

The background is a vibrant red color. It features several abstract geometric shapes: a large teal semi-circle in the top-left corner, a blue semi-circle in the top-right corner containing a white circle, a dark blue horizontal bar in the top-right corner, a teal semi-circle in the bottom-right corner, and a blue semi-circle in the bottom-left corner containing a white circle. There are also smaller white circles within some of these shapes.

Appendix D2
Arboricultural Impact
Assessment Report -
Finglas to
Phibsborough

CMK

Horticulture & Arboriculture Ltd.

Arboricultural Assessment, Report

Scheme 04: Finglas To City Centre

Project No.	TFIN001	Date	24/08/22
Project Name	BUSCONNECTS Core Bus Corridors. Emerging Preferred Routes / Public Consultation	Revision	-

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1 Client brief & Methodology

CMK Hort + Arb Ltd. were commissioned by Roughan & O'Donovan (ROD) engineering consultancy on behalf of NTA (National Transport Authority) to undertake an arboricultural assessment of trees on a located on the Finglas Road (R135) between its intersection with the R108 in Dublin 11 and turn-off to Seamus Ennis Road, Finglas. The fieldwork was undertaken between the 10th and the 14th of August 2020.

The survey methodology, 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).

The trees locations were taken from co-ordinates provided by ROD in the PDF (BCIDD-ROT-ENV_LA-0004_XX_00-SK-LL-0001 (Tree Survey)). Survey data was recorded using a GPS enabled Trimble Geo 7X and formatted to the naming convention as specified in Tree Survey Specification document (No: 19.117.07 TSSAS).

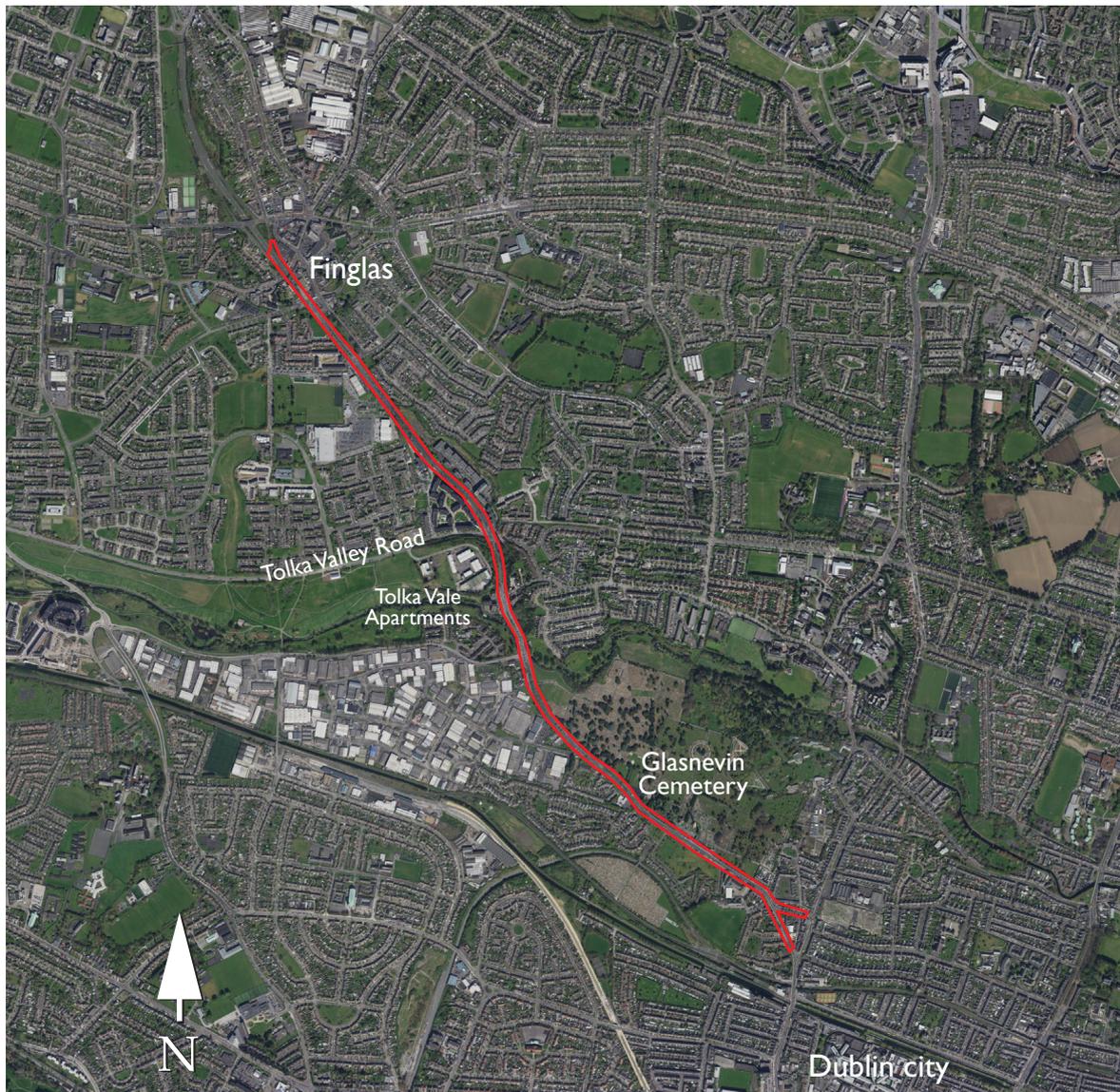


Image 1. Site overview with red line outline of survey boundary located at north Dublin city.

2. General description of trees

A total of 519 trees were surveyed on the route. The tree categories are presented in table 1 (see page 11 for individual and group tree schedule. A breakdown of tree species are outlined in chart 1 and a category breakdown of most prevalent species in chart 2.

This description of surveyed trees begins in the southern section of the route, on the R108 adjacent to the intersection with Prospect Avenue are located more established street trees; London plane (*Platanus × acerifolia*). These are in contrast with the majority of younger specimens of street trees located throughout the route (image 2).



Image 2. Early mature London plane on the R108 adjacent to the intersection with Prospect Avenue.

North, adjacent to younger London plane street plantings are a line of private trees within the grounds of St. Vincent’s Secondary School (image 3). Less than 1m from the public foot path, these include some well formed early mature rowan (*Sorbus aucuparia*), Birch (*Betula pendula*), Purple leaf plum (*Prunus cerasifera Nigra*) and mature Black alder (*Alnus glutinosa*),



Image 3. Early mature cherry, sycamore, birch and rowan withing the grounds of St.Vincent’s Secondary School.

Category	Number	% of total
A	16	3.1%
B	361	69.6%
C	134	25.8%
U	8	1.5%

Table 1. Tree Category breakdown (see page 12 for tree category explanations).

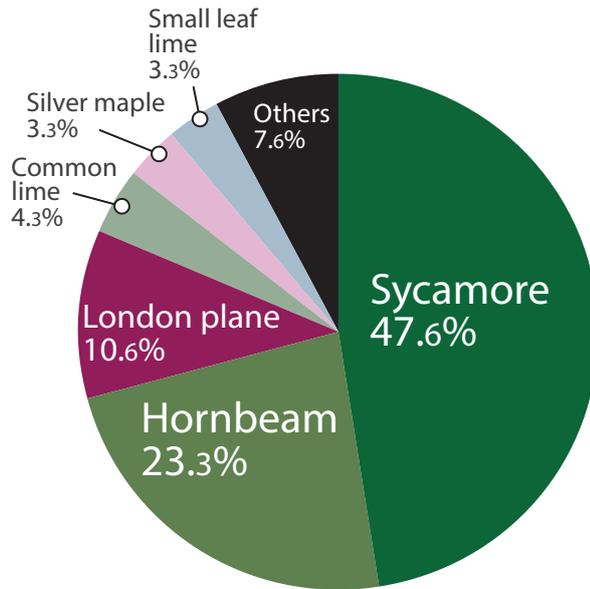


Chart 1. Tree species breakdown.

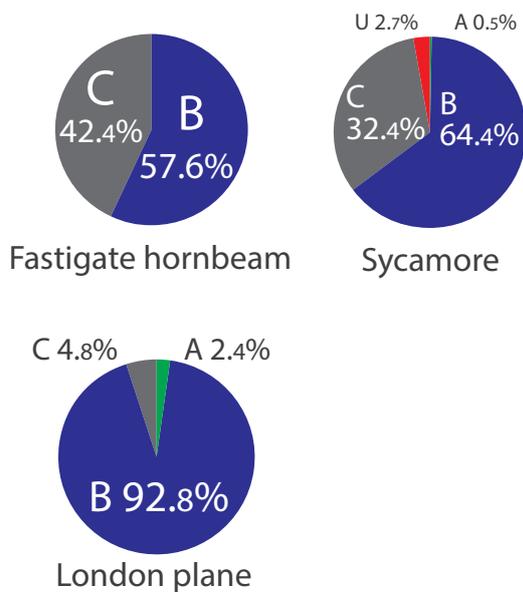


Chart 2. Tree category breakdown by most prevalent species.

Cherry (*Prunus avium*), Sycamore (*Acer pseudoplatanus*), Swedish whitebeam (*Sorbus aria*).

Within Claremont Lawns Park, 200m north and 4.5m from the boundary wall, are a line of common lime (*Tilia x europaea*). This group of 17 trees are



Image 4. Lime trees within Claremont Lawns Park and silver maple street trees.

vigorous and well developed (image 4). 300m north of Claremont Lawns Park is the first central median on the surveyed route (image 5). This contains Rowan (*Sorbus aucuparia*) and London plane (*Platanus x acerifolia*) within a gently sloping grass verge median. Many of



Image 5. Rowan and London plane on the central median between Claremont court and the Willows.

these specimens are suffering from soil buildup near root flares.

Adjacent to the Glasnevin cemetery a longer, 400m, median contains a group of 28 London plane (*Platanus x acerifolia*) of mixed age profiles, with the majority being younger early mature. These trees are likely to be suited to this environment due to their drought tolerance (image 6).



Image 6. Early mature London plane trees in the central median adjacent to Glasnevin Cemetery.

North of the Old Finglas Road and Tolka Valley apartments Fastigiata hornbeam (*Carpinus betulus 'Fastigiata'*) and Sycamore (*Acer pseudoplatanus*) populate the central median (image 7). These trees contain some poorer specimens due to poor soil conditions. More mature sycamores are located in grass verges along the western side of the roadway. These trees are better developed and have benefited from larger planting areas.



Image 7. Sycamore in the central median north of the Old Finglas Road.

Adjacent to the Tolka and Eden Apartments, are located some of the more mature sycamore surveyed on the route (at heights of 17m) (image 8). These trees provide good amenity value to residents living in high density apartments with a lack of local open green spaces within the immediate locality.

South of Glenhill road within the central median here, are Fastigiata hornbeam (*Carpinus betulus 'Fastigiata'*) and Sycamore (*Acer pseudoplatanus*). These have not reached their full potential due to over crowding from tight proximity planting (image 9).

At the entrance to Glenhill Road are two mature gum trees (*Eucalyptus spp*) (image 10). These are unusual to find in north Dublin, the majority being found south of



Image 8. A larger early mature sycamore street tree adjacent to the Tolka and Eden Apartments.



Image 9. Sycamore and hornbeam in the central median south of Glenhill Road. the city. Planted in an open area these have become well established.

North of the Clearwater shopping centre a street plantings of early mature Fastigate hornbeam (*Carpinus betulus 'Fastigiata'*) are located along the foot paths in grass verges. Younger specimens populate the central median (image 11).



Image 11. Street planting of early mature fastigate hornbeam north of the Clearwater shopping centre.

These are some of the poorer quality trees, located in this section, due to sub-optimal soil conditions and close proximity planting. Adjacent to Finglas Village are located early mature Sycamore (*Acer pseudoplatanus*) (image 12). Some of these trees exhibit basal growth near footpaths, that would be best removed for aesthetic and safety concerns.

Within the north-most section of the surveyed route, a group of small-leaf lime (*Tilia cordata*) are located on a sloping grass verge before the turn-off to Seamus Ennis Road in Finglas village. These have developed well due to good soil conditions (image 13).



Image 10. Two mature eucalyptus at the entrance to Glenhill Road.



Image 12. An early mature sycamore in Finglas village.



Image 13. Young small leaf lime and sycamore before the turn-off to Seamus Ennis Road in Finglas village.

3. Statutory or non-statutory designations affecting trees within the survey area

No TPO (Tree Preservation Orders) or SACs (Special Area of Conservation) are designated for trees within the survey area.

As stated in the Dublin City Tree Strategy 2016–2020, “Trees are a valuable functional component of the urban landscape – they also make a significant contribution to people’s health and quality of life”. The strategy affirms its objective as “a proactive and systematic good practice approach to tree management and inspection with the aim of promoting good tree health, condition, diversity, public amenity and a balanced age profile.”

This document lays out strategies where outcomes are to ensure a balance tree health and public safety and comfort, were reasonable.

A greater emphasis is now placed on biodiversity and habitat then before. Where retaining trees, when safe, is considered desirable to promote the encouragement of native species. This includes standing deadwood and the retention of ivy growth on trees (except where removal is necessary to aid visual tree health assessment or where ivy growth is excessive and adversely affecting tree health).

While there are no Tree Protection Orders (TPOs) on any of the trees on this site, however unless planning permission which clearly identifies trees for removal has been granted then under Section 7 of the Forestry Act 2014 a person wishing to fell trees must apply to the minister for a licence to do so.

Exempted trees: Section 19 states that the requirement for a felling licence for the uprooting or cutting down of trees does not apply where:

- The tree in question is standing in an urban area
- The tree is considered dangerous and hazardous.
- The tree is within 10m of a public road and regarded as hazardous
- The tree in question is less than 100 ft. / 30m from a dwelling other than a wall or temporary structure;
- The tree in question is a hazel, apple, plum, damson, pear, or cherry tree grown for the value of its fruit or any other;

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 any queries arise regarding tree felling in general it is recommended that advice is sought from Felling Section of the Forest Service or the local forestry development officer for further information.

Bats

Trees may contain bats. Bats are afforded legal protection under Irish and EU legislation and agreements (Wildlife Act (1976), Wildlife (Amendment) Act (2000), S.I. No. 94 of 1997 and S.I. No. 378 OF 2005 implementing the EU Habitats Directive, Bonn Convention (The Convention on the Conservation of Migratory Species of Wild Animal) and the Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats).

Trees provide roosting opportunities for bats. Mature trees are the most likely to have potential as roost sites. This may be provided by cavities, crevices, limb fractures, storm damage or mechanical damage and may even be by way of loose bark. Felling of mature trees and even surgery to large limbs may place bats at risk and both procedures remove roosting sites for bats.

Professional advice from a licenced surveyor should be sought prior to any works commencing on trees.

4. Guidance for the design team with key considerations

A chief consideration regarding the retention of existing trees pertain to the protection of tree roots. Root growth is inhibited beneath roadways as they present effective barriers for root growth. This has the effect of promoting growth into open soil areas, such as grass verges, and to a lesser extent under paved footpaths.

This means that where roots are expected to be located within grass verges and near roadways, the verges will be expected to contain a greater mass of root volume. To protect existing trees the preservation of these verges areas must be considered. The accompanying survey impact drawings (BCIDD-ROT-ENV_LA-0304_ML_00-DR-LL-0001_CMK Pg.23-37) reflect these greater RPA (Root Protection Area) impacts.

This route contains many young trees that have the potential to resist disturbance to their root structure. If consideration is applied during works, these trees have good potential to recover from root loss, particularly in areas where potential root damage is only affecting one side of the tree and less than 20% of total root area.

Many of the median areas will have adjustments made to existing contours to accommodate new lanes on roadways. As the existing space is limited within these areas, with some less than 1.5m wide, small adjustments can have a significant impact on roots. As noted in Appendix A: individual and group tree schedule, some of these areas contain trees in a poor condition and in such cases the best approach is to replace with a new generation of healthier trees, as they will have a decreased resistance to soil disturbance and root damage.

5. Arboricultural Impact

Design team meetings were strongly influenced by existing trees. With an overall objective to retain the maximum number of good quality trees were constraints of the infrastructure upgrade allowed.

The direct impact of the proposed construction (table 2) will necessitate the removal of 13.1% of the existing category A, B & C trees. Only 3 category A trees will be removed. In addition, all category U trees (8) will be removed.

The removal of trees will be most pronounced within footpath areas where walk ways are to be made wider to accommodate new cycle lanes. Impacts are greater on more mature trees where they have less potential to recover from root area disturbances.

Some of the existing category C trees have been shown as marked for removal where proposed works add a new stressor to trees that have already suffering due to poor soil conditions (as detailed within Appendix A).

	Category A High value trees	Category B Moderate value trees	Category C Lower value trees	Category U Failed or failing trees	Total
Retain	13	322	108	-	443
Remove to facilitate construction	3	39	26	-	68
Remove for sound arboricultural practice	-	-	-	8	8
Category totals	16	361	134	8	519
Trees subject to an RPA incursion	1	40	6	-	47
Trees to be pruned to facilitate the Proposed Development	-	29	-	-	29

Table 2. Arboricultural Impact breakdown.

6. Arboricultural Method Statement

This section gives general guidance on methods of work to minimise damage to trees. For privately owned trees, the owner (or their agent), should be consulted at an early stage prior to the commencement of any works. This will reduce the potential for future conflict between trees and works.

6.1 Below Ground

Wherever trees are present, precautions should be taken to minimise damage to their root systems. As the shape of the root system is unpredictable, there should be control and supervision of any works, particularly if this involves excavating through the surface 600mm, where the majority of roots develop.

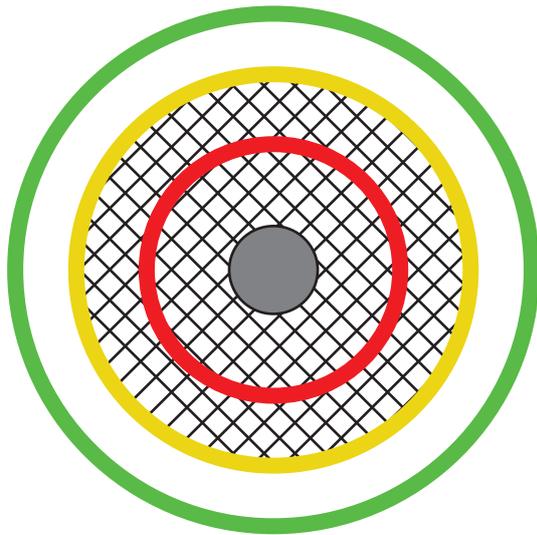
6.1.1 Fine Roots

Fine roots are vulnerable to desiccation once they are exposed to the air. Larger roots have a bark layer which provides some protection against desiccation and temperature change. The greatest risk to these roots occurs when there are rapid fluctuations in air temperature around them e.g. frost and extremes of heat. It is therefore important to protect exposed roots where a trench is to be left open overnight where there is a risk of frost. In winter, before leaving the site at the end of the day, the exposed roots should be wrapped with dry sacking. This sacking must be removed before the trench is backfilled.

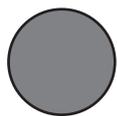
6.1.2 Precautions

The precautions referred to in this section are applicable to any excavations or other works occurring within the Prohibited or Precautionary Zones as illustrated in Figure 1 - 'Tree Protection Zone'.

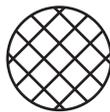
FIGURE 1 – Tree Protection Zone



Key



Trunk of tree



Canopy or branch spread



PROHIBITED ZONE - 1m from trunk. Excavations of any kind must be avoided within this zone. Materials, plant and spoil must not be stored within this zone.



PRECAUTIONARY ZONE - 4 x tree circumference. Where excavations must be undertaken within this zone the use of mechanical excavation plant should be prohibited. Precautions should be undertaken to protect any exposed roots. Materials, plant and spoil should not be stored within this zone.



PERMITTED ZONE - outside of the precautionary zone. Excavation works may be undertaken within this zone, however caution must be applied and the use of mechanical plant limited. Any exposed roots should be protected.

6.1.3 Realignment

Whenever possible works should always be diverted or re-aligned outside the Prohibited or Precautionary Zones. Under no circumstances can machinery be used to excavate open trenches within the Prohibited Zone.

The appropriate method of working within the Precautionary Zone should be determined in consultation with the local authority (or for privately owned trees the owner or their agent) and may depend on the following circumstances;

6.1.3.1 the scope of the works (e.g. one-off repair or part of an extensive operation)

6.1.3.2 degree of urgency (e.g. for restoration of supplies)

6.1.3.3 knowledge of location of other apparatus

6.1.3.4 soil conditions

6.1.3.5 age, condition, quality and life expectancy of the tree

Where works are required for the laying or maintenance of any apparatus within the Prohibited or Precautionary Zones there are various techniques available to minimise damage.

Acceptable techniques in order of preference are;

a) Trenchless

Wherever possible trenchless techniques should be used. The launch and reception pits should be located outside the Prohibited or Precautionary Zones.

In order to avoid damage to roots by percussive boring techniques it is recommended that the depth of run should be below 600mm. Techniques involving external lubrication of the equipment with materials other than water (e.g. oil, bentonite, etc.) must not be used when working within the Prohibited Zone. Lubricating materials other than water may be used within the Precautionary Zone following consultation and by agreement.

b) Broken Trench - Hand-dug

This technique combines hand dug trench sections with trenchless techniques if excavation is unavoidable. Excavation should be limited to where there is clear access around and below the roots. The trench is excavated by hand with precautions taken as for continuous trenching as in (c) below. Open sections of the trench should only be long enough to allow access for linking to the next section. The length of sections will be determined by local conditions, especially soil texture and cohesiveness, as well as the practical needs for access. In all cases the open sections should be kept as short as possible and outside of the Prohibited Zone.

c) Continuous Trench - Hand-dug

The use of this method must be considered only as a last resort if works are to be undertaken by agreement within the Prohibited Zone. The objective being to retain as many undamaged roots as possible.

Hand digging within the Prohibited or Precautionary zones must be undertaken with great care requiring closer supervision than normal operations.

After careful removal of the hard surface material digging must proceed with hand tools. Clumps of roots less than 25mm in diameter (including fibrous roots) should be retained in situ without damage. Throughout the excavation works great care should be taken to protect the bark around the roots.

All roots greater than 25mm diameter should be preserved and worked around. These roots must not be severed without first consulting the owner of the tree or the consulting arboriculturist. If after consultation severance is unavoidable, roots must be cut back using a sharp tool to leave the smallest wound.

6.1.4 Backfilling

6.1.4.1 Backfilling should be carefully carried out to avoid direct damage to roots and excessive compaction of the soil around them. The backfill should, where possible, include the placement of an inert granular material mixed with top soil or sharp sand (not builder’s sand) around the roots. This should allow the soil to be compacted for resurfacing without damage to the roots securing a local aerated zone enabling the root to survive in the longer term.

6.1.4.2 Backfilling outside the constructed highway limits should be carried out using the excavated soil. This should not be compacted but lightly “tamped” and usually left slightly proud of the surrounding surface to allow natural settlement. Other materials should not be incorporated into the backfill.

6.1.5 Additional Precautions near Trees

6.1.5.1 Movement of heavy mechanical plant (excavators etc.) must not be undertaken within the Prohibited Zone and should be avoided within the Precautionary Zone, except on existing hard surfaces, in order to prevent unnecessary compaction of the soil. This is particularly important on soils with a high proportion of clay. Spoil or material must not be stored within the Prohibited Zone and should be avoided within the Precautionary Zone.

6.1.5.2 Where it is absolutely necessary to use mechanical plant within the Precautionary Zone care should be taken to avoid impact damage to the trunk and branches. A tree must not be used as an end-stop for paving slabs or other materials nor for security chaining of mechanical plant. If the trunk or branches of a tree are damaged in any way advice should be sought from the supervising arboriculturist.

See table 1 - ‘Prevention of Damage to Trees Below Ground’ below for summary details regarding causes and types of damage to trees and the implications of the damage and the necessary precautions to be taken to avoid damage.

TABLE 1 - Prevention of Damage to Trees Below Ground

Causes of Damage	Type of Damage	Implications to Tree	Precautions
Trenching, mechanical digging etc.	Root severance	<ul style="list-style-type: none"> The tree may fall over Death of the root beyond the point of damage Potential risk of infection of the tree <p>The larger the root the greater the impact on the tree.</p>	Hand excavate only within the Precautionary Zone. Work carefully around roots. Do not cut roots over 25mm in diameter without referring to the consulting arborist. For roots less than 25mm in diameter use a sharp tool and make a clean cut leaving as small a wound as possible.

Causes of Damage	Type of Damage	Implications to Tree	Precautions
Trenching, mechanical digging, top soil surface removal etc.	Root bark damage	<ul style="list-style-type: none"> The tree may fall over If the damage circles the root it will cause the death of the root beyond that point Potential risk of infection of the tree <p>The larger the root the greater the impact on the tree.</p>	<p>Do not use mechanical machinery to strip the top soil within the Precautionary Zone.</p> <p>Hand excavate only within the Precautionary Zone.</p> <p>Work carefully around roots. Do not cut roots over 25mm in diameter without referring to the consulting arborist.</p> <p>For roots less than 25mm use a sharp tool and make a clean cut leaving as small a wound as possible.</p>
Vehicle movement and plant use. Material storage within the precautionary area.	Soil compaction & water saturation	Restricts or prevents passage of gaseous diffusion through soil, the roots are asphyxiated and killed affecting the whole tree.	Prevent all vehicle movement, plant use or material storage within the Precautionary Zone.
Top-soil scouring, excavation or banking up.	Alterations in soil level causing compaction or exposure of roots.	Lowering levels strips out the mass of roots over a wide area. Raising soil levels asphyxiates roots and has the same effect as soil compaction.	Avoid altering or disturbing soil levels within the Precautionary Zone.
Use of herbicides.	Poisoning of the tree via root absorption	<ul style="list-style-type: none"> Death of the whole tree Death of individual branches <p>Damage to leaves and shoots.</p>	The selection and application of herbicides must be undertaken by a competent person in accordance with COSHH regulations.
Spillage of oils or other materials.	Contamination of soil	Toxic and asphyxiation effects of chemicals, oils, building materials (cement, plaster, additives etc.) on the root system can kill the tree.	Never store oils, chemicals or building materials within the Precautionary Zone or within the branch spread of a tree, which ever is the greater.
Placement or replacement of underground apparatus.	Various	Death of all or part of the tree.	Effective planning and liaison with the consulting arborist, taking into consideration the position of trees, and their future growth potential and management.

6.2 Above Ground

6.2.1 Damage by Pruning

Trees (including shrubs and hedges) can be damaged by inappropriate or excessive pruning. The aim of pruning should be to achieve vegetation clearances in ways which minimise the aesthetic and physical impact on retained trees and shrubs.

Reasonable care should be taken to avoid unnecessary damage to flora and fauna and to access ways.

Work should comply with BS3998. Pruning is a skilled job which should be undertaken by appropriately trained and experienced staff.

Given constraints often imposed by others it is not always possible to prune in an aesthetically pleasing way. However an effective Utility Arborist adjusts the work carried out for each plant to achieve the best possible standard, given the prevailing constraints.

- Ideally vegetation is left well balanced with natural crown shapes
- Pruning must also take into account the vegetation re-growth expected in the interval between cuts. This will vary widely between plant species and sites.
- Vegetation management: tree selection for retention and replanting at an early stage can be used to prevent the need for much more intrusive and damaging work in the future when the vegetation grows closer to the overhead line. Good practice often involves interventions over a number of cutting cycles to manage trees and shrubs so that future conflict with local infrastructure is minimised.

Where reasonably possible avoid recognised injurious practices such as:

- o Topping or lopping to an arbitrary height or branch length
- o Unbalancing a tree crown by excessive one-sided pruning
- o Pollarding. Unless pollarding is the existing recognised management technique.
- o Inappropriate use of flailing.
- o Climbing damage - Care should be taken to avoid injuring thin and weak barked species by inappropriate use of rope access techniques.
- o Access damage - Vehicle access and treatment of arisings should avoid injury to low branches, stems, root buttresses and feeder roots.
- o Spreading Disease - Appropriate regard should be given to avoid spreading fungal diseases.
- If the only pruning option is to severely reduce or unbalance a tree, then coppicing, or felling and replacement planting are often better options.

See table 2 - 'Prevention of Damage to Trees Above Ground' below for summary details regarding causes and types of damage to trees and the implications of the damage and the necessary precautions to be taken to avoid damage.

TABLE 2 - Prevention of Damage to Trees Above Ground

Causes of Damage	Type of Damage	Implications for the Tree	Precautions
<p>Impact by vehicle or plant</p> <p>Physical attachment of signs or hoardings to the trunk</p> <p>Storage of materials at base of tree</p> <p>Rubbing by winch or pulling cables</p>	<p>Bark bruising, bark removal, damage to the wood, damage to buttress roots, abrasion to trunk</p>	<p>Wounding with the potential for infection ultimately resulting in death of all or part of the tree.</p> <p>Structural failure of the tree</p>	<p>Surround the trunk with protective free-standing barrier. Exclude vehicles, plant or material storage from the Precautionary Zone.</p> <p>Ensure sufficient clearance of cables or ropes.</p>
<p>Impact by vehicle or plant</p> <p>Rubbing by overhead cables</p>	<p>Bark damage to branches, breakage and splitting of branches, abrasion to branches</p>	<p>Structural failure of the branch.</p> <p>Wounding or loss of a branch with the potential for infection ultimately resulting in death of all or part of the branch or tree.</p>	<p>Exclude vehicles, plant or material storage from the Precautionary Zone. Ensure sufficient clearance of cables or ropes.</p> <p>All pruning should be carried out in accordance with BS3998 (prune affected branches to give appropriate clearance from cables)</p>
<p>Inappropriate siting of overhead apparatus, such as CCTV, lighting fixtures and communications masts and dishes.</p>	<p>Inappropriate pruning, unnecessary tree removal</p>	<p>Severely pruning tree to acquire line of sight signal for communications dish etc.</p>	<p>Effective planning and liaison with arboriculturist, taking into consideration the position of trees, and their future growth potential and management.</p>
<p>Lack of forethought in design and location of apparatus and services entries on new developments</p>	<p>Complete tree removal</p>	<p>The tree is removed unnecessarily</p>	<p>Agree the location and installation of services at the design stage. Consideration should be given to the creation of dedicated service routes wherever possible.</p>
<p>Use of herbicides</p>	<p>Poisoning of the tree via absorption through bark, leaves and shoots</p>	<p>Death of the whole tree, death of individual branches, damage to leaves and shoots</p>	<p>The selection and application of herbicides must be undertaken by a competent person in accordance with COSHH regulations.</p>

6.2.1 Chemical Damage to Trees

Chemical damage to trees adjacent to utility premises and operational land can be avoided if;

- the risk is identified when planning any work involving herbicides or other chemicals ensuring that only appropriate chemicals are used. Particular care should be exercised when considering the use of herbicides recommended for “non crop areas” as many of these also specify “do not use where there may be roots of desirable plants”,
- herbicides are applied only at the rate and in the manner recommended by the manufacturer,
- follow-up applications are not undertaken until weeds reappear on the operational land,
- alternative methods of weed control are considered.

7. 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.

NB: The prefix 'P' denotes trees within private property.

Terminology (cont.)

Apparatus: Equipment such as valves, stopcocks, chambers, cabinets, transformer chambers etc and includes any structure for the lodging of apparatus.

Arboriculturist: A professional who cultivates and manages trees, hedgerows and shrubs and provides information and advice on specific tree related issues.

Carriageway: A way constituting or comprised in a highway, being a way (other than a cycle track) over which the public have a right of way for the passage of vehicles.

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.

COSHH: Control of Substances Hazardous to Health Regulations

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

Cycle track: A way constituting or comprised in a highway over which the public have a right of way on pedal cycles with or without a right of way on foot.

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.

Desiccation: The state of extreme dryness, the drying out of roots.

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

Footpath: A highway over which the public have a right of way on foot only, not being a footway.

Footway: A way comprised in a highway which also comprises a carriageway, being a way over which the public have a right of way on foot only.

Herbicide: A chemical that destroys plants.

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

Height: Measured in metres.

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.

Root plate: Formed just below the soil surface when shallow lateral growing roots predominate over the development of a deep taproot.

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

Route & Tree ID	Tree Tag Number	Species	Category and Sub Category	Est. Height (m)	Stem Diameter (mm)	RPA Radius (m)	Canopy Spread (N,E,S,W)	First Significant Branch (m) and Direction	Canopy Clearance (m)	Physiological Condition	Life Stage	Structural Condition	Condition Comments	Preliminary Management Comments	Tree Works to Facilitate the Development	Estimated Remaining Contribution (yrs)
04-G001	Tag291	Fastigate hornbeam <i>Carpinus betulus</i> 'Fastigiata'	C2	5.5	120	1.4	1;1;1;1	4.5s	4.75	Fair	Young	Good	Located on the northern side of the Finglas Road at the pedestrian entrance to Decourcy square. A group of three young fastigate hornbeam. Some exhibit pruning wounds that may limit long-term potential. Overhead services limit canopies south due to maintenance activities.	No action necessary	No action necessary	10-15
04-G002	Tag292	London plane <i>Platanus × acerifolia</i>	B2	8	180	2.2	2;2;2;2	6s	6.25	Good	Young	Good	Located either side of Finglas Road east of St.Vincents school. A group of four young London plane. Single stemmed and vigorous. Pavement heave present.	Prune near overhead services.	Remove to facilitate construction of roadway/cycle path.	15-20
04-T003	Tag293	London plane <i>Platanus × acerifolia</i>	B2	10	220	2.6	2.5;2.5;2.5;2.5	6s	6.25	Good	Young	Good	Single stemmed and vigorous. Pavement heave present.	No action necessary	Remove to facilitate construction of roadway/cycle path.	15-20
04-T004P		Sycamore <i>Acer pseudoplatanus</i>	B2	11	370	4.4	6;6;5;5	2.5n	2.75	Fair	Early Mature	Fair	Located inside the grounds of St.Vincents school 2.25m from boundary fence. Exhibits signs of having been coppiced with dense stems and tight unions. Girdling roots visible at base north and south.	No action necessary	No action necessary	15-20
04-T005P		Swedish whitebeam <i>Sorbus aria</i>	A2	12	390	4.7	7;6;6;5;6	3.25n	3.5	Good	Mature	Good	Located inside the grounds of St.Vincents school 2.25m from boundary fence. Some branches rubbing in lower canopy. No other visible defects.	Prune branches that are rubbing in lower canopy.	Remove to facilitate construction of foot path.	20-30
04-T006P		Cherry <i>Prunus avium</i>	B2	9	360	4.3	4;3;4;5	2w	2.25	Good	Mature	Good	Located inside the grounds of St.Vincents school 2.25m from boundary fence. Heavy ivy prevents clear inspection. Sound unions are visible. Bark damage visible east however no decay present.	Cut ivy	Remove to facilitate construction of foot path.	20-30
04-T007P		Cherry <i>Prunus avium</i>	B2	9	290	3.5	4;3;4;4	2.5w	2.75	Good	Early Mature	Good	Located inside the grounds of St.Vincents school 2.25m from boundary fence. Co-dominant at 1m with poor union present. May limit long term potential. No other defects visible.	No action necessary	Remove to facilitate construction of foot path.	20-30
04-T008P		Rowan <i>Sorbus aucuparia</i>	B2	7	260	3.1	1;2;3;2	1s	1.25	Fair	Early Mature	Good	Located inside the grounds of St.Vincents school 2.25m from boundary fence. Multi-stemmed from base. No defects visible.	No action necessary	Remove to facilitate construction of foot path.	15-20
04-T009P		Birch <i>Betula pendula</i>	B2	8	210	2.5	1;2;3;1	4s	4.25	Fair	Early Mature	Fair	Located inside the grounds of St.Vincents school 2.25m from boundary fence. A group of four early mature birch. Planted closely together with canopies suppressed as a result. No defects visible.	No action necessary	Remove to facilitate construction of foot path.	15-20
04-T010P		Sycamore <i>Acer pseudoplatanus</i>	B2	10.5	370	4.4	4.5;4;5;4	3s	3.25	Good	Early Mature	Good	Located inside the grounds of St.Vincents school 2.25m from boundary fence. Well formed with no visible defects.	No action necessary	Remove to facilitate construction of foot path.	20-30
04-T011P		Birch <i>Betula pendula</i>	B2	13	240	2.9	2;2;3;4	2w	2.25	Good	Mature	Good	Located inside the grounds of St.Vincents school 2.25m from boundary fence. Single stemmed and well formed.	No action necessary	Remove to facilitate construction of foot path.	20-30
04-T012P		Purple leaf plum <i>Prunus Cerasifera Nigra</i>	C2	6	240	2.9	2;4;2.5;1	2.25s	2.5	Fair	Early Mature	Fair	Located inside the grounds of St.Vincents school 2.25m from boundary fence. Exhibits signs of minor fungal - cushion bracket (<i>Phellinus pomaceus</i>) in lower canopy though not significant at present.	Monitor infection.	Remove to facilitate construction of foot path.	10-15
04-T013P		Black alder <i>Alnus glutinosa</i>	B2	13	360	4.3	3;3;5;4	4n	4.25	Good	Mature	Good	Located inside the grounds of St.Vincents school 2.25m from boundary fence. Single stem with heavy ivy obscuring inspection of upper crown.	Cut ivy and re-assess	Remove to facilitate construction of foot path.	20-30
04-T014P		Cherry <i>Prunus avium</i>	C2	6	370	4.4	3;2;4;2	2.5s	2.75	Fair	Mature	Fair	Located inside the grounds of St.Vincents school 2.25m from boundary fence. Heavy pruning activity has contributed to sub-optimal vigour.	No action necessary	Remove to facilitate construction of foot path.	10-15
04-T015P		Sycamore <i>Acer pseudoplatanus</i>	A2	18	490	5.9	7;8;7;7	3s	3.25	Good	Mature	Good	Located inside the grounds of St.Vincents school 2.25m from boundary fence. Well formed with no visible defects.	No action necessary	Remove to facilitate construction of foot path.	30-40
04-G016	Tag294	Silver maple <i>Acer saccharinum</i>	B2	13	290	3.5	4;4;4;4	5n	5.25	Good	Early Mature	Good	Located on the southern side of the Finglas Road adjacent to Glasnevin cemetery. A group of three early mature silver maple. Single stemmed with no visible defects.	Remove hanging branches south.	Remove two easterly trees to facilitate construction of roadway (refer to drawing).	20-30
04-G017	Tag295	Silver maple <i>Acer saccharinum</i>	B2	7.5	180	2.2	2;2;1;1	4n	4.25	Good	Young	Good	Located on the southern side of the Finglas Road adjacent to Glasnevin cemetery. A group of ten young silver maple. Well formed with no visible defects.	SUDs are shown between these trees. Root protection mats should be placed during works on nearby SUDs construction to reduce impact on roots.	A single tree to be removed due to road contouring (refer to drawing).	15-20
04-G018	Tag296	Field maple <i>Acer campestre</i>	A2	7	240	2.9	4;3;3;2	2n	2.25	Good	Early Mature	Good	Located inside Claremont Lawns park south of Finglas Road, 7m from the boundary wall. A group of two young field maple. Well formed with no visible defects.	No action necessary	No action necessary	20-30

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04-G019	Tag297	Common Lime <i>Tilia x europaea</i>	B2	7.5	250	3	3;3;3;3	1.5n	1.75	Good	Early Mature	Good	Located inside Claremont Lawns park south of Finglas Road, 4.5m from the boundary wall. A group of 17 early mature lime. Vigorous with no visible defects.	Raise crown 1-2m for amenity access.	Remove nine easterly trees to facilitate construction of foot path (refer to drawing). Provision is given for a planting area surrounding current trees, however the impact of reducing levels and constructing the proposed foot path on two sides, less than 1m of existing trees will make these trees unviable.	30-40
04-G020	Tag298	Fastigate hornbeam <i>Carpinus betulus 'Fastigiata'</i>	B2	6.5	210	2.5	1.5;1.5;1.5;1.5	2.5n	2.75	Good	Young	Good	Located within a 2m grass verge on the southern side of Finglas Road. A group of 14 young fastigate hornbeam. Well suited to local environment with no defects visible.	SUDs are shown between these trees. Root protection mats should be placed during works on nearby SUDs construction to reduce impact on roots.	No action necessary	20-30
04-T021	Tag299	Rowan <i>Sorbus aucuparia</i>	U	7	200	2.4	1;1;1;1		0.25	Very Poor	Early Mature	Very Poor	Located on a central median on the Finglas Road adjacent to the Willows residential housing estate. Co-dominate from 2.5m with pronounced decay present above and below the union.	Fell	Fell and recommend replace with similar.	<10
04-T022	Tag300	Rowan <i>Sorbus aucuparia</i>	U	6.5	240	2.9	1;1;1;1		0.25	Fair	Early Mature	Very Poor	Located on a central median on the Finglas Road adjacent to the Willows residential housing estate. Bark damage with deep underlying decay in base from 0.25m south.	Fell	Fell and recommend replace with similar.	0
04-G023	Tag301	Rowan <i>Sorbus aucuparia</i>	B2	6.5	210	2.5	2;2;1;1	3s	3.25	Good	Early Mature	Fair	Located on a central median on the Finglas Road adjacent to the Willows residential housing estate. A group of four early mature rowan. Some exhibit bark damage from likely mower impacts. Though no associated decay visible at present.	No action necessary	Construction works to facilitate road lanes are needed here, which has a chance of damage to root systems. However, the affected areas are less than 10% of the potential root area and as these trees are younger they should recover well.	15-20
04-T024	Tag302	London plane <i>Platanus x acerifolia</i>	B2	18	540	6.5	6;6;5;5.5	2w	2.25	Good	Mature	Good	Located on a central median on the Finglas Road adjacent to the Willows residential housing estate. Soil built up too high west with no root flair visible. Lower canopy is dense with some intrusion into roadway. Otherwise well formed.	Raise canopy 2-3m for traffic safety.	Construction works to facilitate road lanes are needed here, which has a chance of damage to root systems. However, as the affected area are less than 10% of the potential root area this tree should recover well.	30-40
04-G025	Tag303	London plane <i>Platanus x acerifolia</i>	B2	12	270	3.2	4;4.5;2;3	4.5n	4.75	Good	Early Mature	Good	Located on a central median on the Finglas Road adjacent to the Willows residential housing estate. A group of seven early mature London plane. These have been planted deep with western root flares not visible. Crowns show good vigour. These trees are well suited for this roadside environment.	Reduce soil level west.	Construction works to facilitate road lanes are needed here, which has a chance of damage to root systems. However, the affected areas are less than 10% of the potential root area and as these trees are younger they should recover well.	15-20
04-T026	Tag304	Cherry cultivar <i>Prunus cv</i>	C2	5	230	2.8	3;3;3;1.5	3e	3.25	Fair	Early Mature	Poor	Located within a narrow grass verge 0.25m from the roadside at the entrance to the Willows residential estate. Bark damage with associated decay at 1.25m west. Potentially limited long-term	Reassess and remove if decay progresses.	No action necessary	10
04-T027	Tag305	Cherry cultivar <i>Prunus cv</i>	U	6	440	5.3	1;1;1;1		0.25	Fair	Mature	Very poor	Located within a narrow grass verge 0.25m from the roadside at the entrance to the Willows residential estate. Extensive decay in main stem.	Fell	Fell	<10

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04-T028	Tag306	London plane <i>Platanus × acerifolia</i>	B2	16	480	5.8	5;3.5;4;5	4s	4.25	Fair	Early Mature	Fair	Located within a wide grass verge on the central median of the Finglas Road. Has lost a stem south at 4.25m. No associated decay visible. Drawn up canopy form. No other visible defects.	No action necessary	No action necessary	20-30
04-G029	Tag307	London plane <i>Platanus × acerifolia</i>	B2	10	290	3.5	3.5;3.5;3.5;3.5	6e	6.25	Good	Early Mature	Fair	Located within a wide (4m) grass verge in the central median on the Finglas road adjacent to Lidl shopping centre. A group of 25 early mature London plane. Many have been planted too deeply with root flares not visible. Pruning wounds visible in lower crown due to roadside maintenance which these trees are exhibiting resilience to. Canopies are well formed and vigorous.	Reduce soil levels near root flare.	No action necessary	15-20
04-G030	Tag308	London plane <i>Platanus × acerifolia</i>	C2	6.5	110	1.3	1;2;1;1	2.25n	2.5	Good	Young	Good	Located within a wide (4m) grass verge in the central median on the Finglas road adjacent to Lidl shopping centre. A group of two young London plane. No visible defects.	No action necessary	No action necessary	10-15
04-T031	Tag309	London plane <i>Platanus × acerifolia</i>	A2	17	540	6.5	6;7;6;6	4.5w	4.75	Good	Mature	Good	Located within a wide (4m) grass verge in the central median on the Finglas road adjacent to Lidl shopping centre. Single stemmed with well formed canopy. No visible defects.	No action necessary	Minimal disturbance inside RPA. Remomend use of hand tools where possible to reduce impact on roots.	30-40
04-G032	Tag310	Small leaved lime cultivar <i>Tilia cordata cv</i>	C2	5	140	1.7	2;2;2;2	2s	2.25	Fair	Young	Fair	Located on the eastern side of the Finglas road within a 2.5m grass verge. A group of six young small leaf lime. Some exhibit impact damage though no associated decay.	No action necessary	Remove the first, most easterly tree, to facilitate construction of foot path. The other five will have minimal impact from root disturbance.	10-15
04-G033	Tag311	Small leaved lime cultivar <i>Tilia cordata cv</i>	B2	9	240	2.9	3;3;2;3	3w	3.25	Good	Early Mature	Good	Located on the eastern side of the Finglas road within a 2.5m grass verge. A group of three small leaf lime. Well formed with no visible defects.	No action necessary	No action necessary	20-30
04-G034	Tag312	Rowan <i>Sorbus aucuparia</i>	C2	7	250	3	2;2;2;2		0.25	Fair	Early Mature	Fair	Located within a grass verge 2.5m wide in a cental median north of Tolka river bridge. A group of four early mature rowan. No visible defects.	No action necessary	Remove three north-most trees to facilitate construction of roadway. The single southerly tree is unaffected (refer to drawing).	20-30
04-G035	Tag313	London plane <i>Platanus × acerifolia</i>	B2	11	370	4.4	4;4;3;4	4w	4.25	Good	Early Mature	Good	Located within a grass verge 2.5m wide in a cental median north of Tolka river bridge. A group of six early mature London plane. Well formed and suited to roadside environment. No major defects save for some root damage from mower activity with no associated decay.	No action necessary	Remove two north-most trees to facilitate construction of roadway.	30-40
04-T036	Tag314	Cherry <i>Prunus avium</i>	B2	5.5	170	2	4;4;2;3.5	2.5s	2.75	Good	Early Mature	Fair	Located within a grass verge on the corner of the Finglas Road and the Old Finglas road. Exhibits bark damage at base north with no associated decay. Single stem with sound branch unions. Canopy suppressed at 2m south by advert hoarding.	No action necessary	No action necessary	15-20
04-G037	Tag315	Fastigate hornbeam <i>Carpinus betulus 'Fastigiata'</i>	B2/C2	6	140	1.7	2;2;2;2	3n	3.25	Good	Young	Good	Located on a 3.5m grass verge within a sloping central median. A group of four young fastigate hornbeam. No visible defects.	No action necessary	Remove for construction works to facilitate road lanes.	15-20
04-T038	Tag316	Sycamore <i>Acer pseudoplatanus</i>	U		150	1.8	1;1;1;1		0.25				Located on a 3.5m grass verge within a sloping central median.	Fell	Fell	0
04-G039	Tag317	Sycamore <i>Acer pseudoplatanus</i>	C2/B2	6	140	1.7	2;2;2;2	2.5n	2.75	Good	Young	Good	Located on a 3.5m grass verge within a sloping central median. A group of seven young sycamore and one birch. Soil levels are sub-optimal, but no defects visible.	No action necessary	Construction works to facilitate road lanes are needed here, which has a chance of damage to root systems. However, the affected areas are less then 10% of the potential root area and as these trees are young they should recover well. Three needed to be removed (refer to drawing)	10-15
04-T040	Tag318	Sycamore <i>Acer pseudoplatanus</i>	B2	17	500	6	6;5;4;5	3n	3.25	Good	Mature	Fair	Located on a 3.5m grass verge within a sloping central median. Exhibits minor root girdling east due to sub-optimal soil levels. Multi stemmed from 2.25m with minor deadwood in centre stem likely caused by light suppression. Crown well formed.	Dead wood	No action necessary	20-30
04-G041	Tag319	Sycamore <i>Acer pseudoplatanus</i>	B2	9	180	2.2	3;3;3;3	4s	4.25	Good	Young	Good	Located on a 3.5m grass verge within a sloping central median. A group of 15 young sycamore.	Reduce soil levels	No action necessary	15-20

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04-G042	Tag320	Sycamore <i>Acer pseudoplatanus</i>	B2	16	400	4.8	5;4;5;5	4n	4.25	Good	Early Mature	Good	Located on the western side of the finglas road, north of the Old Finglas road junction. A group of nine early mature sycamore within a 2m wide grass verge. These specimens display a dense multi stem arrangement due to heavy pruning activity. Crowns have been raised east over roadway which produces a drawn up profile. The many of the trees located on the southern side have produced pavement heave that presents a hazard for foot traffic.	No action necessary	Construction of cycle path to south of trunks of the two southern trees. Recommend use of Cellweb or equivalent to protect roots, with AirSpade excavation to minimise root disturbance. The seven remaining trees have minimal impact (<10%) to root systems from works.	20-30
04-G043	Tag320	Sycamore <i>Acer pseudoplatanus</i>	C2	8	150	1.8	2;2;2;1	3w	3.25	Fair	Young	Good	Located on the western side of the finglas road, north of the Old Finglas road junction. A group of two young sycamore. No visible defects.	No action necessary	SUDs are shown between these trees. Root protection mats should be placed during works on nearby SUDs construction to reduce impact on roots.	10-15
04-G044	Tag321	Sycamore <i>Acer pseudoplatanus</i>	B2	11	200	2.4	3;1;4;3	2.75n	3	Good	Young	Good	Located on the eastern side of the Finglas road, north of the Old Finglas road. A group of two young sycamore within a 2m wide grass verge. Minor mower damage to root flare with no associated decay. Sound sounds visible.	No action necessary	Construction of cycle path to south of trunks of the two southern trees. Recommend use of Cellweb or equivalent to protect roots, with AirSpade excavation to minimise root disturbance.	15-20
04-G045	Tag322	Cherry <i>Prunus avium</i>	C2		90	1.1	0.5;0.5;0.5;0.5		0.25	Fair	Juvenile	Fair	Located on the eastern side of the Finglas road, north of the Old Finglas road within a 2m wide grass verge. A group of two Juvenile cherry. Leaf scorch present. Will need to be pruned in coming seasons due to overhead services directly above.	Review drainage.	SUDs are shown between these trees. Root protection mats should be placed during works on nearby SUDs construction to reduce impact on roots.	10-15
04-T046	Tag323	Fastigate hornbeam <i>Carpinus betulus</i> 'Fastigiata'	B2	10	270	3.2	4;5;4;4	3n	3.25	Good	Early Mature	Good	Located within a 1.3m wide grass verge in a central median adjacent to the Tolka Apartments apartments. Impact damage at base west with no major physiological effects visible. Well developed crown that has been well maintained.	No action necessary	No action necessary	15-20
04-G047	Tag324	Fastigate hornbeam <i>Carpinus betulus</i> 'Fastigiata'	B2	7	180	2.2	2;2;2;2	2.75w	3	Good	Young	Good	Located within a 1.3m wide grass verge in a central median adjacent to the Tolka Apartments apartments. A group of five young fastigate hornbeam. Many exhibit mower impact that may limit long-term potential.	No action necessary	No action necessary	15-20
04-G048	Tag325	Sycamore <i>Acer pseudoplatanus</i>	C2	6.5	200	2.4	1.5;1.5;1.5;1.5	4.5n	4.75	Fair	Young	Fair	Located within a 1.3m wide grass verge in a central median adjacent to the Tolka Apartments apartments. A group of 22 young sycamore. Many exhibit mower impact damage that may impact long-term potential.	No action necessary	No action necessary	10-15
04-G049	Tag326	Sycamore <i>Acer pseudoplatanus</i>	B2	11	200	2.4	3;3;3;3	5n	5.25	Good	Young	Good	Located within a 1.3m wide grass verge in a central median adjacent to the Tolka Valley Road. A group of two young sycamore. Forms drawn up due to roadside maintenance. No defects visible.	No action necessary	No action necessary	20-30
04-T050	Tag327	Sycamore <i>Acer pseudoplatanus</i>	B2	19	510	6.1	5;6;5;6	3n	3.25	Good	Early Mature	Good	Located within a 1.5m grass verge on the western side of the Finglas road adjacent to the Tolka Apartments. Has a dense stem formation due to pollarding activity. This specimen may present negative impact through excessive shading for adjacent residents. Minor pavement heave west.	Prune to reduce shading on apartments	Verge expansion near root zone. Recommend use of AirSpade/ hand tools where possible to reduce damage to roots.	20-30
04-G051	Tag328	Sycamore <i>Acer pseudoplatanus</i>	B2	10.5	340	4.1	4;4;4.5;4.5	2.75n	3	Good	Early Mature	Good	Located within a 1.5m grass verge on the western side of the Finglas road adjacent to the Tolka Apartments. A group of two early mature sycamore. Minor pavement heave west. Well formed with no visible defects.	No action necessary	Verge expansion near root zone. Recommend use of AirSpade/ hand tools where possible to reduce damage to roots.	20-30
04-G052	Tag329	Fastigate hornbeam <i>Carpinus betulus</i> 'Fastigiata'	C2	5.5	100	1.2	1;1;1;1	0	0.25	Fair	Juvenile	Good	Located within a 1.5m grass verge on the western side of the Finglas road adjacent to the Tolka Apartments. A group six Juvenile fastigate hornbeam. No defects visible.	No action necessary	Verge expansion near root zone. Recommend use of AirSpade/ hand tools where possible to reduce damage to roots.	10-15

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04-G053	Tag330	Sycamore <i>Acer pseudoplatanus</i>	B2	11	250	3	4;4;4;4	2.5n	2.75	Good	Young	Good	Located within a 1.5m grass verge on the western side of the Finglas road adjacent to the Tolka Apartments. A group of six young sycamore. Well formed with no visible defects.	No action necessary	Construction of cycle path to west of trunks. Recommend use of Cellweb or equivalent to protect roots, with AirSpade excavation to minimise disturbance.	15-20
04-T054	Tag331	Sycamore <i>Acer pseudoplatanus</i>	B2	17	480	5.8	5;5;4.5;6	5w	5.25	Good	Early Mature	Good	Located within a 1.5m grass verge on the western side of the Finglas road adjacent to the Tolka and Eden Apartments. Minor cavity at 2m west not significant at present but likely to reduce long term potential. Dense stem formation. Serves as a high value aesthetic feature to main entrance to the Tolka and Eden Apartments.	Monitor for adaptation to cavity.	Construction of cycle path to west of trunk. Recommend use of Cellweb or equivalent to protect roots, with AirSpade excavation to minimise disturbance to root zone.	15-20
04-G055	Tag332	Sycamore <i>Acer pseudoplatanus</i>	C2	3	60	0.7	0.5;0.5;0.5;0.5	2.5n	2.75	Good	Juvenile	Good	Located within a 1.5m grass verge on the western side of the Finglas road adjacent to the Eden Apartments. Group of two juvenile sycamore. No defects visible.	No action necessary	Retained with recommended use of cellweb and build up of cyclepath.	10-15
04-G056	Tag333	Sycamore <i>Acer pseudoplatanus</i>	B2	11	360	4.3	3;3;3;3	4.5n	4.75	Good	Early Mature	Good	Located within a 1.5m grass verge on the western side of the Finglas road adjacent to the Tolka Vale Apartments. A group of 6 early mature sycamore. Minor mower impacts on some specimens but unlikely to reduce long term potential. Well formed with no defects visible.	No action necessary	Remove one tree (see drawing) as roots are impacted directly north from new cycle path. South most tree to be retained with recommended use of cellweb and build up of cyclepath. Where SUDs are shown within 3m of areas near trunks, airspade techniques must be used to reduce impact on roots.	20-30
04-G057	Tag335	Sycamore <i>Acer pseudoplatanus</i>	B2	12	300	3.6	3;3.5;3;3.5		0.25	Good	Early Mature	Fair	Located on the eastern side of the Fingal road, adjacent to the Tolka Vale Apartments. Within a 2.25m wide grass verge. A group of 16 early mature sycamore. Close unions present where stems form that may produce branch rubbing in future.	No action necessary	Where SUDs are shown within 3m of areas near trunks, airspade techniques must be used to reduce impact on roots.	20-30
04-T058	Tag336	Sycamore <i>Acer pseudoplatanus</i>	C2	7	160	1.9	2;2.5;2;2	3w	3.25	Fair	Young	Fair	Located on the eastern side of the Fingal Road, adjacent to the Tolka Vale Apartments. Bark damage south with minor associated decay.	Reassess for viability for retention annually	No action necessary	10
04-T059	Tag337	Sycamore <i>Acer pseudoplatanus</i>	U	11	380	4.6	1;1;1;1		0.25	Dead	Early Mature			Fell	Fell	0
04-T060	Tag338	Fastigate hornbeam <i>Carpinus betulus</i> 'Fastigiata'	C2	10	530	6.4	3;4;1;2	2n	2.25	Poor	Early Mature	Fair	Located within a central median on a 3m wide grass verge. Girdling roots north and east. Wide spread decline in vigour throughout crown. Source of stressor not visible.	Improve drainage	No action necessary	10-15
04-T061	Tag339	Fastigate hornbeam <i>Carpinus betulus</i> 'Fastigiata'	B2	10	260	3.1	3;3;2;3	3.5n	3.75	Good	Early Mature	Good	Located within a central median on a 3m wide grass verge. Minor root damage due to mower activity. Crown well formed.	No action necessary	No action necessary	15-20
04-G062	Tag340	Sycamore <i>Acer pseudoplatanus</i>	C2	8	250	3	2;2;2;2	4w	4.25	Fair	Young	Good	Located within a central median on a 3m wide grass verge. A group of seven young sycamore. Planted within 3m apart these specimens are drawn up as a result.	No action necessary	No action necessary	10-15
04-G063	Tag341	Fastigate hornbeam <i>Carpinus betulus</i> 'Fastigiata'	B2	7.5	200	2.4	3;3;3;3	2.5e	2.75	Good	Early Mature	Good	Located within a central median on a 3m wide grass verge. A group of nine early mature fastigate hornbeam and three early mature sycamore. Well formed with no visible defects.	No action necessary	No action necessary	15-20
04-T064	Tag342	Sycamore <i>Acer pseudoplatanus</i>	U		150	1.8	3;3;3;3		0.25	Very Poor	Young			Fell	Fell	
04-T065	Tag343	Sycamore <i>Acer pseudoplatanus</i>	C2	6.5	210	2.5	3;2;3;3.5	3n	3.25	Fair	Young	Fair	Located on western side of the Finglas road within a 2m wide grass verge. Single stemmed. Minor deadwood and reduced vigour.	No action necessary	No action necessary	10-15

Route & Tree ID	Tree Tag Number	Species	Category and Sub Category	Est. Height (m)	Stem Diameter (mm)	RPA Radius (m)	Canopy Spread (N,E,S,W)	First Significant Branch (m) and Direction	Canopy Clearance (m)	Physiological Condition	Life Stage	Structural Condition	Condition Comments	Preliminary Management Comments	Tree Works to Facilitate the Development	Estimated Remaining Contribution (yrs)
04-G066	Tag344	Sycamore <i>Acer pseudoplatanus</i>	B2	13	440	5.3	5;4;3.5;4	2n	2.25	Good	Early Mature	Good	Located on western side of the Finglas road within a 2m wide grass verge. A group of seven early mature sycamore. These all feature minor impact damage to exposed roots/root flare from mower activity. However the effects are mitigated by these specimens maturity. Generous planting distance (10m) has allowed for well developed crowns.	No action necessary	Remove the two north most trees to facilitate construction of cycle path. Establish tree protection to mitigate damage to roots. Use of hand tools where possible are recommended to minimise impact on roots including areas where SUDs are shown.	20-30
04-T067	Tag345	Eucalyptus <i>Eucalyptus globulus</i>	A2	22	910	10.9	6;7;6;6	5n	5.25	Good	Mature	Good	Located within an open area at the entrance to the Glenhill residential housing estate. Heavy ivy growth obscures inspection of the lower trunk (2-6m) area. However the base contains no defects - two large diameter pruning cuts (0.5m south and east) have recovered well. Features a lean east by 1.5m that corrects at 6m. A wide crown with characteristic open canopy has afforded favourable conditions for an undercanopy of a group of 8 young ash 4m west. A tree a high landscape value given its maturity and rarity (especially in North Dublin).	Cut ivy and re-assess	No action necessary	30-40
04-T068	Tag346	Eucalyptus <i>Eucalyptus globulus</i>	A2	19	580	7	4;4;2.5;4		0.25	Good	Mature	Good	Located within an open area at the entrance to the Glenhill residential housing estate. Single stemmed and sub-dominant to neighbouring eucalyptus 5m south. Minor mower damage to exposed roots east.	No action necessary	No action necessary	30-40
04-G071	Tag347	Fastigate hornbeam <i>Carpinus betulus</i> 'Fastigiata'	B2	7	210	2.5	2;2;2;2	2n	2.25	Good	Early Mature	Good	Located within an open area north of the roadway entrance to Clearwater shopping centre. A group of 8 early mature fastigate hornbeam. Some exhibit minor bark damage from mower activity. Crowns exhibit good vigour due to favourable drainage conditions.	No action necessary	Please tree protection fencing.	20-30
04-T072	Tag348	Fastigate hornbeam <i>Carpinus betulus</i> 'Fastigiata'	B2	7	240	2.9	1.5;1.5;1.5;1.5	2.25e	2.5	Good	Early Mature	Good	Located within a narrow (1.25m) grass verge on the western side of the Finglas road; north of the Clearwater shopping centre. A group of 7 early mature fastigate hornbeam. No defects visible.	No action necessary	Open verge area is expanding east near the root systems of these trees. Use of hand tools where possible are recommended to minimise impact on roots.	15-20
04-G073	Tag349	Sycamore <i>Acer pseudoplatanus</i>	B2	12	310	3.7	3;3;3;3	4n	4.25	Good	Young	Fair	Located on both sides of the Finglas road; directly south of Finglas village. A group of 26 young/early mature sycamore. Many exhibit minor deadwood in lower canopy which is characteristic for the species. Crown profiles are drawn up due to roadside pruning.	Dead wood	Six to remove to facilitate construction of cycle path on the western side of the Finglas Road (refer to drawing). Where SUDs are shown within 3m of areas near trunks, airspade techniques must be used to reduce impact on roots. Tree protection fencing is recommended for those on the eastern side.	20-30
04-G074	Tag350	Sycamore <i>Acer pseudoplatanus</i>	C2	9	160	1.9	2;2;2;2	3n	3.25	Poor	Young	Fair	Located within a 1.5m wide grass verge on the eastern side of the Finglas road; 40m north of the Clearwater Shopping Centre entrance. A group of four young sycamore. These exhibit poor vigour from likely suboptimal planting (root flares are not visible).	Reduce soil levels	Remove to facilitate construction of cycle path. These poor specimens will suffer from significant impact on root systems.	10
04-G075	Tag351	Sycamore <i>Acer pseudoplatanus</i>	C2	5.5	120	1.4	1;1;1;1	3e	3.25	Poor	Young	Fair	Located within a grass verge in the central median starting at the entrance to the Clearwater Shopping Centre and continuing north. A group of 11 juvenile sycamore. These have been planted too deep and have poor soil conditions.	Improve soil conditions. If no improvement taken - consider for replacement.	Remove five (see drawing) to facilitate construction of roadway. Median will realign and impact tree RPA's. As these trees are of poorer quality new plantings would be recommended.	<10
04-T076	Tag352	Sycamore <i>Acer pseudoplatanus</i>	U		100	1.2	1;1;1;1		0.25					Fell	Fell	0

Route & Tree ID	Tree Tag Number	Species	Category and Sub Category	Est. Height (m)	Stem Diameter (mm)	RPA Radius (m)	Canopy Spread (N,E,S,W)	First Significant Branch (m) and Direction	Canopy Clearance (m)	Physiological Condition	Life Stage	Structural Condition	Condition Comments	Preliminary Management Comments	Tree Works to Facilitate the Development	Estimated Remaining Contribution (yrs)
04-T077	Tag355	Sycamore <i>Acer pseudoplatanus</i>	B2	9	260	3.1	3;3;3;3	4w	4.25	Good	Early Mature	Good	Located within a grass verge in the central median beginning at the entrance to the Clearwater Shopping Centre and continuing north. Minor pruning wounds in lower canopy with no associated decay.	No action necessary	Remove to facilitate construction of realigned median.	20-30
04-G078	Tag354	Fastigate hornbeam <i>Carpinus betulus</i> 'Fastigiata'	C2	6	190	2.3	2;2;2;2	2.75n	3	Good	Young	Good	Located within a 3m wide grass verge on a central median directly south of Finglas village. A group of 29 young fastigate hornbeam and two young sycamore.	No action necessary	Remove five at north end of median (refer to drawing) to facilitate construction of realigned roadway.	10-15
Note: Tag 355 Not in use																
04-G079	Tag356	Sycamore <i>Acer pseudoplatanus</i>	B2	12	390	4.7	4;5;4;3	3w	3.25	Good	Early Mature	Fair	Located within a 2m wide grass verge on the eastern side of the Finglas road adjacent to the Wellmount road junction. A group of nine early mature sycamore. Have been pollarded and have a dense stem structure with a drawn up profile as a result.	Remove basal growth near footpaths.	No action necessary	20-30
04-T080	Tag357	Sycamore <i>Acer pseudoplatanus</i>	U		280	3.4	1;1;1;1		0.25	Very Poor	Early Mature			Fell	Fell	<10
04-G081	Tag358	Birch <i>Betula pendula</i>	B2	6	170	2	2;2;2;2	1.75e	2	Good	Early Mature	Good	Located on a central median on the Finglas road; north of the Wellmount junction. A group of two early mature birch. Sound unions present and no visible defects.	No action necessary	No action necessary	15-20
04-G082	Tag359	Fastigate hornbeam <i>Carpinus betulus</i> 'Fastigiata'	B2	11	240	2.9	3;3;3;3	3.5e	3.75	Good	Early Mature	Good	Located on a central median on the Finglas road, north of the Wellmount junction. A group of four early mature fastigate hornbeam. No defects visible.	No action necessary	No action necessary	15-20
04-G083	Tag360	Sycamore <i>Acer pseudoplatanus</i>	B2	9	200	2.4	2;2;2;2	3n	3.25	Good	Young	Good	Located within a 2m grass verge south of the North Road turn-off. A group of nine young sycamore. Planted 6m+ apart. Well developed crowns.	No action necessary	Three southern most trees have either SUDs or reduction of root zone shown so airspace techniques should be used to reduce impact on roots. Six trees north require no action.	15-20
04-G084	Tag361	Sycamore <i>Acer pseudoplatanus</i>	C2	4.5	120	1.4	1;1;1;1	2.5e	2.75	Good	Juvenile	Good	Located within a 2m grass verge south of the North Road turn-off. A group of two Juvenile sycamore plantings with no visible defects.	No action necessary	No action necessary	10-15
04-G085	Tag362	Small leaved lime cultivar <i>Tilia cordata</i> cv	C2	5	180	2.2	2;2;2;2	2w	2.25	Good	Young	Fair	Located within a 9m sloping grass verge embankment south of the North Road turn-off. A group of five small leaf lime. Planted in a tight grouping which will limit long-term potential. Exposed roots have damaged bark with some associated decay present.	No action necessary	No action necessary	10-15
04-G086	Tag029	London plane <i>Platanus</i> × <i>acerifolia</i>	C2	10	130	1.6	2;2;2;2	3w	3.25	Fair	Young	Fair	Group of six young trees either side of Finglas Road; south of Prospect Way. Located 1m from kerb; many exhibit minor bark damage from minor traffic impacts. Lower crowns have been reduced over Roadway to 1m.	No action necessary	No action necessary	15-20
04-T087	Tag030	London plane <i>Platanus</i> × <i>acerifolia</i>	B2	13	210	2.5	3;3;4;4	3.75w	4	Good	Early Mature	Good	Located on the Finglas Road parallel to Prospect Way. 0.5m from kerb. Roots causing minor pavement heave east. Single stem with early development of included bark at branch union 2.25m west though unlikely to limit long-term potential. Lower canopy east has been raised for Roadside maintenance.	Raise canopy west over pavement.	No action necessary	20-30
04-T088	Tag031	Rowan cultivar <i>Sorbus aucuparia</i> cv	B2	6	290	3.5	2.5;3;3;2	2.25n	2.5	Good	Early Mature	Fair	Located at the entrance to De Courcy Square 2m from the Finglas Road kerb side. Multi stemmed from 2m where it appears to have been coppiced in past. Lower canopy crowded as a result with deadwood and branch rubbing. Pavement heave west for 1.5m.	Undertake formative pruning	Remove to facilitate construction of cycle path.	15-20
04-G089	Tag032	London plane <i>Platanus</i> × <i>acerifolia</i>	A2	14	440	5.3	4;4;4;4	8n	8.25	Good	Early Mature	Good	Group of five London plane located on the south side of prospect way. Pavement has been replaced around bases due to root heave. Crowns well formed though drawn up due to Roadside maintenance of lower canopy. Wide unions present and no visible defects.	No action necessary	No action necessary	40
04-G090	Tag033	London plane <i>Platanus</i> × <i>acerifolia</i>	A2	11	340	4.1	4;3;4;3	7s	7.25	Good	Early Mature	Good	Group of four London plane located on the north side of prospect way, 0.3m from the kerb side. Growth moderately extended north due to Roadside pruning south. Wide unions present for stems and limbs. These trees provide high landscape value for this setting.	No action necessary	The single eastern tree to be removed to facilitate construction of cycle path. Three western trees to be retained (refer to drawing).	30-40

Route & Tree ID	Tree Tag Number	Species	Category and Sub Category	Est. Height (m)	Stem Diameter (mm)	RPA Radius (m)	Canopy Spread (N,E,S,W)	First Significant Branch (m) and Direction	Canopy Clearance (m)	Physiological Condition	Life Stage	Structural Condition	Condition Comments	Preliminary Management Comments	Tree Works to Facilitate the Development	Estimated Remaining Contribution (yrs)
04-G091		Lombardy poplar <i>Populus nigra</i> 'Italica'	B2	18	350 avg	4.2	3;3;3;3	N/A	N/A	Good	Mature	Good	Well developed trees planted to screen the footbridge from the south. No visible defects. Roots will spread extensively into the surrounding grasses area including the access area from the road to the base of the bridge.	No action necessary	Access footpath proposed at this point to link North Road and the R135. Will encroach into RPA. Recommend buildup of path with Cellweb to protect roots. Tree protection fencing during initial construction.	15-30
04-G092		Birch <i>Betula pendula</i>	B2	10 avg	250 avg	3	2;2;2;2	2n	3	Good	Early Mature	Good	A cluster of seven trees adjacent to wall along R135. Relatively well developed.	No action necessary	Place tree protection fencing.	20
04-G093		Eucalyptus <i>Eucalyptus gumii</i>	C2	6-12 avg	250 avg	3	2;2;2;2	2n	2.5	Fair	Young/ Early mature	Fair	A cluster of younger eucalyptus located between the R135 and boundary railing. Form generally poor due to competition between trees.	Overhaul	No action necessary	10-20
04-G094		Small leaved lime cultivars <i>Tilia cordata</i> cv	B2	6 avg	210 avg	2.5	2.5,2.5,2.5,2.5	2n	2.5	Good	Early Mature	Good	A single line planting forming a partial screen to the adjacent retail centre. Well developed with no visible defects.	No action necessary	No action necessary	40
04-G095		Norway maple <i>Acer platanoides</i> , Purple leaved Norway maple <i>Acer platanoides</i> Crimson King	B2	10 avg	310 avg	3.8	3;3;3;3	3n	3.5	Good	Early Mature	Good	A screen planting to the edge of a public park, set back 2.5m from a metal railing on a low stone wall. Trees relatively well developed.	No action necessary	A footpath is proposed along outside of the low wall. This is unlikely to have any adverse effect on RPA, where roots will be impeded by this obstacle.	40
04-G096		Ash <i>Fraxinus excelsior</i> , Norway maple <i>Acer platanoides</i> , Cherry <i>Prunus avium</i>	B2	10-12 avg	320 avg	3.9	4;4;4;4	3n	3.5	Good	Early Mature	Good	A well developed group of trees, set 2.5m back from a metal railing on a low stone wall. Forming a screen planting to edge of public park.	No action necessary	Public foot path proposed adjacent to low stone wall. Raise canopies to 3m over railing to accommodate future works. No impact foreseen due to wall acting as root barrier. Wall with railing can function as tree protection.	30-40
04-G097		Sycamore <i>Acer pseudoplatanus</i>	B2	5-7 avg	210 avg	2.5	2;2;2;2	2s avg	2.5	Good	Early Mature	Good	A planted group of 35 early mature sycamore. Moderate branch congestion in the lower canopies, otherwise well developed with good light exposure available (3.5m plus between plantings)	No action necessary	A public foot path is proposed to link Casement Road to the R135. The outline of which is sympathetic to this existing tree group. Recommend setting proposed path 4m from tree group. Place tree protection fencing south and east of tree group. Raise canopies to 2.75m that extend over proposed footpath.	30-40
04-G098		Fastigate hornbeam <i>Carpinus betulus</i> 'Fastigiata'	C2	6	200		1;1;1;1	N/A	N/A	Good	Young	Fair	Located within the median at the entrance to the Clearwater shopping centre. Young and heavily pruned to upper canopy.	No action necessary	Remove to facilitate construction of roadway.	10-20
04-G099		Fastigate hornbeam <i>Carpinus betulus</i> 'Fastigiata'	C2	6	180		1;1;1;1	N/A	N/A	Good	Young	Fair	Located within the median at the entrance to the Clearwater shopping centre. Young and heavily pruned to upper canopy.	No action necessary	Remove to facilitate construction of roadway.	10-20

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

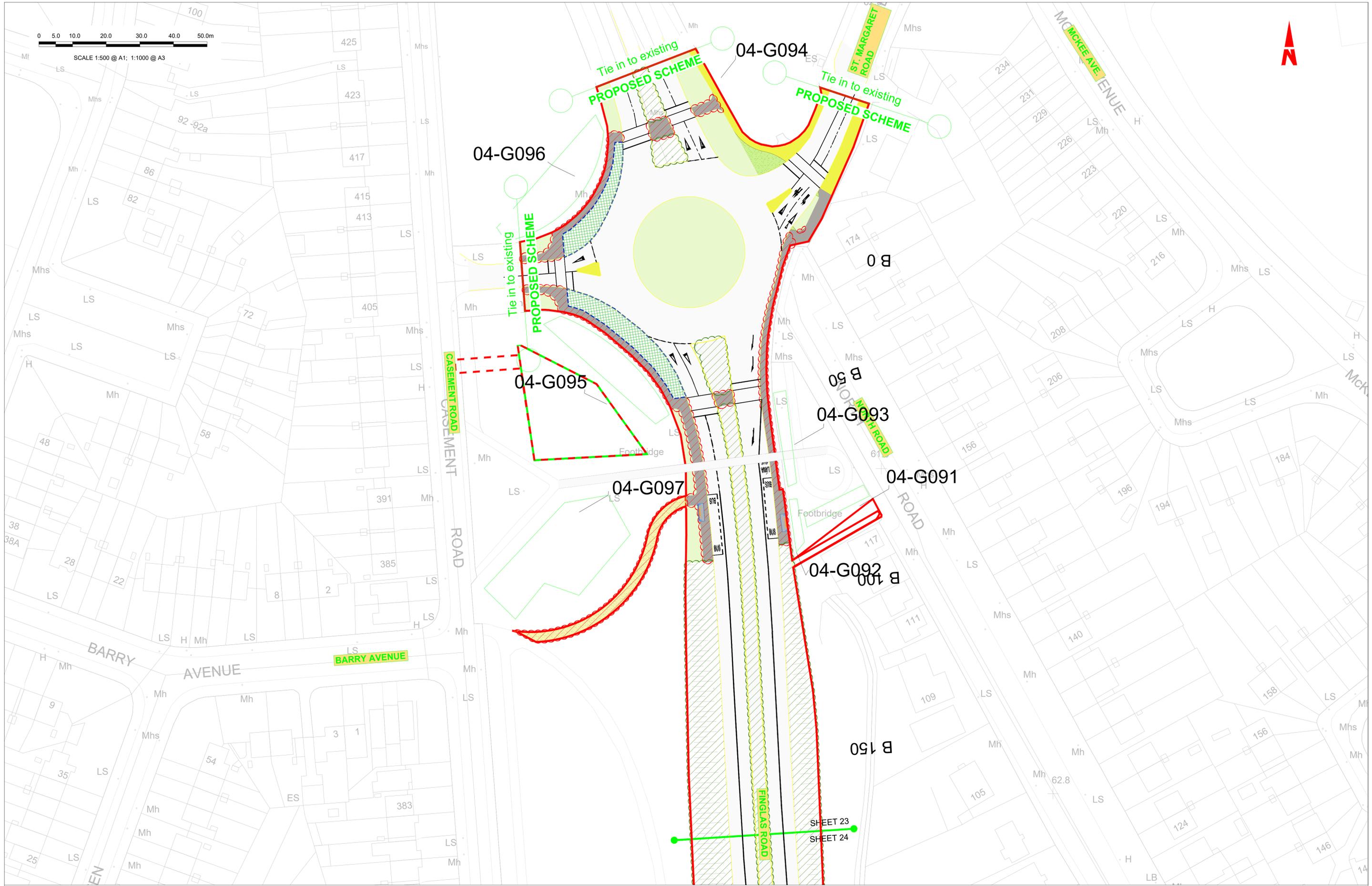
Mattheck and Breloer (1994). The body language of trees

Dublin City Council (2016) Dublin City Tree Strategy 2016 – 2020

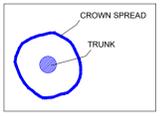
NJUG (2007) Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees.



SCALE 1:500 @ A1; 1:1000 @ A3



- LEGEND**
- ARBORICULTURAL IMPACT**
 - TREES RETAINED
 - TREES REMOVED TO FACILITATE DEVELOPMENT
 - TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT



Drawing to be interpreted with reference to Tree Survey document

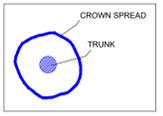
Tree constraints shown are calculated from guidelines contained within BS5837 (2012) and dimensions contained within Section 6 of the Tree Survey document. This outline should not be interpreted as the exact extent of root spread however it is considered the optimal area to be retained free of developmental impacts. Natural and/or man made barriers such as waterlogged soil, roads or buildings may restrict the spread of tree roots. Crown spreads may also prove to be a constraint particularly where crown reduction may not be possible.

The constraints lines shown on this drawing are therefore a guide only. An on-site assessment should be undertaken in the event of any developments being planned within the areas shown for retained trees.

CMK Horticulture & Arboriculture Ltd		PROJECT: BALLYMUN/FINGLAS TO CITY CENTRE BUS CORRIDOR SCHEME		JOB NO: TBUS001
Client: NATIONAL TRANSPORT AUTHORITY (NTA)	DRAWING: Arboricultural Impact	DATE: 15-10-21	SCALE: 1:500 @ A1	DRAWING NO: 23
NOTES: (Small text)	DRAWN BY: C.M. O'NEILL	CK: (Small text)	REVISION: C	STATUS: Planning



- LEGEND**
- ARBORICULTURAL IMPACT**
- TREES RETAINED
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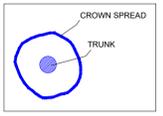
Client: NATIONAL TRANSPORT AUTHORITY (NTA)	PROJECT: BALLYMUN / FINGLAS TO CITY CENTRE BUS CORRIDOR SCHEME	JOB NO. TBUS001
DRAWING: Arboricultural Impact	DATE: 15-10-21	SCALE: 1:500 @ A1
DRAWN BY: C.M. O'NEILL	CK M.H. O'NEILL	REVISION 24 C
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SCALE 1:500 @ A1; 1:1000 @ A3



- LEGEND**
- ARBORICULTURAL IMPACT**
 - TREES RETAINED
 - TREES REMOVED TO FACILITATE DEVELOPMENT
 - TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT



Drawing to be interpreted with reference to Tree Survey document

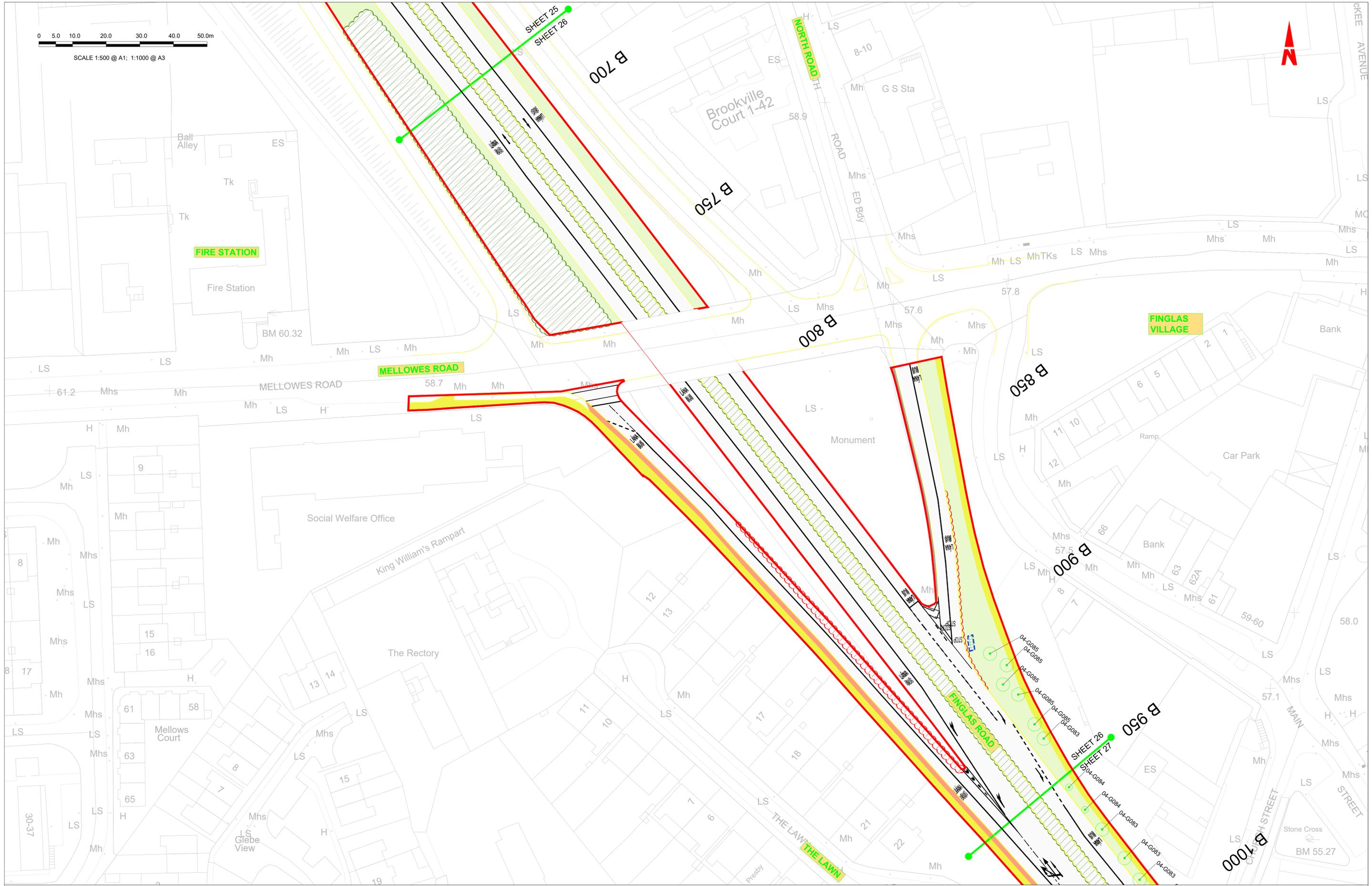
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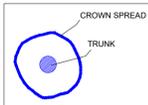
CMK Horticulture & Arboriculture Ltd		PROJECT: BALLYMUN/FINGLAS TO CITY CENTRE BUS CORRIDOR SCHEME		JOB NO: TBUS001
Client: NATIONAL TRANSPORT AUTHORITY (NTA)	DRAWING: Arboricultural Impact	DATE: 15-10-21	SCALE: 1:500 @ A1	DRAWING NO: 25
NOTES: (Small text)	DRAWN BY: CMK/AR/ST/MS	CK: MTH/LS	REVISION: C	STATUS: Planning



SCALE 1:500 @ A1; 1:1000 @ A3



- LEGEND**
- ARBORICULTURAL IMPACT
 - TREES RETAINED
 - TREES REMOVED TO FACILITATE DEVELOPMENT
 - TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT



Drawing to be interpreted with reference to Tree Survey document

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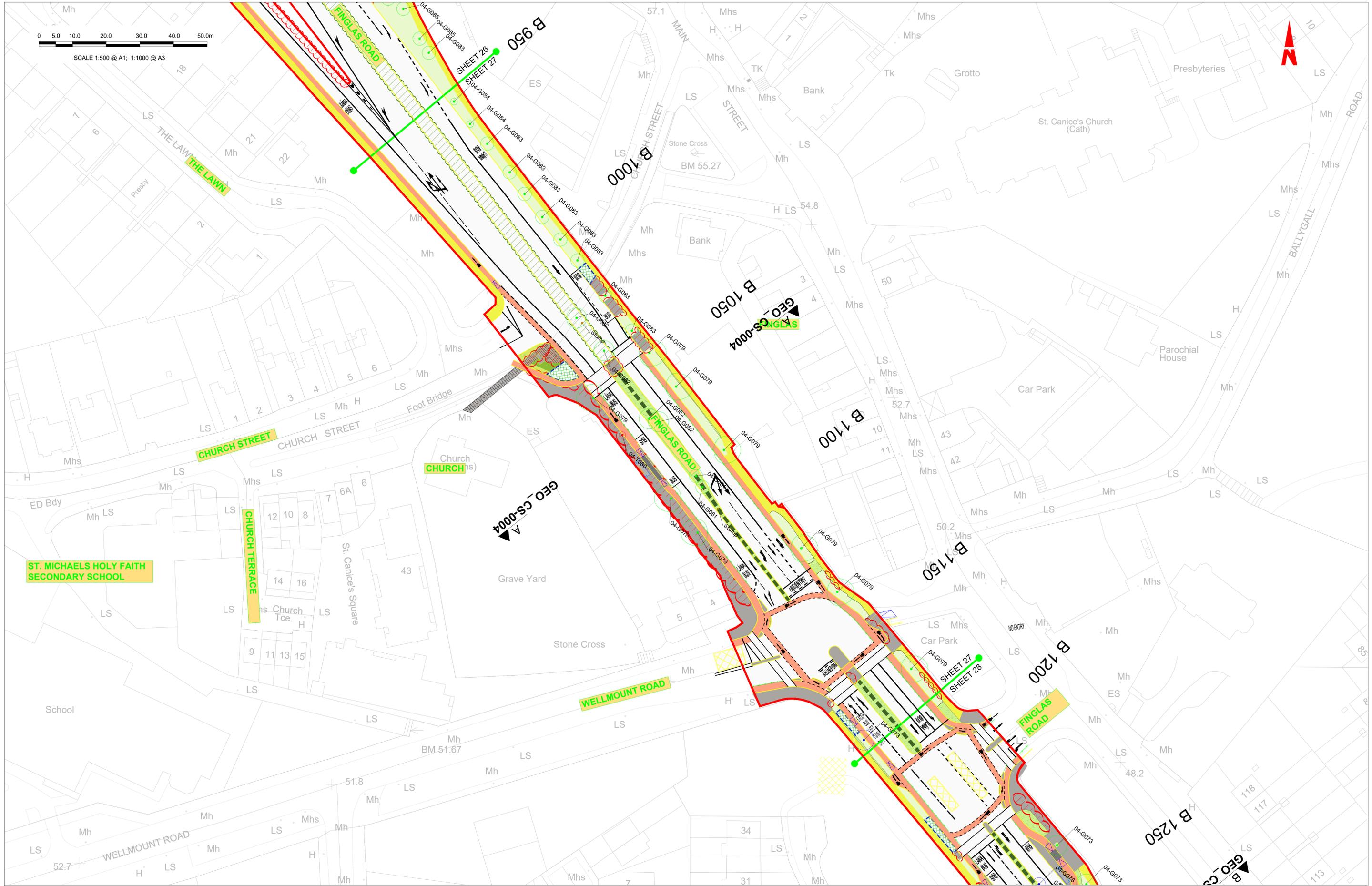
The constraints lines shown on this drawing are therefore a guide only. An on-site assessment should be undertaken in the event of any developments being planned within the areas shown for retained trees.

CMK
 Horticulture & Arboriculture Ltd

Client: NATIONAL TRANSPORT AUTHORITY (NTA)	PROJECT: BALLYMUN/FINGLAS TO CITY CENTRE BUS CORRIDOR SCHEME	DATE: 15-10-21	SCALE: 1:500 @ A1	JOB NO. TBUS001
DRAWING: Arboricultural Impact	DRAWN BY: CARMAN KEATING	CK METHUS	REVISION: C	
NOTES: This drawing is a copyright of CMK Horticulture & Arboriculture Ltd. It is not to be used for any other project without the written consent of CMK Horticulture & Arboriculture Ltd.		STATUS: Planning		

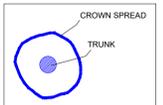


SCALE 1:500 @ A1; 1:1000 @ A3



**ST. MICHAELS HOLY FAITH
SECONDARY SCHOOL**

- LEGEND**
- ARBORICULTURAL IMPACT**
 - TREES RETAINED
 - TREES REMOVED TO FACILITATE DEVELOPMENT
 - TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT



Drawing to be interpreted with reference to Tree Survey document

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CMK
Horticulture & Arboriculture Ltd

Client: NATIONAL TRANSPORT AUTHORITY (NTA)	PROJECT: BALLYMUN/FINGLAS TO CITY CENTRE BUS CORRIDOR SCHEME	JOB NO. TBUS001
DRAWING: Arboricultural Impact	DATE: 15-10-21	SCALE: 1:500 @ A1
DRAWN BY: CINIAH/SG/TMG	CK INITIALS	REVISION C
STATUS: Planning		

NOTES:
1. This drawing is a copyright of CMK Horticulture & Arboriculture Ltd.
2. This drawing is a copyright of CMK Horticulture & Arboriculture Ltd.

0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

WELLMOUNT ROAD

Car Park

SHEET 27
SHEET 28

B 1200
FINGLAS ROAD

B 1250
GEO CS-004
FINGLAS ROAD

B 1300
FINGLAS ROAD

B 1350
FINGLAS ROAD

B 1400
FINGLAS PL

B 1450
SHEET 28
SHEET 29

B 1500
GLENHILL PLACE

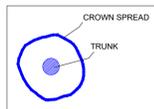
0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

LEGEND

ARBORICULTURAL IMPACT

-  TREES RETAINED
-  TREES REMOVED TO FACILITATE DEVELOPMENT
-  TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT



Drawing to be interpreted with reference to Tree Survey document

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CMK

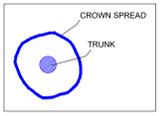
Client: NATIONAL TRANSPORT AUTHORITY (NTA)	PROJECT: BALLYMUN/FINGLAS TO CITY CENTRE BUS CORRIDOR SCHEME	DATE: 15-10-21	SCALE: 1:500 @ A1	JOB NO. TBUS001
DRAWING: Arboricultural Impact		DRAWN BY: CINIA/SG/TMG	CK DHT/LAS	REVISION C
NOTES: This drawing is a copyright of CMK Horticulture & Arboriculture Ltd.		STATUS: Planning		



SCALE 1:500 @ A1; 1:1000 @ A3



- LEGEND**
- ARBORICULTURAL IMPACT**
- TREES RETAINED
 - TREES REMOVED TO FACILITATE DEVELOPMENT
 - TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT



Drawing to be interpreted with reference to Tree Survey document

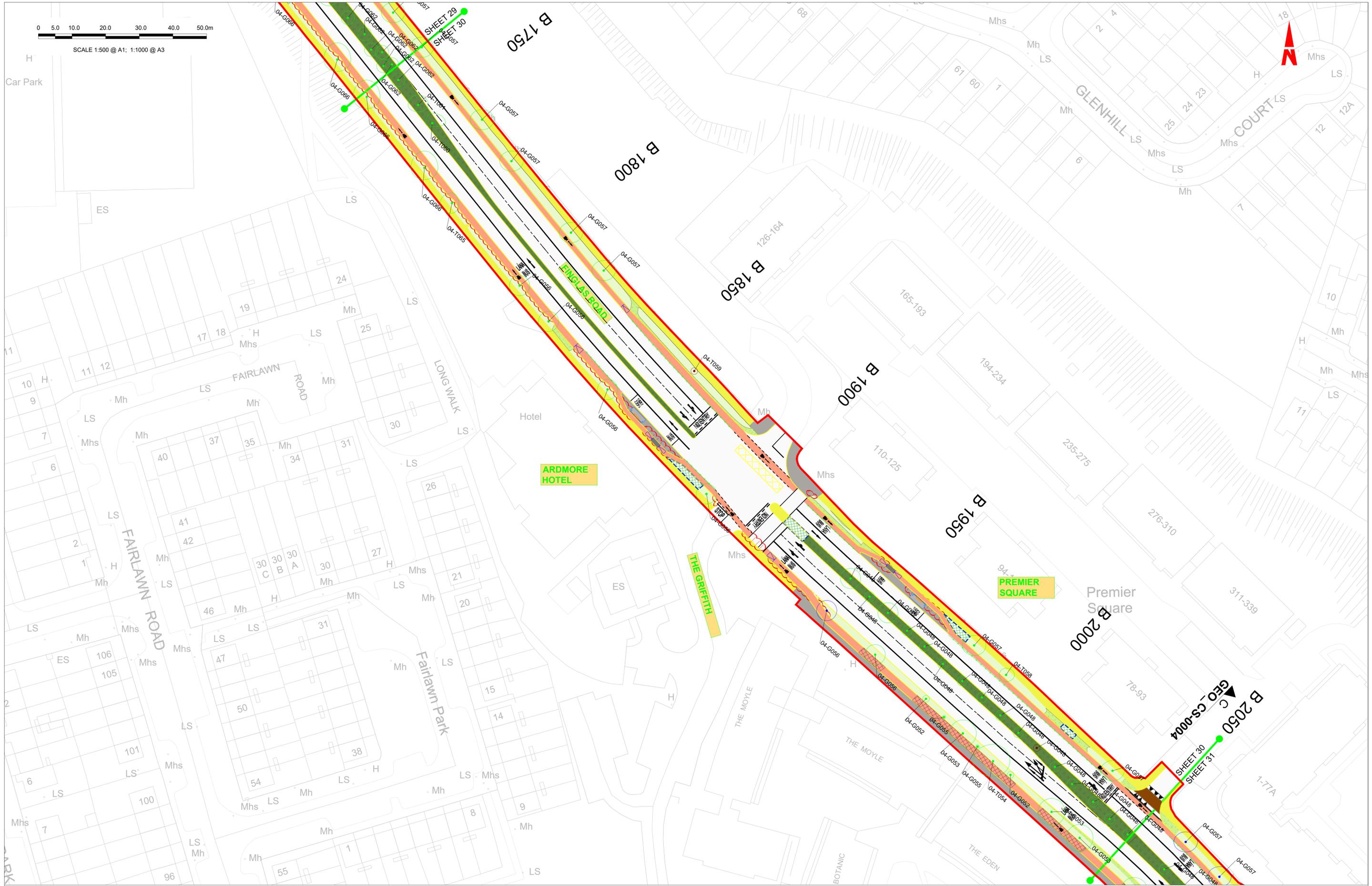
Tree constraints shown are calculated from guidelines contained within BS5837 (2012) and dimensions contained within Section 6 of the Tree Survey document. This outline should not be interpreted as the exact extent of root spread however it is considered the optimal area to be retained free of developmental impacts. Natural and/or man made barriers such as waterlogged soil, roads or buildings may restrict the spread of tree roots. Crown spreads may also prove to be a constraint particularly where crown reduction may not be possible.

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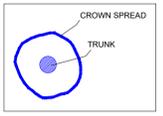
CMK Hydroculture & Arboriculture Ltd		PROJECT: BALLYMUN/FINGLAS TO CITY CENTRE BUS CORRIDOR SCHEME		JOB NO: TBUS001
Client: NATIONAL TRANSPORT AUTHORITY (NTA)	DRAWING: Arboricultural Impact	DATE: 15-10-21	SCALE: 1:500 @ A1	DRAWING NO: 29
NOTES: (Small text)	DRAWN BY: CMK/MS/ST/NG	CK: INT/LS	REVISION: C	STATUS: Planning



SCALE 1:500 @ A1; 1:1000 @ A3



- LEGEND**
- ARBORICULTURAL IMPACT**
- TREES RETAINED
 - TREES REMOVED TO FACILITATE DEVELOPMENT
 - TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT



Drawing to be interpreted with reference to Tree Survey document

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CMK
Civil & Mechanical

Client: NATIONAL TRANSPORT AUTHORITY (NTA)	PROJECT: BALLYMUN / INGLAS TO CITY CENTRE BUS CORRIDOR SCHEME	DATE: 15-10-21	SCALE: 1:500 @ A1	JOB NO. TBUS001
DRAWING: Arboricultural Impact	DRAWN BY: C.M. O'NEILL	STATUS: Planning	REVISION: C	

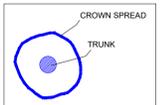
NOTES:
1. This drawing is a copy of the original drawing and is not to be used for any other purpose.
2. This drawing is the property of CMK and shall remain the property of CMK.



SCALE 1:500 @ A1; 1:1000 @ A3



- LEGEND**
- ARBORICULTURAL IMPACT**
- TREES RETAINED
 - TREES REMOVED TO FACILITATE DEVELOPMENT
 - TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT



Drawing to be interpreted with reference to Tree Survey document

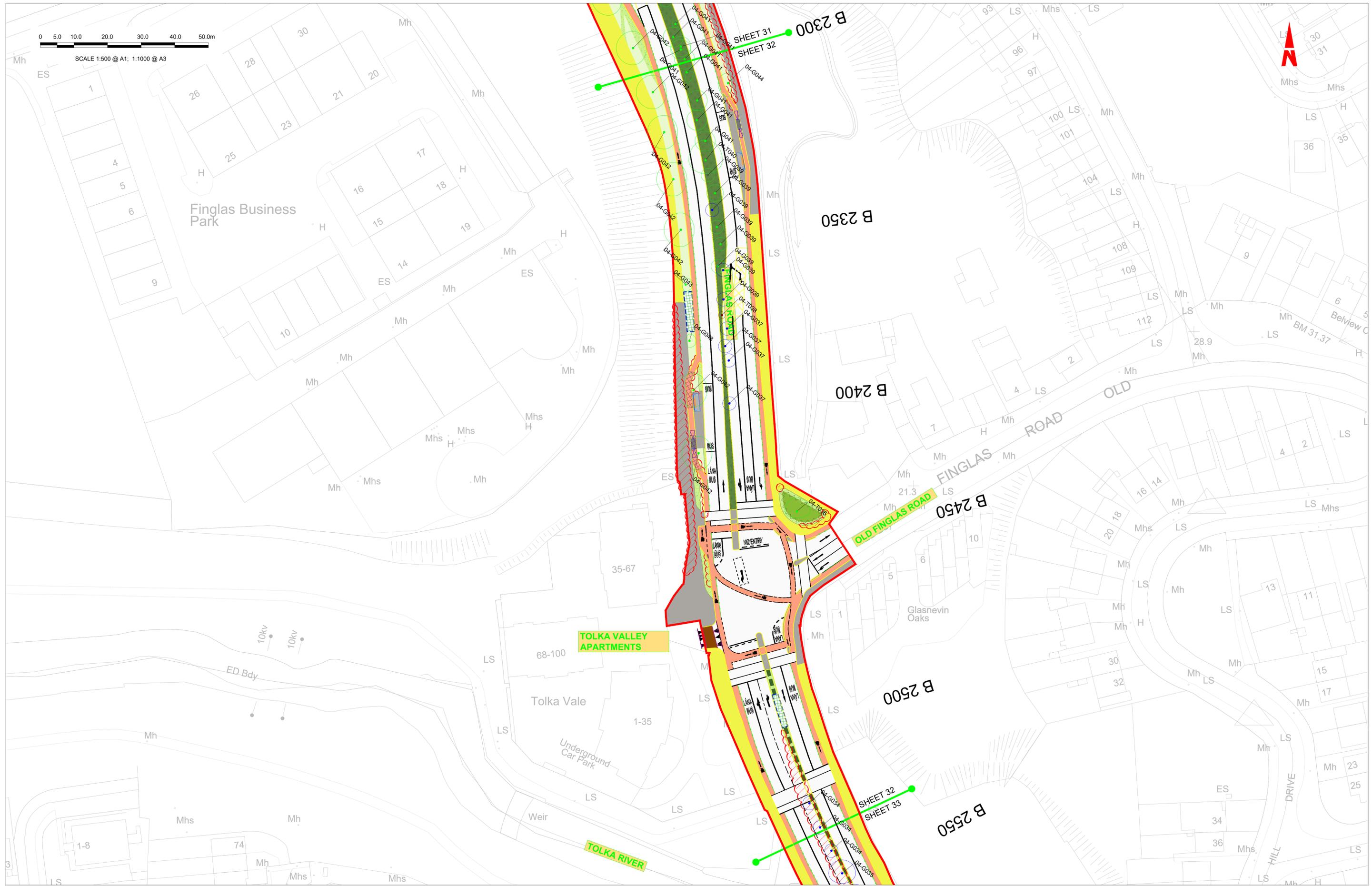
Tree constraints shown are calculated from guidelines contained within BS5837 (2012) and dimensions contained within Section 6 of the Tree Survey document. This outline should not be interpreted as the exact extent of root spread however it is considered the optimal area to be retained free of developmental impacts. Natural and/or man made barriers such as waterlogged soil, roads or buildings may restrict the spread of tree roots. Crown spreads may also prove to be a constraint particularly where crown reduction may not be possible.

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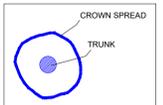
CMK Horticulture & Arboriculture Ltd		PROJECT: BALLYMUN / INGLAS TO CITY CENTRE BUS CORRIDOR SCHEME		JOB NO. TBUS001
Client: NATIONAL TRANSPORT AUTHORITY (NTA)	DRAWING: Arboricultural Impact	DATE: 15-10-21	SCALE: 1:500 @ A1	DRAWING NO. 31
NOTES: (Small text)	DRAWN BY: CMK/AR/04/19/20	CK INITIALS	REVISION C	STATUS: Planning

0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3



- LEGEND**
- ARBORICULTURAL IMPACT**
- TREES RETAINED
 - TREES REMOVED TO FACILITATE DEVELOPMENT
 - TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT



Drawing to be interpreted with reference to Tree Survey document

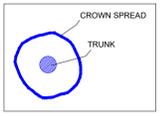
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CMK Horticulture & Arboriculture Ltd		PROJECT: BALLYMUN/FINGLAS TO CITY CENTRE BUS CORRIDOR SCHEME		JOB NO. TBUS001
Client: NATIONAL TRANSPORT AUTHORITY (NTA)	DRAWING: Arboricultural Impact	DATE: 15-10-21	SCALE: 1:500 @ A1	DRAWING NO. 32
NOTES: (Small text)	DRAWN BY: CMK/MS/ST/MS	CK: CK	REVISION: C	STATUS: Planning



- LEGEND**
- ARBORICULTURAL IMPACT**
- TREES RETAINED
 - TREES REMOVED TO FACILITATE DEVELOPMENT
 - TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT

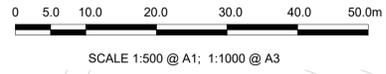


Drawing to be interpreted with reference to Tree Survey document

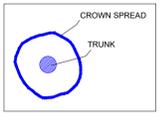
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CMK Horticulture & Arboriculture Ltd		PROJECT: BALLYMUN/FINGLAS TO CITY CENTRE BUS CORRIDOR SCHEME		JOB NO. TBUS001
Client: NATIONAL TRANSPORT AUTHORITY (NTA)	DRAWING: Arboricultural Impact	DATE: 15-10-21	SCALE: 1:500 @ A1	DRAWING NO. 33
NOTES: See Report Document Title. Do not scale. Do not reproduce without written consent.	DRAWN BY: CMK/AN/RS/10/10	CK: INT/LS	REVISION: C	STATUS: Planning



- LEGEND**
- ARBORICULTURAL IMPACT**
- TREES RETAINED
 - TREES REMOVED TO FACILITATE DEVELOPMENT
 - TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT

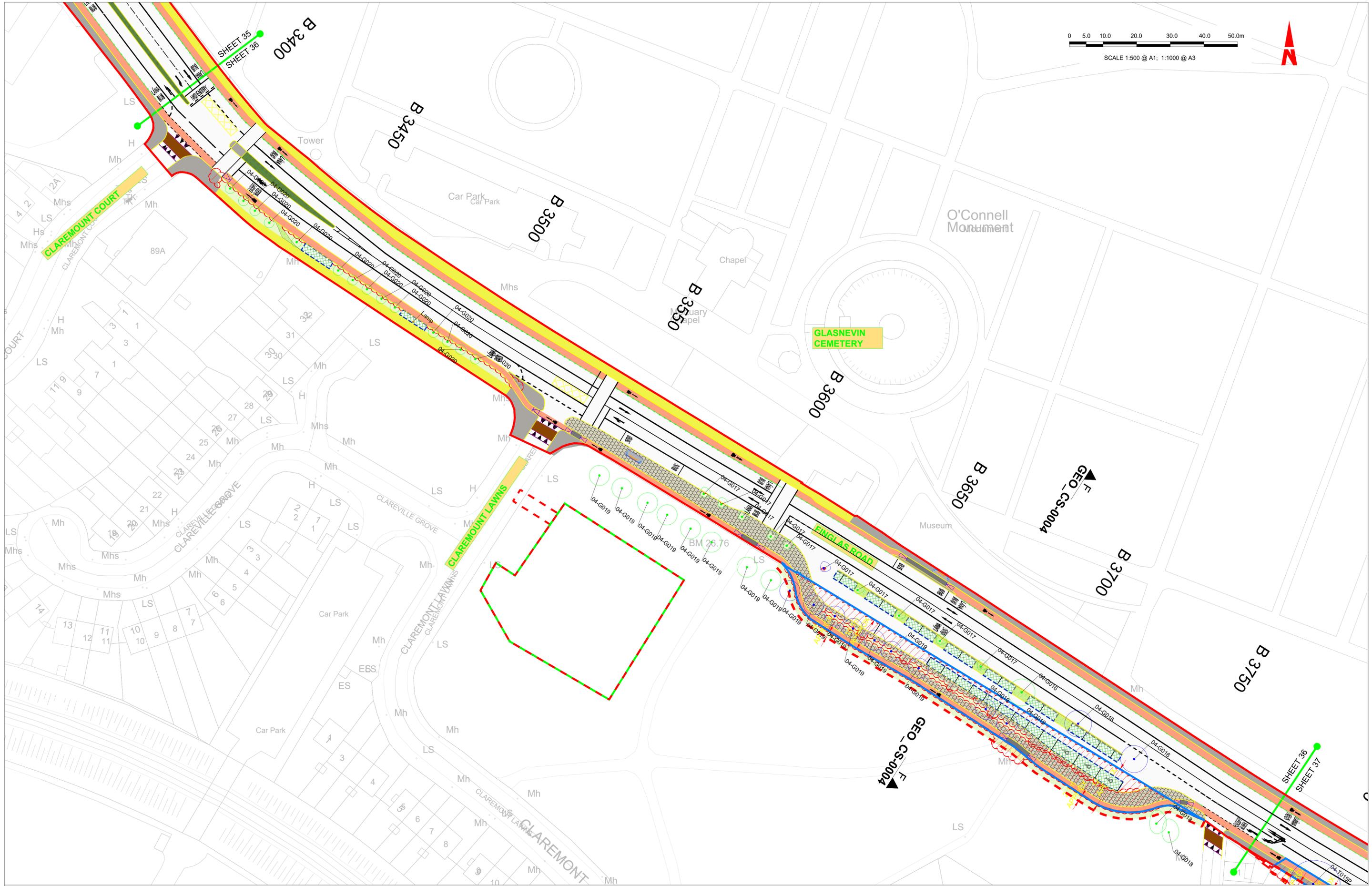


Drawing to be interpreted with reference to Tree Survey document

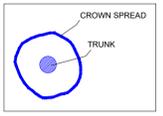
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CMK Horticulture & Arboriculture Ltd		Client: NATIONAL TRANSPORT AUTHORITY (NTA)		PROJECT: BALLYMUN/FINGLAS TO CITY CENTRE BUS CORRIDOR SCHEME	JOB NO. TBUS001
		DRAWING: Arboricultural Impact	DATE: 15-10-21	SCALE: 1:500 @ A1	DRAWING NO. 35
NOTES: <small>(None)</small>		DRAWN BY: CMK/RS/ATG	CK INITIALS	REVISION C	STATUS: Planning



- LEGEND**
- ARBORICULTURAL IMPACT**
- TREES RETAINED
 - TREES REMOVED TO FACILITATE DEVELOPMENT
 - TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT



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CMK Horticulture & Arboriculture Ltd		PROJECT:		JOB NO.	
		NATIONAL TRANSPORT AUTHORITY (NTA)		TBUS001	
DRAWING:		DATE:	SCALE:	DRAWING NO.	
Arboricultural Impact		15-10-21	1:500 @ A1	36	
DRAWN BY:		CK	INTIALS	REVISION	
CINIAW/SAITNG				C	
STATUS: Planning					

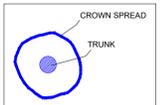


SCALE 1:500 @ A1; 1:1000 @ A3



SCALE 1:500 @ A1; 1:1000 @ A3
Dublin

- LEGEND**
- ARBORICULTURAL IMPACT
 - TREES RETAINED
 - TREES REMOVED TO FACILITATE DEVELOPMENT
 - TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT



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CMK Horticulture & Arboriculture Ltd		PROJECT:		JOB NO.:	
Client:		BALLINAMINAH ROAD TO CITY CENTRE BUS CORRIDOR SCHEME		TBUS001	
NATIONAL TRANSPORT AUTHORITY (NTA)		DRAWING:		DATE:	
		Arboricultural Impact		15-10-21	
		DRAWN BY:		SCALE:	
		CMK/NTA/INT		1:500 @ A1	
		STATUS: Planning		DRAWING NO.:	
				37	
				REVISION:	
				C	

