

Report



Arboricultural Method Statement North Manchester General Hospital HV Cable Diversion

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Submitted to:

Hive Projects Ltd

Prepared by:

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Quality Assurance

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Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the quality management system of RSK ADAS Ltd.

Revision History

Revision	Date	Amendment
-	October 2021	Initial Report

1 Executive Summary

As part of development works at North Manchester General Hospital, utility diversion works will be required. Electricity North West Ltd have proposed a route for a new high voltage (HV) cable and the proposals also demonstrate some associated LV cable installation and the demolition of two existing switch rooms, and the construction of a new switch room and HV substation.

ADAS was commissioned by Hive Projects Ltd, via RSK Biocensus, to undertake a tree survey along the route of the proposed HV cable installation to inform the production of an arboricultural method statement, including tree protection methodology, for the works.

The tree survey was carried out on the 21st September 2021 and identified a total of 41 individual trees and 15 groups of trees that have the potential to be impacted by the proposed works. Of these tree features, 2 were awarded a high-quality A grade, 29 were awarded a moderate-quality B grade, 21 were awarded a low-quality C grade and 4 were awarded a very low-quality U grade.

In order facilitate the proposed development, it will be necessary to remove one low-quality C grade Rowan tree (T23) and one very low-quality U grade tree group (G11) which is composed of two Rowan and two Elder trees.

Based upon initial scheme proposals it is also possible that the works will require the removal of one high-quality A grade tree (T5). However, it is anticipated that minor amendments to the final routing of the proposed new HV cable can be made to permit retention of this specimen.

A search of Manchester City Council's online mapping service has established that none of the trees surveyed are situated within a Conservation Area.

Information regarding Tree Preservation Orders was not available online. An enquiry seeking to determine if any of the trees surveyed are protected by a TPO should be submitted to Manchester City Council prior to undertaking any works to trees.

This report will provide the principles to adopt when working in close proximity to trees and can also be used to provide reassurance to Manchester City Council that Hive Projects Ltd and Electricity North West Ltd are taking reasonable steps to plan their work around trees.

ADAS believes that adopting the approach specified within this report will ensure that the proposed works will not have a significant impact on the health and stability of the trees which are to be retained and will particularly ensure that these trees continue to contribute to the amenity value of the local area.

2 Introduction

2.1 The Author

This document has been prepared by Edmund Lusk, an ADAS approved Arboricultural Consultant. Edmund is a Professional Member of the Arboricultural Association, a Professional Member of the Consulting Arborist Society and holds the Higher National Diploma in Arboriculture. Edmund has 19 years of experience within the arboricultural industry, both in the Public Sector as a Tree Officer and in the Private Sector as an Arboricultural Consultant.

2.2 Client Instruction

ADAS was instructed by Hive Projects Ltd, via RSK Biocensus, in September 2021 to carry out a tree survey and produce an Arboricultural Method Statement in respect of the proposed HV cable diversion works to be undertaken at North Manchester General Hospital.

2.3 Purpose of Report

The purpose of this document is to provide reference and clarification on tree protection and working methods for works near to trees. To achieve this, the methodology for works that may affect the trees will be clearly set out.

2.4 Assumptions and Limitations

The Tree Protection Plan (TPP) contained in **Appendix 1** has been developed from the tree survey information and the NMGH South HV Cable Diversion Plan (drawing ref: E51164.001). The proposed cable routes indicated upon this plan have been used to assess the risk associated with each tree.

This report is not a full hazard or risk assessment of trees and should not be used as such.

Trees are living organisms and are constantly adapting to their ever-changing environment. No tree is completely safe and there is no guarantee that problems or deficiencies may not arise in the future, which have not been identified in this report. Therefore, this report is only valid for a period of one year from the date of the initial site inspection.

2.5 Tree Survey Methodology

The initial tree survey of North Manchester General Hospital was carried out on the 21st September 2021. The tree survey was carried out in accordance with the recommendations contained within 'BS5837:2012 Trees in Relation to Design, Demolition and Construction: Recommendations' and the guidance contained in National Joint Utilities Group Volume 4 Issue 2 (NJUG).

All trees have been visually inspected from ground level unless otherwise stated, with no climbing or boring tests being undertaken. The comments made on their condition are based on observable factors present at the time of inspection.

The information, shown in **Table 1** below, was recorded as part of the tree survey.

Table 1: Tree Survey Schedule heading descriptions

Column Heading	Description
Tree Ref No.	All individual trees and groups of trees have been given a unique reference number. Each number is prefixed by a letter. - T = Individual tree - G = Group of trees
Species	The English common name has been used.
Single or Multiple stem (S or M)	'S' represents a tree which has a single clear stem to at least 1.5m above ground level. 'M(a)' represents a tree where the main stem divides into two to five stems below 1.5m above ground level, and 'M(b)' represents a tree where the main stem divides into 6 or more stems below a height of 1.5m.
Height (m)	Where possible tree heights are measured using a laser. In some instances, such as in close groups of trees, one height may be measured, and other nearby trees estimated from this height. Measurements are provided in metres.
Stem Diameter (mm)	S _n represents the stem number. Measurements are provided in millimetres at 1.5m above ground level for single stemmed trees.
Branch Spread (m)	Measured in metres to the four cardinal compass points (N, E, S, W).
Crown Clearance	(1) Height in metres of the first significant branch, and the direction of growth. (2) Height in metres of lowest part of crown.
Life Stage	The stage at which the tree is within its lifecycle (Y = young, SM = semi-mature, EM = early-mature, M = mature, OM = over mature, V = veteran)
General Observations	Any relevant observations are recorded, with particular reference to structural and/or physiological condition.
Preliminary Management Recommendations	Recommendations are made where management work is required for reasons of health and safety or sound arboricultural management.
Estimated Remaining Contribution (years)	An estimation of how long the feature will contribute to its surroundings. This is recorded in bands of either <10 years, 10+ years, 20+ years and 40+ years.
Tree Quality Grading	The trees are graded to the categories prescribed within BS5837:2012 (U, A, B & C). Details of this grading system can be found in Appendix 2 .
Root Protection Area	Calculated as prescribed in section 4.6 of BS5837:2012, provided as an area (m ²) and a radius from the tree's stem (m).
Note: Those measurements shown in <i>italics</i> have been estimated, usually where access has restricted it being taken.	

2.6 Legislation

2.6.1 Tree Preservation Orders and Conservation Areas

Local Planning Authorities (LPAs) have the power to preserve selected trees and woodlands through the making of TPOs. Similarly, special provision is provided to trees located within CAs which are not the subject of a TPO. The LPAs powers to do this are provided by the following Act of Parliament and its associated regulations:

- Town and Country Planning Act 1990
- Town and Country Planning (Determination of Appeals by Appointed Persons) (Prescribed Classes) (Amendment) (England) Regulations 2008
- Town and Country Planning (Tree Preservation) (England) Regulations 2012

The principal effect of a TPO is to prohibit the cutting down, uprooting, topping, lopping, wilful damage or wilful destruction of trees without first obtaining the consent of the relevant Local Authority.

Where works to trees within a CA are proposed, six weeks notification must first be given to the relevant Local Authority.

Unauthorized works to trees either protected by a TPO or those that are located within a CA, could result in an unlimited fine for each tree.

A search of Manchester City Council's online mapping service on 6th October 2021 revealed that the site is not situated within a Conservation Area. The results from this search are included in **Appendix 3**.

Information regarding Tree Preservation Orders was not available online. An enquiry seeking to determine if any of the trees surveyed are protected by a TPO should be submitted to Manchester City Council prior to undertaking any works to trees.

No works should commence on site until Manchester City Council have confirmed that none of the trees affected by the works are protected by a Tree Preservation Order.

3 Tree Survey Results

3.1 Overview

The tree survey identified a total of 56 tree features, composed of 41 individual trees and 15 groups of trees, which have the potential to be impacted by the proposals.

Of the tree features surveyed, 2 were awarded a high-quality A grade, 29 were awarded a moderate-quality B grade, 21 were awarded a low-quality C grade and 4 were awarded a very low-quality U grade.

A full tree survey schedule is included in **Appendix 4** and tree positions are indicated upon the Tree Quality and Constraints Plan included at **Appendix 5**.

4 Arboricultural Impact Assessment

4.1 Overview

The impact the proposals are likely to have on the existing trees has been assessed under the following categories, and the findings are summarised in **Table 2** below and detailed upon the Arboricultural Impact Assessment Plans in **Appendix 6**.

- Trees proposed for removal, due to their position directly over the proposed cable route.
- Retained trees that require extra protection due to their proximity to the proposed cable route.
- Retained trees that require extra protection due to their proximity to demolition operations.
- Retained trees which are unaffected by the proposed cable route or demolition works.

Table 2: Arboricultural Impact Assessment

Impact	Reason	Tree Quality Assessment Category Grading*				Totals
		A	B	C	U	
Trees to be removed	Directly over cable route.	T5*	None	T23	G11	3
Retained trees that are at risk of damage due to proximity to the proposed cable route	RPA/canopy spread fully or partially within the proposed cable route.	T5*, T30	T8, T9, T10, T11, T13, T14, T17, T18, T21, T25, T26, T27, T29.	T15, T16, T24, G5.	None	19
Retained trees that are at risk of damage due to proximity to proposed demolition operations	Structures to be demolished within RPA / canopy spread.	None	T2, T31.	T3.	None	3
Retained trees, which are unaffected by the proposals	No works within RPAs or canopy spread	None	T6, T7, T19, T20, T32, T36, T37, T38, T40, T41, G6, G7, G10, G12.	T1, T4, T12, T22, T28, T34, G1, G2, G3, G4, G8, G9, G13, G14, G15.	T33, T35, T39.	32
Totals						57

* T5 recorded twice within table as it is anticipated that minor amendments to the cable route will be possible to facilitate its retention.

4.2 RPA Impacts - Roads

With respect to the potential RPA impacts to trees (T8, T9, T10, T11, T13, T14, T15, T16, T17, T18, T21, T24, T25, T26, T27 and G5) where installation of the proposed cables is to be undertaken within the existing road, it is noted that root development within the areas affected by the works is likely to have been significantly impaired due to suboptimal growing conditions. As such it is not anticipated that a significant risk of harm to the root systems of these specimens exists due to the proposed excavation works to be completed within the road. Nonetheless, works beneath the canopies of the trees will be required to facilitate excavation and as such precautions must be taken to minimise the potential for branch damage to occur and should root presence beneath the road surface become evident during the course of excavation then continued excavation shall be completed following the precautionary methodology set out within this report.

However, where excavation for new LV cables is proposed within the RPAs of T29 and T30 it is considered that some opportunistic root development beneath the existing roads and paths in this area may have occurred, as evidenced by localised disruption to existing hard surfacing around the trees. There is a higher risk that roots will be encountered whilst undertaking the excavation works within the RPAs of these trees and thus, to minimise the potential for harm, it is essential that the works are completed in accordance with the guidance set out within this report.

4.3 Route Amendment

It is also noted that the initial cable route, as indicated upon the Electricity Northwest NMGH South HV Cable Diversion Plan (drawing ref: E51164.001) would require the removal of T5, a Category A tree. As indicated upon the Arboricultural Impact Assessment Plan (**Appendix 3**) it is anticipated that a minor amendment to the proposed cable route can be made to permit the retention of this tree. This approach would need to be confirmed on site during final setting out of the proposed works.

5 Method Statement

5.1 Overview

The contractors undertaking the cable installation works will be working to the guidelines set out in NJUG Vol 4 while completing excavations within the site. The final cable route will be marked out on site to avoid the RPAs of retained trees where possible. In addition to the NJUG guidelines, the contractors will also be following the precautions set out below.

5.2 Working methods to be adopted

The following precautions will be taken where works are proposed within the RPAs or above ground parts of trees along the proposed cable route:

1. Prior to commencement of the works access facilitation pruning works to the crowns of retained trees, as identified in the Tree Works Schedule (**Appendix 7**), will be undertaken to allow for sufficient space for the movement and operation of machinery.
2. The RPAs of all trees will be clearly marked on the ground prior to the commencement of any works. These will be marked as a circle centred on the base of the tree. The dimensions of the RPAs can be found in the survey schedule which is contained in **Appendix 4**.
3. Wherever possible the route chosen for cable installation will avoid the marked RPAs.
4. Tree protection barriers will be installed in the locations detailed upon the Tree Protection Plan (**Appendix 1**) prior to commencement of the works.
5. No excavations will be carried out within 1.0m of the base of any tree.
6. Stripping of top soil will only be carried out within the RPA in the location of the trench required for cable installation.
7. Vehicle movements will be limited to lightweight (5/6T) tracked equipment.
8. In areas where there is existing hard surfacing, this will be used as the default surface and will act as adequate ground protection for the passage of vehicles and pedestrians throughout the works.
9. Where the route of the trench deviates away from existing hard surfacing, temporary proprietary surfacing, such as TuffTrak which is flexible and conforms to the existing surface (and will therefore not require excavation or infill to level out surfaces), will be used for all vehicle and pedestrian movements, to prevent compaction of the ground.
10. Where excavation for the installation of new cables is to occur within the existing road works, this can be completed using plant machinery as it is not anticipated that root activity will have occurred beneath the road surface (with the exception to works to be undertaken within the RPAs of T5, T29 and T30). However, the works shall be monitored by an appointed person to assess for the presence of tree roots as excavation is undertaken. Should the presence of tree roots become

evident then the use of plant equipment will be stopped, and further excavation completed using the preferred method of a vacuum excavator and airspade, or hand tools, such as spades and forks.

11. Where excavation is to occur within the RPAs of T5, T29 and T30, this will be carried out using the preferred method of a vacuum excavator and airspade, or using hand tools such as spades and forks. Care will be taken to avoid damaging or cutting any roots over 25mm in diameter. This includes avoiding stripping bark from the roots. Roots below 25mm in diameter may be pruned back using a proprietary cutting tool such as bypass secateurs. If roots over 25mm diameter must be cut, this will only be done after consultation with the retained arboricultural consultant or the council tree officer. See **Section 5.4** for more detailed description of working methods to be used within RPAs of trees.
12. Leaving roots exposed for prolonged periods of time, particularly overnight, will be avoided. Where this is not possible, they will be wrapped in damp hessian sacking (during summer months) to retain moisture, or in dry sacking (during winter months) to protect from freezing, and the trench will be covered to prevent moisture loss.
13. The trench will be kept as narrow as possible.
14. The trench will only be backfilled using the excavated material, with a granular material or sharp sand (not builders' sand) placed around the roots to prevent damage from compaction. The backfill should be only lightly consolidated. Any hessian sacking will be removed prior to backfilling.
15. Any spoil will be placed directly into an onsite dumper.
16. When dumpers are full, existing hard surfacing will be used to move spoil to storage areas on hard standing outside the working zone. No spoil will be stored on bare earth within the RPAs of the trees.
17. As the roots of the trees extend well beyond the limits of the RPAs, no fuels or chemicals will be poured or stored within an area equal to the height of the tree.
18. No materials or equipment will be stored within the RPAs of any trees.
19. Nothing will be attached to the trees.

5.3 Barriers

It is intended that temporary exclusion fencing will be installed and dismantled on a rolling basis as works continue along the proposed cable route. This fencing will simultaneously act as tree protection fencing and site fencing by separating the worksite from surrounding trees and continued land use. Wherever possible the barriers will be located to prevent access within the RPAs of trees which are to be retained. The proposed location of the protective barriers to be installed is detailed upon the Tree Protection Plan in **Appendix 1**.

In line with Section 6.2.2 of BS 5837:2012, which requires that the tree protection barriers be fit for the purpose of excluding construction activity and that they provide adequate protection to the trees, it is proposed that they will consist of 2m tall, welded mesh panels supported on concrete feet. Each panel will be secured to its neighbour with a minimum of 2 anti-tamper couplers secured so that they can only be undone from inside the RPA. The panels will be further supported by stabilizer struts which will be pinned to the ground. An example of this type of barrier is contained in **Appendix 8**.

In order to ensure that the RPA remains intact, the tree protection barriers will not be moved or temporarily dismantled whilst works are in progress.

5.4 Trenching within the RPAs of trees

In the first instance temporary exclusion fencing shall be installed as described in **Section 5.3** above.

Where excavations are proposed within the RPAs of T5, T29 and T30, or where root presence has been identified beneath the road construction within the RPAs of other retained trees, the hard surface will first be broken and removed via manual means. Under no circumstances will the subsoil be excavated during this operation. Once the surface is removed, the following precautions will apply:

- All excavations through the RPAs of the identified trees will be carried out under the supervision of the retained arboricultural consultant who will advise on potential root pruning and tree protection methods.
- Works shall proceed by use of the preferred method of a vacuum excavator and airspade, or with hand tools.
- No roots will be severed at any time without first consulting the retained arboricultural consultant.
- Any roots encountered that do not exceed 25mm, will be pruned back, if required, under the supervision of the retained arboricultural consultant using pruning saw or secateurs, leaving a clean-cut surface and to a lateral root where possible.
- Any roots left exposed for a period of time will be wrapped in hessian sacking, as per **Section 5.2, point 12**.
- No roots will be left exposed for a period of over 24 hours.
- If any roots encountered exceed a 25mm diameter, works will stop and the suitability for root pruning will be determined by the retained arboricultural consultant.
- Where possible, services will be fed beneath any exposed structural roots.

Backfill should, where possible, contain originally excavated material, and should include the placement of an inert granular material mixed with top soil or sharp sand (not builders' sand) around roots. This will

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.

5.5 Tree Removal & Tree Pruning

The proposed works will require the removal of T23 and of G11 (composed of two small Rowan trees and two Elder trees). Initial proposals also indicate that T5 would be lost, although it is anticipated that minor amendments to the proposed cable route can be agreed to permit the retention of this specimen. In addition to the proposed tree removal, it is recommended that some access facilitation pruning works, as detailed in the tree works schedule (**Appendix 7**), are undertaken to minimise the potential for branch damage to occur during completion of the works.

All tree work and felling operations will be carried out in accordance with BS3998:2010 'Recommendations for Tree Work'; current arboricultural industry guidelines and best practice; and all relevant Health & Safety standards. Tree work is a specialist task that requires operatives to be appropriately qualified, skilled, and adequately insured. Guidance on selecting an appropriate contractor can be obtained from the Arboricultural Association, who also maintains a directory of Approved Contractors. The Arboricultural Association can be contacted on 01242 522152 or via their website <http://www.trees.org.uk>.

5.6 Demolition Operations

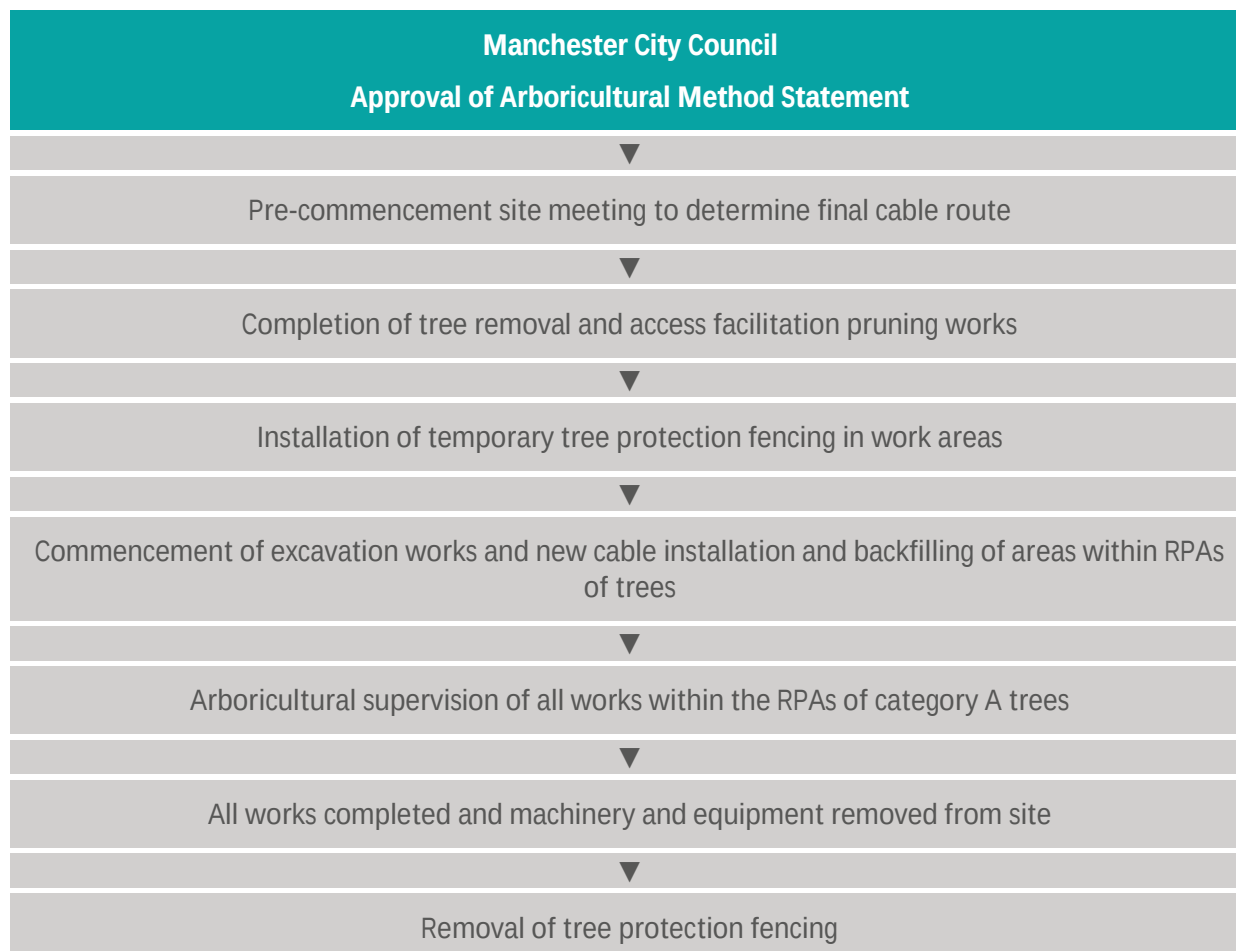
Demolition of the existing switch rooms will occur within the RPAs of T2, T3 and T31. The existing structures are likely to have significantly limited root development within their footprint and it is not anticipated that the demolition works would be likely to result in root damage occurring. Nonetheless, in order to avoid damage to these trees during the demolition process, these structures will be removed in line with the recommendations contained within section 7.3 of BS5837:2012 and as outlined below:

- During demolition of a structure that stands within the RPA of retained trees, barriers should be erected as specified in Section 6.2.2. of BS5837:2012. The proposed location for the protective barriers is detailed upon the Tree Protection Plan (**Appendix 1**).
- If machinery is to be used it will operate from outside the RPAs of the retained trees. If this is not possible the machinery will operate from existing hard surfaces. Under no circumstances will machinery stand or move over exposed soil within the RPAs of retained trees.
- Where possible, structures will be demolished using a “top down, pull back” system. This means the structures will be demolished inwards towards the centre of the building meaning that the existing flooring will protect the roots of the trees.
- Demolition within the RPAs of retained trees should be undertaken under the supervision of the retained arboricultural consultant.

6 Arboricultural Input

6.1 Sequence of Events

The following Arboricultural Sequence of Events shall be referenced during the works process:



6.2 Key Contacts during Development

A list of key contacts relevant to this site that may be required throughout the duration of the works has been included in **Appendix 9**.

6.3 Arboricultural Monitoring

The retained arboricultural consultant will monitor all works within the RPAs of T5, T29 and T30. This is to prevent the severing of main structural roots and give advice on potential root pruning to allow for the safe retention of the trees.

Work within the RPAs of other retained trees will be carried out using the methods described in **Section 5.2** above and will be supervised by the site manager.

The retained arboricultural consultant will be kept informed of the progress of works. The site manager will be made aware of the importance of keeping vehicles and machinery to the existing hardstanding and temporary trackways to prevent damage to trees present on the site.

7 Conclusion

ADAS has identified 56 tree features which have the potential to be impacted by the proposed HV Cable diversion works to be completed at North Manchester General Hospital. The trees have been recorded in the Tree Survey Schedule and plotted on the Tree Protection Plan, which form part of this report.

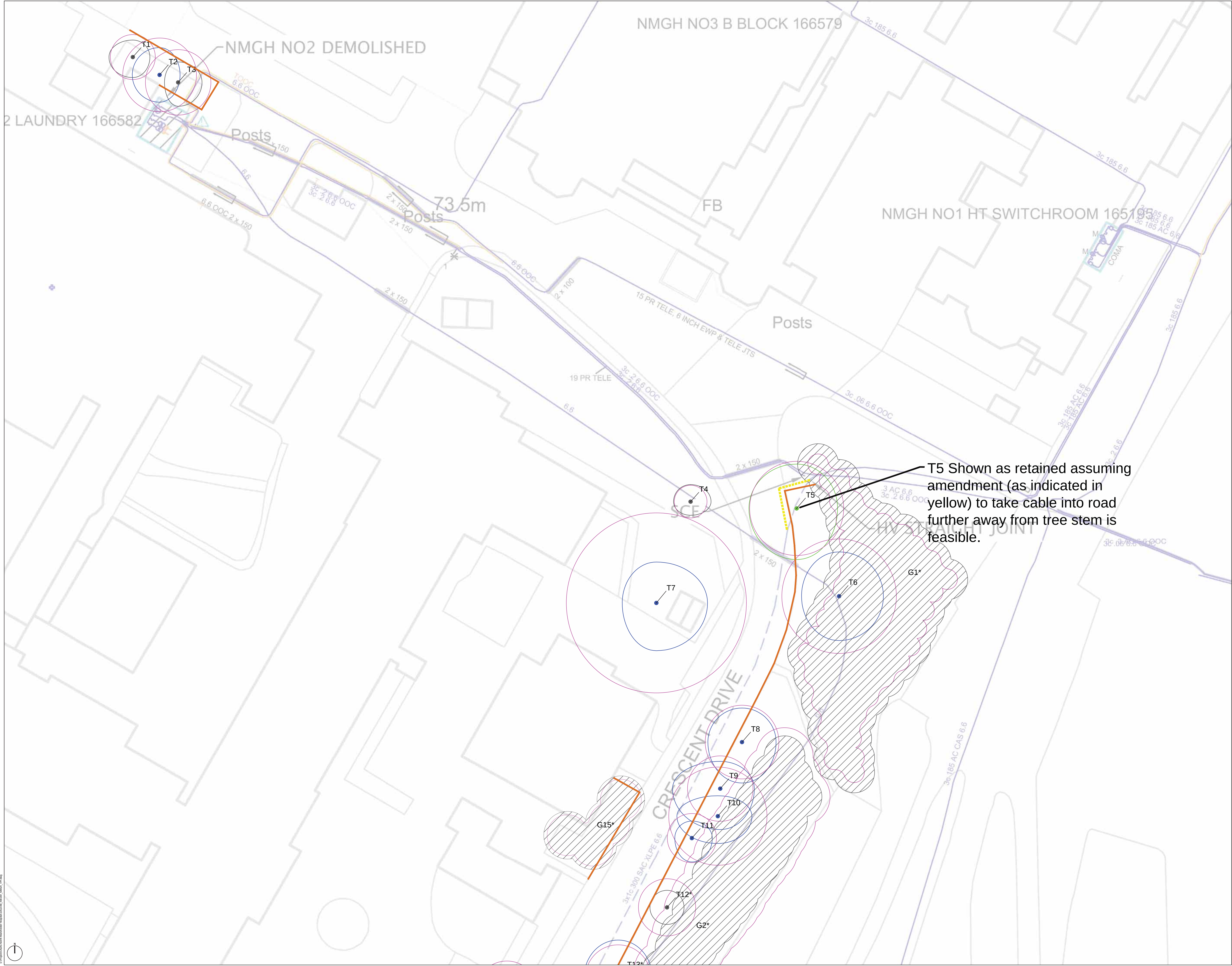
To facilitate the proposed works the removal of T23 and G11 will be required. It is also possible that the removal of T5 will be required, although it is anticipated that this tree can be retained by making minor amendments to the route of the proposed cable.

During demolition of existing structures and the installation of new cabling, precautions will need to be taken as set out in **Section 5** of this report to ensure that the trees can be successfully retained.

ADAS is satisfied that if the recommendations contained within this Arboricultural Method Statement are followed, then the new underground cable can be successfully installed with minimal harm being caused to the retained trees adjacent to the work area.

Appendix 1: Tree Protection Plans

See following page.

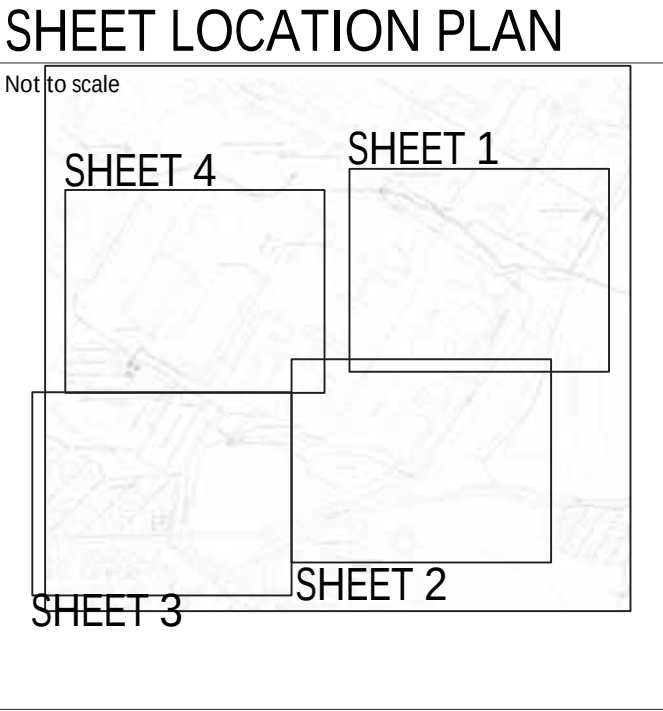


LEGEND

TREE CATEGORIES - NOTE: Quality class description derived from BS5837:2012

- Category A**
Trees / Groups of high quality, with an estimated remaining life expectancy of at least 40 years.
- Category B**
Trees / Groups of moderate quality, with an estimated remaining life expectancy of at least 20 years.
- Category C**
Trees / Groups of low quality, with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.
- Category U**
Trees / Groups, in such a condition that they cannot realistically be retained during trees in the context of current land use for longer than 10 years.
- Root Protection Area (RPA)**
- T#***
Trees not included in original site survey and therefore positions are indicative only.
- Trees To Be Removed**
Trees / Groups, which are to be removed.
- Tree Protection Fencing**

Based on Electricity Northwest drawing NMGH HV Cable Diversion number T551164.001 P17, 05/11/04.002 - NMGH - HV South Cable Diversion (P16-ASL-TPP). Please see original for details.



First Issue Rev.	Issue Details.	October 2021 Date.
Client: Hive Projects Ltd		
Project: North Manchester General Hospital		
Drawing Title: Tree Protection Plan		
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Scale: 1:250		
Drawn by: EL		Date: 10.21
Checked by: IB		Date: 10.21
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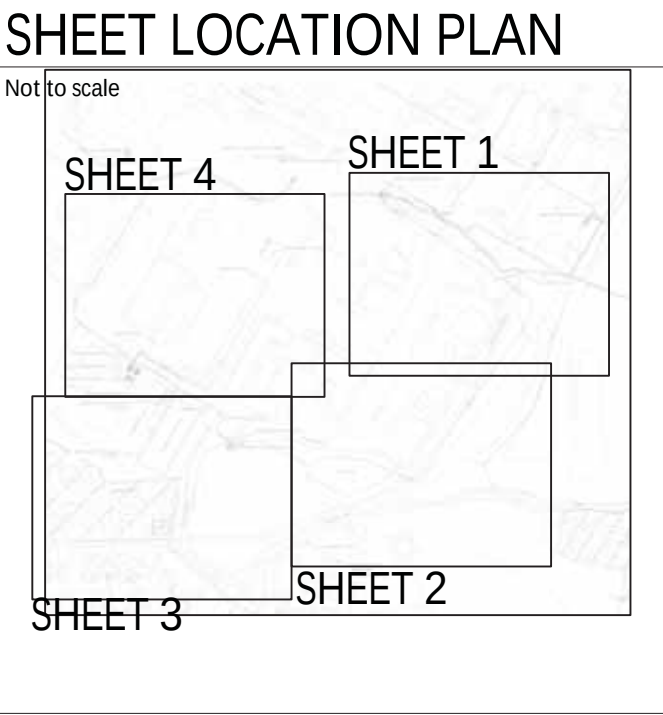


LEGEND

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- Category B**
Trees / Groups of moderate quality, with an estimated remaining life expectancy of at least 20 years.
- Category C**
Trees / Groups of low quality, with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.
- Category U**
Trees / Groups: in such a condition that they cannot realistically be retained as living trees in the context of current land use for longer than 10 years.
- Road Protection Area (RPA)**
- T#***
Trees not included in original site survey and therefore positions are indicative only.
- Trees To Be Removed**
Trees / Groups, which are to be removed.
- Tree Protection Fencing**

Based on Electricity Northwest drawing NMGR HV Cable Diversion number T51164.001 P17, 031164.002 - NMGR - HV South Cable Diversion (P&A-TPP). Please see original for details.



First Issue	-	October 2021
Rev.	Issue Details.	Date.

Client:
Hive Projects Ltd

Project:
North Manchester General Hospital

Drawing Title:
Tree Protection Plan

Drawing No: 1051448_RSK0AF_NMGH_TPP_Sheet 2

Scale: 1:250

Drawn by: EL
Checked by: IB

Date: 10.21
Date: 10.21

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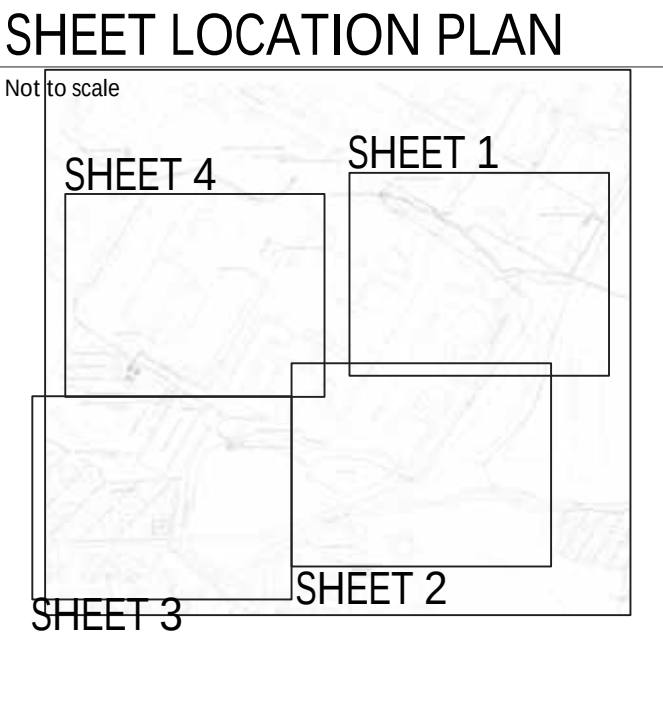


LEGEND

TREE CATEGORIES - NOTE: Quality class description derived from BS5837:2012

- Category A** Trees / Groups of high quality, with an estimated remaining life expectancy of at least 40 years.
- Category B** Trees / Groups of moderate quality, with an estimated remaining life expectancy of at least 20 years.
- Category C** Trees / Groups of low quality, with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.
- Category U** Trees / Groups, in such a condition that they cannot realistically be retained as living trees in the context of current land use for longer than 10 years.
- Road Protection Area (RPA)**
- T#*** Trees not included in original site survey and therefore positions are indicative only.
- Trees To Be Removed** Trees / Groups, which are to be removed.
- Tree Protection Fencing**

Based on Electricity Northwest drawing NMGH HV Cable Diversion number T551164.001 P&T, 05/11/14.002 - NMGH - HV South Cable Diversion (P&T-AL-TP). Please see original for details.



First Issue	October 2021
Rev.	Date.
Issue Details.	

Client: Hive Projects Ltd
Project: North Manchester General Hospital
Drawing Title: Tree Protection Plan
Drawing No: 1051448_RSK0AF_NMGH_TPP_Sheet 3
Scale: 1:250
Drawn by: EL Date: 10.21
Checked by: IB Date: 10.21

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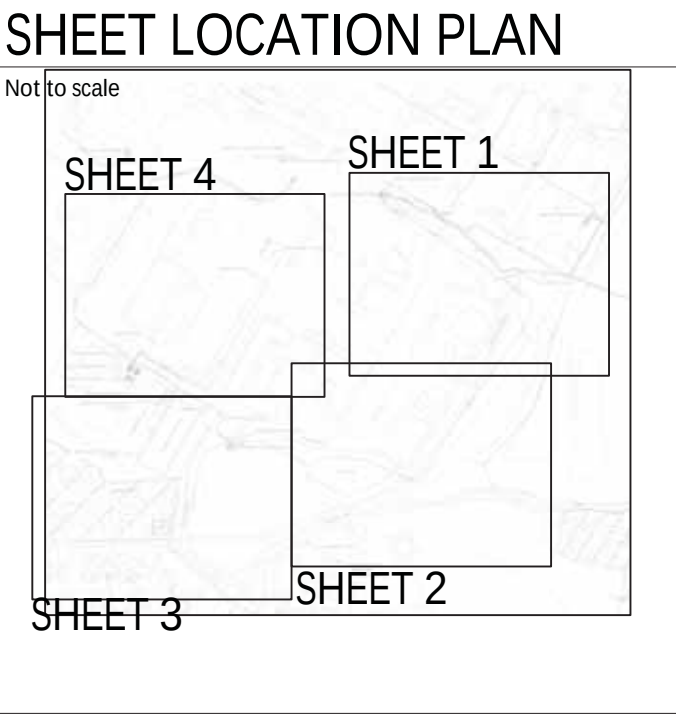


LEGEND

TREE CATEGORIES - NOTE: Quality class description derived from BS5837:2012

- Category A** Trees / Groups of high quality, with an estimated remaining life expectancy of at least 40 years.
- Category B** Trees / Groups of moderate quality, with an estimated remaining life expectancy of at least 20 years.
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- Category U** Trees / Groups, in such a condition that they cannot realistically be retained as living trees in the context of current land use for longer than 10 years.
- Root Protection Area (RPA)**
- T#*** Trees not included in original site survey and therefore positions are indicative only.
- Trees To Be Removed** Trees / Groups, which are to be removed.
- Tree Protection Fencing**

Based on Electricity Northwest drawing NMGR HV Cable Division number T551164.001 P17, 0551164.002 - NMGR - HV South Cable Division (P16-ASL-TPP). Please see original for details.



First Issue	October 2021
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Client:
Hive Projects Ltd

Project:
North Manchester General Hospital

Drawing Title:
Tree Protection Plan

Drawing No: 1051448_RSK0AF_NMGH_TPP_Sheet 4

Scale: 1:250

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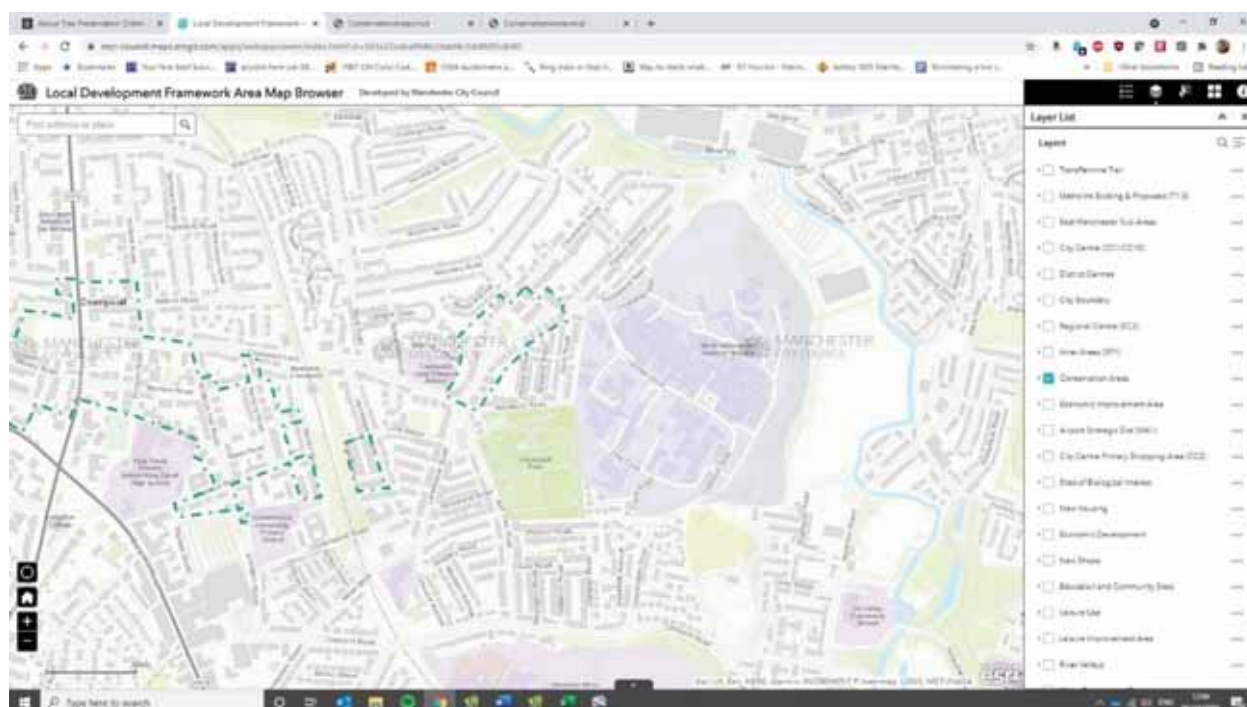
Appendix 2: Cascade Chart for Tree Quality Assessment

See following page.

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)	Identification on plan
Trees unsuitable for retention (see Note)		
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) - Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline - Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>	See Table 2
1 Mainly arboricultural qualities		
2 Mainly landscape qualities		
3 Mainly cultural values, including conservation		
Trees to be considered for retention		
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees with material conservation or other cultural value
	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value

Appendix 3: Conservation Area Search



Appendix 4: Tree Survey Schedule

See following page.



Tree Ref No.	Species	Single or Multiple Stem (S or M)	Height (m)	Stem Diameter (mm)					Very Large Girth (Y / N)	Ancient, Veteran or Notable (A, V or N)	Branch Spread (m)				Crown Clearance (m)		Life Stage	General Observations (structural / physiological condition)	Preliminary Management Recommendations	Estimated Remaining Contribution (years)	Tree Quality Grading	Root Protection Area	
				S1	S2	S3	S4	S5			N	E	S	W	(1)	(2)						(m²)	(radius in m)
T1	Whitebeam (Sorbus aria)	S	6	260					N	Not Applicable	2.5	2.5	3	3.5	2-E	1.5	EM	Exposed surface roots. Roots causing damage to hard surfacing.	None required.	10+	C1	30.6	3.1
T2	Sycamore (Acer pseudoplatanus)	S	10	450					N	Not Applicable	4	3	4	4	2.5-N	2	EM	Roots causing damage to hard surfacing.	None required.	20+	B1	91.6	5.4
T3	Whitebeam (Sorbus aria)	S	8	380					N	Not Applicable	3	3.5	3.5	2	2-E	1.5	EM	Roots causing damage to hard surfacing.	None required.	10+	C1	65.3	4.6
T4	Laburnum (Laburnum anagyroides)	M(a)	6	100	120	120			N	Not Applicable	2.5	3	2	2.5	2-E	1.5	M	Trifurcate at 1.0m. Previous branch failure wounds in crown. Stem wounds at base.	None required.	10+	C1	17.6	2.4
T5	Purple Norway Maple (Acer platanoides 'Crimson King')	S	18	570					N	Not Applicable	6.5	6	7.5	7	2.5-N	1.5	M	Trifurcate at 2.0m.	None required.	40+	A1	147.0	6.8
T6	Norway Maple (Acer platanoides)	S	17	700					N	Not Applicable	6.5	6.5	6.5	5.5	2-S	2	M	Ivy clad tree. Restricted inspection. Rot holes at old pruning wounds at 2.5m.	None required.	20+	B1	221.7	8.4
T7	Black Poplar (Populus nigra var. betulifolia)	S	23	1090					N	Not Applicable	6	7.5	7	5	4-E	3	M	Previously topped at c. 20m. Epicormic growth on stem.	None required.	20+	B1	537.6	13.1
T8	Purple Norway Maple (Acer platanoides 'Crimson King')	S	17	450					N	Not Applicable	5	5	6	5	2-S	2	EM	Minor deadwood in crown.	None required.	40+	B1	91.6	5.4
T9	Purple Norway Maple (Acer platanoides 'Crimson King')	S	17	380					N	Not Applicable	4	5	6	7	2.5-W	4	EM	Minor deadwood in crown.	None required.	20+	B1	65.3	4.6
T10	Corsican Pine (Pinus nigra var. maritima)	M(a)	18	420	420				N	Not Applicable	3	5	4	6	2-W	2	M	Bifurcate at base. Deadwood in lower crown.	Remove deadwood.	20+	B1	159.6	7.1
T11	Field Maple (Acer campestre)	S	12	280					N	Not Applicable	2.5	3	3.5	2.5	2-S	2	EM	Crown shape distorted due to group pressure.	None required.	20+	B1	35.5	3.4
T12	Lawson Cypress Cultivar (Chamaecyparis lawsoniana cv.)	M(a)	8	290	110	110	110		N	Not Applicable	2.5	2.5	2.5	2.5	2-W	2	EM	Multi-stemmed at 1.0m. Cultivar liable to branches splitting out.	None required.	10+	C1	54.5	4.2
T13	Purple Norway Maple (Acer platanoides 'Crimson King')	S	15	400					N	Not Applicable	5.5	5	3.5	5	2-E	2	EM	Estimated position as not on topographical survey.	None required.	20+	B1	72.4	4.8
T14	Corsican Pine (Pinus nigra var. maritima)	S	17	410					N	Not Applicable	2.5	3	2.5	3	2-S	5	M	Deadwood in lower crown. Estimated position.	Remove deadwood.	20+	B1	76.1	4.9
T15	Purple Norway Maple (Acer platanoides 'Crimson King')	M(a)	15	270	240	280	210		N	Not Applicable	4.5	4.5	5	5	2.5-S	2	M	In decline with apical branch dieback. Stem wounds at base.	None required.	10+	C1	114.5	6.0
T16	Purple Norway Maple (Acer platanoides 'Crimson King')	S	10	250					N	Not Applicable	4	1.5	3	3	2.5-E	2	SM	Apical and lateral branch dieback.	None required.	10+	C1	28.3	3.0
T17	Corsican Pine (Pinus nigra var. maritima)	M(a)	15	270	300	390			N	Not Applicable	4	5	4	3.5	2.5-E	2	M	Trifurcate at base. Deadwood in lower crown.	Remove deadwood.	20+	B1	142.5	6.7
T18	Purple Norway Maple (Acer platanoides 'Crimson King')	S	14	400					N	Not Applicable	5.5	5	5	5.5	3-W	2	EM	Crown shape distorted due to group pressure.	None required.	20+	B1	72.4	4.8
T19	Field Maple (Acer campestre)	S	10	240					N	Not Applicable	2.5	3	3.5	3	2-W	2	EM	Crown shape distorted due to group pressure.	None required.	20+	B1	26.1	2.9
T20	Common Alder (Alnus glutinosa)	S	9	180					N	Not Applicable	2	2	3	3	2-E	1.5	SM	No significant defects. Estimated position.	None required.	20+	B1	14.7	2.2



Tree Ref No.	Species	Single or Multiple Stem (S or M)	Height (m)	Stem Diameter (mm)					Very Large Girth (Y / N)	Ancient, Veteran or Notable (A, V or N)	Branch Spread (m)				Crown Clearance (m)		Life Stage	General Observations (structural / physiological condition)	Preliminary Management Recommendations	Estimated Remaining Contribution (years)	Tree Quality Grading	Root Protection Area	
				S1	S2	S3	S4	S5			N	E	S	W	(1)	(2)						(m²)	(radius in m)
T21	Ash (Fraxinus excelsior)	S	15	300					N	Not Applicable	4.5	4	4.5	4.5	3-S	2.5	SM	Ivy clad tree. Restricted inspection.	None required.	20+	B1	40.7	3.6
T22	Ash (Fraxinus excelsior)	M(a)	6	75	75	75	75	75	N	Not Applicable	2.5	2.5	2.5	2.5	1-N	1	Y	Off-site tree. Restricted inspection. Estimated position.	None required.	10+	C1	12.7	2.0
T23	Rowan (Sorbus aucuparia)	S	6	170					N	Not Applicable	3	3	3	3	1.5-N	1.5	SM	Extensive stem wounding at 0.5m.	None required.	10+	C1	13.1	2.0
T24	Weeping Birch (Betula pendula 'Tristis')	S	15	460					N	Not Applicable	4	4	4.5	5	2-S	1	M	Stem leaning north. Reduced canopy density.	None required.	10+	C1	95.7	5.5
T25	Weeping Birch (Betula pendula 'Tristis')	S	15	460					N	Not Applicable	5	4	6	5	3-N	2	M	Minor deadwood in crown.	None required.	20+	B1	95.7	5.5
T26	Lawson Cypress (Chamaecyparis lawsoniana)	S	10	280					N	Not Applicable	2.5	2.5	2.5	2.5	2-E	2	EM	Crown shape distorted due to group pressure.	None required.	20+	B1	35.5	3.4
T27	Silver Birch (Betula pendula)	S	15	360					N	Not Applicable	4.5	5	4.5	4.5	4-E	2.5	M	Crown shape distorted due to group pressure.	None required.	20+	B1	58.6	4.3
T28	Silver Birch (Betula pendula)	S	9	150					N	Not Applicable	3	3	2.5	2	2.5-E	2.5	SM	Crown shape distorted due to group pressure.	None required.	20+	C1	10.2	1.8
T29	Corsican Pine (Pinus nigra var. maritima)	S	10	420					N	Not Applicable	4.5	4	5	4.5	2-S	1.5	M	Stem lean east. Minor deadwood in crown.	None required.	20+	B1	79.8	5.0
T30	London Plane (Platanus x hispanica)	S	17	450					N	Not Applicable	7.5	6.5	5.5	7.5	2.5-N	1.5	EM	Previously pollarded at 5.0m. Root disturbance of adjacent hard surfacing evident.	None required.	40+	A1	91.6	5.4
T31	Ash (Fraxinus excelsior)	S	26	820					N	Not Applicable	8.5	11	7.5	6	6-N	1	M	Access for inspection restricted by vegetation. Recent ground works within RPA. Previous failure at 6.0m with decaying wound.	None required.	20+	B1	304.2	9.8
T32	Silver Birch (Betula pendula)	S	15	390					N	Not Applicable	6	5	6	5	3.5-S	1	M	Not on topographical survey. Position estimated.	None required.	20+	B1	68.8	4.7
T33	Poplar (Populus sp.)	S	7	120					N	Not Applicable	1	0.5	0.5	1.5	4-N	4	Y	In decline.	Fell and remove.	<10	U	6.5	1.4
T34	Ash (Fraxinus excelsior)	S	12	280					N	Not Applicable	2.5	2	6	5	4-S	3	M	Position estimated. Minor deadwood and branch dieback in crown.	None required.	10+	C1	35.5	3.4



Tree Ref. No.	Species	Single or Multiple Stem (S or M)	Height (m)	Stem Diameter (mm)					Very Large Girth (Y / N)	Ancient, Veteran or Notable (A, V or N)	Branch Spread				Crown Clearance (m)		Life Stage	General Observations (structural / physiological condition)	Preliminary Management Recommendations	Estimated Remaining Contribution (years)	Tree Quality Grading	Root Protection Area	
				S1	S2	S3	S4	S5			(m)				(1)	(2)						(m²)	(radius in m)
											N	E	S	W									
T35	Ash (Fraxinus excelsior)	M(a)	12	210	300				N	Not Applicable	3	5	5	4	4-S	2.5	M	Position estimated. Advanced deadwood and branch dieback in crown.	Fell and remove.	<10	U	60.7	4.4
T36	Poplar (Populus sp.)	S	16	340					N	Not Applicable	3	3.5	5	4.5	3-W	1	EM	Crown shape distorted due to group pressure. Estimated position.	None required.	20+	B1	52.3	4.1
T37	Poplar (Populus sp.)	S	16	480					N	Not Applicable	3	4	6	5	4-W	1.5	EM	Estimated position as not on topographical survey.	None required.	20+	B1	104.2	5.8
T38	Poplar (Populus sp.)	S	14	270					N	Not Applicable	3	5	6	4	4-W	2.5	SM	Estimated position as not on topographical survey.	None required.	20+	B1	33.0	3.2
T39	Ash (Fraxinus excelsior)	S	15	420					N	Not Applicable	5	5	3.5	3.5	4-S	3	M	In advanced decline.	Fell and remove.	<10	U	79.8	5.0
T40	Weeping Willow (Salix x chrysocoma)	M(a)	12	390	280				N	Not Applicable	5	5	5.5	5.5	2.5-E	1	EM	Bifurcate at base. Low branches over road and path.	None required.	20+	B1	104.3	5.8
T41	Weeping Willow (Salix x chrysocoma)	S	12	360					N	Not Applicable	2.5	5	4.5	5	2.5-S	1	EM	Low branches over road and path.	None required.	20+	B1	58.6	4.3
G1	Rowan (Sorbus aucuparia), Ash (Fraxinus excelsior), Cherry Laurel (Prunus laurocerasus), Dogwood (Cornus spp.), Privet (Ligustrum spp.), Sycamore (Acer pseudoplatanus), Norway Maple (Acer platanoides)	S	6	120					N	Not Applicable	3	3	3	3	0-S	0	SM	Dense group of shrubs and small trees.	None required.	20+	C2	6.5	1.4
G2	Holly (Ilex aquifolium), Cherry Laurel (Prunus laurocerasus), Elder (Sambucus nigra), Cherry (Prunus sp.)	S	6	340					N	Not Applicable	3	3	3	3	0-S	0	SM	Dense group of shrubs and small trees. Occasional trees of larger diameter set 5.0m back from kerb edge.	None required.	20+	C2	52.3	4.1
G3	Sycamore (Acer pseudoplatanus), Apple (Malus spp.), Rhododendron (Rhododendron spp.), Cherry Laurel (Prunus laurocerasus)	S	6	250					N	Not Applicable	2.5	2.5	2.5	2.5	0-S	0	SM	Dense group of shrubs and small trees. Occasional trees of larger diameter set 5.0m back from kerb edge.	None required.	20+	C2	28.3	3.0



Tree Ref No.	Species	Single or Multiple Stem (S or M)	Height (m)	Stem Diameter (mm)					Very Large Girth (Y / N)	Ancient, Veteran or Notable (A, V or N)	Branch Spread				Crown Clearance (m)		Life Stage	General Observations (structural / physiological condition)	Preliminary Management Recommendations	Estimated Remaining Contribution (years)	Tree Quality Grading	Root Protection Area	
				S1	S2	S3	S4	S5			(m)				(1)	(2)						(m²)	(radius in m)
											N	E	S	W									
G4	Ash (Fraxinus excelsior), Sycamore (Acer pseudoplatanus)	S	10	150					N	Not Applicable	2.5	2.5	2.5	2.5	0-S	0	SM	Group of immature trees.	None required.	20+	C2	10.2	1.8
G5	Poplar (Populus sp.), Ash (Fraxinus excelsior)	S	20	700					N	Not Applicable	7	7	7	7	5.0-S	3	M	Off-site trees. Restricted inspection. Previously topped.	None required.	10+	C2	221.7	8.4
G6	Silver Birch (Betula pendula)	S	12	230					N	Not Applicable	3	3	3	3	2.0-S	1	EM	Dense group of trees.	None required.	20+	B2	23.9	2.8
G7	Silver Birch (Betula pendula)	S	12	250					N	Not Applicable	3.5	3.5	3.5	3.5	2.0-S	1	EM	Dense group of trees. Recent stem wounding from construction works.	None required.	20+	B2	28.3	3.0
G8	Lawsons Cypress (Chamaecyparis lawsoniana)	S	6	140					N	Not Applicable	1.5	1.5	1.5	1.5	0-S	0	SM	Linear group of small trees suppressed by larger Birch.	None required.	10+	C2	8.9	1.7



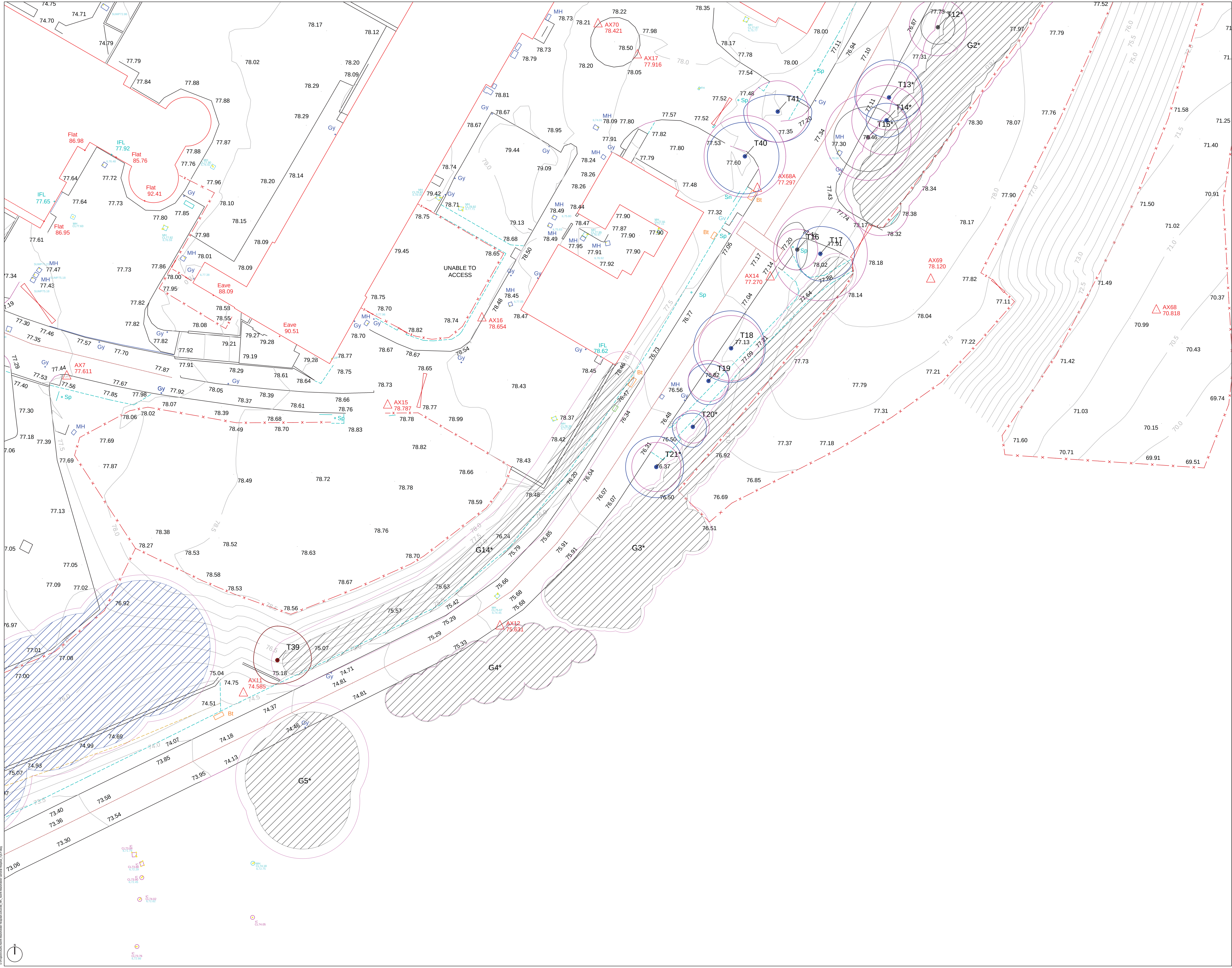
Tree Ref No.	Species	Single or Multiple Stem	Height	Stem Diameter					Very Large Girth	Ancient, Veteran or Notable	Branch Spread				Crown Clearance		Life Stage	General Observations (structural / physiological condition)	Preliminary Management Recommendations	Estimated Remaining Contribution	Tree Quality Grading	Root Protection Area		
				(mm)							(m)				(m)							(years)	(m²)	(radius in m)
				(S or M)	(m)	S1	S2	S3			S4	S5	(Y / N)	(A, V or N)	N	E								
G9	Purple Leaf Plum (Prunus cerasifera 'nigra'), Flowering Cherry (Prunus spp.)	M(a)	5	110	190				N	Not Applicable	2.5	2.5	2.5	2.5	1.5-S	1	SM	Linear group of small trees in narrow verge.	None required.	10+	C2	21.8	2.6	
G10	Silver Birch (Betula pendula), Larch (Larix sp.)	S	12	260					N	Not Applicable	4	4	4	4	2.0-S	2	EM	Linear group of trees.	None required.	20+	B2	30.6	3.1	
G11	Rowan (Sorbus aucuparia), Elder (Sambucus nigra)	S	8	220					N	Not Applicable	3	3	3	3	1.5-S	1	SM	Small group of poor quality trees. Previous branch failure wounds evident.	Fell and remove.	<10	U	21.9	2.6	
G12	Black Poplar (Populus nigra var. betulifolia), Ash (Fraxinus excelsior), Beech (Fagus sylvatica)	S	25	900					N	Not Applicable	10	10	10	10	4.0-S	1.5	M	Large group of trees located on sloping ground. Poplar trees located behind wall along southern edge of group.	None required.	20+	B2	366.5	10.8	
G13	Ash (Fraxinus excelsior), Hawthorn (Crataegus monogyna)	S	10	250					N	Not Applicable	4	4	4	4	0-S	0	SM	Small group of trees. Minor deadwood in crowns.	None required.	10+	C2	28.3	3.0	
G14	Laburnum (Laburnum anagyrodies), Rhododendron (Rhododendron spp.), Hawthorn (Crataegus monogyna), Silver Birch (Betula pendula), Sycamore (Acer pseudoplatanus)	S	12	320					N	Not Applicable	2	2	2	2	0-S	0	SM	Dense hedgerow planting with occasional trees.	None required.	10+	C2	46.3	3.8	



Tree Ref No.	Species	Single or Multiple Stem (S or M)	Height (m)	Stem Diameter (mm)					Very Large Girth (Y / N)	Ancient, Veteran or Notable (A, V or N)	Branch Spread (m)				Crown Clearance (m)		Life Stage	General Observations (structural / physiological condition)	Preliminary Management Recommendations	Estimated Remaining Contribution (years)	Tree Quality Grading	Root Protection Area	
				S1	S2	S3	S4	S5			N	E	S	W	(1)	(2)						(m²)	(radius in m)
G15	Lawson Cypress (Chamaecyparis lawsoniana)	S	10	240					N	Not Applicable	3.5	3.5	3.5	3.5	0-E	0	SM	Linear group of trees around edge of building.	None required.	10+	C2	26.1	2.9

Appendix 5: Tree Quality and Constraints Plans

See following page.



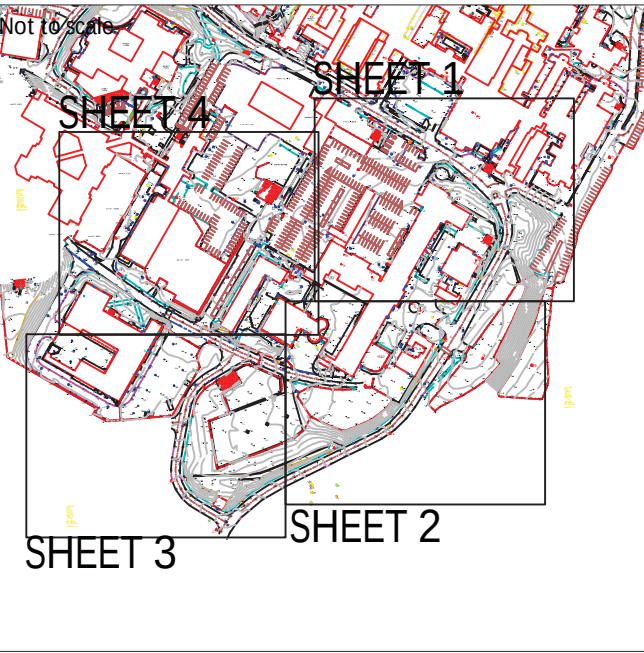
LEGEND

TREE CATEGORIES - NOTE: Quality class description derived from BS5837:2012

- Category A**
Trees / Groups of high quality - with an estimated remaining life expectancy of at least 40 years.
- Category B**
Trees / Groups of moderate quality - with an estimated remaining life expectancy of at least 20 years.
- Category C**
Trees / Groups of low quality - with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.
- Category U**
Trees / Groups in such a condition that they cannot realistically be retained as living trees in the context of current land use for longer than 10 years.
- Root Protection Area (RPA)**
- T#***
Trees not included in original site survey and therefore positions are indicative only.

Based on Survey Operations drawing 'Utility Survey of Land at: North Manchester General Hospital' number '208201/011 A' (208201_A.dwg). Please see original for details.

SHEET LOCATION PLAN



First Issue	October 2021
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Issue Details.	

Client:
Hive Projects Ltd

Project:
North Manchester General Hospital

Drawing Title:
Tree Quality and Constraints Plan

Drawing No: 1051448_RSK0AF_NMGH_TQCP_Sheet 2

Scale: 1:250

Drawn by: EL Date: 10.21

Checked by: IB Date: 10.21

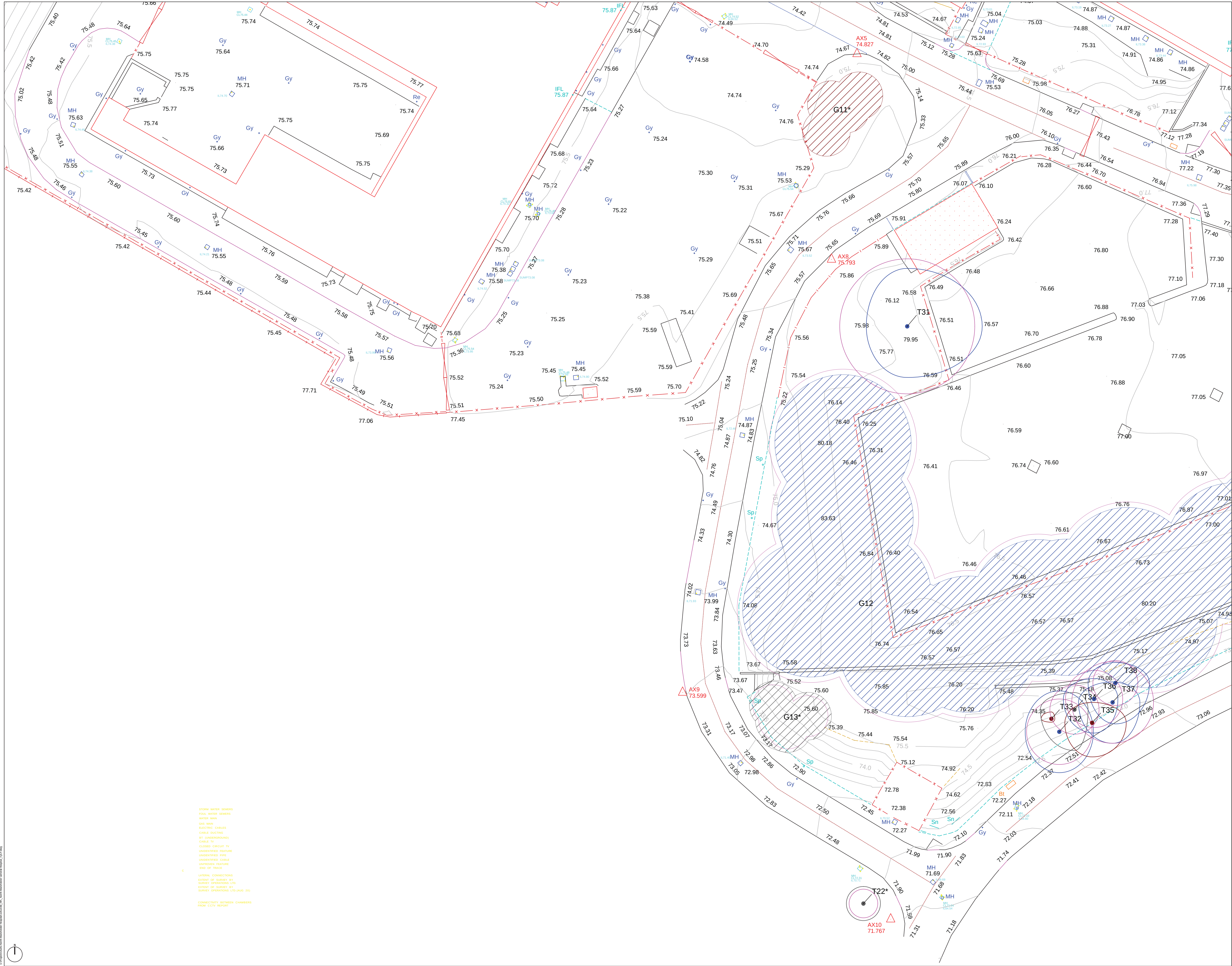
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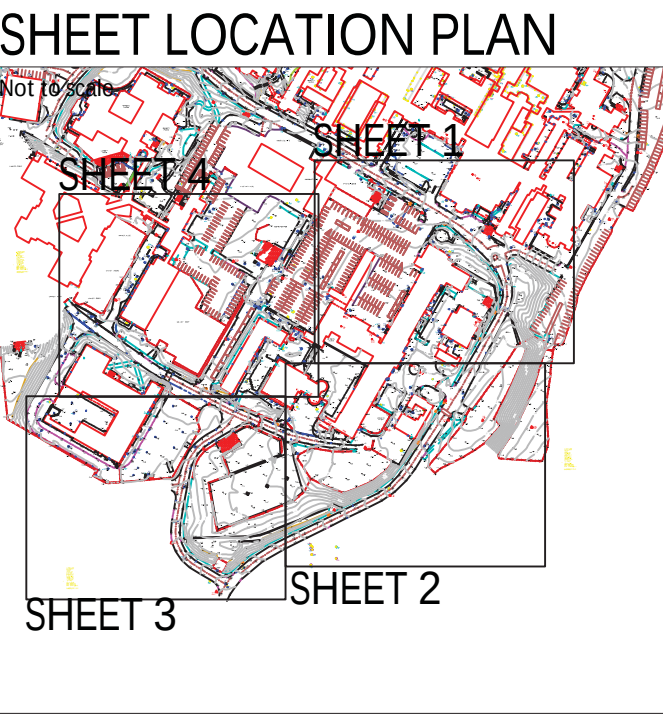


LEGEND

TREE CATEGORIES - NOTE: Quality class description derived from BS5837:2012

- Category A**
Trees / Groups of high quality: with an estimated remaining life expectancy of at least 40 years.
- Category B**
Trees / Groups of moderate quality: with an estimated remaining life expectancy of at least 20 years.
- Category C**
Trees / Groups of low quality: with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.
- Category U**
Trees / Groups in such a condition that they cannot realistically be retained as living trees in the context of current land use for longer than 10 years.
- Root Protection Area (RPA)**
- T#***
Trees not included in original site survey and therefore positions are indicative only.

Based on Survey Operations drawing: Utility Survey of Land at: North Manchester General Hospital number 208201/011 A: (208201_A.dwg). Please see original for details.



First Issue	October 2021
Rev.	Date.
Issue Details.	

Client:
Hive Projects Ltd

Project:
North Manchester General Hospital

Drawing Title:
Tree Quality and Constraints Plan

Drawing No: 1051448_RSK0AF_NMGH_TQCP_Sheet 3

Scale: 1:250

Drawn by: EL Date: 10.21

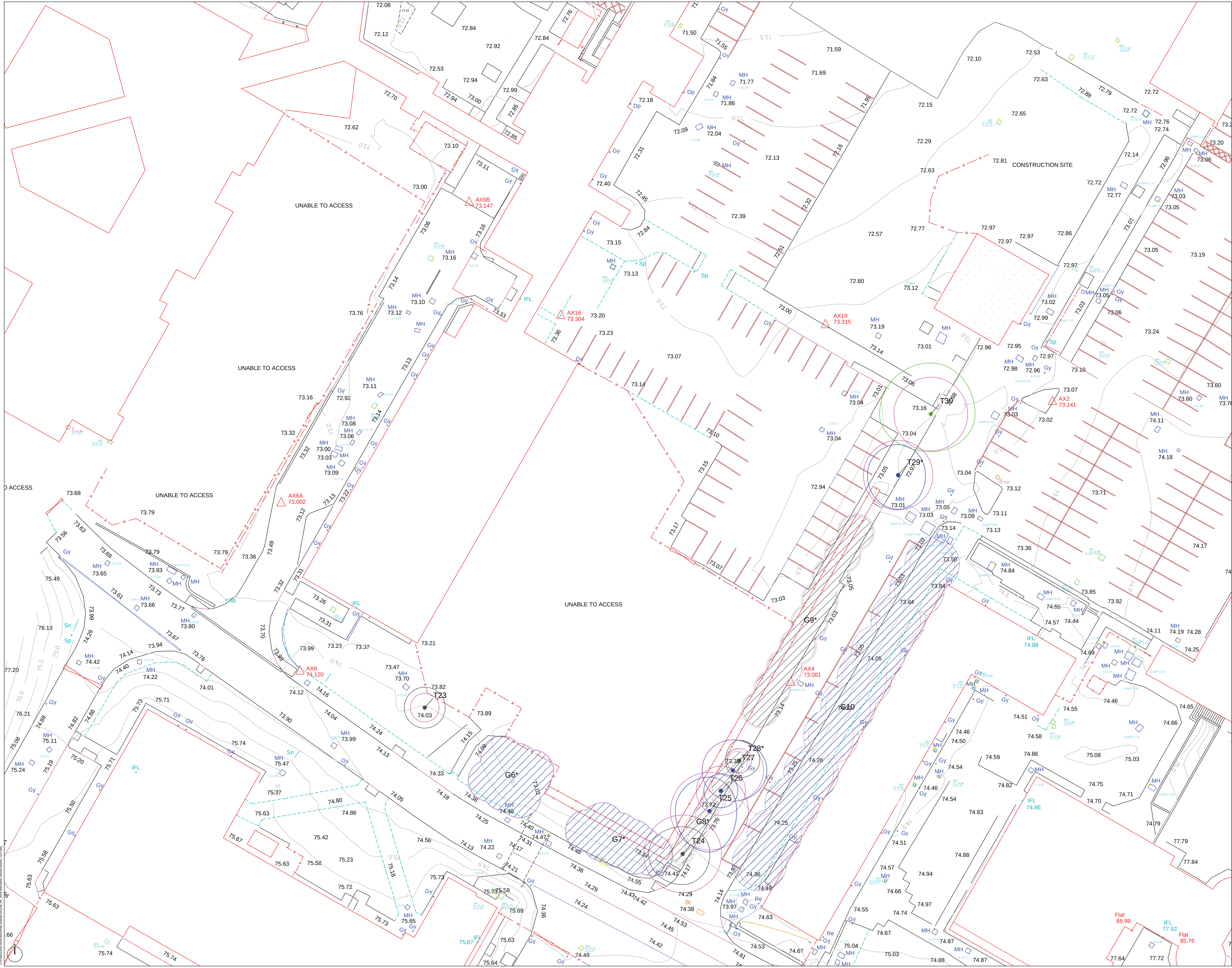
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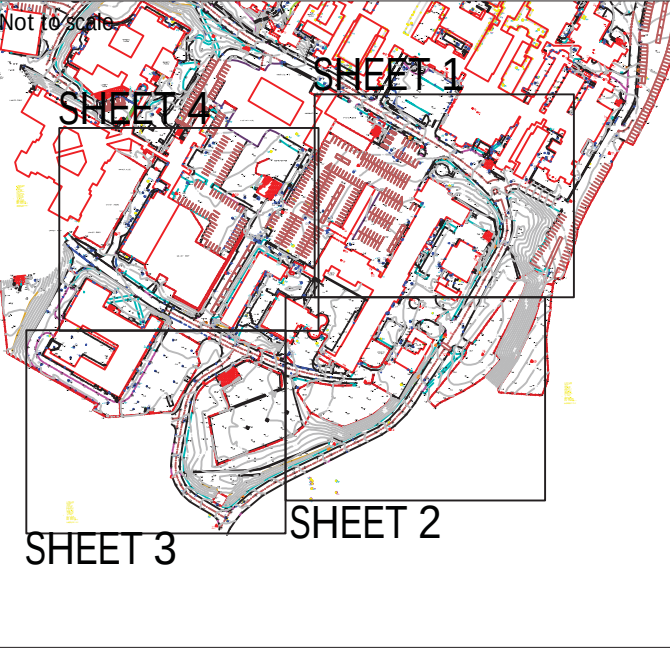
LEGEND

TREE CATEGORIES - NOTE: Quality class description derived from BS5837:2012

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Based on Survey Operations drawing 'Utility Survey of Land at: North Manchester General Hospital' number '208201/011 A' (208201_A.dwg). Please see original for details.

SHEET LOCATION PLAN



First Issue
Rev.
October 2021
Date.

Client:
Hive Projects Ltd

Project:
North Manchester General Hospital

Drawing Title:
Tree Quality and Constraints Plan

Drawing No: 1051448_RSKOAF_NMGH_TQCP_Sheet 4

Scale: 1:250

Drawn by: EL
Checked by: IB

Date: 10.21
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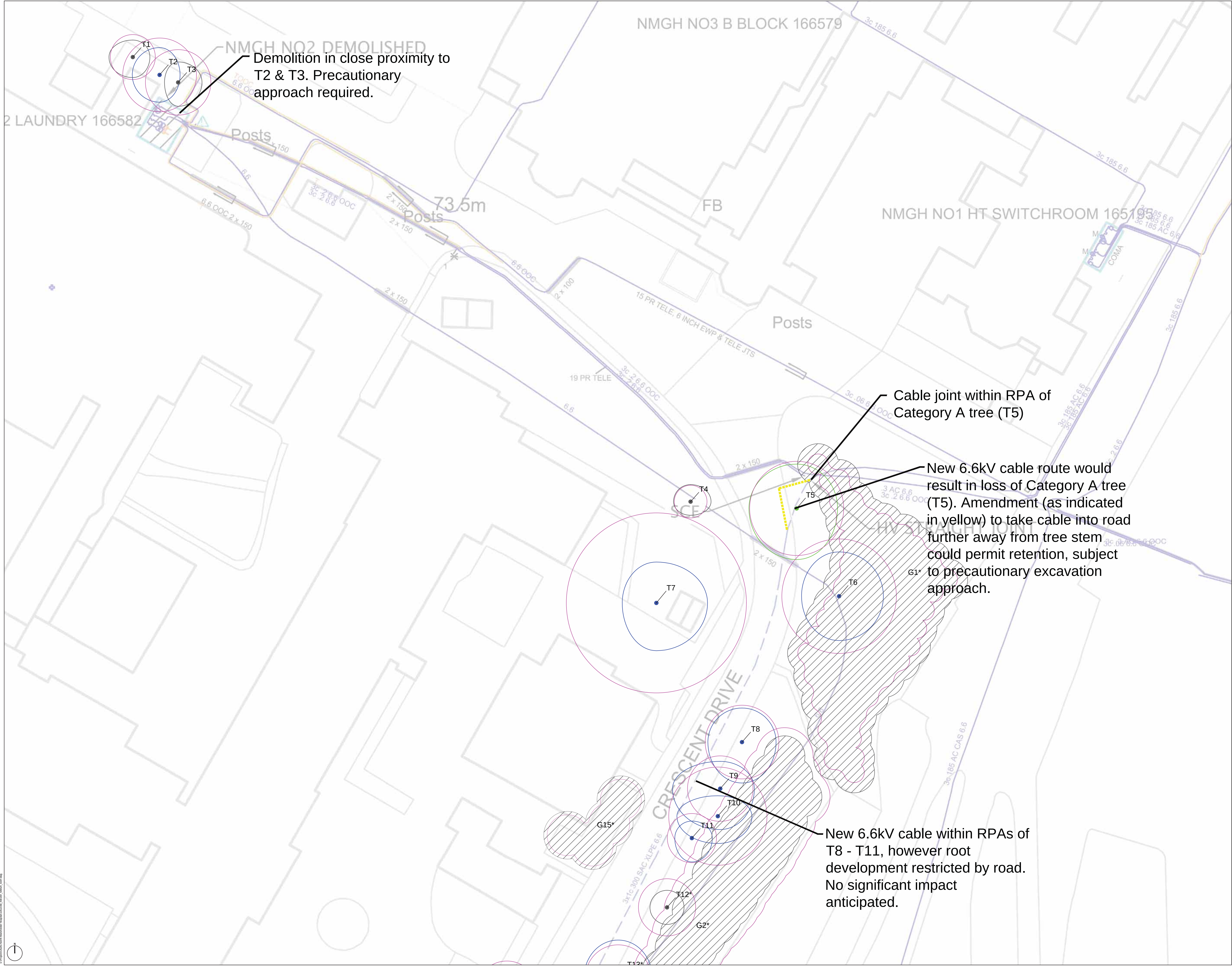
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Appendix 6: Arboricultural Impact Assessment Plans

See following page.



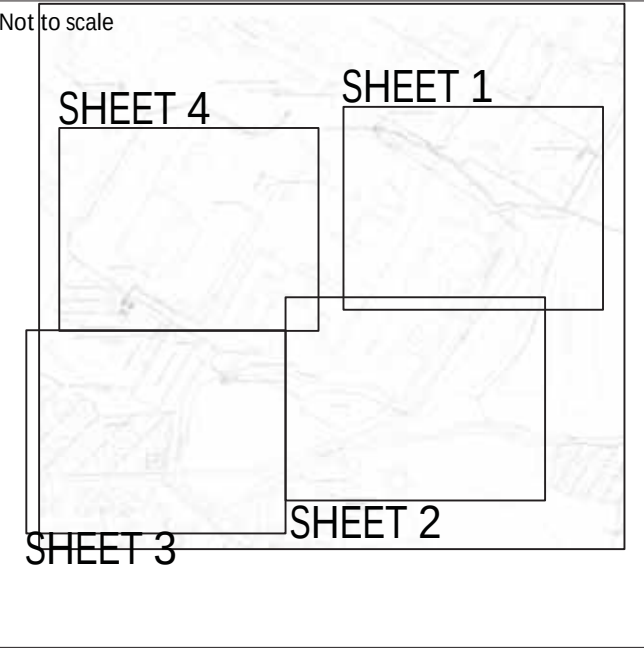
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Based on Electricity Northwest drawing "NMGH HV Cable Diversion" number "E51164.001 P4". (E51164.001 - NMGH - HV South Cable Diversion (P4) A31 PDF). Please see original for details.

SHEET LOCATION PLAN



First Issue
Rev. Issue Details. October 2021
Date.

Client:
Hive Projects Ltd

Project:
North Manchester General Hospital

Drawing Title:
Arboricultural Impact Assessment Plan

Drawing No: 1051448_RSK0AF_NMGH_AIAP_Sheet 1

Scale: 1:250

Drawn by: EL Date: 10.21

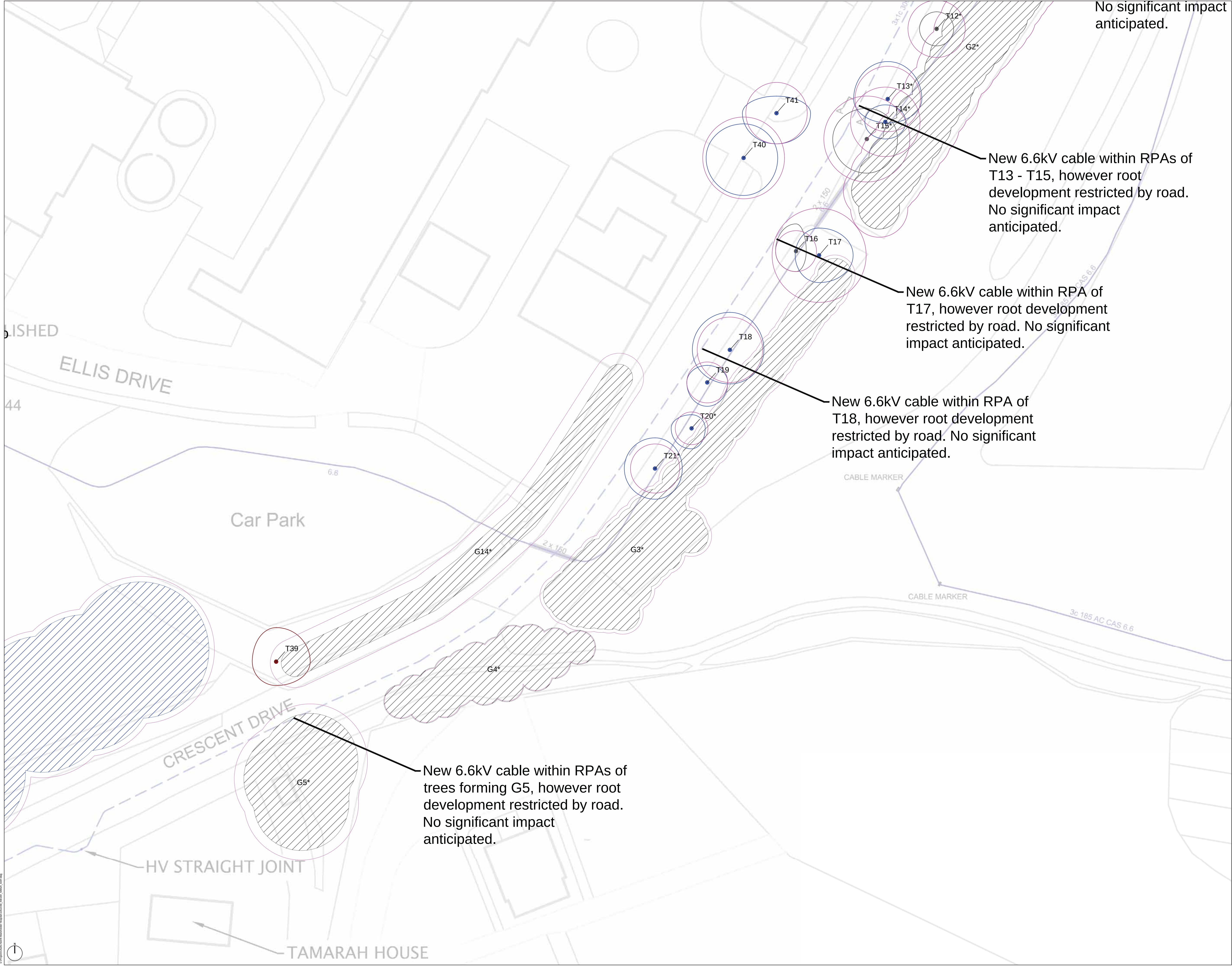
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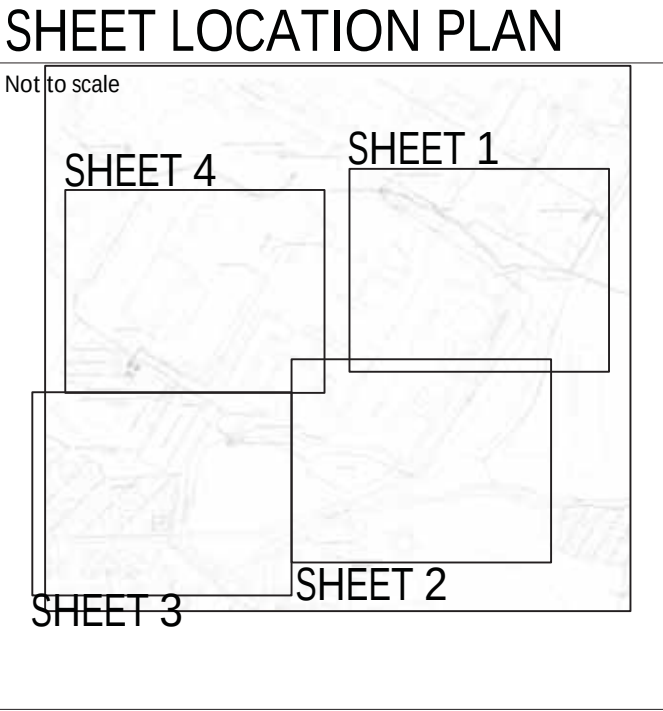


LEGEND

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First Issue	Rev.	Issue Details.	October 2021	Date.
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Client:
Hive Projects Ltd

Project:
North Manchester General Hospital

Drawing Title:
Arboricultural Impact Assessment Plan

Drawing No: 1051448_RSK0AF_NMGH_AIAP_Sheet 2

Scale: 1:250

Drawn by: EL

Checked by: IB

Date: 10.21

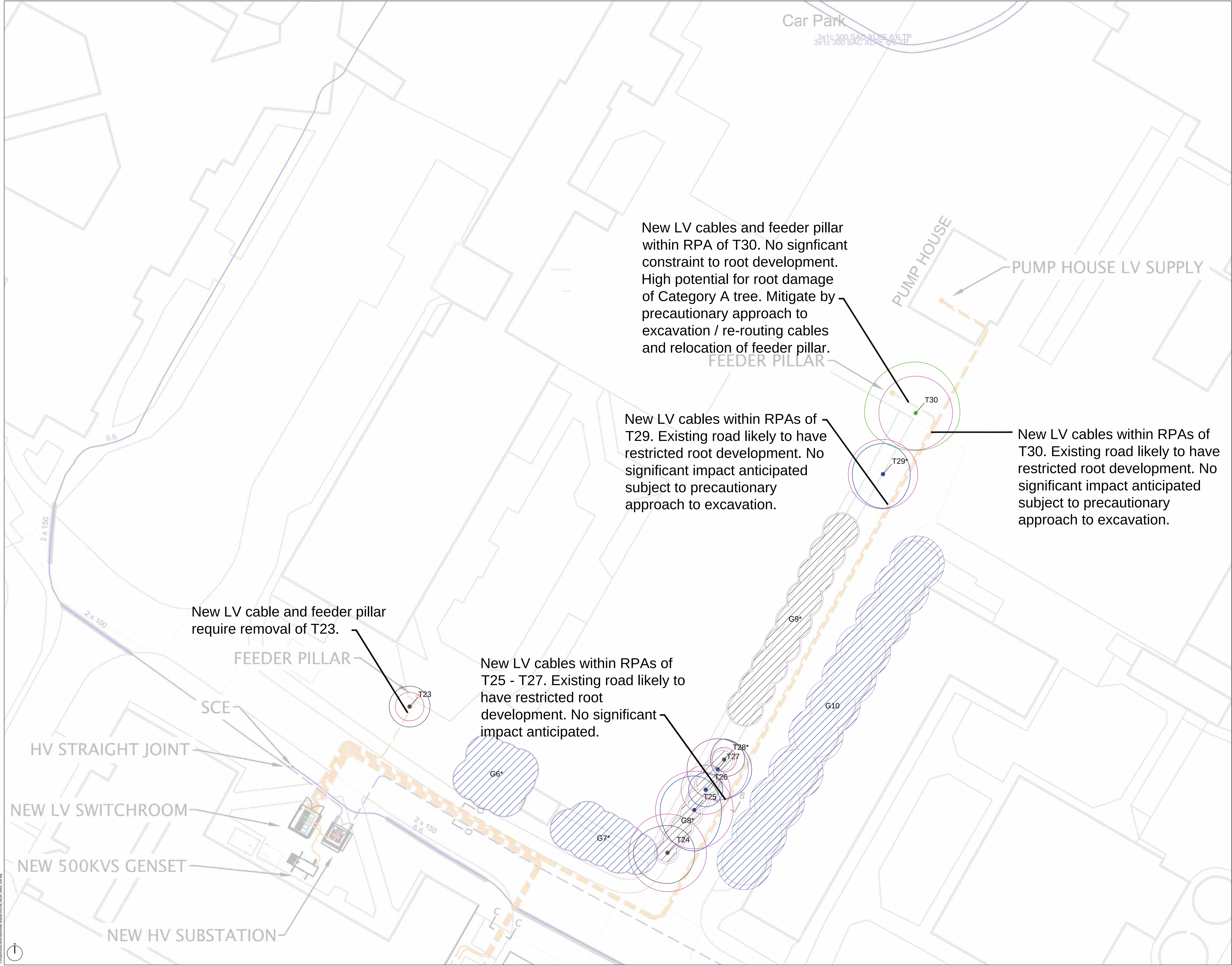
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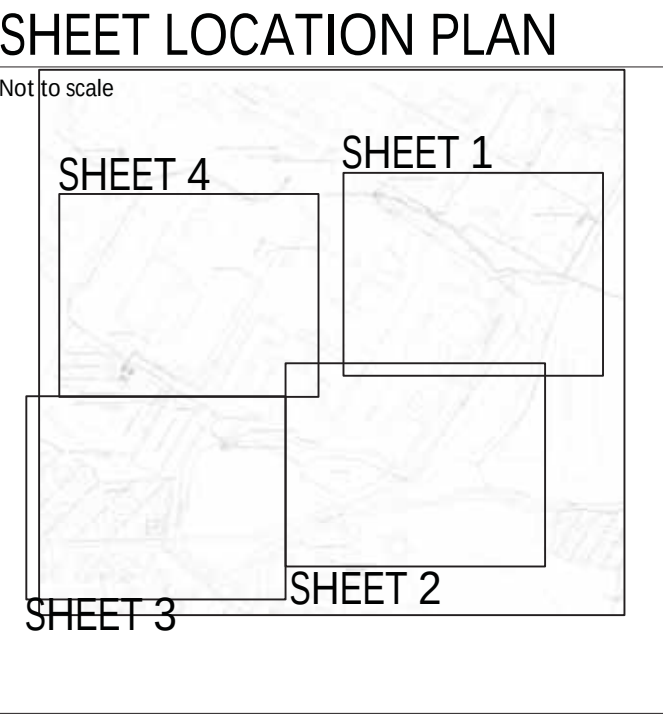


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First Issue	October 2021
Rev.	Issue Details.

Client:
Hive Projects Ltd

Project:
North Manchester General Hospital

Drawing Title:
Arboricultural Impact Assessment Plan

Drawing No: 1051448_RSK0AF_NMGH_AIAP_Sheet 4

Scale: 1:250

Drawn by: EL	Date: 10.21
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Appendix 7: Tree Works Schedule

Tree No:	Species	Recommended Management Work
T5	Purple Norway Maple	Remove or if retained crown lift to provide 4.5m above ground level over working area.
T8	Purple Norway Maple	Crown lift to provide 4.5m above ground level over working area.
T9	Purple Norway Maple	Crown lift to provide 4.5m above ground level over working area.
T10	Corsican Pine	Crown lift to provide 4.5m above ground level over working area.
T13	Purple Norway Maple	Crown lift to provide 4.5m above ground level over working area.
T15	Purple Norway Maple	Crown lift to provide 4.5m above ground level over working area.
T16	Purple Norway Maple	Crown lift to provide 4.5m above ground level over working area.
T18	Purple Norway Maple	Crown lift to provide 4.5m above ground level over working area.
T21	Ash	Crown lift to provide 4.5m above ground level over working area.
T23	Rowan	Fell and remove.
T24	Weeping Birch	Crown lift to provide 4.5m above ground level over working area.
T25	Weeping Birch	Crown lift to provide 4.5m above ground level over working area.
T27	Silver Birch	Crown lift to provide 4.5m above ground level over working area.
T28	Silver Birch	Crown lift to provide 4.5m above ground level over working area.
T29	Corsican Pine	Crown lift to provide 4.5m above ground level over working area.
T30	London Plane	Crown lift to provide 4.5m above ground level over working area.

Tree No:	Species	Recommended Management Work
G11	Rowan, Elder	Fell and remove.

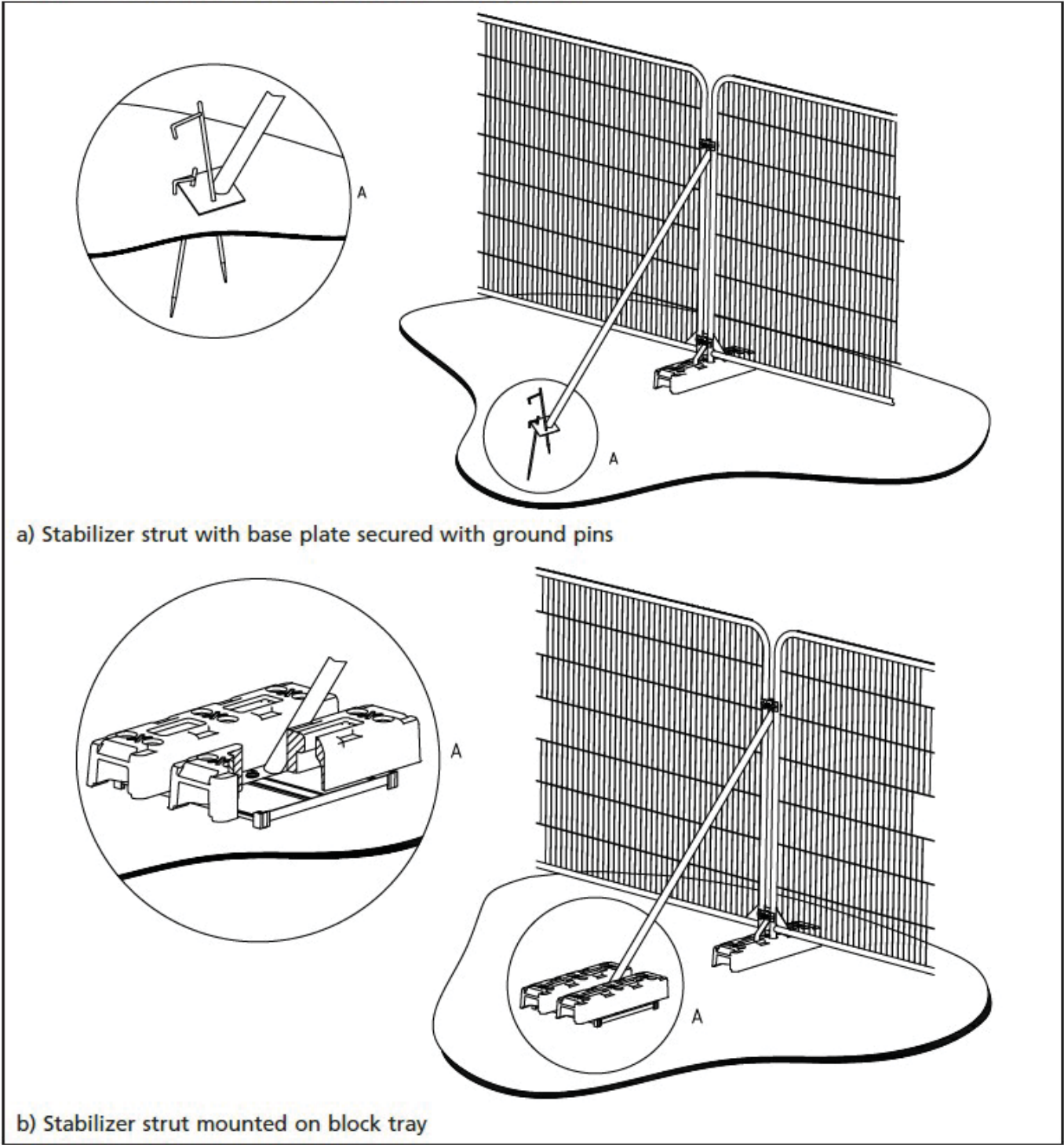
Accompanying Notes:

- Prior to undertaking any tree works Manchester City Council should be consulted to establish if any of the trees within the site are protected by a Tree Preservation Order.
- All tree work and felling to be carried out in accordance with BS 3998 (2010) 'Recommendations for Tree Work', current industry guidelines and best practice, and all relevant Health & Safety standards;
- All operatives to be appropriately qualified, skilled, and adequately insured, for the task they are undertaking;
- All tree work and felling must comply with The Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000;
- Modification to, or deviation from, the above schedule must first gain approval from Manchester City Council.

Appendix 8: Tree Protection Barrier Examples

See following page.

Figure 3 Examples of above-ground stabilizing systems



Appendix 9: Key Contacts

	Name	Main Contact and Details
Site Manager	TBC	TBC
Project Manager	Hive Projects Ltd	TBC
Arboricultural Consultant	ADAS	13 Beecham Court Pemberton Business Park Wigan WN3 6PR 01942 493255
Local Planning Authority	Manchester City Council	Manchester City Council Planning and Regeneration PO Box 532 Town Hall Manchester M60 2LA