

Arboricultural Assessment Report

Finglas Village Improvement Scheme

September 2022



TREESPACE

Trees • Woodland • Urban Forestry

DOCUMENT CONTROL SHEET

PROJECT NAME: Arboricultural Assessment – *an assessment of trees in relation to development.*

PROJECT REFERENCE: Finglas Village Improvement Scheme

PROJECT LOCATION: Finglas Village, Dublin City, Co. Dublin

PREPARED FOR: Dublin City Council

PREPARED BY: Conor O Callaghan

POSITION HELD: Arborist

WORK DESCRIPTION: Field Assessor/Author

QUALIFICATIONS: MSc Arboriculture & Urban Forestry, BSc Forestry Management

CONTACT: info@treespace.ie

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1. INTRODUCTION

1.1. Instructions and Brief

1.1.1. Tree-space has been instructed to undertake a tree survey and arboricultural impact assessment for proposed new cycle path infrastructure in Finglas Village, Co. Dublin. The proposed scheme introduces new cycling paths along the existing roads and pavements and includes new areas of soft landscaping.

1.1.2. This report addresses the potential impacts of the proposed scheme on the existing tree population. The field assessment was completed between the 31st of August and the 1st of September 2022. The following documents were provided to Tree-space to inform the tree survey and report:

Table 1: List of drawings to inform the tree survey and report

Document Title	Document/Drawing Number	Originator
Extent of the tree survey	FVIS_ARUP-ZZ-ZZ-DR-CH-0002-02	ARUP
Topographical Survey	No reference	APEX Surveys
Proposed Development Layout	FVIS_ARUP-ZZ-ZZ-DR-CH-0001-00	ARUP

1.1.3. The report should be read in conjunction with the following Tree-space plans:

- Tree Constraints Plans: TS_TCP_6_9_22
- Tree Assessment Plans: TS_TAP_6_9_22
- Tree Removal & Protection Plans: TS_TPP_8_9_22

1.2. Aims and Approach

1.2.1. The purpose of this assessment is to quantify and categorise the arboricultural features on the site and assess the potential constraints to development. Trees are a material consideration for local authorities and tree owners. Whether they have statutory protection or not the potential impacts of construction must be considered. Construction activities often exert pressures on pre-existing trees and in some cases trees that have taken decades to mature can be damaged irreparably. The assessment and implementation of protection measures is therefore critical to mitigate against any potential negative impacts.

1.2.2. The arboricultural impact assessment was conducted in accordance with the British Standard *BS 5837:2012 Trees in relation to design, demolition, and construction – Recommendations*¹. The British Standard sets out the principles and procedures to be

¹ The British Standards Institution (2012) *Trees in relation to design, demolition, and construction – Recommendations*. BSI Standards Limited.

applied to achieve a harmonious and sustainable relationship between trees and structures. The assessment process undertaken for this report is described in table two below.

Table 2: Arboricultural Impact Assessment Process

TASK	DESCRIPTION
Topographical survey	Record the position of all trees within the site with a stem diameter of 75mm or more, measured at 1.5m above highest adjacent ground level.
Tree survey	Collect relevant information on all trees included in the topographical survey, as well as any that might have been missed. The parameters of the tree survey are set out in BS5837:2012 section 4.4 and are described in more detail in Appendix 2 of this report.
Tree categorization	Identify the quality and value of the existing tree population. The categorization method set out in table 1, BS5837:2012 allows informed decisions to be made concerning which trees should be removed or retained in the event of a development occurring. Category A trees are of a high quality, category B trees are of moderate quality, and category C trees are of a low quality. Category U trees are unsuitable for retention. The subcategories 1, 2 and 3 are intended to reflect arboricultural and landscape qualities, and cultural values, respectively. The tree quality assessment table is included in appendix 2 of this report.
Impact assessment	Identify the requirements for the successful retention of the retained trees and detail the measures necessary for protection during the development process. Root protection areas (RPA's) are calculated in accordance with section 4.6, BS5837:2012. The RPA is the minimum area around a tree that needs to remain undisturbed to maintain the tree's viability. The RPAs of each categorised tree will be highlighted with magenta and plotted on relevant scaled drawings.
Tree protection plan	The tree protection plan indicates the precise location of the protective barriers to be erected to form a construction exclusion zone around the retained trees. The plan will be superimposed on the layout plan, based on the topographical survey.
Arboricultural method statement	The arboricultural method statement (AMS) sets out the measures required for the successful protection of the retained trees during the construction phase. The AMS will address some or all of the following: Pre-development tree works, site

TASK	DESCRIPTION
	supervision, protective fencing, ground protection, boundary treatments, services and drainage, and monitoring.

1.3. The Limitations of the Report

- 1.3.1. Only those trees specified in the scope of work were assessed. The observations that were made are limited to the requirements of planning and development. The survey is not a tree risk assessment.
- 1.3.2. The trees were visually assessed from ground level only. No climbing inspections were carried out. No invasive or other detailed internal decay detection devices were used.
- 1.3.3. The conclusions relate to the conditions found at the time of survey. Trees are living organisms that are subject to the stresses of climatic extremes, decay fungi and injurious diseases. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the trees in question may not arise in the future.

2. THE SCHEME

2.1. Description of the Scheme

- 2.1.1. The proposed scheme covers an area between the junction of Seamus Ennis Road/North Road (to the west) and the junction of Seamus Ennis Road / Clune Road / Glasanaon Road (to the east). It also includes Jamestown Road between the junction with Main Street (to the south) and the junction with Seamus Ennis Road (to the north).
- 2.1.2. It is proposed to alter the following:

Between North Road Junction and McKee Avenue/Jamestown Road/Seamus Ennis Road junction

- Removal of slip lanes from North Road arm of the junction of North Road/Seamus Ennis Road
- Removal of right-turn pocket into Drogheda Mall car park
- Removal of 9 no. on-street parking spaces
- Provision of a segregated cycle track on both sides of the road
- Provision of a new bus shelter for westbound services
- Provision of entry treatment at the junction of Main Street and Seamus Ennis Road
- Introduction of new SuDS features

McKee Avenue/Jamestown Road/Seamus Ennis Road junction

- Introduction of a protected style junction to enhance safety for cyclists
- Closure of the Jamestown Road approach to the junction to vehicles (i.e. the southern arm)
- New pedestrian crossings
- Public realm improvements outside of Super Valu

Jamestown Road (south)

- Closure of the Jamestown Road (south) - i.e. the southern approach to the junction with Seamus Ennis Road
- Conversion of Jamestown Road (south) from one-way to two-way between Bank of Ireland and Main Street
- Provision of entry treatment at the junction of Main Street / Jamestown Road (south) along with minor works to the central median on Main Street to accommodate vehicle movements
- Removal of bus stop and set-down along Jamestown Road (south)
- Public realm improvements between Seamus Ennis Road and Bank of Ireland car park access

Between Seamus Ennis Road/McKee Avenue/Jamestown Road junction and Seamus Ennis Road / Clune Road / Glasanaon Road

- Provision of segregated cycle tracks on both sides of the road
- Removal of 2 no. on-street parking spaces on the southern side of the road
- Relocation of bus shelters
- Reduction in footpath width to minimum 2m on northern side of the road
- Introduction of new SuDS features

Drogheda Mall Car Park

2.1.3. Reconfiguration of car park to provide a mobility hub which incorporates the following:

- 3 no. accessible bays
- 4 e-charging bays
- Sheltered bike parking
- Public realm improvements

2.1.4. The works at the Drogheda Mall car park will result in a net loss of 7 no. car parking spaces.

2.2. Spatial Scope

- 2.2.1. The tree survey targeted the trees established within the redline boundary on the tree survey extent drawings (drawing no: FVIS_ARUP-ZZ-ZZ-DR-CH-0002-02) provided by ARUP. The tree numbering begins on T1774 in the west of the village next to the down ramp on to the Finglas Bypass. The tree numbering continues east through the village on the northern side of Seamus Ennis Road and returns to the centre of the village on the southern edge of the road. The final two trees (T1824 & 1825) are established in a raised planter on Jamestown Road.

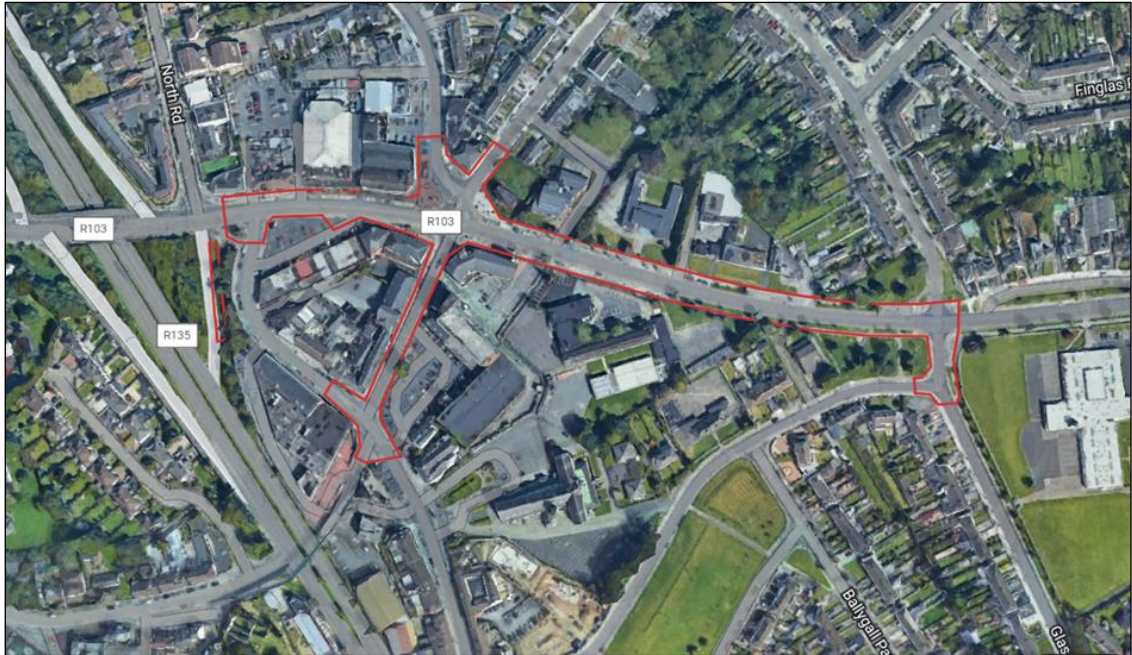


Figure 1: Aerial image of the site and its immediate surroundings. The approximate boundary of the tree survey extent is outlined in red. Image (Google Earth, 2020).

3. THE TREES

3.1. General Description of the Trees

- 3.1.1. In total 53 individual trees were included in the field assessment. The trees are established in small tree pits cut out of the pavement, others are in 3 – 3.5 m wide grass verges and some in raised planters. The most common species is Callery Pear (*Pyrus calleryana*) most likely the cultivar ‘Chanticleer’ more commonly known as Bradford Pear. The *Pyrus* trees are all in the semi-mature life-stage with their physiological condition was assessed as normal. The other most common species included in the assessment are Sycamore (*Acer pseudoplatanus*), Whitebeam (*Sorbus aria*) and Rowan (*Sorbus aucuparia*).

- 3.1.2. The majority (77%) of the surveyed trees were assessed as having normal vitality, indicating a normal leaf area and vigour for the life-stage and growing conditions. Nineteen percent of the trees had fair to poor vitality, one tree was dead, and the other was assessed as good. Thirty-eight trees (72%) were categorized as category B. Category B trees are of moderate quality with an estimated remaining life expectancy of at least 20 years. All of the trees fell into the subcategory 2, indicating visual importance and having merit as landscape features. Twenty-three percent of the trees were categorized as C, 4% as category A (the highest quality) and 2% as category U (the lowest quality and not suitable for retention).

4. ARBORICULTURAL IMPACT ASSESSMENT

4.1. Potential Tree Loss to Facilitate the Construction of the Proposed Scheme

- 4.1.1. Table 3 below describes the trees that would be directly affected in the event of a development occurring. The tree number, the tree species, the BS 5837 retention category, and a short description of the impact are included.

Table 3: Description of the potential impacts of the proposed scheme on the surveyed tree population.

Tree No	Tree Species	CAT BS5837	Description of Impact
T1785	Rowan spp:Sorbus spp	U	Tree is dead. Not suitable for retention
T1790	Bradford Pear:Pyrus calleryana chanticleer	B2	Direct conflict with the alignment of the proposed cycle path.
T1791 & T1793 (2 x trees)	Rowan:Sorbus aucuparia	C2	Direct conflict with the alignment of the proposed cycle path.
NP (New planting)	Bradford Pear:Pyrus calleryana chanticleer	B2	Direct conflict with the alignment of the proposed cycle path.

Summary of Direct Impacts

- **In total 5 trees or 9% of the total surveyed tree population will need to be removed to facilitate the construction of the proposed scheme.**
- **2 category B trees (5% of the total CAT B), 2 category C (16% of the total CAT C) and 1 category U (100% category U) will need to be removed to facilitate the construction of the proposed scheme.**

4.2. Potential Tree Pruning Works

- 4.2.1. Tree pruning works are generally not necessary to facilitate the construction of the proposed scheme. However, some headroom issues and branch conflicts were noted over the existing pedestrian infrastructure. The recommended tree pruning works are detailed in the tree works schedule in Appendix 4 of this report.
- 4.2.2. It is recommended that an arboricultural assessment of the retained trees is undertaken post development and prior to public usage of the cycle paths. The tree inspection should address headroom along the route and assess any damage that may have occurred during the construction phase of the project.

4.3. Construction Activities & The Retained Trees

- 4.3.1. In total 48 individual trees will be retained within the working area of the proposed scheme. All of the retained trees have the potential to be negatively impacted upon during the construction phase. To mitigate against any potential negative impacts the installation of tree protection fencing around the retained trees has been recommended. An image of the default fencing specification is provided in the arboricultural method statement in Appendix 1 of this report. The alignment of the tree protection fencing should resemble what is detailed in the Tree Removal & Protection drawings (TS_TPP_8_9_22).
- 4.3.2. The root protection areas for the recorded tree population have been highlighted with magenta on the Tree Removal & Protection Plans. The root protection area (RPA) is the area around the tree which needs to remain undisturbed to maintain the trees viability. The tree protection fencing should be in place before the construction activities commence. The onsite storage of materials and all plant and machinery movements should be directed outside of the RPAs. The main contractor appointed to construct the scheme will have a responsibility to ensure the tree protection measures are installed correctly, and none of the retained trees are negatively impacted upon.
- 4.3.3. The proposed new cycle path generally follows the alignment of existing carriageways and pavements and intersects the RPAs of retained trees in a number of locations. The intended design of the new scheme should seek to retain the existing hardscape within the RPAs of any retained trees. Where the existing hardscape needs to be removed within the RPA it should be excavated using hand tools e.g., pneumatic breaker, pick, spade. The sub-base should be left undisturbed. Where the sub-base needs to be removed, hand tools or air-spades should be utilized for the excavation work. If tree roots are encountered within the sub-base small trowels may be required so that the roots are not damaged. If the exposed tree roots are an obstruction in the construction profile and are less than 25 mm in diameter they can be pruned safely with a sharp secateurs or handsaw without further consultation. If the exposed tree roots are greater than 25 mm in diameter advice should be sought from the retained

consulting arborist. The arboricultural method statement in Appendix 1 of this report provides further guidance on excavations and root pruning.

- 4.3.4. Excavations of existing grass verges where trees are established will also be required. The root systems of the trees are likely to be concentrated within the grass verge and may not follow the shape of the highlighted RPA. The grass verges should be excavated with air spades. Any exposed roots should be retained and moved out of the construction profile. Where the roots are not pliable root pruning may need to be undertaken.

4.4. Replacement Tree Planting

- 4.4.1. The current assessment estimates that 5 trees will need to be removed to facilitate the construction of the proposed scheme. There is potential for further tree loss during the construction phase. The landscape proposal should seek to establish at least 10 – 15 new trees post development. It is indicated on the proposed plan that new areas of grass/soil are to be established. These areas could be considered for new tree planting. There are also a number of existing trees underperforming (category C). Consideration should be given to removing the lowest quality category C trees and replacing them during the landscape works.

5. CONCLUSIONS

- The potential tree loss to facilitate the construction of the proposed scheme is not considered significant, 90% of the surveyed tree population can be retained. Both of the highest quality category A trees will be retained.
- There are a number of sensitive areas along the scheme alignment which require more delicate excavation work. The workflow described under the heading 'Excavations within the root protection areas (RPAs)' in Appendix 1 of this report should be used as a general guidance.
- The contractor in charge of constructing the development will have a responsibility to ensure the tree protection measures are installed correctly and no further negative impacts occur.
- The landscape proposal should consider the tree loss and seek to establish adequate replacement tree planting.
- The arboricultural method statement (AMS) in Appendix 1 of this report addresses the following: pre-construction site briefing, pre-construction tree works, tree protection fencing, excavations within the RPAs, roots & root pruning, monitoring & compliance, and landscaping activities. The AMS is a brief outline of the tree protection measures based on the current scheme design. Further construction stage arboricultural method statements may be required.

Appendix 1

Outline Arboricultural Method Statement

The following arboricultural method statement outlines the order of works and tree protection measures for the proposed Finglas Village Improvement Scheme. The method statement is a brief outline of the tree protection measures based on the scheme design at the planning stage. Further arboricultural method statements may be required at the construction stage. The method statement should be read in conjunction with the Tree Removal & Protection Plans (TS_TPP_8_9_22).

Pre-Construction Site Briefing

- Prior to the construction phase of the development a briefing should be arranged between the principal contractor and the retained consulting arborist. The objectives of the briefing will be to clarify the following:
 - Confirm the tree works to be undertaken.
 - Confirm the location of the tree protection fencing.
 - Review and raise awareness of sensitive areas on the site where trees are being retained.
 - Discuss the work methods for excavating within the RPAs of retained trees.
 - Confirm the requirements for arboricultural method statements and monitoring for the duration of the construction phase.

Pre-Construction Tree Works

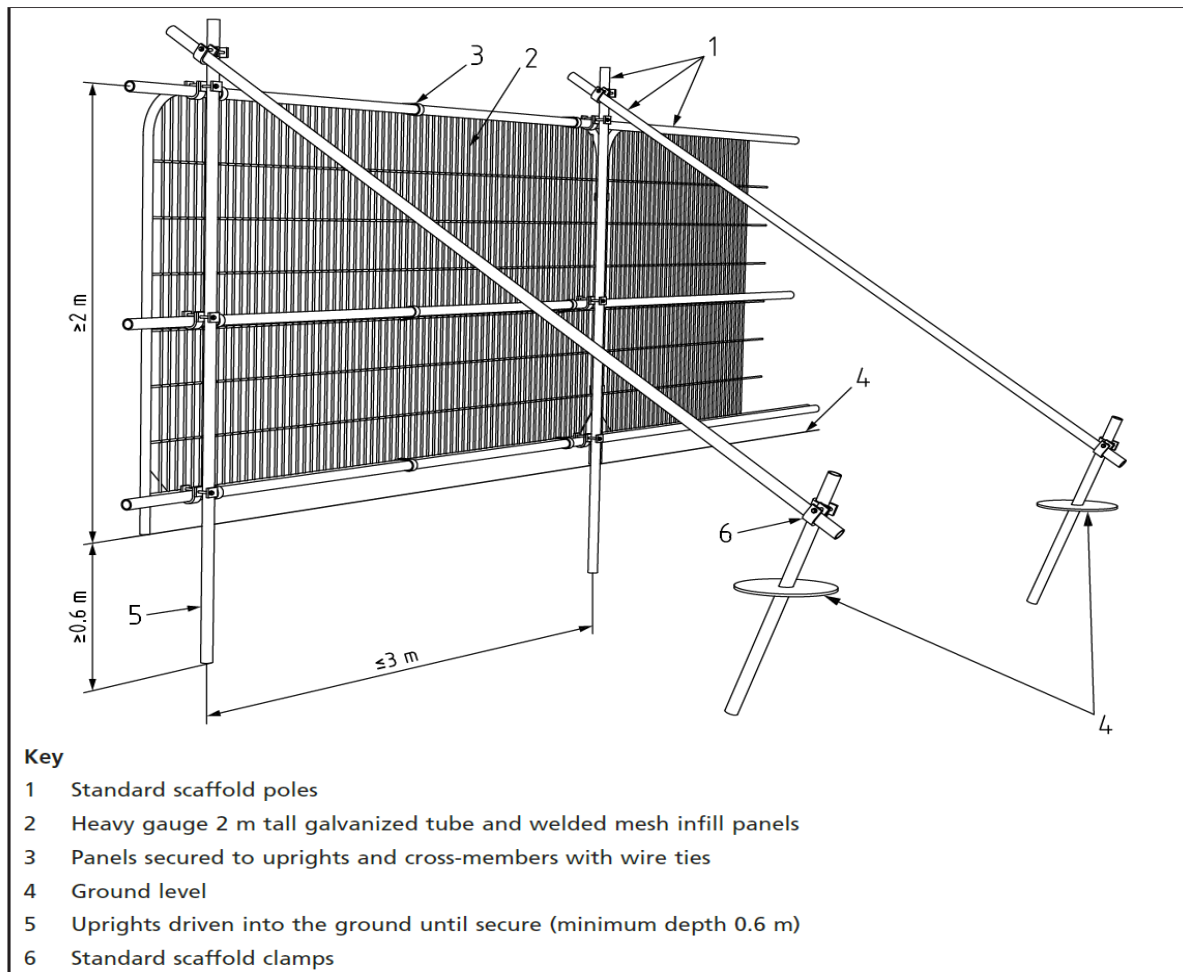
- The necessary tree works to facilitate the proposed development are described in the tree works schedule (appendix 4 of this report).
- The tree works schedule should be presented to the tree owner prior to any work being carried out. The tree owner must agree to the proposed works.
- All tree works will be carried out in accordance with the recommendations given in BS 3998 (2010) and current health & safety requirements.
- The planned removal of trees and vegetation should not negatively impact on any of the retained trees or their RPAs.
- Prior to the commencement of any tree works, the trees and their surroundings should be assessed for the presence of any seasonal nesting sites, potential roost features or protected species.
- **In accordance with Section 40 of the Wildlife Act 1976 (as amended 2000) the tree works, and removal of hedges and ivy should be scheduled outside of the nesting season (1st of March to 31st of August).**

Protective Fencing

- The tree protection fencing is designed to create a construction exclusion zone around the retained trees to protect the critical root mass from negative impacts.

- The alignment of the tree protection fencing largely follows the perimeter of the retained trees RPAs. The layout of the fencing should resemble what is detailed in the tree protection plans (TS_TPP_8_9_22).
- The tree protection fencing should be fit for purpose and well braced to resist impacts. The default fencing specification outlined in the British Standard is 2 m tall weld mesh panels. An image of the fencing configuration is provided below. It is understood that the default fencing specification may not be practical to install along the entire route. Two alternative fencing specifications have been provided.
- Signs will be erected on the fences stating 'CONSTRUCTION EXCLUSION ZONE – NO ACCESS'.
- The main contractor will inform the client that the tree protection fencing, and signage is in place before construction activities commence.
- The tree protection fencing will remain in place for the duration of the construction phase and should not be removed without approval from the retained consulting arborist.

British Standard BS 5837: TREE PROTECTIVE FENCING



ALTERNATIVE FENCING



Excavations within the Root Protection Areas (RPAs)

- Excavation work within the RPAs of retained trees should be avoided.
- The root protection radius is indicated in metres on the Tree Removal & Protection drawings. The RPA (magenta circle) should be marked on the ground.
- Where excavation work of hard surfaces is necessary within the RPA it should be carried out with hand tools e.g., pneumatic breaker, crowbar, pick, mattock, spade.
- Excavations of soft surfaces or sub-bases within the RPA can be undertaken with air spades or smaller hand tools e.g., trowels.
- The spoil arising from the excavation should be positioned outside of the RPA.
- Cover any exposed roots with hessian/jute.
- Avoid damaging the bark of any exposed roots.

Roots & Root Pruning

- Where tree roots are encountered after ground works begin it is recommended that rolls of hessian/jute are stored on site. The hessian can be used to cover any exposed roots and protect them from drying out and desiccation occurring.
- Where tree roots are encountered in the working areas and cannot be moved out of the construction profile root pruning may be required (see guidance point below). The roots should be target pruned with a sharp secateurs or handsaw. Once pruning is complete the cut ends should be recovered with topsoil or hessian.
- **General guidance:** if the exposed tree roots are less than 25 mm in diameter, they can be pruned by the on-site construction staff. If the tree roots are greater than 25 mm in diameter advice should be sought from the retained consulting arborist.

Monitoring & Compliance

- It is recommended that a qualified consulting arborist is assigned to the project for the duration of the construction phase.
- The responsibilities of the assigned arborist will include:
 - Bi-weekly checks on the tree protective fencing.
 - Monitoring the health and vitality of the retained trees.
 - Monitoring soil disturbance and root disturbance in the working areas.
 - Carry out any potential root pruning operations if necessary.

Landscaping

- The proposed landscape activities e.g., planting works, tree planting, installation of new hard surfaces should be directed outside of the RPAs of any retained trees.
- The landscaping contractor should be briefed in detail by the retained consulting arborist to highlight the extent of the RPAs of any retained trees.
- No heavy mechanical cultivation such as ploughing or rotavation should occur within the RPAs of the retained trees.
- No soil level changes should occur within the RPA of any retained trees. Soil should never be raised and heaped against the tree trunks.
- Compaction of the soil within and around the RPAs of retained trees should be avoided.

Appendix 2

Tree Schedule Key

Tree/Group number	Reference number for individual trees or groups of trees, prefixed by T (Tree), TG (Tree Group), W (Woodland), H (Hedge) or S (Shrub) to indicate the type of feature
Tree Count	Number of trees of a particular species recorded within a group feature, with the default value of 1 for single trees.
Species	Scientific name followed by common name
Height (m)	Tree height to the nearest metre, measured with a Haglofs Clinometer or estimated.
Stem Count	Number of stems. Stem count indicates whether the tree is single-stemmed or multi-stemmed and informs the RPA calculation.
Stem Diameter	Stem diameter measured at 1.5m above ground level in accordance with Annex C of BS5837:2012.
Crown Spread	Distance from the stem position to the crown periphery in the four cardinal directions.
First Significant Branch Height (m) – Direction of growth	Distance between the ground and lowest significant branch and the direction of growth.
Canopy Clearance Height (m)	Distance between the ground and the lowest point of the crown periphery, estimated to the nearest half metre.
Life-stage	Young, Semi-mature, Early-mature, Mature, Late Mature, Ancient or Veteran
Physiological Condition	Good, Normal, Fair, Poor, Dead
Observations	General description of the tree or tree group, including basic features and morphology, structural and physiological condition, growing conditions and surroundings.
Recommendations	Management recommendations for tree works to address immediate unacceptable risks, or to facilitate development proposals.
Estimated Remaining Contribution (years)	Estimated number of years for which the tree will continue to make a positive contribution to the site, banded as <10yrs, 10-20yrs, 20-40yrs, 40+.
Retention Category	Quality and value category as defined in table 1 of BS5837:2012 (see following page for full description)
Retention Sub-category	One or more sub-categories as defined in table 1 of BS5837:2012 (see following page for full description)

RPR (m) Radius of the RPA, in metres, when this is plotted as a circle around the tree stem

RPA (m³) Root protection area calculated from the stem diameter according to the formula in BS5837:2012. The RPA is the minimum area required to maintain tree viability.

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
Category U Those 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	<ul style="list-style-type: none"> Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <p><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></p>			See Table 2
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	See Table 2
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	See Table 2
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	See Table 2

Appendix 3

Feature	Number	No. of trees	SPECIES Common name:scientific name	Stem count	Stem diameter (mm)	Height (m)	Crown spread (m)				First significant branch (FSB)- height	First significant branch (FSB) - direction of growth	Canopy clearance Ht (m)	Life stage: Y-SM-EM-M-LM-V-A	Physiological Condition: G-N-F-P-D	Observations	Preliminary management recommendations	Remaining contribution in years: <10, 10+, 20+, 40+	Retention category	Retention Sub-	RPR (M)	RPA(M ²)
							N	E	S	W												
T	1774	1	Small-leaved Lime:Tilia cordata	1	270	10	4.5	4.5	4.0	3.0	2	E	0.5	Early-mature	Normal	Structural condition-good, clear leader, branch unions appear good.	Consider crown raise over pavement and road to improve headroom. Target prune stub cuts.	40+	A	2	3.2	33
T	1775	1	Sycamore:Acer pseudoplatanus	1	330	10	4.5	4.0	4.0	3.5	2	N	2	Early-mature	Normal	Trunk and stems heavily obscured by ivy, basal suckering.	Remove basal suckers. Remove ivy to 1 m from ground level to facilitate future tree inspections	20+	B	2	4	49
T	1776	1	Sycamore:Acer pseudoplatanus	1	310	10	4.0	4.0	4.0	3.5	2	N	3	Early-mature	Normal	Structural condition-good, clear leader, branch unions appear good, some minor codominance, minor wound on the trunk. Trunk is partially obscured by ivy, basal suckering.	Remove basal suckers. Remove ivy to 1 m from ground level to facilitate future tree inspections	20+	B	2	3.7	43
T	1777	1	Large-leaved Lime:Tilia platyphyllos	1	300	10	4.0	4.0	4.0	4.0	3	S	1.5	Early-mature	Normal	Structural condition-moderate, codominant stems with partial bark inclusion. Restricted rooting environment but no major heaving evident.	Crown raise over pavement to improve headroom, 2.5 m clear from ground level.	20+	B	2	3.6	41
T	1778	1	Sycamore:Acer pseudoplatanus	1	120	5	2.0	2.0	2.0	2.0	2	W	2	Semi-mature	Fair	Structural condition-moderate, codominant stems, limbs have an irregular growth pattern. Restricted rooting environment, minor pavement heaving.	Light crown raise over pavement, remove branch conflict with neighbouring street sign.	10+	C	2	1.4	6.5
T	1779	1	Sycamore:Acer pseudoplatanus	1	120	5	2.5	2.5	2.0	2.5	2	S	2	Semi-mature	Normal	Structural condition-moderate, natural lean in the trunk. Restricted rooting environment. Branch conflict with buses.	Side prune branches clear of bus stop to prevent conflict with buses.	10+	C	2	1.4	6.5
T	1780	1	Sycamore:Acer pseudoplatanus	1	120	5	2.0	3.0	2.0	2.0	2	W	2	Semi-mature	Poor	Structural condition-fair, codominant stems, minor deadwood in the crown. Poor leaf area and vigour. Restricted rooting environment.	None	10+	C	2	1.4	6.5
T	1781	1	Sycamore:Acer pseudoplatanus	1	210	8	2.5	2.5	2.0	2.5	2	E	2	Semi-mature	Normal	Structural condition-good, clear leader, branch unions appear good. Restricted rooting environment, minor pavement heaving.	Consider crown raise over pavement and roof of pedestrian shelter.	20+	B	2	2.5	20

Feature	Number	No. of trees	SPECIES Common name:scientific name	Stem count	Stem diameter (mm)	Height (m)	Crown spread (m)				First significant branch (FSB)- height	First significant branch (FSB) - direction of growth	Canopy clearance Ht (m)	Life stage: Y-SM-EM-M-LM-V-A	Physiological Condition: G-N-F-P-D	Observations	Preliminary management recommendations	Remaining contribution in years: <10, 10+, 20+, 40+	Retention category	Retention Sub-	RPR (M)	RPA(M ²)
							N	E	S	W												
T	1782	1	Sycamore:Acer pseudoplatanus	1	100	6	3.0	1.5	2.0	3.0	2.5	N	3	Semi-mature	Fair	Structural condition-moderate, asymmetric crown. Poor leaf area and vigour. Restricted rooting environment.	None	10+	C	2	1.2	4.5
T	1783	1	Sycamore:Acer pseudoplatanus	1	75	5	2.0	2.0	2.0	2.0	2	NE	2	Semi-mature	Poor	Structural condition-fair, minor dead branches in the crown. Poor leaf area and vigour. Restricted rooting environment.	None	10+	C	2	0.9	2.5
T	1784	1	Sycamore:Acer pseudoplatanus	1	190	9	2.0	3.0	2.0	3.0	2	W	2	Semi-mature	Normal	Structural condition-moderate, codominant stems, union appears good. Moderate leaf area. Restricted rooting environment, some minor pavement heaving.	None	20+	B	2	2.3	16
T	1785	1	Rowan spp:Rowan (Sorbus spp)	1	80	4	1.0	1.0	1.0	1.0	2.5	E	3	Young	Dead	Structural condition-poor	Remove	<10	U		1	2.9
T	1786	1	Rowan:Sorbus aucuparia	1	110	5	1.5	1.5	1.5	1.5	2	E	2	Semi-mature	Normal	Structural condition-moderate, codominant stems, v shaped unions. Established in a raised flower bed.	None	20+	B	2	1.3	5.5
T	1787	1	Bradford Pear:Pyrus calleryana chanticleer	1	200	8	2.0	2.0	3.0	2.0	2	N	2	Semi-mature	Normal	Structural condition-moderate, lean in trunk towards road, evidence of branch conflicts with traffic, fractured branches in the crown. Restricted rooting environment.	Target prune the fractured branches in the crown.	20+	B	2	2.4	18
T	1788	1	Bradford Pear:Pyrus calleryana chanticleer	1	100	6	1.5	1.5	1.5	1.5	2	W	2	Semi-mature	Normal	Structural condition-good. Good leaf area and vigour. Rooting environment is partially restricted.	None	40+	A	2	1.2	4.5
T	1789	1	Swedish whitebeam:Sorbus intermedia	1	320	8	3.0	2.5	3.0	3.0	2	N	2	Early-mature	Good	Structural condition-moderate, codominant stems, poor branch structure. Good leaf area and vigour. Restricted rooting environment, evidence of pavement heaving.	None	20+	B	2	3.8	46
T	1790	1	Bradford Pear:Pyrus calleryana chanticleer	1	100	5	1.0	1.0	1.0	1.0	2	N	2	Semi-mature	Normal	Structural condition-moderate, minor codominance. Good leaf area and vigour.	Remove tree tie post	20+	B	2	1.2	4.5
T	1791	1	Rowan:Sorbus aucuparia	1	60	4	1.0	1.0	1.0	1.0	1.5	N	2	Young	Poor	Structural condition-fair, minor deadwood in the crown. Leader is dead, poor leaf area.	Remove tree tie post, consider removing the tree and replacement.	10+	C	2	0.7	1.6

Feature	Number	No. of trees	SPECIES Common name:scientific name	Stem count	Stem diameter (mm)	Height (m)	Crown spread (m)				First significant branch (FSB)- height	First significant branch (FSB) - direction of growth	Canopy clearance Ht (m)	Life stage: Y-SM-EM-M-LM-V-A	Physiological Condition: G-N-F-P-D	Observations	Preliminary management recommendations	Remaining contribution in years: <10, 10+, 20+, 40+	Retention category	Retention Sub-	RPR (M)	RPA(M ²)
							N	E	S	W												
T	1792	1	Rowan: Sorbus aucuparia	1	90	6	1.0	2.0	2.0	1.0	1.5	W	2.5	Semi-mature	Fair	Structural condition-moderate, minor codominance, minor wound on the trunk. Moderate leaf area and vigour.	None	10+	C	2	1.1	3.7
T	1793	1	Whitebeam: Sorbus aria	1	280	8	3.0	3.0	3.0	3.0	2.5	W	4	Early-mature	Normal	Structural condition-moderate, minor codominance, minor wound on the trunk. Normal leaf area and vigour. Conflict with overhead electric network.	None	20+	B	2	3.4	35
T	1794	1	Bradford Pear: Pyrus calleryana chanticleer	1	90	7	1.5	1.5	1.5	1.5	2	S	2	Semi-mature	Normal	Structural condition-good. Suckers in the tree pit. Normal leaf area and vigour.	None	20+	B	2	1.1	3.7
T	1795	1	Bradford Pear: Pyrus calleryana chanticleer	1	80	5	1.0	1.0	1.0	1.0	2	S	2	Semi-mature	Normal	Structural condition-good. Normal leaf area and vigour.	None	20+	B	2	1	2.9
T	1796	1	Bradford Pear: Pyrus calleryana chanticleer	1	80	5	1.0	1.0	1.0	1.0	2	S	2	Semi-mature	Normal	Structural condition-good. Normal leaf area and vigour.	None	20+	B	2	1	2.9
T	1797	1	Bradford Pear: Pyrus calleryana chanticleer	1	90	5	1.0	1.5	1.0	1.0	2	E	2	Semi-mature	Normal	Structural condition-good. Normal leaf area and vigour.	Remove tree tie post	20+	B	2	1.1	3.7
T	1798	1	Bradford Pear: Pyrus calleryana chanticleer	1	110	5	1.5	1.5	1.5	1.5	2	S	2	Semi-mature	Normal	Structural condition-good. Normal leaf area and vigour.	Remove tree tie post	20+	B	2	1.3	5.5
T	1799	1	Whitebeam: Sorbus aria	1	200	5	2.5	2.5	2.5	2.5	3	N	3	Early-mature	Normal	Structural condition-moderate, minor codominance, minor wound on the trunk. Normal leaf area and vigour. Restricted rooting environment, evidence of pavement heaving.	None	20+	B	2	2.4	18
T	1800	1	Bradford Pear: Pyrus calleryana chanticleer	1	110	7	2.0	2.0	2.0	2.0	2	N	2.5	Semi-mature	Normal	Structural condition-good. Normal leaf area and vigour. Basal suckering.	None	20+	B	2	1.3	5.5
T	1801	1	Bradford Pear: Pyrus calleryana chanticleer	1	80	5	1.0	1.0	1.0	1.0	2	E	2	Semi-mature	Normal	Structural condition-good. Normal leaf area and vigour. Basal suckering.	None	20+	B	2	1	2.9
T	1802	1	Whitebeam: Sorbus aria	1	230	6	3.0	3.0	3.0	3.0	2	E	3.5	Early-mature	Normal	Structural condition-moderate, codominant stems with partial bark inclusions, lean in trunk. Good leaf area and vigour.	None	20+	B	2	2.8	24

Feature	Number	No. of trees	SPECIES Common name:scientific name	Stem count	Stem diameter (mm)	Height (m)	Crown spread (m)				First significant branch (FSB)- height	First significant branch (FSB) - direction of growth	Canopy clearance Ht (m)	Life stage: Y-SM-EM-M-LM-V-A	Physiological Condition: G-N-F-P-D	Observations	Preliminary management recommendations	Remaining contribution in years: <10, 10+, 20+, 40+	Retention category	Retention Sub-	RPR (M)	RPA(M ²)
							N	E	S	W												
T	1803	1	Whitebeam:Sorbus aria	1	160	6	1.5	2.0	1.5	2.0	2	W	3	Early-mature	Normal	Structural condition-moderate, codominant stems with partial bark inclusions, lean in trunk, large wound at the base of the trunk, evidence of decay. Good leaf area and vigour. Restricted rooting environment.	None	20+	B	2	1.9	12
T	1804	1	Sycamore:Acer pseudoplatanus	1	140	8	1.5	1.5	2.0	2.0	2.5	S	3	Semi-mature	Normal	Structural condition-moderate, codominant stems, wounds at the base of the trunk, minor decay. Reasonable leaf area and vigour.	None	20+	B	2	1.7	8.9
T	1805	1	Bradford Pear:Pyrus calleryana chanticleer	1	80	5	1.0	1.0	1.5	1.0	1.5	S	2	Semi-mature	Normal	Structural condition-good. Normal leaf area and vigour. Basal suckering.	None	20+	B	2	1	2.9
T	1806	1	Whitebeam:Sorbus aria	1	270	7	4.0	4.0	3.0	3.5	2.5	W	3	Early-mature	Normal	Structural condition-moderate, codominant stems with partial bark inclusion. Good leaf area and vigour.	None	20+	B	2	3.2	33
T	1807	1	Whitebeam:Sorbus aria	1	290	7	4.0	3.0	3.5	4.0	3	E	3	Early-mature	Normal	Structural condition-moderate, codominant stems with partial bark inclusion. Good leaf area and vigour.	None	20+	B	2	3.5	38
T	1808	1	Rowan:Sorbus aucuparia	1	130	5	2.0	2.0	2.0	2.0	2	S	2	Semi-mature	Normal	Structural condition-moderate, codominant stems, wounds at the base of the trunk, evidence of decay. Reasonable leaf area and vigour.	None	10+	C	2	1.6	7.6
T	1809	1	Bradford Pear:Pyrus calleryana chanticleer	1	90	5	1.2	1.2	1.2	1.2	2	NE	2	Semi-mature	Normal	Structural condition-good, minor trunk damage. Normal leaf area and vigour.	None	20+	B	2	1.1	3.7
T	1810	1	Bradford Pear:Pyrus calleryana chanticleer	1	110	7	1.5	1.5	1.5	1.5	2	E	2	Semi-mature	Normal	Structural condition-good. Normal leaf area and vigour. Basal suckering.	None	20+	B	2	1.3	5.5
T	1811	1	Bradford Pear:Pyrus calleryana chanticleer	1	120	7	1.5	1.5	1.5	1.5	2	E	2	Semi-mature	Normal	Structural condition-good, minor trunk damage. Normal leaf area and vigour. Conflict with overhead electricity network.	None	20+	B	2	1.4	6.5
T	1812	1	Sycamore:Acer pseudoplatanus	1	210	8	2.5	3.0	3.0	3.0	3	S	3.5	Early-mature	Normal	Structural condition-moderate, codominant stems. Good leaf area and vigour. Conflict with overhead electricity networks.	None	20+	B	2	2.5	20

Feature	Number	No. of trees	SPECIES Common name:scientific name	Stem count	Stem diameter (mm)	Height (m)	Crown spread (m)				First significant branch (FSB)- height	First significant branch (FSB) - direction of growth	Canopy clearance Ht (m)	Life stage: Y-SM-EM-M-LM-V-A	Physiological Condition: G-N-F-P-D	Observations	Preliminary management recommendations	Remaining contribution in years: <10, 10+, 20+, 40+	Retention category	Retention Sub-	RPR (M)	RPA(M ²)
							N	E	S	W												
T	1813	1	Whitebeam:Sorbus aria	1	110	6	1.0	1.5	1.5	1.0	2.5	S	3	Semi-mature	Poor	Structural condition-moderate, codominant stems, wounds on the trunk, evidence of decay. Low leaf area and vigour.	None	10+	C	2	1.3	5.5
T	1814	1	Swedish whitebeam:Sorbus intermedia	1	320	8	3.0	4.0	3.5	3.5	3	NE	3	Early-mature	Normal	Structural condition-moderate, codominant stems with partial bark inclusions, wounds at the base of the trunk, minor decay, natural lean in the trunk. Good leaf area and vigour. Conflict with overhead electrical network.	None	20+	B	2	3.8	46
T	1815	1	Bradford Pear:Pyrus calleryana chanticleer	1	100	6	1.5	1.5	1.5	1.5	2	E	2	Semi-mature	Normal	Structural condition-good. Normal leaf area and vigour.	None	20+	B	2	1.2	4.5
T	1816	1	Swedish whitebeam:Sorbus intermedia	1	170	6	2.0	2.0	2.0	2.0	2	W	2.5	Semi-mature	Normal	Structural condition-good. Normal leaf area and vigour.	None	20+	B	2	2	13
T	1817	1	Whitebeam:Sorbus aria	1	330	8	3.5	3.5	3.5	3.5	2	W	2	Early-mature	Normal	Structural condition-moderate, codominant stems with partial bark inclusions, wounds at the base of the trunk, evidence of decay. Good leaf area and vigour. Conflict with overhead electrical network.	None	20+	B	2	4	49
T	NP	1	Bradford Pear:Pyrus calleryana chanticleer	1	50	4	1.0	1.0	1.0	1.0	2	S	2	Young	Normal	Structural condition-good, minor wound at the base of the trunk. Normal leaf area and vigour.	Loosen tree tie.	20+	B	2	0.6	1.1
T	1818	1	Whitebeam:Sorbus aria	1	360	8	4.0	4.0	4.0	4.0	2.5	W	3.5	Early-mature	Normal	Structural condition-moderate, codominant stems with partial bark inclusions, wound on the trunk, minor decay, partial occlusion. Good leaf area and vigour. Restricted rooting environment, evidence of minor pavement heaving.	None	20+	B	2	4.3	59

Feature	Number	No. of trees	SPECIES Common name:scientific name	Stem count	Stem diameter (mm)	Height (m)	Crown spread (m)				First significant branch (FSB)- height	First significant branch (FSB) - direction of growth	Canopy clearance Ht (m)	Life stage: Y-SM-EM-M-LM-V-A	Physiological Condition: G-N-F-P-D	Observations	Preliminary management recommendations	Remaining contribution in years: <10, 10+, 20+, 40+	Retention category	Retention Sub-	RPR (M)	RPA(M ²)
							N	E	S	W												
T	1819	1	Whitebeam:Sorbus aria	1	260	8	2.5	2.0	3.0	3.0	2	W	3.5	Early-mature	Normal	Structural condition-moderate, codominant stems with partial bark inclusions, wound on the trunk, minor decay, partial occlusion. Good leaf area and vigour. Restricted rooting environment, evidence of pavement heaving.	None	20+	B	2	3.1	31
T	1820	1	Rowan:Sorbus aucuparia	1	120	7	1.0	1.0	1.0	1.0	3	E	3.5	Semi-mature	Normal	Structural condition-moderate, codominant stems. Normal leaf area and fruit. Restricted rooting environment. Conflict with overhead electrical network.	None	20+	B	2	1.4	6.5
T	1821	1	Rowan:Sorbus aucuparia	1	180	7	1.5	1.5	1.5	1.5	2	E	2	Semi-mature	Normal	Structural condition-moderate, codominant stems with partial bark inclusion. Normal leaf area and fruit. Restricted rooting environment. Conflict with overhead electrical network.	Crown raise over pavement to improve headroom, 2.5 m clear from ground level.	10+	C	2	2.2	15
T	1822	1	Rowan:Sorbus aucuparia	1	130	7	1.0	1.5	1.5	1.0	2	W	2.5	Semi-mature	Fair	Structural condition-moderate, codominant stems with partial bark inclusion. Low leaf area, normal fruit. Restricted rooting environment. Conflict with overhead electrical network.	None	10+	C	2	1.6	7.6
T	1823	1	Rowan:Sorbus aucuparia	1	130	5	1.5	2.0	1.0	1.0	2	E	2	Semi-mature	Fair	Structural condition-poor, heavy lean in the trunk.	Consider straightening or removal.	10+	C	2	1.6	7.6
T	1824	1	Norway maple:Acer platanoides	1	350	15	5.5	4.0	2.5	4.0	3	N	4	Early-mature	Fair	Structural condition-moderate, minor codominance, deadwood accumulating in the crown. Low leaf area, evidence of dieback in 20% of the crown. Tree is established in a raised planter. Conflict with overhead electrical network.	Consider crown clean	20+	B	2	4.2	55

Feature	Number	No. of trees	SPECIES Common name:scientific name	Stem count	Stem diameter (mm)	Height (m)	Crown spread (m)				First significant branch (FSB)- height	First significant branch (FSB) - direction of growth	Canopy clearance Ht (m)	Life stage: Y-SM-EM-M-LM-V-A	Physiological Condition: G-N-F-P-D	Observations	Preliminary management recommendations	Remaining contribution in years: <10, 10+, 20+, 40+	Retention category	Retention Sub-	RPR (M)	RPA(M ²)
							N	E	S	W												
T	1825	1	Norway maple:Acer platanoides	1	450	15	3.0	6.0	6.0	5.0	2	N	4	Early-mature	Normal	Structural condition-moderate, codominant stems, deadwood accumulating in the crown. Normal leaf area, browning of the leaves approximately 30%. Tree is established in a raised planter. Conflict with overhead electrical network.	Consider crown clean	20+	B	2	5.4	92

Appendix 4

FINGLAS VILLAGE TREE WORKS SCHEDULE - SEPTEMBER 2022

- In accordance with Section 40 of the Wildlife Act 1976 (as amended 2000) the tree works, and removal of ivy should be scheduled outside of the nesting season (1st of March to 31st of August).
- All tree works are to be carried out in accordance with the *British Standard BS 3998: 2010 Tree Work - Recommendations* and current Health and Safety requirements.
- The trees that need to be removed are marked with red hatched lines on the Tree Removal & Protection Plans (TS_TPP_8_9_22).
- The tree works schedule should be presented to the tree owner in advance of any tree works being carried out.
- The removal of ivy should be carried out with handsaws (silky saws) to avoid bark and trunk damage.

Tree No	Tree Species	CAT	Description of Tree Work
		BS5837	
Tree Works to Facilitate Scheme Construction			
T1785	Rowan spp:Rowan (Sorbus spp)	U	Tree is dead. Remove
T1790	Bradford Pear:Pyrus calleryana chanticleer	B2	Direct conflict with the alignment of the proposed cycle path. Remove
T1791 & T1793 (2 x trees)	Rowan:Sorbus aucuparia	C2	Direct conflict with the alignment of the proposed cycle path. Remove
NP (New planting)	Bradford Pear:Pyrus calleryana chanticleer	B2	Direct conflict with the alignment of the proposed cycle path. Remove
Additional Recommended Tree Works			
1774	Small-leaved Lime:Tilia cordata	A	Consider crown raise over pavement and road to improve headroom. Target prune stub cuts.
1775	Sycamore:Acer pseudoplatanus	B	Remove basal suckers. Remove ivy to 1 m from ground level to facilitate future tree inspections
1776	Sycamore:Acer pseudoplatanus	B	Remove basal suckers. Remove ivy to 1 m from ground level to facilitate future tree inspections

Tree No	Tree Species	CAT	Description of Tree Work
		BS5837	
1777	Large-leaved Lime:Tilia platyphyllos	B	Crown raise over pavement to improve headroom, 2.5 m clear from ground level.
1778	Sycamore:Acer pseudoplatanus	C	Light crown raise over pavement, remove branch conflict with neighbouring street sign.
1779	Sycamore:Acer pseudoplatanus	C	Side prune branches clear of bus stop to prevent conflict with buses.
1781	Sycamore:Acer pseudoplatanus	B	Consider crown raise over pavement and roof of pedestrian shelter.
1787	Bradford Pear:Pyrus calleryana chanticleer	B	Target prune the fractured branches in the crown.
1797	Bradford Pear:Pyrus calleryana chanticleer	B	Remove tree tie post
1798	Bradford Pear:Pyrus calleryana chanticleer	B	Remove tree tie post
NP	Bradford Pear:Pyrus calleryana chanticleer	B	Loosen tree tie.
1821	Rowan:Sorbus aucuparia	C	Crown raise over pavement to improve headroom, 2.5 m clear from ground level.
1823	Rowan:Sorbus aucuparia	C	Consider straightening or removal.
1824	Norway maple:Acer platanoides	B	Consider crown clean
1825	Norway maple:Acer platanoides	B	Consider crown clean

Appendix 5



