Arboricultural Impact Assessment (AIA)

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URBAN GREEN

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Appendix 1 – Tree Data Schedule

Appendix 2 – Tree Schedule Definition of Terms

Appendix 3 – Tree Retention Categories

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1 Executive Summary

1.1.1 We have been instructed by Kieran Hedges to carry out an Arboricultural Survey to British Standard 5837:2012 guidelines at 21 Didsbury Park, Didsbury, Manchester and produce our findings in a report.

1.1.2 It is proposed to demolish the existing property and develop two self-contained dwellings with the curtilage of the site, alongside landscape improvements such as parking and soft landscaping. The proposed development will require the demolition of an existing building and landscape features. Full details of the proposed site layout can be seen on the plans included in Appendix 4.

1.1.3 Two trees, three groups and part of one hedge will require removal to facilitate the development proposals. These are categorised as C and U grade.

1.1.4 The surveyor had categorised T7 as U grade and recommended this tree for removal. However, the tree officer for Manchester Council has confirmed by email on 31/05/2019 that T7 should remain on site.

1.1.5 The proposed front boundary wall and associated gates within the RPA of T3, T4 and T5 will need to be constructed using raft and pile foundations to minimise the impact of the foundations on the roots of retained trees.

1.1.6 T19 will require supervised root pruning to facilitate the construction of the proposed development.

1.1.7 G11 will require selective removal of stems to allow for the installation of portioning fencing between the two proposed plots.

1.1.8 Before any tree works are carried out trees should first be assessed for their suitability for protected species by a suitably qualified and experienced ecologist.

1.1.9 Tree protection fencing will need to be installed at the alignment shown on the Tree Protection Plan in Appendix 4 before any construction activity takes place.

1.1.10 A cellular confinement system will need to be utilised to mitigate against compaction and reduced water permeation for the construction of the new driveway areas. Details of installation methods can be found in section 4.17.

2 Introduction

2.1 Instructions and references

2.1.1 All trees, regardless of their statutory status, are a material consideration in a planning application. We have been instructed by Kieran Hedges to carry out a Arboricultural Impact Assessment (AIA) in accordance with BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations at the site location and produce our findings in a report to be submitted with a detailed planning application.

2.1.2 BS 5837 recognises the potential conflict between trees and development. The standard sets out to assist those concerned with trees in relation to construction and aid with decision making. This is achieved by providing impartial and balanced information on trees and their potential impacts.

2.1.3 The site is located in the area shown in Figure 1. The OS Grid Reference is SJ 84951 90563.

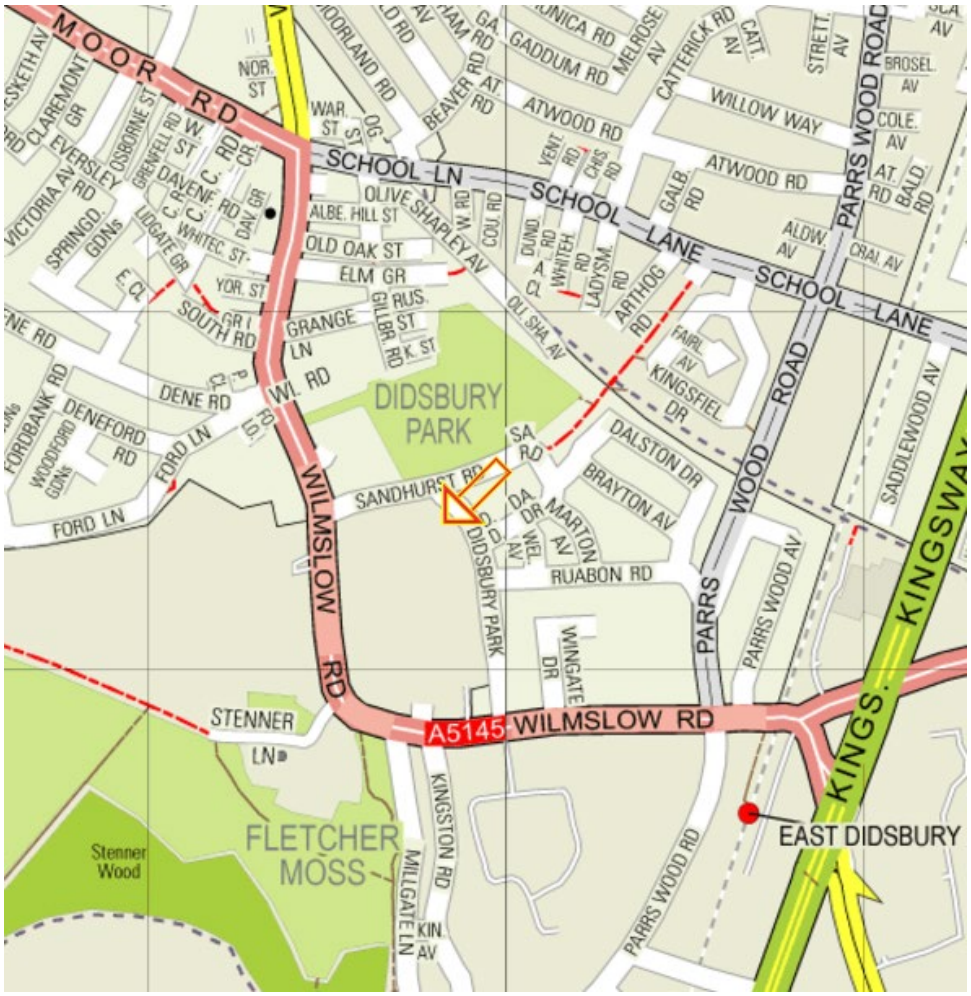


Figure 1 – Site Location Plan

2.2 Scope

2.2.1 The AIA takes into account any potential impacts on existing trees including the effect of any tree loss required to implement the design and recommendation for the establishment of new trees.

2.2.2 The AIA will also asses any potentially damaging activities proposed in the vicinity of retained trees and the effect that the retained trees may have on the development such as potential nuisance caused by excessive leaf/fruit litter, lighting levels and potential damage to structures.

2.3 Documents provided

2.3.1 A scaled plan has been provided with tree positions already plotted. Any extra trees found on site that were not included on the original plan have been plotted according to measurements taken on site and/or using aerial photography.

2.3.2 Tree locations which have been estimated are illustrated on the Tree Protection Plan in Appendix 4. The exact locations of these trees must be verified, and any discrepancies discussed with the Arboricultural Consultant before starting works on site.

2.3.3 A plan outlining the development proposals has been overlaid with the Tree Constraints Plan in order to assess the potential impacts.

2.4 Limitations

2.4.1 The report is based upon a visual inspection. The consultant shall not be responsible for events that happen after the date of the report due to factors that were not apparent at the time, and the acceptance of this report constitutes an agreement with the guidelines and the terms listed in this report.

2.4.2 The consultant accepts no liability in respect of the trees unless the recommendations of this report are carried out under his supervision.

2.4.3 The surveyor had categorised T7 as U grade and recommended this tree for removal. However, the tree officer for Manchester Council has confirmed by email on 31/05/2019 that T7 should remain on site.

2.4.4 Assessing the potential influence of trees upon load bearing soils, beneath existing and proposed structures resulting from water abstraction by trees or rehydration of shrinkable soils was not included in the contract brief and is therefore not considered in the report. The consultant cannot be held responsible for damage arising from such action.

2.4.5 Trees are living organisms whose health, condition and structure can change over time. The contents of this report are valid for a period of one year from the date of the report.

2.4.6 Potentially hazardous trees are highlighted and appropriate recommendations are made. However, this report is not a substitute for a full tree risk assessment or management plan which are specifically designed to minimise risk and liability associated with responsibility for trees.

3 Legislation

3.1 Tree protection status

3.1.1 A Tree Preservation Order (TPO) is an order made by a Local Authority to protect specific trees, groups of trees or woodlands in the interests of amenity. A TPO prohibits the cutting down, topping, lopping, uprooting and wilful damage or destruction of trees without the Local Authority's written consent.

3.1.2 Manchester City Council confirmed that no trees within the site are subject to any Tree Preservation Orders.

3.1.3 The site is within the Didsbury St James Conservation Area.

3.1.4 It is recommended that the Local Authority is consulted before any tree works are undertaken, as new TPOs may have been created since the time of enquiry, and heavy fines exist for unauthorised works to protected trees.

3.1.5 All works to trees covered by a TPO require permission from the Local Authority, including any pruning. However, this does not include trees that are dead or have become dangerous. The removal of dead branches is also excluded from a TPO. Although the above exceptions exist, it is advisable to give the Local Authority five days' notice in writing of any intended removal. Permission is not needed where tree work is required to implement an approved planning application.

3.1.6 In a Conservation Area, all trees greater than 75mm in diameter at 1.5m above ground level are protected. Where tree work is required in a Conservation Area, a Section 211 notice of intent must be submitted the Local Planning Authority who have six weeks to decide to either make a TPO or allow the work to proceed.

3.1.7 The proposed work can proceed after six weeks as it is presumed that the Local Authority consents if they have not responded in that time.

3.1.8 It is an offence to remove more than $5m^3$ of timber in any one calendar quarter without having first obtained a felling licence from the Forestry Commission. It must be noted, however, that this excludes sites where planning permission has already been granted.

3.2 Wildlife

3.2.1 Prior to the commencement of any tree works, the trees should be assessed for the presence of protected species, some of which are subject to the *Wildlife and Countryside Act 1981* (as amended) and the *Conservation of Habitats and Species Regulations 2010.*

3.2.2 Where there is evidence that bats, birds or other protected species are present, the advice of a suitably qualified ecologist should be sought.

3.2.3 If tree works are carried out during the bird nesting season (March to August inclusive), trees would need to be inspected by a qualified ecologist within the 24-hour period prior to the commencement works.

4 Arboricultural Impact Assessment (AIA)

4.1 Summary of the development

4.1.1 It is proposed to demolish the existing property and develop two self-contained dwellings with the curtilage of the site, alongside landscape improvements such as parking and soft landscaping. The proposed development will require the demolition of an existing building and landscape features. Full details of the proposed site layout can be seen on the plans included in Appendix 4.

4.2 Tree constraints

4.2.1 BS 5837:2012 recognises that conflicting requirements of the planning system for development means that trees are only one factor which need to be taken into consideration. Although there may be certain specimens that can pose significant constraints to development due to their importance, it is essential that inappropriate tree retention is avoided.

4.2.2 Trees can be adversely affected on development sites if their protection is not factored into the wider project management of onsite operations. We have transposed the tree survey plan over plans detailing current proposals in order to assess the impact on surveyed trees.

4.2.3 It is essential that roots are protected from construction works including physical damage from excavation and changes in soil structure from compaction and changes in ground levels.

4.3 Root Protection Areas (RPAs) explained

4.3.1 The RPA is an area of ground around the base of a retained tree, which is calculated in relation to the stem diameter, where disturbance should be kept to a minimum and avoided if at all possible.

4.3.2 The majority of tree roots grow within the upper 600mm of the soil profile where most nutrients are available as the result of the decomposition of organic matter close to the surface. Rooting conditions become less favourable at depth as the soil density increases, creating anaerobic conditions.

4.3.3 It is essential that roots are protected from construction works including physical damage from excavation and changes in soil structure from compaction and changes in ground levels.

4.4 Tree works

4.4.1 Tree works that are recommended in Appendix 1 are made in line with good arboricultural practice and should be programmed in accordance with the Tree Data Schedule.

4.4.2 All specified tree work is to be carried out in accordance with BS 3998:2010 Tree work - Recommendations. Any recommendations provided in the Tree Schedule are based on site conditions during the survey.

4.5 Impacts of development

4.5.1 Two trees, three groups and part of one hedge will require removal to facilitate the development proposals. These are categorised as C and U grade.

4.5.2 The surveyor had categorised T7 as U grade and recommended this tree for removal. However, the tree officer for Manchester Council has confirmed by email on 31/05/2019 that T7 should remain on site.

4.5.3 T19 will require supervised root pruning to facilitate the construction of the proposed development. T19 will also require crown lifting to provide 3m clearance from finished ground levels. It is advised that crown reduction works are carried out, as shown in the Tree Removal Plan.

4.5.4 G11 will require selective removal of stems to allow for the installation of portioning fencing between the two proposed plots.

4.5.5 The proposed front boundary wall and associated gates will be installed within the RPA's of T3, T4 and T5. These will need to be constructed using raft and pile foundations.

The mechanical gates will be hung from a natural stone pillar based on pad foundations. The wall and posts will be constructed with red textured brick with a sandstone coping. The posts will be 440mm square brick posts with a central (hidden) universal column. The columns support the new metal gates. Trial holes for the gate posts will need to be dug under Arboricultural supervision.

4.5.6 T1 is located at the front of the property and is to be removed due to its low quality.

4.6 Tree surgery works

4.6.1 Tree works that are recommended in the Tree Data Schedule in Appendix 1 are of a general maintenance nature and can be carried out at any time as per recommendations.

4.6.2 Tree works required to facilitate the development will be carried out prior to the commencement of any onsite operations. This should allow sufficient space for approved construction to be carried out. For further details regarding the pruning of trees for the facilitation of the development please refer to Arboricultural Impact Assessment.

4.6.3 Any unforeseen tree works that become apparent during the construction process will require written consent from the Local Authority Tree Officer.

4.7 Protective fencing

4.7.1 Temporary protective fencing will need to be installed at the alignment indicated on the Tree Protection Plan in Appendix 4, prior to the commencement of any construction activities on site including the delivery of materials and site facilities.

4.7.2 Any fencing that is damaged so that it is no longer able to protect retained trees must be replaced/repaired immediately with appropriate fencing.

4.7.3 The required specification for protective fencing is illustrated in the Tree Protection Plan (Insert 1).

4.7.4 The 'in-ground' system involves driving vertical scaffold poles approximately 0.6m into the ground onto which are affixed horizontal scaffold poles and bracing struts. 2m high anti-climb weldmesh panels are then wired to the scaffold framework. The vertical scaffold poles should be at a maximum of 3m apart.

4.7.5 No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to the tree roots when locating uprights.

4.7.6 A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" shall be fixed to every 10m of protective fencing, as illustrated on the Tree Protection Plan (Insert 2).

4.15 Excavation within RPA's

4.15.1 Any necessary excavation must be carried out using hand tools to avoid direct damage to the protective bark of tree roots. It may be possible in some instances to use specialised equipment such as high air pressure machinery to excavate the soil with minimal disturbance to roots.

4.15.2 To install the proposed driveway, the existing hardstanding and soft landscaping planting area will have to be lifted; this must be carried out by hand in the areas shown on the Tree Protection Plan under arboricultural supervision. This will enable an understanding of where roots are located and if further removals are necessary.

4.15.3 Exposed roots will be wrapped in dry, clean Hessian sacking to prevent desiccation and to protect from rapid temperature changes. In warmer weather, the sacking should be kept moist by regular watering. Sacking should be removed before backfilling.

4.15.4 Roots less than 25mm diameter may be pruned back, preferably to a growing point. A sharp cutting tool such as bypass secateurs or a handsaw should be used to leave the smallest wound possible. Roots greater than 25mm in diameter should be retained wherever possible.

4.15.5 Root pruning should be carried out under the supervision of the Arboricultural Consultant to ensure that only roots necessary to facilitate the development will be removed and the long-term well-being of retained trees is maintained.

4.15.6 Backfilling of any excavation should be carried out by hand to avoid direct root damage by excessive compaction and should include, where possible, the replacement of inert granular material mixed with sharp sand (not builder's sand) around retained roots.

4.16 Demolition and removal of surfaces within the RPA

4.16.1 During demolition, the following restrictions will apply:

4.16.2 Where direct damage by falling masonry is likely, the tree should be protected by exterior grade plywood sheets constructed around the main stem.

4.16.3 The main body of any mechanical excavator will operate outside the RPA.

4.16.4 Masonry will be pulled away from trees where possible.

4.16.5 When breaking masonry, a fine water spray will be used to minimise dust particles.

4.16.6 Excessive dust particles on trees will be removed each day by spraying with water.

4.16.7 Hard surfaces should be kept in place for as long as possible during construction works in order to prevent soil compaction in the RPA.

4.16.8 During surface removal, the following restrictions will apply:

4.16.9 Only hand operated tools will be used to lift existing surfaces and sub-base. No mechanical excavators are to be used.

4.16.10 No excavation below the existing sub-base will occur.

4.16.11 All surface removal within the RPA will be supervised by the Arboricultural Consultant or the Local Authority Tree Officer.

4.17 Cellular confinement system – method statement

4.17.1 The new surface must utilise a cellular confinement to avoid compaction and undue damage to the rooting environment.

4.17.2 The four general principles that will require strictly upholding when designing a no dig solution within the RPA are:

- Roots must not be severed.
- Ground Levels must not be changed.
- Soil structure must not be damaged by compaction.
- Oxygen and water must be able to diffuse into the soil below.

4.17.3 A cellular confinement system will ensure that no excavation is required. This will therefore lead to an increase in ground levels.

4.17.4 It is advised that a porous block paving detail is utilized; please refer to Insert 4 of the Tree Protection Index for cross sectional detailing.

4.17.5 The sequence of events for the installation of the cellular confinement system will be as follows:

1. Remove the surface vegetation within the footprint of the roadway up to 50mm.

2. A 40mm layer of washed sharp sand containing no fines or salt will be spread across the footprint of the roadway filling any hollows. High points must not be compacted though rolling.

3. Appropriate kerbing/edging will be set above ground level. The cellular confinement system may be retained using pins that are driven into the ground and supported by treated timber edging.

4. A geotextile membrane will be laid over the footprint of the roadway with each section overlapping by a minimum of 300mm.

5. Open out and lay the specified layer thickness of cellular (to be confirmed by product manufacturer and engineer) and pin in place between the edging boards. It may be necessary to cut the cellular confinement system to size using a sharp knife or it can be left uncut and folded up against the edgings if preferred.

6. Ensure that the cells are fully expanded by inserting steel fixing pins at approximately 1-2m spacings (depending on specific engineering requirements). Avoid tree root damage during the pinning process.

7. The cells must be filled with clean, open graded angular aggregate, normally in the particle size range of 5mm - 45mm, not single sized or rounded aggregate. The project engineer may determine alternative fill materials.

8. Do not roll the surface, a light vibratory compaction plate (whacker) may be permitted to settle the stone into the cells. Do not contaminate the filled cells with site debris, soil or mud.

9. Install the permeable pavement layer/wearing course

4.18 New boundary wall – T3, T4 and T5

4.18.1 The proposed front boundary wall and associated gates within the RPA of T3, T4 and T5 will need to be constructed using raft and pile foundations to minimise the impact of the foundations on the roots of retained trees.

4.18.2 Where foundations are to be laid in the RPA of retained trees, root damage can be minimized by using small diameter piles located to avoid major tree roots. The proposed area for pile installation should be dug by hand to a depth of approximately 750mm in order to ascertain the position of roots present. Beams, slabs and suspended floors should be laid at or above ground level and cantilevered, as necessary, to avoid tree roots.

4.18.3 Where piling is to be installed in proximity to trees, the smallest practical pile diameter should be used as this reduces the possibility of striking major tree roots and reduces the size of the rig required to sink the piles. The latter is particularly important where piling within the branch spread is proposed, as mini-rigs reduce the need for access facilitation pruning. Sheathed piles protect the soil and adjacent roots from the potential toxic effects of concrete.

4.18.4 Backfilling of any excavation should be carried out by hand to avoid direct root damage by excessive compaction and should include, where possible, the replacement of inert granular material mixed with sharp sand (not builder's sand) around retained roots.

4.18.5 Any pruning should be carried out under the supervision of the Arboricultural Consultant to ensure that only branches necessary to facilitate the proposed development will be removed and the long-term well-being of retained trees is maintained.

4.19 Boundary treatments

4.19.1 Where fencing is to be installed within RPAs of retained trees, post holes will be excavated by hand and kept as narrow as possible. Trial holes will be dug using a manually operated soil augur in order to position post holes to avoid major roots.

4.19.2 Exploratory post holes will be dug before committing to positions. If any roots in excess of 25mm are encountered they are to remain intact and the post hole will be relocated to avoid them. The fencing system must permit such flexibility (i.e. where fixed panel widths are used, all post holes must be excavated before committing to the final location)

4.19.3 All post holes will be excavated by hand and kept as narrow as possible (maximum diameter 300mm).

4.20 Temporary site cabins

4.20.1 All storage facilities and deliveries will make use of existing hard surfaces to avoid unnecessary compaction within RPAs. The locations will be agreed in writing with the LPA prior to delivery and will remain in the agreed locations unless approved by the LPA.

4.20.2 If storage facilities require siting within RPAs, every effort will be made to ensure that any damage to aerial parts of retained trees is avoided and that appropriate footings are used to avoid root damage or compaction of the soil.

4.21 Recommendations

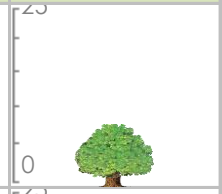
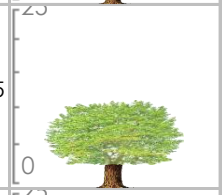
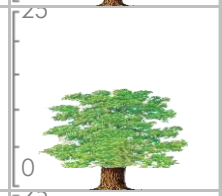
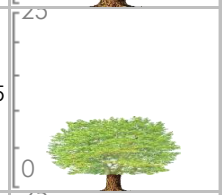
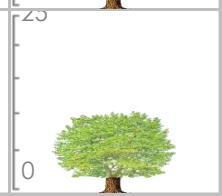
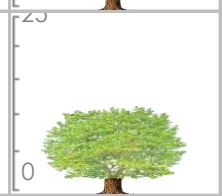
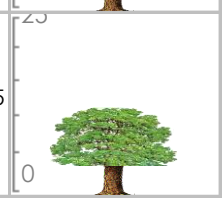
4.21.1 All operations that could affect trees on and adjacent to the site must be considered as part of the project management of the Proposed Development. It is therefore imperative that an Arboricultural Consultant is appointed as part of the design and management team to advise on pre-development issues and supervise on-site operations.

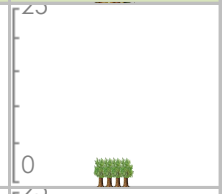
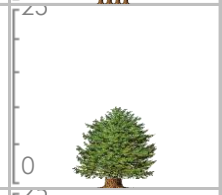
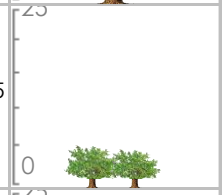
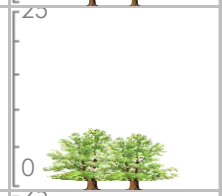
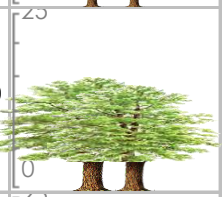
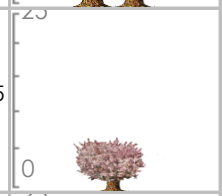
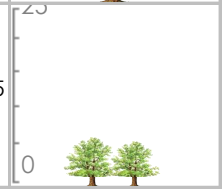
4.21.2 The Arboricultural Consultant may also have an advisory role in the preparation of site including tree surgery works and the protection of trees during demolition processes.

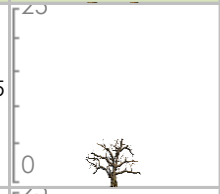
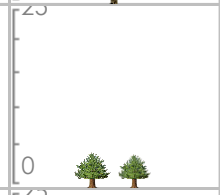
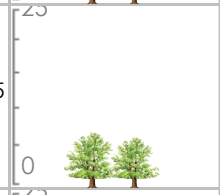
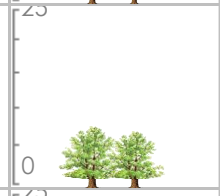
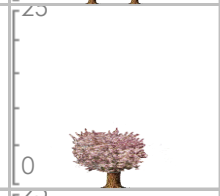
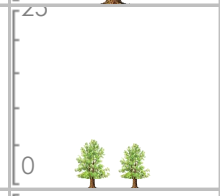
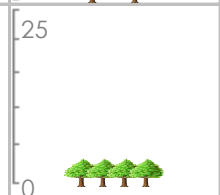
4.21.3 The Arboricultural Consultant shall be responsible for inspecting all protective fencing prior to the commencement of all onsite activity.

Appendix 1 - Tree Data Schedule

The following pages contain information gathered during the site survey. The reader should refer to Appendix 2 in order to correctly interpret the tree data. All images within the Tree Data Schedule are diagrammatical only. Their purpose is to indicate, at a glance, the relative dimensions of each tree. The images are computer generated based on measurements recorded for stem diameter, crown spread, crown height and overall height.

Reference (G = Group, H = Hedge)	Age & Species	Height (m)	Crown Ht (m)	Diameter (mm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m)	Notes	Recommendations: Priority	Recommendations: Inspect Freq (yrs)	Physiological Condition / Structural Condition	Life Expectancy (yrs) / Retention Category
T1	Early-Mature **Horse Chestnut** Aesculus hippocastanum	7	1	520	av 3 3 3 3 each		1: Previously topped. 2: Leaf minor throughout crown. 3: Situated on boundary.	Monitor. Moderate	1	Poor Fair	10-20 C
T2	Early-Mature **Lime** Tilia sp	11	3	600	av 5.5 5.5 5.5 5 each		1: Previously topped. 2: Epicormic growth at base. 3: No significant defects observed.	No action required. n/a	3	Good Good	40+ B
T3	Early-Mature **Ash** Fraxinus excelsior	13	3	900	5.5 5 8 6		1: In a moribund state. 2: Dense ivy prevented a detailed inspection. 3: Deadwood throughout crown.	Remove ivy and re-inspect for defects, monitor, deadwood. High	1	Poor Fair	10-20 C
T4	Early-Mature **Lime** Tilia sp	9	2	490	av 5.5 6 5.5 4.5 each		1: Previously topped. 2: No significant defects.	No action required. n/a	3	Good Good	40+ B
T5	Early-Mature **Lime** Tilia sp	10	2	500	5 4 6 5		1: Dense ivy and vegetation prevented a detailed inspection. 2: Previously topped.	No action required. n/a	3	Good Good	40+ B
T6	Early-Mature **Lime** Tilia sp	11	2	620	6 6 7 5		1: Previously topped. 2: No significant defects observed.	No action required. n/a	3	Good Good	40+ B
T7	Early-Mature **Sycamore** Acer pseudoplatanus	11	3.5	640	5 6.5 3.5 6		1: Included union at base. 2: Potentially hazardous.	Remove. Moderate	1	Good Very Poor	<10 U

Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (mm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m)	Notes	Recommendations Priority	Recommendations Inspect Freq (yrs)	Physiological Condition / Structural Condition	Life Expectancy (yrs) / Retention Category
H8	Semi-Mature **Privet** Ligustrum ovalifolium	av 1.2	0.1	70	5 5 5 0.2		1: Formally maintained hedge.	No action required.	n/a 3	Good / Good	40+ / C
T9	Early-Mature **Yew** Taxus baccata	10	1	590	3 3 5 2		1: Situated on third party land. 2: Unbalanced crown due to pruning. 3: Retaining wall segregates tree and site.	No action required.	n/a 3	Good / Good	40+ / B
G10	Semi-Mature **Apple** Malus sp	av 4	av 1	av 150	1.5 1.5 av 1.5 1.5 each		1: Group of 6 trees forming small orchard. 2: Acceptable condition at present.	No action required.	n/a 3	Good / Good	40+ / C
G11	Early-Mature **Mixed** Species	av 7	av 0.1	av 300	4 4 av 4 4 each		1: Mixed group consisting of pear, yew, poplar and one dead cherry. 2: Low amenity value. 3: Acceptable condition at present.	Remove dead cherry.	Moderate 1	Fair / Fair	20-40 / C
T12	Early-Mature **Grey Poplar** Poplus x canescens	av 15	av 4	av 700	7 10 av 12 4 each		1: Previously topped. 2: Dense ivy and vegetation prevented a detailed inspection.	Repollard to previous pruning points.	Moderate 1	Fair / Fair	10-20 / C
T13	Early-Mature **Wild Cherry** Prunus avium	7	1	430	5 5.5 5 4		1: Dense ivy prevented a detailed inspection. 2: Minor deadwood throughout crown. 3: Acceptable condition at present.	Remove ivy and re-inspect for defects, crown clean and deadwood.	Moderate 1	Fair / Fair	20-40 / B
G14	Semi-Mature **Mixed** Species	av 5	av 0.1	av 100	1.5 1.5 av 1.5 1.5 each		1: Mixed group consisting of lilac, yew, holly and cotoneaster. 2: Low value.	No action required.	n/a 3	Fair / Fair	20-40 / C

Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (mm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m)	Notes	Recommendations		Physiological Condition	Life Expectancy (yrs)
								Priority	Inspect Freq (yrs)	Structural Condition	Retention Category
T15	**Dead** **Apple** Malus sp	5	0.5	170	1.5 1.5 1.5 1.5		1: Dead specimen.	Remove.	Moderate 1	**Dead** **Dead**	Dead **U**
G16	Semi-Mature **Yew** Taxus baccata	av 3	av 0.1	av 100	av 1 1 1 1 each		1: Formally maintained specimens. 2: Acceptable condition at present.	No action required.	n/a 3	Good Good	40+ C
G17	Semi-Mature **Mixed** Species	av 6	av 0.1	av 100	av 1.5 1.5 1.5 1.5 each		1: Mixed group consisting of holly, rhododendron and laurel. 2: Low value.	No action required.	n/a 3	Good Good	40+ C
T18	Semi-Mature **Bay Tree** Laurus nobilis	av 7	av 1	av 200	av 1 3 3 3 each		1: Situated on third party land. 2: Acceptable condition at present.	No action required.	n/a 3	Good Good	40+ C
T19	Early-Mature **Wild Cherry** Prunus avium	8	1.5	450	6.5 7 5 4		1: Slightly unbalanced crown. 2: Multi stemmed at 2m. 3: Acceptable condition at present.	No action required.	n/a 3	Good Good	40+ B
G20	Semi-Mature **Mixed** Species	av 5	av 0.1	av 80	av 1 1 1 1 each		1: Mixed group consisting of damson and yew.	No action required.	n/a 3	Fair Fair	10-20 C
H21	Semi-Mature **Leyland Cypress** x Cupressocyparis leylandii	av 2	0.1	70	1 1 1 1		1: Situated on third party land.	No action required.	n/a 3	Good Good	40+ C

Appendix 2 – Tree Schedule Definition of Terms

Tree Referencing	**Individual Trees** T (+number) **Grouped Trees** G (+number) **Hedgerows** H (+number) **Woodlands** W(+number)
Age Category	**Young** Usually <15 years **Semi-mature** Significant growth expected, approximately one third of life expectancy complete **Early-Mature** Full height achieved with further significant growth possible, up to two thirds of life expectancy complete **Mature** Full height has been achieved with possible spreading of the canopy, usually past two thirds of overall life expectancy **Veteran** Usually a tree of significant age with characteristics that give additional cultural, landscape and conservation benefits, **Over-mature** A tree declining due to age as indicated by deterioration in the health and condition of its crown and trunk.
Species	**Botanical Name** - conforming to the International Code of Nomenclature for algae, fungi, and plants (ICN). For universal plant recognition. **Common Name** – commonly used names usually on a local and national scale.
Tree Height	The vertical distance between the base of the tree (where soil and buttress meet) and the tip of the highest branch on the tree.
Crown Height	Measured from ground level to the height at which the main crown begins.
Stem Diameter (DBH)	Stem diameter is measured at 1.5 m above ground level
	A diagrammatical representation of the tree taken from measurements of stem diameter, crown height and spread, and overall height.
Crown	Measurements taken from all four cardinal points in metres.
Notes	Notes are made to inform of any possible defects, peculiarities or points of interest that may relate to the trees position, physiology, safety and possible effects on developments.
Recommendations	Recommendations are made in accordance to good arboricultural practice. Recommendations are made regardless to the end usage of the site.
Priority Scale	Priority is given dependant on the perceived threat and the likelihood of failure given to a possible hazard. The priority of work is given regardless of the end usage of the site. **Urgent** To be carried out as soon as possible. **Very High** To be carried out within 1 month. **High** To be carried out within 3 months. **Moderate** To be carried out within 1 year. **Low** To be carried out within 3 years.
Physiological Condition:	**Good** Usually healthy with no symptoms of poor health or disease. **Fair** Exhibiting signs of poor health or minor disease infections that are not considered to be hazardous. **Poor** Disease present in considerable quantities or with very poor physiological vigour. **Very Poor** Tree is in a moribund state in extremely poor condition, usually with little chance of recovery.
Structural Condition:	**Good** A tree with no significant structural defects. **Fair** Minor defects may have been observed but are not considered to be immediately hazardous. 1.1.2. **Poor** Significant defects found. Tree requires monitoring or remedial works. **Very Poor** Major defects that require immediate remedial work or the removal of the tree.
Life Expectancy:	The estimated number of years before the tree may require removal should no unexpected mechanical or environmental impacts occur to the tree.
Retention Category:	Please refer to Tree retention categorisation table on the next page.

Appendix 3 – Tree Retention Category

The following table provides an explanation of retention categories used.		
Trees to be removed		Colour on Plan
Category U Includes trees of very low quality that offer little or no amenity value.	Trees that are in such a condition that they should be removed as a matter of good arboricultural practice regardless of given proposals.	RED
Trees to be considered for retention		
Category A Trees of a high quality, with an estimated life of expectancy of at least 40 years	Trees that are excellent examples of their species, usually mature, especially if rare or unusual including veteran trees. Category A trees are likely to enhance a development and should be retained wherever possible.	GREEN
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	Trees that are good examples of their species. B category trees are usually mature or younger trees with the potential to reach A category in the future. Although the retention of these trees is desirable, some losses may be acceptable.	BLUE
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm.	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	GREY
NOTE: Trees that are viewed as borderline and do not fit neatly into either of the categories are given a plus or minus rating (+/-) in the tree data schedule. Therefore, C+ would denote a tree being borderline C/B although C is deemed to be the most appropriate category. Similarly, B- would denote a tree being borderline B/C with B seen as the most appropriate category.		

Appendix 4 – Site Plans

The site plans referred to in the report follow this page which include the following:

- Tree Constraints Plan
- Tree Removal Plan
- Tree Protection Plan – Pre Construction
- Tree Protection Plan –Construction
- Tree Protection Inserts

Although included plans are usually to scale, they are only intended to indicate positions of surveyed trees and dimensions should not be taken from these drawings.

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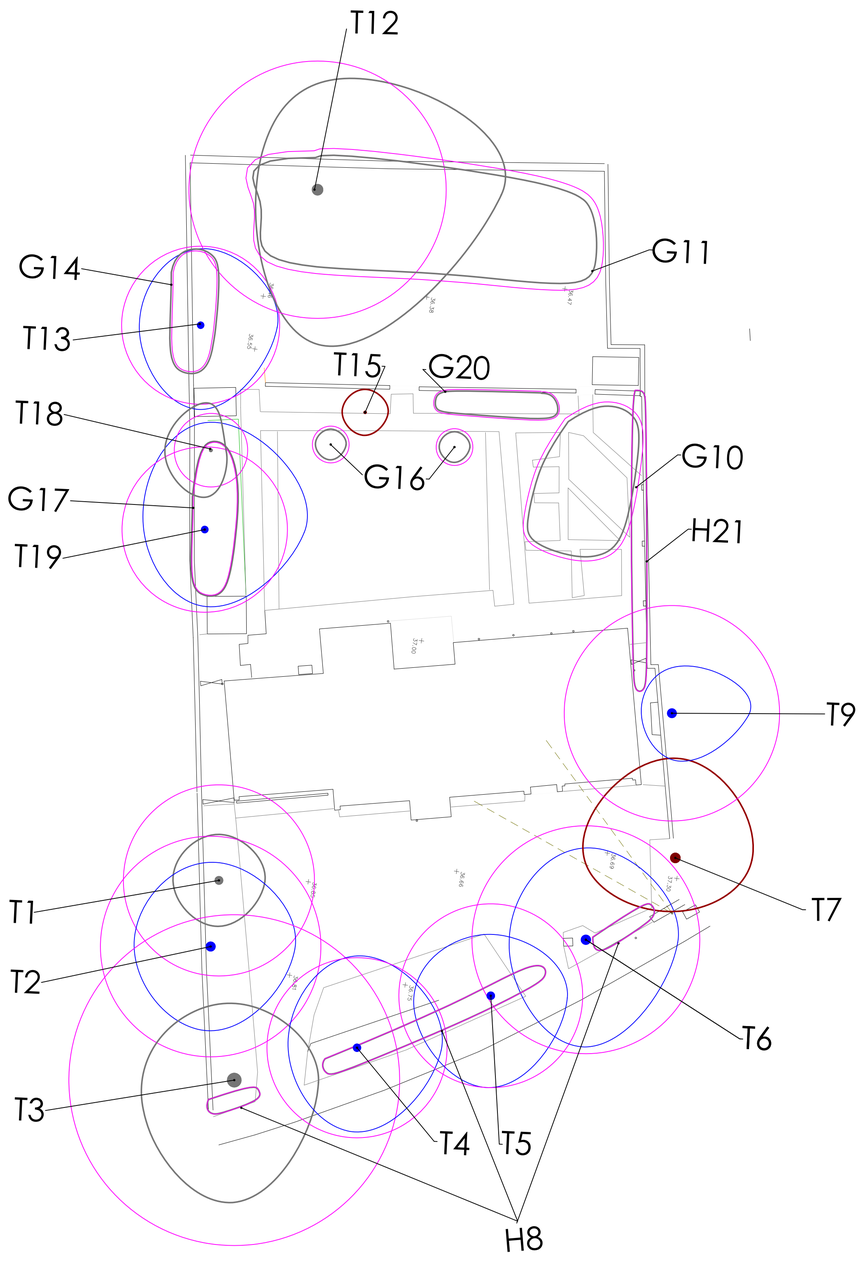
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Indicative

Notes:-



- Category A tree, group or hedge
- Category B tree, group or hedge
- Category C tree, group or hedge
- Category U tree, group or hedge
- Root Protection Area (RPA)

REV.	DATE.	DESCRIPTION	DRAWN	CHK'D
P02	16/10/18	Planning	GT	KO

URBAN GREEN
Jactin House, 24 Hood Street, Manchester M4 6WX
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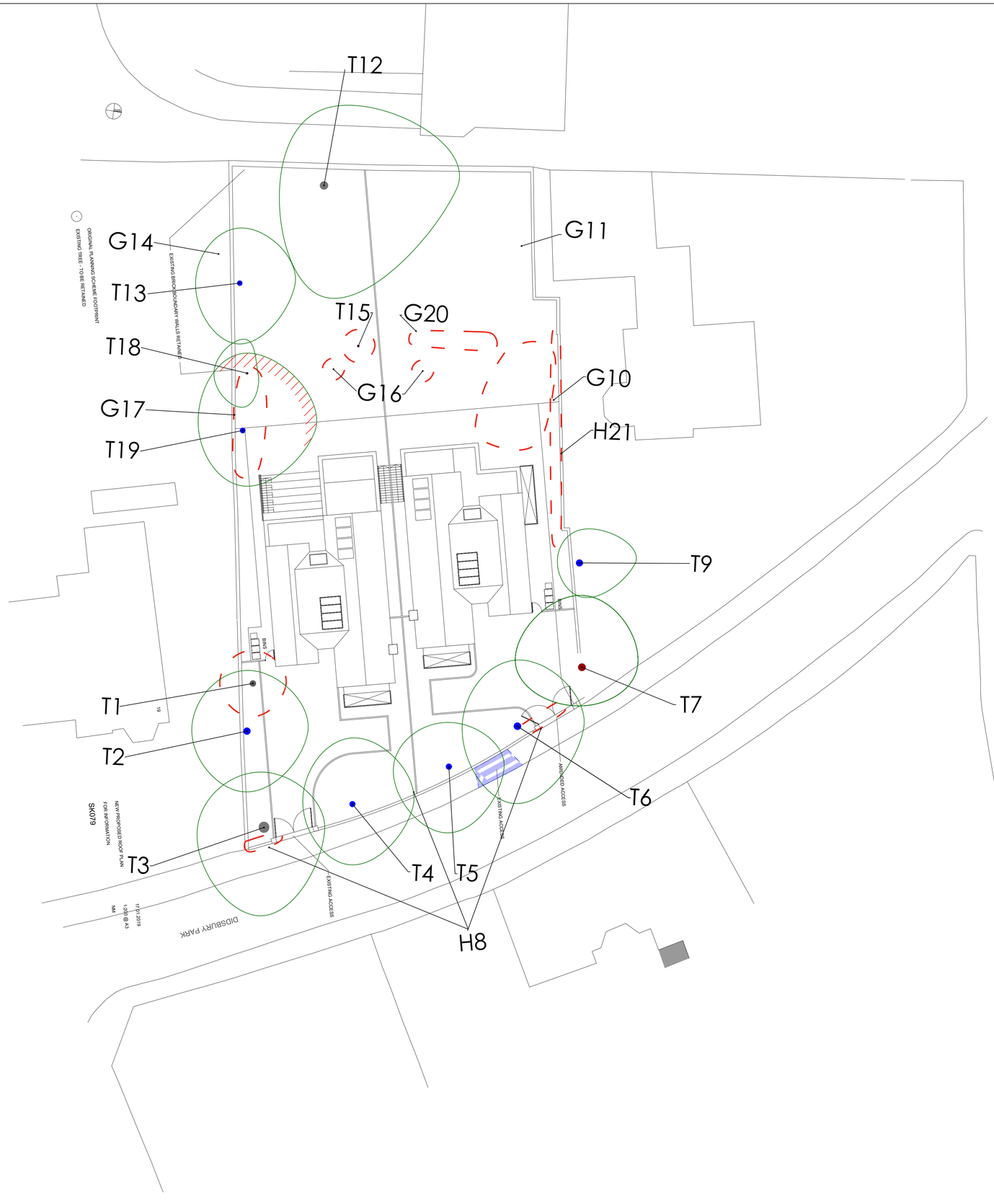
Client:
Kieran Hedges

Project:
21 Didsbury Park, Didsbury

Title:
Tree Constraints Plan

Status: Planning

Project:	11551	**Drawn:**	KO	**Checked:**	JC
Scale @ A1:	1:200	**Date:**	16/08/17	**Approved:**	JC
Drawing No:	UG_11551_ARB_TCP_01			**Revision:**	P01



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Notes:-

- Category A tree, group or hedge
- Category B tree, group or hedge
- Category C tree, group or hedge
- Category U tree, group or hedge
- Retained tree
- Removed tree
- Extents of pruning

REV.	DATE.	DESCRIPTION	DRAWN	CHK'D
P06	07/06/19	Updated tree retention	GT	KO
P05	31/05/19	Updated layout	GT	KO
P04	15/04/19	Updated layout	GT	KO
P03	16/10/18	Updated layout	GT	KO
P02	16/10/17	Updated layout	KO	JC

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Client:

Kieran Hedges

Project:

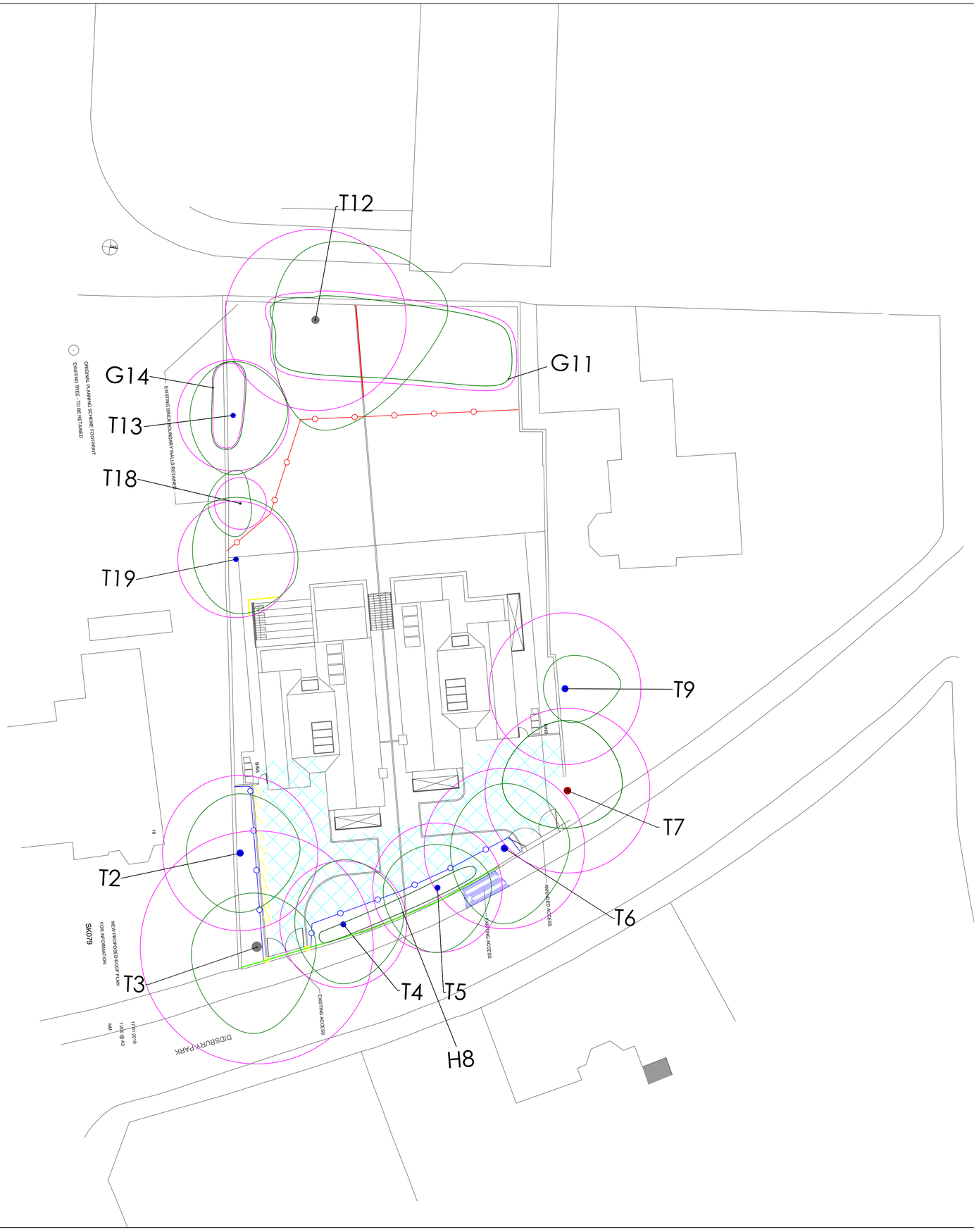
21 Didsbury Park, Didsbury

Title:

Tree Removal Plan

Status: Planning

Project:	11551	**Drawn:**	KO	**Checked:**	JC
Scale @ A1:	1:200	**Date:**	16/08/17	**Approved:**	JC
Drawing No:	UG_11551_ARB_TRP_01			**Revision:**	P06



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Notes:-

- Category A tree, group or hedge
- Category B tree, group or hedge
- Category C tree, group or hedge
- Category U tree, group or hedge
- Retained tree
- Root Protection Area (RPA)
- Protective fencing (See Insert 1 & Insert 2)
- Protective fencing (See Insert 3)
- Supervised excavation
- Hand dig removal of hard surfacing
- Raft and pile foundations
- Supervised root pruning
- Boundary Treatment

REV.	DATE.	DESCRIPTION	DRAWN	CHK'D
P07	07/06/19	Updated tree retention	GT	KO
P06	31/05/19	Updated layout	GT	KO
P05	15/04/19	Updtaed layout	GT	KO
P04	23/10/18	Raft and pile foundations	ED	KO
P03	16/10/18	Updated layout	GT	KO
P02	16/10/17	Updated layout	KO	JC

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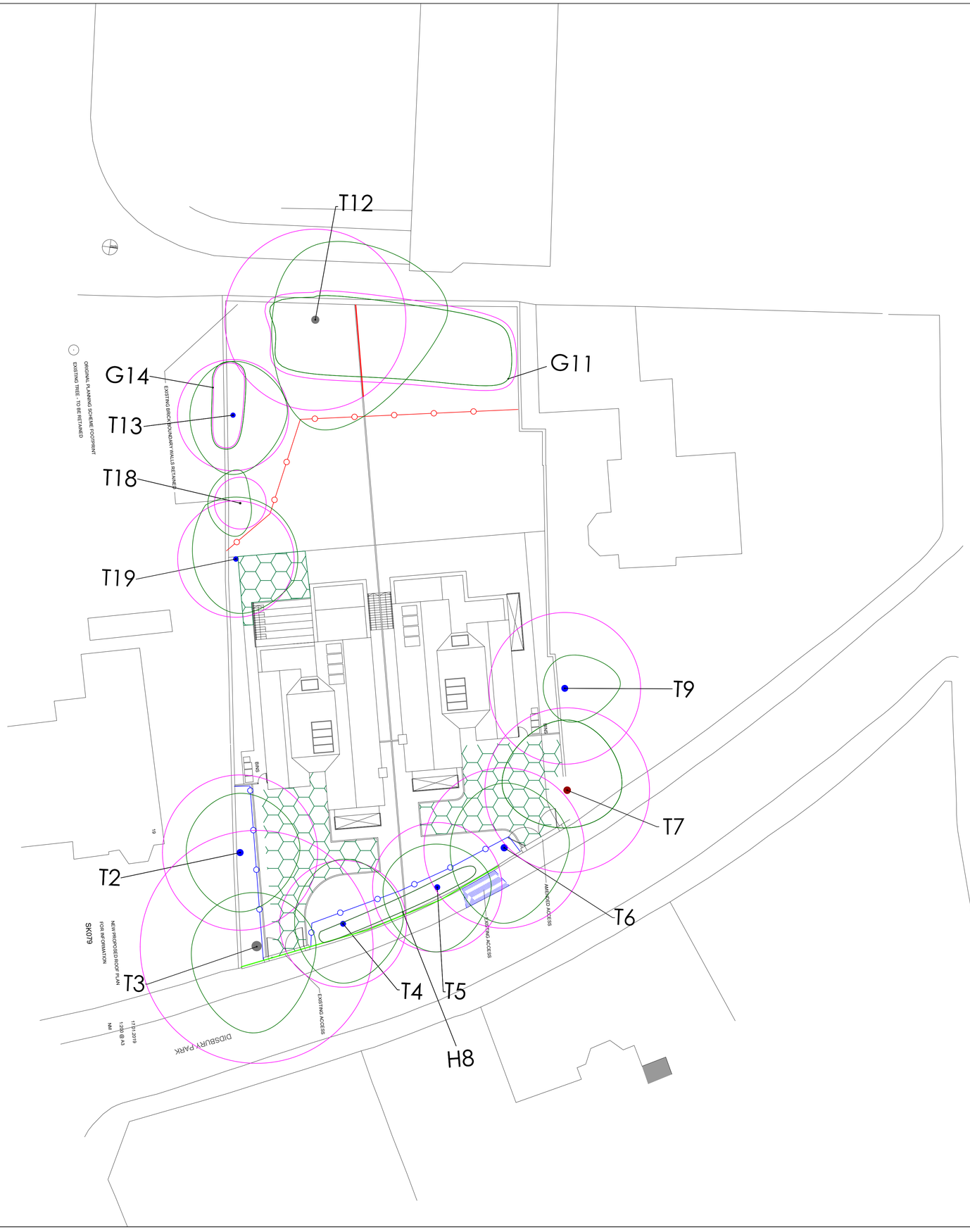
Client:
Kieran Hedges

Project:
21 Didsbury Park, Didsbury

Title:
Tree Protection Plan - Pre-Construction

Status: Planning

Project:	11551	**Drawn:**	KO	**Checked:**	JC
Scale @ A1:	1:200	**Date:**	16/08/17	**Approved:**	JC
Drawing No:	UG_11551_ARB_TPP_01			**Revision:**	P07



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Notes:-

- Category A tree, group or hedge
- Category B tree, group or hedge
- Category C tree, group or hedge
- Category U tree, group or hedge
- Retained tree
- Root Protection Area (RPA)
- Protective fencing (See Insert 1 & Insert 2)
- Protective fencing (See Insert 3)
- Supervised excavation/Cellular Confinement System
- Raft and pile foundations
- Boundary Treatment

REV.	DATE.	DESCRIPTION	DRAWN	CHK'D
P07	07/06/19	Updated tree retention	GT	KO
P06	31/05/19	Updated layout	GT	KO
P05	15/04/19	Updated layout	GT	KO
P04	23/10/18	Raft and pile foundations	ED	KO
P03	16/10/18	Updated layout	GT	KO
P02	16/10/17	Updated layout	KO	JC

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Client:
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Project:
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Title:
Tree Protection Plan - Construction

Status: Planning

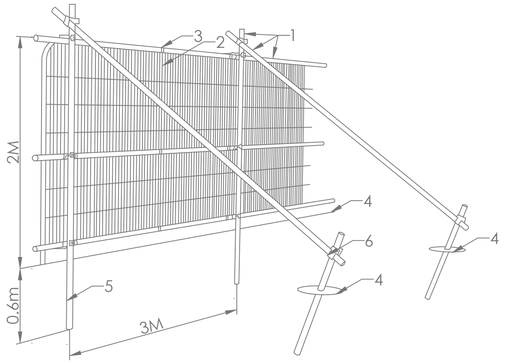
Project:	11551	**Drawn:**	KO	**Checked:**	JC
Scale @ A1:	1:200	**Date:**	16/08/17	**Approved:**	JC

Drawing No: UG_11551_ARB_TPP_02

Revision: P06

Insert 1: Tree protective fencing specification

Default specification for protective barrier



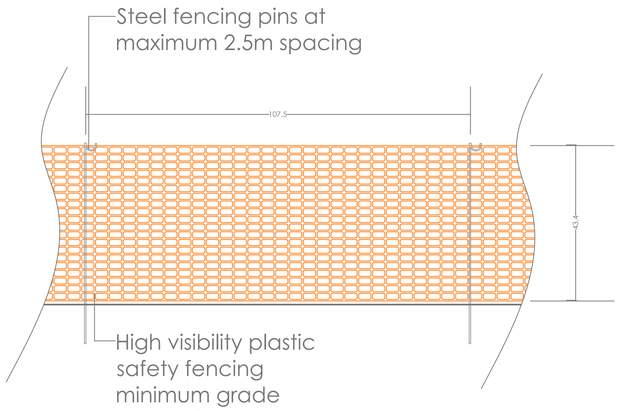
Key

1 Standard scaffold poles
2 Heavy gauge 2m tall galvanised tube and welded mesh infill panels
3 Panels secured to upright and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground untill secure (minimum depth 0.6m)
6 Standard scaffold clamps

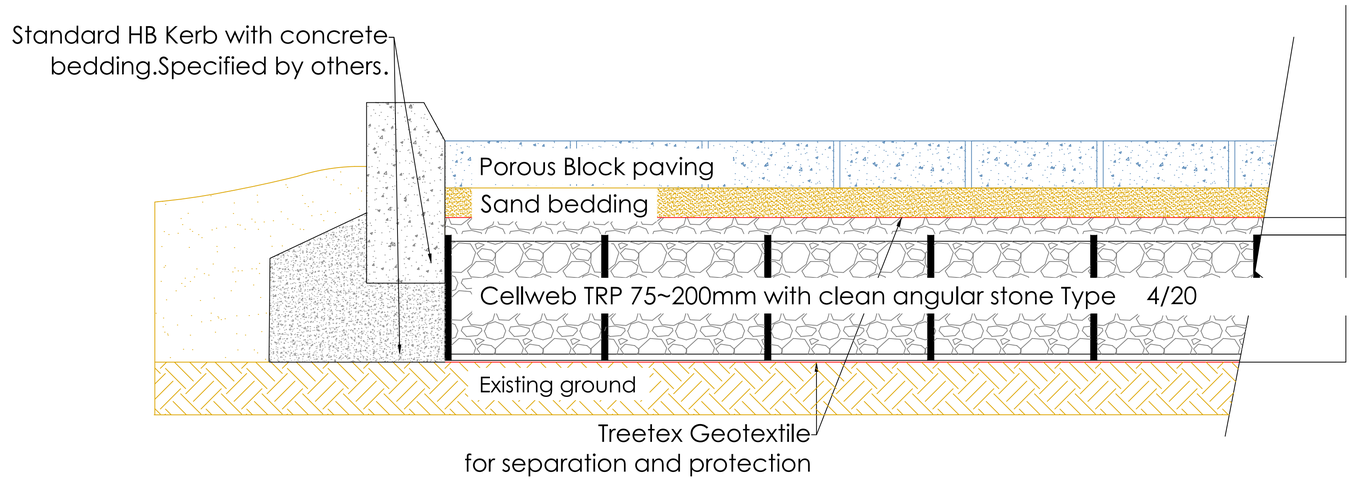
Insert 2: Tree protection notice



Insert 3: Barrier mesh specification



Insert 4: Cellweb 75~200mm Porus Paving Standard Detail



Note: Subbase could be required depending on the existing ground CBR %
and the type of traffic on the surface.

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Notes:-

REV.	DATE.	DESCRIPTION	DRAWN	CHK'D
P04	17/05/19	Cellular confinemnet detail addition	GT	KO
P03	16/10/18	Updated layout	GT	KO
P02	16/10/17	Updated layout	KO	JC

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Client: Kieran Hedges

Project: 21 Didsbury Park, Didsbury

Title: Tree Protection Inserts

Status: Information

Project:	11551	**Drawn:**	KO	**Checked:**	JC
Scale @ A1:	NTS	**Date:**	16/10/17	**Approved:**	JC
Drawing No:	UG_11551_ARB_TPI_01			**Revision:**	P04