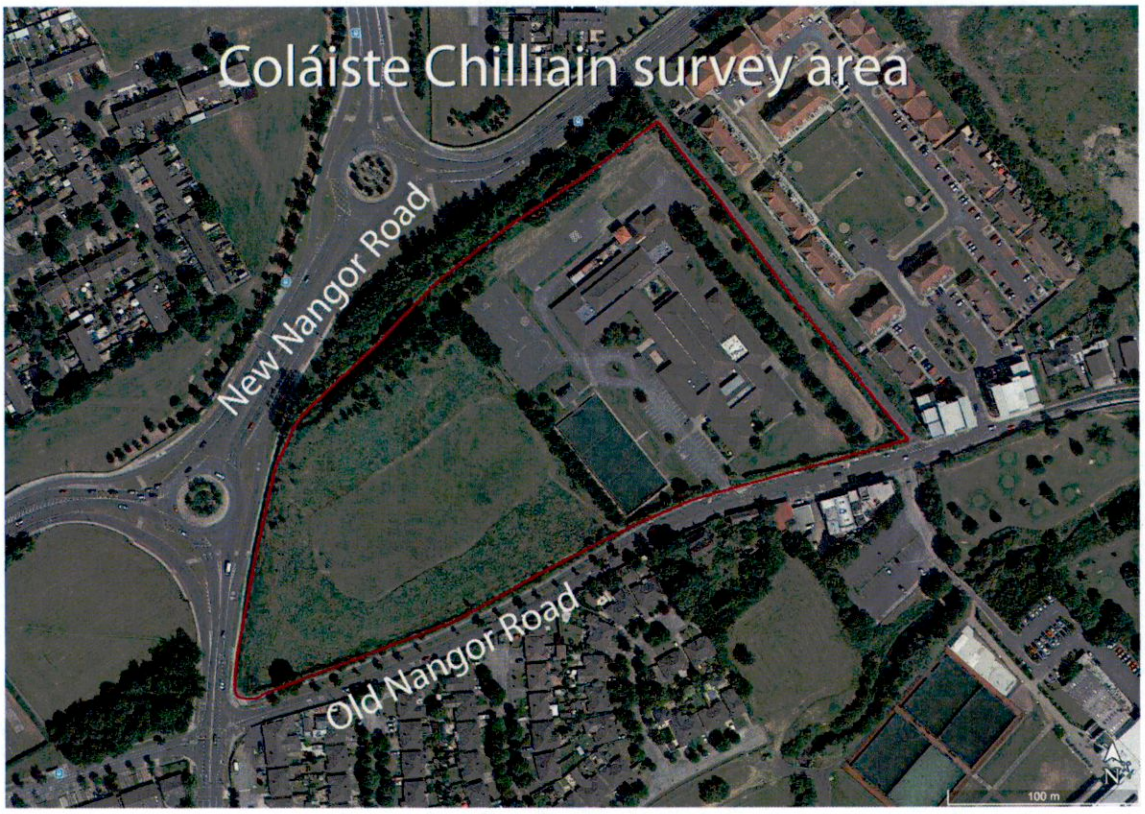
Other exceptions apply in the case of local authority road construction, road safety and electricity supply operations.

The Act is administered by the Forest Service (Department of Agriculture, Fisheries and Food). The Felling Section of the Forest Service is based in Johnstown Castle, Co. Wexford (053-9160200 or 1890-200223).

If you have any queries about felling in general or are unsure whether or not the trees fall under any of the above cases, it is recommended that you seek the advice of the Felling Section or of your local forestry development officer for further information.

Trees may contain bats. Bats are protected under Schedule 5 of the Wildlife Act 1976 and Schedule 1 of the European Communities (Natural Habitats) Regulations 1997. Professional advice from a licenced surveyor should be sought prior to any works commencing on trees.

5. Site overview



6. Terminology

Tree categories	
A	Trees of high quality and value due to their size, age, condition, historical/visual merit and/or conservation potential. (a minimum of 40 years)
A1	Mainly arboricultural values. Particularly good examples of species, essential components of groups or of formal or semi-formal arboricultural features.
A2	Mainly landscape values. Trees, groups or woodlands which provide a definite screening or softening effects to the locality in relation to views into or out of site, or those of particular visual importance.
A3	Mainly cultural values, including conservation. Trees, groups or woodlands of significant conservation, historical, comparative or other value (e.g. veteran trees or wood-pasture).
B	Trees of moderate quality and value (a minimum of 20 years)
B1	Mainly arboricultural values. Trees that might be included in high categories but are downgraded because of impaired condition (e.g. presence of remedial defects including unsympathetic past management and minor storm damage)
B2	Mainly landscape values. Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals but which are not, individually, essential components of formal or semi-formal features (e.g. trees of moderate quality within an avenue that includes better A category specimens) or trees situated internally to the site, therefore individually having little visual impact on the wider locality.
B3	Mainly cultural values including conservation. Trees with clearly identifiable conservation or other cultural benefits.
C	Trees of low quality and value (a minimum of 10 years).
C1	Not qualifying in higher categories
C2	Trees present in groups or woodlands but without conferring on them greater landscape value and/or trees offering low or only temporary screening benefit.
C3	Trees with very limited conservation or other cultural benefits.
U	Trees in such condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management. Trees that are dead, dying or showing immediate and irreversible decline.

Terminology (cont.)

Comments: Refers to the tree's condition and suitability for the site.

Common name: Most widely used non botanical name.

Co-dominant: Two branches assuming the role of leading shoots. When growing close together may form a weak attachment (included bark) at their point of contact. Trees with this defect may be in danger of splitting at this weak attachment.

Crown Spread: Measured in meters north, south, east and west.

Decay fungi: Refers to those species of fungi which degrade living wood and which may, depending on the degree of degradation, render the tree structurally unsound.

Defects: Refers to cracks, storm damage and any other damage mechanical or biological.

Diameter: Diameter of the trunk (millimetres) at 1.5m. M.S. after the measurement refers to the tree being multi-stemmed.

Genus & Species: Refers to the botanical names for the tree.

Height: Measured in meters.

Monitor: Refers to trees which need to be re-surveyed on a yearly basis to assess their condition. This timescale may be sooner where works or adverse weather conditions have impacted negatively on the trees.

Overhaul: A reference to standard tree surgery work which consists of the removal of deadwood, crossing branches and balancing where appropriate.

Recommendations: Indicates surgery work necessary for the retention or, where necessary, removal of the tree.

Tree No. Refers to numbered tag fixed to tree during survey.

7. Tree condition analysis & preliminary recommendations

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Category	Useful life expectancy
501	Black Poplar *Populus nigra*	Young	Good	A well developed specimen with a basal sucker present. No visible defects.	Remove basal sucker	B2	30
502	Black Poplar *Populus nigra*	Mature	Good	A multi stemmed specimen located on southern boundary. Becoming embedded in boundary fence. Structural weaknesses exist between stems at base but are unlikely to be significant at present. Upper canopy well developed.	No action necessary	B2	20
503	Black Poplar *Populus nigra*	Young	Good	A well developed specimen which appears to have self-seeded. No visible defects.	No action necessary	B2	30
504	Black Poplar *Populus nigra*	Young	Good	A well developed specimen which appears to have self-seeded. No visible defects.	No action necessary	B2	30
505	Black Poplar *Populus nigra*	Young	Good	A well developed specimen within open space area. One branch infected by bacterial canker. This likely to become more developed in time thereby reducing long-term potential.	Remove branch with bacterial canker present	C2	10
506	Black Poplar *Populus nigra*	Young	Fair	A well developed specimen within open space area. Early stage infection by bacterial canker visible in lower crown.	Remove branch with bacterial canker present	C2	10
507	Golden willow *Salixalba vitellina*	Young	Good	A well developed specimen within open space area. No visible defects.	No action necessary	B2	30
508	Black Poplar *Populus nigra*	Young	Poor	Located within open space area. Large areas of infection by bacterial canker present in trunk.	Fell	U	0
509	Golden willow *Salixalba vitellina*	Early mature	Good	A well developed specimen which appears to have self-seeded. No visible defects.	No action necessary	B2	30
510	Black Poplar *Populus nigra*	Young	Good	A slightly sub dominant specimen located on boundary. No visible defects	No action necessary	B2	30
511	Black Poplar *Populus nigra*	Mature	Good	A slightly sub dominant specimen located on boundary. No visible defects	No action necessary	B2	30
512	Black Poplar *Populus nigra*	Mature	Good	A slightly sub dominant specimen located on boundary. No visible defects	No action necessary	B2	30
513	Black Poplar *Populus nigra*	Mature	Good	A slightly sub dominant specimen located on boundary. No visible defects	No action necessary	B2	30

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Category	Useful life expectancy
514	Black Poplar *Populus nigra*	Mature	Good	A slightly sub dominant specimen located on boundary. Crown poorly developed due to competition from neighboring tree but not significantly so. Long term potential reduced due to competition from neighboring trees and form.	No action necessary	C2	10-15
515	Black Poplar *Populus nigra*	Mature	Poor	Extensive basal decay present. Long term potential limited as a result.	Fell	U	<10
516	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. Upper trunk kinked due to competition from neighboring tree but not significantly so. No visible defects.	No action necessary	B2	30
517	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
518	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
519	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
520	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
521	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
522	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. Trunk kinked due to competition from neighboring tree but not significantly so. No visible defects.	No action necessary	B2	30
523	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
524	Black Poplar *Populus nigra*	Early mature	Good	A slightly sub dominant specimen on boundary. No visible defects.	No action necessary	B2	30
525	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
526	Black Poplar *Populus nigra*	Early mature	Good	A slightly sub dominant specimen on boundary. Trunk kinked and crown restricted toward north due to competition from neighboring trees.	No action necessary	B2	30
527	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Category	Useful life expectancy
528	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
529	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
530	Black Poplar *Populus nigra*	Early mature	Good	A relatively well developed specimen. Trunk co-dominant from 3.5m with a wide union between stems. Upper canopy well developed with no visible defects.	No action necessary	B2	30
531	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
532	Tag not in use						
533	Black Poplar *Populus nigra*	Early mature	Good	A relatively well developed specimen though trunk kinked due to competition from neighboring tree. Not significantly so.	No action necessary	B2	30
534	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen. Trunk co-dominant from 1m with a wide union between stems. No visible defects.	No action necessary	B2	30
535	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
536	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
537	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
538	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
539	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. Trunk co-dominant from 3.5m with a wide union between stems. Upper canopy well developed with no visible defects.	No action necessary	B2	30
540	Black Poplar *Populus nigra*	Early mature	Good	A large dominant specimen on boundary. No visible defects.	No action necessary	B2	30
541	Black Poplar *Populus nigra*	Early mature	Good	A large dominant specimen on boundary. No visible defects.	No action necessary	B2	30
542	Black Poplar *Populus nigra*	Early mature	Good	A large dominant specimen on boundary. No visible defects.	No action necessary	B2	30

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Category	Useful life expectancy
543	Black Poplar *Populus nigra*	Early mature	Fair	A sub dominant specimen located on boundary. Trunk co-dominant from 1.25m with a wide union between stems. Long term potential reduced due to competition from neighboring trees.	No action necessary	C2	10-15
544	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
545	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
546	Black Poplar *Populus nigra*	Early mature	Good	A slightly sub dominant specimen located on boundary. No visible defects but long term potential reduced due to competition from neighboring trees.	No action necessary	C2	10-15
547	Black Poplar *Populus nigra*	Early mature	Poor	A sub dominant specimen located on boundary. Form poor and long term potential reduced due to competition from neighboring trees.	No action necessary	C2	10
548	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
549	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
550	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. Trunk co-dominant from 400mm with a wide union between stems. No visible defects.	No action necessary	B2	30
551	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
552	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary. No visible defects.	No action necessary	B2	30
553	Black Poplar *Populus nigra*	Early mature	Good	Located on boundary. Formerly co-dominant from base with one stem removed. Potential for decay development to occur where stem removed though unlikely to be significant at present. Minor branch damage in lower crown but upper canopy well developed with no visible defects.	No action necessary	B2	20
554	Black Poplar *Populus nigra*	Early mature	Poor	A poorly developed isolated specimen following removal of neighboring trees. Providing little in terms of screening or long term potential.	No action necessary	C2	10-15

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Category	Useful life expectancy
555	Black Poplar *Populus nigra*	Early mature	Poor	A poorly developed isolated specimen following removal of neighboring trees. Providing little in terms of screening or long term potential.	No action necessary	C2	10-15
556	Black Poplar *Populus nigra*	Early mature	Good	A well developed specimen on boundary of site. Crown restricted toward west due to competition from neighboring trees. These trees have now been removed.	No action necessary	B2	30
557	Black Poplar *Populus nigra*	Young	Poor	Located within open space area. Bacterial canker present in trunk and lower crown. Long term potential reduced significantly as a result.	Fell	U	<10
558	Black Poplar *Populus nigra*	Early mature	Good	Located within open space area. Bacteria bacterial canker present in lower crown but not advanced at present. However long term potential reduced significantly as a result.	Fell	U	<10
559	Black Poplar *Populus nigra*	Early mature	Good	Located within open space area. Bacteria bacterial canker present in lower crown but not advanced at present. However long term potential reduced significantly as a result.	Fell	U	<10
560	Black Poplar *Populus nigra*	Young	Poor	Located within open space area. Bacterial canker present in lower crown; Long term potential reduced significantly as a result.	Fell	U	<10
561	Black Poplar *Populus nigra*	Young	Good	A well developed specimen within open space area. No visible defects and no sign of bleeding canker present. However it is most likely that infection will occur relatively soon.	No action necessary	C2	10-15
562	Black Poplar *Populus nigra*	Young	Poor	Located within open space area bacterial canker is present in tree with long term potential reduced as a result.	Fell	U	<10
563	Black Poplar *Populus nigra*	Young	Poor	A self seeded cluster of stems in open space area. Extensive bacterial canker present on stems. Long term potential very limited as a result.	Fell	U	<10
564	Black Poplar *Populus nigra*	Young	Poor	Self-seeded in open space area. Extensive bacterial canker present in trunk. Long term potential very limited as a result.	Fell	U	<10

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Category	Useful life expectancy
565	Black Poplar *Populus nigra*	Mature	Good	A large well developed specimen on internal boundary. Trunk co-dominant from 0.75m with a wide union between stems. No visible defects.	No action necessary	B2	30
566	Black Poplar *Populus nigra*	Young	Poor	Self-seeded in open space area. Bacterial canker present in upper trunk. Long term potential very limited as a result.	Fell	U	<10
567	Black Poplar *Populus nigra*	Mature	Good	A large well developed specimen on internal boundary. No visible defects.	No action necessary	B2	30
568	Black Poplar *Populus nigra*	Young	Poor	A self seeded specimen located within open space area. Extensive bacterial canker present.	Fell	U	<10
569	Black Poplar *Populus nigra*	Mature	Poor	A large portion of this tree has failed rendering tree unsuitable for retention.	Fell	U	<10
570	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen on internal boundary. There may be a long term weakness at 0.5m to north where a lower stem is located but unlikely to be significant at present.	No action necessary	B2	30
571	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen on internal boundary. No visible defects.	No action necessary	B2	30
572	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen on internal boundary. No visible defects.	No action necessary	B2	30
573	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen on internal boundary. No visible defects.	No action necessary	B2	30
574	Black Poplar *Populus nigra*	Mature	Good	A well developed though slightly sub dominant specimen on internal boundary. No visible defects.	No action necessary	B2	30
575	Black Poplar *Populus nigra*	Mature	Poor	Located on internal boundary. Upper canopy lost to storm damage.	Fell	U	<10
576	Black Poplar *Populus nigra*	Mature	Good	Located on internal boundary. Trunk three-stemmed from 1m with wide unions between stems. Crown extended toward north east due to competition from neighboring tree but not significantly so.	No action necessary	B2	30
577	Black Poplar *Populus nigra*	Mature	Good	Located on internal boundary. Three stemmed from base with wide unions between stems. Upper canopy well developed with no visible defects.	No action necessary	B2	30

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Category	Useful life expectancy
578	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen on internal boundary. No visible defects.	No action necessary	B2	30
579	Black Poplar *Populus nigra*	Mature	Good	Located on internal boundary. Trunk co dominant from base with a tight union between stems. This may become an area of structural weakness in the future but in unlikely to be significant at present. Upper canopy well developed with no visible defects.	No action necessary	B2	30
580	Black Poplar *Populus nigra*	Mature	Good	A relatively well developed specimen well developed specimen on internal boundary. Crown well developed with no visible defects.	No action necessary	B2	30
581	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen on internal boundary. No visible defects.	No action necessary	B2	30
582	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen on internal boundary. No visible defects.	No action necessary	B2	30
583	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen internal boundary. Three stemmed from base with wide unions between stems. Upper canopy well developed with no visible defects.	No action necessary	B2	30
584	Black Poplar *Populus nigra*	Young	Poor	Probably self seeded and located near playing fields. Decay in trunk rendering tree unsuitable for retention	Fell	U	<10
585	Black Poplar *Populus nigra*	Mature	Fair	A relatively well developed specimen located on internal boundary. There is a small branch to south with what appears to be bacterial canker. This is not significant at present but would be a sign of early infection stage.	Remove branch with bacterial canker present Monitor for further infection	C2	20
586	Black Poplar *Populus nigra*	Mature	Fair	A relatively well developed specimen located on internal boundary. There is a small amount of bacterial canker in crown and a small pocket of decay in trunk at 2m to south. This is not significant at present but would be a sign of early infection stage.	Remove branch with bacterial canker present Monitor for further infection	C2	20
587	Black Poplar *Populus nigra*	Mature	Fair	Located on field boundary embankment. Trunk co-dominant from base with a tight union between and structural weakness at this point. Upper canopy well developed though crossing and rubbing branches present.	Remove branch congestion in crown	C2	20

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Category	Useful life expectancy
588	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen on internal boundary. No visible defects.	No action necessary	B2	30
589	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen on internal boundary. Trunk co dominant from base with a wide union between stems. Upper canopy well developed but slightly congested with minor branches.	No action necessary	B2	30
590	Black Poplar *Populus nigra*	Mature	Good	A relatively well developed specimen on internal boundary. Branch damage to lower crown from machinery impact. Upper canopy well developed.	Remove damaged branches	B2	30
591	Lime cultivar *Tilia cv*	Early mature	Good	Located within a lawn area this is a well developed specimen with a well structured crown. Minor branch congestion throughout crown but no visible defects.	Remove branch congestion	B2	>40
592	Alder *Alnus sp*	Early mature	Good	A well developed specimen with lawn area. No visible defects but stake with potential to damage trunk.	Remove stake	B2	>40
593	Lodgepole Pine *Pinus contorta*	Early mature	Good	A well developed specimen located within lawn area. Long term potential reduced due to competition from neighboring trees to west. No visible defects.	No action necessary	B2	30
594	Birch *Betula pendula*	Mature	Poor	Extensive decay in trunk to south.	Fell	U	0
595	Birch *Betula pendula*	Mature	Good	Located within open space area. Trunk co dominant from 0.5m with a wide union between stems. Upper canopy well developed with no visible defects.	Remove stake	B2	>40
596	Leyland cypress x*Cupressocyparis leylandii*	Mature	Good	A large well developed specimen on northern boundary of site. Base of tree in contact with boundary fence but no damage to either tree or fence at present. Light suppressed deadwood scattered throughout crown but no visible defects.	Deadwood	B2	>40
597	Leyland cypress x*Cupressocyparis leylandii*	Mature	Good	A large well developed specimen on northern boundary of site. Base of tree in contact with boundary fence but no damage to either tree or fence at present. Light suppressed deadwood scattered throughout crown but no visible defects.	Deadwood	B2	40

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Category	Useful life expectancy
598	Leyland cypress x*Cupressocyparis leylandii*	Mature	Poor	A poorly developed sub dominant specimen within screen planting on northern boundary. Effectively dead.	Fell	U	0
599	Leyland cypress x*Cupressocyparis leylandii*	Mature	Good	A relatively well developed specimen within screen planting on northern boundary. Light suppressed deadwood scattered throughout crown but no visible defects.	Deadwood	B2	40
600	Leyland cypress x*Cupressocyparis leylandii*	Mature	Good	A relatively well developed specimen within screen planting on northern boundary. Light suppressed deadwood scattered throughout crown but no visible defects.	Deadwood	B2	40
Tags 601 - 900	Not in use						
901	Leyland cypress x*Cupressocyparis leylandii*	Mature	Good	A relatively well developed specimen within screen planting on northern boundary. Light suppressed deadwood scattered throughout crown but no visible defects.	Deadwood	B2	40
902	Leyland cypress x*Cupressocyparis leylandii*	Mature	Good	A relatively well developed specimen within screen planting on northern boundary. Light suppressed deadwood scattered throughout crown but no visible defects.	Deadwood	B2	40
903	Leyland cypress x*Cupressocyparis leylandii*	Mature	Good	A relatively well developed specimen within screen planting on northern boundary. Light suppressed deadwood scattered throughout crown but no visible defects.	Deadwood	B2	40
904	Leyland cypress x*Cupressocyparis leylandii*	Mature	Good	A large well developed specimen on northern boundary of site. Base of tree in contact with boundary fence but no damage to either tree or fence at present. Light suppressed deadwood scattered throughout crown but no visible defects.	Deadwood	B2	>40
905	Leyland cypress x*Cupressocyparis leylandii*	Mature	Good	A large well developed specimen on northern boundary of site. Base of tree in contact with boundary fence but no damage to either tree or fence at present. Light suppressed deadwood scattered throughout crown but no visible defects.	Deadwood	B2	>40

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Category	Useful life expectancy
906	Black Poplar *Populus nigra*	Mature	Good	Located within a single line planting to north of school buildings. This is a well developed specimen with no visible defects. Surface roots appear to be lifting tarmac to north of tree.	No action necessary	B2	30
907	Black Poplar *Populus nigra*	Mature	Good	Located within a single line planting to north of school buildings. This is a well developed specimen with no visible defects. Minor storm damage to lower crown.	Remove storm damage	B2	30
908	Cherry avium cv *Prunus avium cv*	Mature	Good	A relatively well developed specimen within lawn area. Multi stemmed from base with included bark and areas of structural weakness present. Unlikely to be significant at present but long term potential reduced as a result.	No action necessary	B2	15-20
909	Black Poplar *Populus nigra*	Mature	Good	Located within a single line planting to north of school buildings. This is a well developed specimen with no visible defects. Minor storm damage to lower crown.	Remove storm damage	B2	30
910	Lime cultivar *Tilia cv*	Early mature	Good	A well developed specimen within lawn area. Trunk multi stemmed from 0.5m with wide unions between stems. In time these will become more compressed and possibly hazardous but at present not an issue. Light branch congestion throughout crown.	Remove branch congestion	B2	30
911	Black Poplar *Populus nigra*	Mature	Good	Located within a single line planting to north of school buildings. This is a well developed specimen with no visible defects.	No action necessary	B2	30
912	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen within a single line planting to north of school buildings. Trunk co-dominant from 300mm with a tight union between stems but not significantly so at present. Upper canopy well developed with no visible defects.	No action necessary	B2	30
913	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen within a single line planting to north of school buildings. Trunk co-dominant from 300mm with a tight union between stems but not significantly so at present. Upper canopy well developed with no visible defects. Storm damage in upper canopy may lead to decay development in time.	Remove storm damage	B2	20

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Category	Useful life expectancy
914	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen within a single line planting to north of school buildings. Trunk co-dominant from 1.5m with a wide union between stems. Minor storm damage to lower crown.	Remove storm damage	B2	30
915	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen within a single line planting to north of school buildings. Minor storm damage to lower crown.	Remove storm damage	B2	30
916	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen within single line planting to north of school buildings. No visible defects.	No action necessary	B2	30
917	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen within single line planting to north of school buildings. There is evidence of past storm damage in crown which may lead to decay development in this area but is not significant at present.	No action necessary	B2	20
918	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen within a single line planting to north of school buildings. Minor bark damage to base of trunk but not significant at present. Upper canopy well developed with no visible defects.	No action necessary	B2	30
919	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen within a single line planting to north of school buildings. No visible defects.	No action necessary	B2	30
920	Whitbeam *Sorbus aria*	Mature	Fair	A relatively well developed specimen though included bark between stems will ultimately lead to failure. Not significant at present.	No action necessary	C2	15-20
921	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen within a single line planting to north of school buildings. No visible defects. Soil disturbance at base may have damaged roots but there is no direct evidence of this at present.	No action necessary	B2	30
922	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen within a single line planting to north of school buildings. No visible defects. Root damage to base is evident following soil disturbance works.	No action necessary	B2	30
923	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen within a single line planting to north of school buildings. Trunk co-dominant from 1.25m with a wide union between stems. Upper canopy well developed with no visible defects.	No action necessary	B2	30

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Category	Useful life expectancy
924	Tag not in use						
925	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen within a single line planting to north of school buildings. Trunk with a sub dominant stem from 0.5m with a tight union with trunk. Upper canopy well developed with no visible defects.	No action necessary	B2	30
926	Black Poplar *Populus nigra*	Mature	Good	A well developed specimen within single line planting to north of school buildings. Heavy ivy growth up trunk obscuring view for assessment but upper canopy well developed with no visible defects.	No action necessary	B2	30
927	Birch *Betula pendula*	Mature	Good	A well developed specimen within lawn area adjacent to school buildings. Trunk co-dominant from 2m with a tight union between stems. This is an area of potential structural weakness in the future but is not significant at present.	No action necessary	B2	30
928	Whitbeam *Sorbus aria*	Early mature	Good	A well developed specimen within an internal area between buildings. Crown slightly congested with minor branches but no visible defects.	Remove branch congestion	B2	30
929	Birch *Betula pendula*	Mature	Good	A well developed specimen within lawn area adjacent to school buildings. Trunk co dominant from base with a wide union between stems. Upper canopy well developed with no visible defects.	No action necessary	B2	40
930	Whitbeam *Sorbus aria*	Mature	Fair	A relatively well developed specimen within lawn area near entrance to school. Crown slightly congested with minor branches but not significantly so.	No action necessary	B2	20
931	Birch *Betula pendula*	Early mature	Good	A well developed specimen near entrance to school. Trunk with a lean toward north but not significantly so. No visible defects.	No action necessary	B2	40
932	Ash *Fraxinus excelsior*	Early mature	Good	A well developed specimen within lawn area. No visible defects.	No action necessary	B2	>40
933	Leyland cypress *Cupressus × leylandii*	Early mature	Good	A well developed specimen within lawn area. No visible defects.	No action necessary	B2	>40

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Category	Useful life expectancy
934	Cherry *Prunus avium*	Early mature	Good	A well developed specimen within lawn area adjacent to school buildings. No visible defects.	No action necessary	B2	40
935	Ash *Fraxinus excelsior*	Early mature	Good	A well developed specimen within lawn area adjacent to school buildings. No visible defects.	No action necessary	B2	>40
936	Crab apple cultivar *Malus cv*	Early mature	Good	A well developed specimen within lawn area adjacent to school buildings. No visible defects.	No action necessary	B2	40
937	Wild Cherry *Prunus avium*	Early mature	Good	A well developed specimen within a lawn area adjacent to school buildings. No visible defects.	No action necessary	B2	40
938	Purple leaf cherry *Prunus pissardii nigra*	Mature	Good	A relatively well developed specimen within lawn area adjacent to school buildings. Multi stemmed from base with tight unions between stems and suckers from base.	Remove suckers	C2	20
939	Wild Cherry *Prunus avium*	Early mature	Good	A well developed specimen within a lawn area adjacent to school buildings. No visible defects.	No action necessary	B2	40
940	Whitbeam *Sorbus aria*	Early mature	Fair	Located within a lawn area adjacent to school buildings. Co-dominant from base with a tight union between stems. Trunk with a lean but becoming vertical at 2m. No visible defects. Tight unions between stems will ultimately become structural weaknesses and could lead to failure.	No action necessary	C2	10
941	*Fastigiate* Rowan *Sorbus cv*	Early mature	Fair	A relatively well developed specimen within roundabout. Basal suckers and stake present. Upper canopy slightly congested but not significantly so.	Remove stake, basal suckers and crown congestion.	B2	30
942	Purple leaf cherry *Prunus pissardii nigra*	Mature	Fair	A relatively well developed specimen within lawn area adjacent to school carpark. Multi stemmed from base with tight unions between stems. Suckers also present at base.	Remove suckers	C2	20
943	Lime cultivar *Tilia cv*	Early mature	Good	A relatively well developed specimen within a lawn area adjacent to school carpark. Trunk co dominant from 1m with a tight union between stems. This will ultimately become an area of structural weakness. Upper canopy well developed though minor branch congestion present.	Remove branch congestion	C2	20

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Category	Useful life expectancy
944	Sycamore *Acer pseudoplatanus*	Early mature	Good	Growing through boundary hedge. Self-seeded and in close proximity to boundary fence. A relatively well developed specimen with no visible defects.	No action necessary	C2	15-20
945	Birch *Betula pendula*	Young	Good	A well developed specimen located a courtyard area. No visible defects but in close proximity to neighboring ash. Long term potential reduced as a result.	No action necessary	B2	20
946	Oak *Quercus robur*	Young	Good	A well developed specimen located a courtyard area. No visible defects but in close proximity to neighboring birch. Long term potential reduced as a result.	No action necessary	B2	10-15
947	Whitbeam *Sorbus aria*	Early mature	Fair	A poorly developed specimen adjacent to boundary fence. Multi stemmed from base with congestion and included bark between stems. Basal suckers also present and crown poorly developed. Long term potential limited.	Remove basal suckers	C2	10
948	Ash *Fraxinus excelsior*	Young	Fair	Located within a lawn area this is a relatively well developed specimen though there appears to be signs of early stage infection by bacterial canker. Not advanced at present and may not become significant.	No action necessary	B2	40
949	Norway maple *Acer platanoides*	Young	Poor	Located within a lawn area. Extensive basal decay. Long term potential very limited as a result.	Fell	U	<10

10. Tree measurements

Tree No.	Height m.	D.B.H. mm.	Spread m. N,S,E,W	Clear Stem N,S,E,W	Root Protection Diameter m.
501	9	170	1,1,1,1	0,0,0,0	2.0
502	26	1040	4,5,5,4	3,0,0,0	12.0
503	8	170	1,1,1,1	1,1,1,1	2.0
504	8	180	1,1,1,1	0,0,0,0	2.2
505	10	180	1,1,1,1	0,0,0,0	2.2
506	11	170	1,1,1,1	0,0,0,0	2.0
507	5	160	1,1,1,1	0,0,0,0	1.9
508	6	210	1,1,2,1	2,2,1,1	NA
509	4	170	1,1,1,1	0,0,0,0	2.0
510	9	180	1,2,1,1	1,0,2,3	2.2
511	19	260	0,1,1,1	2,2,1,3	3.1
512	20	180	0,1,1,1	3,3,3,5	2.2
513	20	190	0,1,1,1	8,0,0,8	2.3
514	23	210	0,1,2,0	2,2,2,2	2.5
515	20	280	0,1,1,1	4,2,4,4	NA
516	20	180	0,1,0,0	4,2,4,4	2.2
517	20	180	0,1,1,0	0,0,0,5	2.2
518	20	180	1,2,1,1	2,2,2,2	2.2
519	20	150	0,0,1,0	4,0,0,4	1.8
520	20	190	0,2,0,1	5,0,5,2	2.3
521	20	220	1,2,1,1	2,1,1,2	2.6
522	20	180	1,2,1,1	1,0,1,3	2.2
523	20	250	1,1,1,1	2,2,3,3	3.0
524	18	170	1,1,1,1	1,1,1,1	2.0
525	20	210	1,1,1,1	2,0,2,2	2.5
526	20	210	2,2,1,1	3,1,3,3	2.5
527	20	170	1,1,1,1	6,6,6,6	2.0
528	20	170	1,1,1,1	3,3,3,2	2.0
529	20	180	1,1,1,1	0,0,0,0	2.2
530	20	290	1,2,1,1	3,3,3,3	3.5
531	20	200	1,2,1,1	2,1,2,2	2.4
532	Tag not in use				
533	18	190	1,1,1,1	4,0,0,4	2.3
534	20	250	0,1,1,1	4,1,4,1	3.0
535	20	210	1,1,1,1	4,1,4,4	2.5
536	20	190	1,2,1,1	3,2,3,3	2.3
537	19	170	1,1,1,1	3,1,3,3	2.0
538	20	200	1,2,1,1	3,3,3,3	2.4
539	19	220	2,2,1,1	2,1,2,2	2.6
540	22	250	1,2,1,1	6,4,6,4	3.0
541	23	240	1,2,1,1	4,4,4,4	2.9
542	20	260	1,2,1,1	1,1,1,1	3.1
543	16	150	1,3,1,1	2,2,4,2	1.8
544	20	200	2,1,1,1	3,1,1,3	2.4
545	20	240	2,2,1,1	2,2,2,2	2.9
546	17	190	1,1,1,1	4,4,4,4	2.3
547	16	180	0,2,1,1	1,1,2,2	2.2
548	20	220	1,1,1,1	5,5,5,5	2.6
549	20	240	2,2,1,1	2,1,1,1	2.9
550	20	260	2,2,1,1	4,3,2,2	3.1
551	20	210	2,1,1,1	1,0,2,3	2.5
552	20	200	1,2,1,1	1,1,4,1	2.4
553	19	190	2,1,1,1	3,3,3,3	2.3
554	10	150	2,0,1,2	2,3,3,2	1.8
555	16	140	2,0,0,0	9,9,9,9	1.7

Survey carried out by: Ciaran Keating (BSc. PI.Sc./PI.Ecol., H.N.D. Hort., A.A. Tech Cert.)

Tree No.	Height m.	D.B.H. mm.	Spread m. N,S,E,W	Clear Stem N,S,E,W	Root Protection Diameter m.
556	20	310	1,1,2,1	3,3,3,3	3.7
557	13	190	1,1,1,1	0,0,0,0	NA
558	13	160	1,1,1,1	1,1,1,1	NA
559	13	160	1,1,1,1	0,0,0,0	NA
560	13	200	1,1,2,1	0,0,0,0	NA
561	12	150	1,1,1,1	1,1,1,1	1.8
562	15	180x2	1,1,2,2	0,0,0,0	NA
563	16	210	1,2,1,1	4,1,1,3	NA
564	17	180	1,2,1,1	8,8,8,8	NA
565	22	400	4,4,4,4	3,2,3,1	4.8
566	17	180	1,2,1,1	8,8,8,8	NA
567	22	340	4,3,2,2	2,1,1,2	4.1
568	10	180	0,2,1,1	4,2,1,1	NA
569	22	370	2,4,6,2	2,1,1,2	NA
570	22	340	2,1,1,2	4,1,3,4	4.1
571	22	400	2,3,2,2	3,1,1,1	4.8
572	22	380	5,3,1,2	2,1,2,2	4.6
573	22	340	3,2,1,1	4,1,2,2	4.1
574	20	380	5,4,2,2	2,2,2,2	4.6
575	14	320	1,3,1,2	8,2,3,3	NA
576	16	450	4,3,4,2	5,3,2,5	5.4
577	18	350	3,2,4,3	2,2,2,2	4.2
578	18	370	3,3,3,3	2,2,2,2	4.4
579	18	340	4,3,3,2	2,2,2,2	4.1
580	18	400	3,2,3,2	3,3,3,3	4.8
581	18	380	3,2,2,2	2,2,2,2	4.6
582	18	360	4,2,4,3	2,2,2,2	4.3
583	18	230x2	4,3,2,2	3,2,2,2	3.3
584	14	160	1,1,1,1	3,3,3,3	NA
585	18	350	3,3,3,2	3,3,3,3	4.2
586	18	280	3,2,4,2	2,2,2,2	3.4
587	17	320	3,2,2,2	3,3,2,2	3.8
588	17	280	3,3,3,3	2,2,2,2	3.4
589	17	220	2,3,3,3	3,2,2,2	2.6
590	16	350	2,2,4,3	2,1,1,2	4.2
591	8	210	3,3,2,2	2,2,2,2	2.5
592	9	160	2,1,1,1	3,3,3,3	1.9
593	4	230	2,2,2,2	0,0,0,0	2.8
594	18	260	2,2,3,1	3,3,3,3	NA
595	16	450	3,4,4,3	3,2,2,3	5.4
596	16	630	3,3,6,6	0,0,0,0	7.6
597	16	420	3,3,3,6	0,0,0,0	5.0
598	16	320	2,2,2,2	0,0,0,0	NA
599	16	390	3,3,4,2	0,0,0,0	4.7
600	14	330	4,3,1,1	0,0,0,0	4.0
901	16	200	4,4,1,1	0,0,0,0	2.4
902	16	400	4,3,1,1	0,0,0,0	4.8
903	16	450	4,3,3,2	0,0,0,0	5.4
904	16	480	4,3,3,3	0,0,0,0	5.8
905	16	620	4,3,4,3	0,0,0,0	7.4
906	24	450	4,3,4,5	4,4,4,1	5.4
907	24	350	3,4,5,5	4,3,3,3	4.2
908	12	280	3,4,4,4	1,2,1,2	3.4
909	24	370	4,3,4,4	2,2,2,1	4.4
910	8	280	2,2,2,2	2,2,2,2	3.4
911	24	380	4,3,4,4	2,3,2,2	4.6
912	24	320	2,3,4,4	3,2,3,2	3.8
913	24	400	3,4,5,4	2,3,2,3	4.8

Tree No.	Height m.	D.B.H. mm.	Spread m. N,S,E,W	Clear Stem N,S,E,W	Root Protection Diameter m.
914	24	490	4,5,5,5	2,2,4,2	5.9
915	24	370	4,3,5,4	2,2,2,2	4.4
916	24	420	3,4,4,4	2,2,3,2	5.0
917	24	460	3,5,6,5	3,2,3,2	5.5
918	22	360	3,3,5,3	3,2,3,2	4.3
919	22	430	4,5,6,6	1,1,2,3	5.2
920	19	290	2,2,2,2	1,1,1,1	3.5
921	17	320	3,3,4,3	1,2,1,1	3.8
922	17	300	3,4,5,4	3,2,3,2	3.6
923	19	390	4,5,4,4	2,2,2,2	4.7
924	Tag not in use				
925	18	360	2,3,4,4	3,2,2,2	4.3
926	19	400	2,4,4,4	2,2,2,2	4.8
927	15	320	2,2,2,2	3,2,3,3	3.8
928	11	170	2,2,1,1	3,2,2,2	2.0
929	16	350	2,4,4,2	3,4,4,4	4.2
930	5	280	2,2,2,2	1,1,1,1	3.4
931	10	190	1,2,2,1	2,2,2,2	2.3
932	13	350	3,3,4,4	2,3,3,2	4.2
933	11	330	2,2,2,2	2,2,2,2	4.0
934	3	190	1,3,2,4	1,1,1,1	2.3
935	8	160	2,2,2,2	2,2,2,2	1.9
936	6	160	3,2,3,1	2,2,1,2	1.9
937	5	150	3,3,3,1	2,1,1,2	1.8
938	5	250	3,2,3,1	1,1,0,1	3.0
939	3	130	2,2,2,1	2,2,2,2	1.6
940	5	200	1,1,1,1	1,1,1,1	2.4
941	4	100	1,1,1,1	2,2,2,2	1.2
942	8	250	2,2,2,2	1,1,1,1	3.0
943	6	260	2,2,2,2	1,1,1,1	3.1
944	11	190	2,1,1,1	2,2,1,2	2.3
945	16	130	1,1,1,1	2,2,2,2	1.6
946	14	120	2,1,1,0	1,1,1,1	1.4
947	4	250	2,1,1,1	2,1,1,1	3.0
948	6	90	1,1,1,1	2,2,2,2	1.1
949	5	90	1,1,1,1	2,2,2,2	NA

11. Image sheets

Image 1. View of leyland cypress along the north-eastern boundary of site.

Image 2. Beech hedge along the Old Nangor road, south-western boundary of site.

Image sheets (cont.)

Image 3. View showing ornamental trees at front of school.

Image 4. View of internal birch adjacent to school buildings.

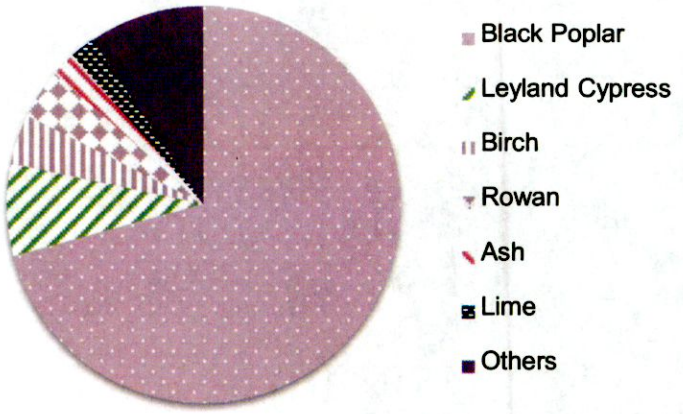
Image sheets (cont.)

Image 5. View of the northern boundary poplar in background with internal linear poplar planting in foreground.

Image 6. View linear planting of poplar adjacent to school buildings, occasional ornamental trees and beech hedge on eastern boundary. .

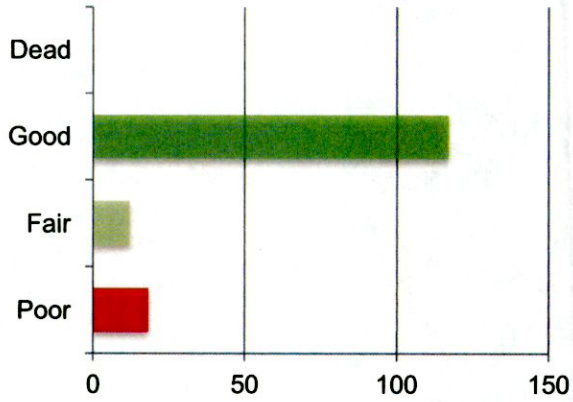
11. Charts and Graphs

Chart 1: Tree Species breakdown

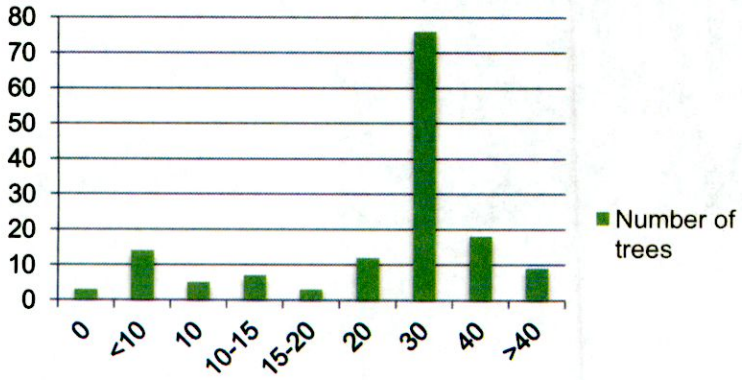


Age Classes	
Y	Young
S.M	Semi-mature
M	Mature
O.M	Over-Mature
V	Veteran

Chart 2: Tree condition breakdown



Useful life expectancy (years)



Survey carried out by: Ciaran Keating (BSc. Pl.Sc./Pl.Ecol., H.N.D. Hort., A.A. Tech Cert.)

12. Tree protection

Tree protection fencing must be erected before construction works commence and must be in accordance with BS 5837 (2012).

a. Oil, bitumen, cement or other materials likely to be injurious to a tree should not be stacked or discharged within 10m of a bole, and materials generally should not be stacked or discharged within 5m of a bole. It is essential that allowance is made for the slope of the ground so that damaging materials such as concrete washings, mortar or diesel oil cannot run towards trees.

b. Concrete mixing should not be carried out within 10m of a tree.

c. Fires should not be lit in a position where the flames could extend within 5m of foliage, branches or trunk, bearing in mind the size of the fire and the wind direction.

d. As the majority of tree roots occur within the top 600mm of soil changes to soil levels within the root zone can have serious consequences for tree health.

Increases in soil levels within the root zone of trees can lead to root asphyxiation and ultimately to tree decline and/or death.

A reduction in soil levels may expose roots to drying out and/or being damaged and have the same effect on the tree as described above.

Tree root protection

The Root Protection Area should be calculated using as per Table 1 and/or Annex D (BS 5837 2012) as an area equivalent to a circle with a radius 12 times the stem diameter for single stem trees and 10 times basal diameter for trees with more than one stem arising below 1.5m above ground level.

Number of stems	Calculation
Single stem tree	$RPA\ (m^2) = \frac{(\text{stem diameter (mm) @ 1.5 m} \times 12)^2 \times 3.142}{1000}$
Tree with more than one stem arising below 1.5m above ground level.	$RPA\ (m^2) = \frac{(\text{basal diameter (immediately above root flare (mm)} \times 10)^2 \times 3.142}{1000}$

13. References

BS 5837 (2012). Trees in Relation to Design Demolition and Construction

Mattheck and Breloer (1994). The body language of trees