Trees and Construction

BS5837:2012 Tree Survey, Arboricultural Implications Assessment & Method Statement

Site: Edgar Wood Academy, Land to the east of Heywood Old Road, Middleton, Rochdale

Ref: Edgar Wood Academy /A3

Client: Wates Construction Ltd

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- Dec 2020 -

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Revision	**Description**	**Date**
/	Edgar Wood Academy (Edgar Wood Academy /A1)	8/12/2020

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1. INTRODUCTION

1.1 **Instruction:** This advice has been prepared for Wates Construction Ltd (hereafter; client) and is in respect of the tree related planning considerations at proposed Edgar Wood Academy, Land off Heywood Old Road, Middleton, Rochdale, (hereafter; site).

As the proposal relates to development works at site, the advice herein is produced in accordance with the British Standard 5837 : 2012 '*Trees in Relation to Design, Demolition and Construction - Recommendations'* (hereafter; BS5837).

1.2 **BS5837:** The scope of BS5837 is to provide guidance on how trees and other vegetation can be integrated into construction and development design schemes. The overall aim is to ensure the protection of trees which are appropriate for retention.

1.3 **Scope of this advice:** This advice has been produced in accordance with BS5837 and is intended to demonstrate the site's realistic arboricultural constraints and assist with the design process. The objective is to systematically assess and provide suitable recommendations regarding the proposal's potential impact on trees and vice versa.

1.4 Following instruction the consultant surveyed the site on the 18th November 2020 where a site walkover and BS5837 tree survey were carried out; all trees on site and around the application boundary were surveyed from ground level and plotted as either an individual or a tree group.

1.5 This advice is subject to caveat at Appendix I, outlines relevant terms and definitions at Appendix II and constitutes the findings of the preliminary site assessment and associated arboricultural recommendations.

1.6 The survey data and site observations use the supplied topographical survey to illustrate the surveyed trees in plan format as a 'Tree Constraints Plan' (hereafter; TCP); the TCP and the tree survey data table are at Appendix III.

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2. SITE INFORMATION & TREE ASSESSMENT

2.1 The existing site is made up of grazing land located to the south of Whittle Brook, to the south east of the residential properties fronting Heywood Old Road at Birch, and to the north of Bowlee Playing Fields. To the east lies the wider grazing land, which is bounded at a distance from the site by residential properties on Wrigley Fold.

The land is accessed off Heywood Old Road at Birch where a new access junction will be created.

2.2 **Proposal:** Outline planning permission was granted for the development of a secondary school at the site on 16th October 2020 (application reference 20/00912/OUT). This approved the principle of a school being built on the site. Current plan set EWA-ALA-00-XX-DR-L-0001-Landscape Illustrative Masterplan-P04

2.3 The site requires consideration from an arboricultural perspective due to the presence of trees on and around the site; these trees are deemed to be within impacting distance of the existing site and potential construction area.

2.4 <u>The trees</u> -

2.4.1 The tree survey and assessment resulted in the BS5837 quality/retention categories of 'B - moderate' and 'C - low' being attributed to trees/tree groups.

2.4.2 The BS5837 tree survey is a means of objective assessment and reflects the trees' condition, quality contribution, remaining life expectancy and spatial considerations (stem, crown and roots). On this basis and in order to consider the trees' accurate constraints, the survey data has the crown extents for north, south, east west, the stem diameter measurement, and the calculated root protection areas (hereafter; RPAs). Hereafter, the trees are therefore reviewed and considered on their own merits and in line with the guidance of BS5837.

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3. FINDINGS & RECOMMENDATIONS

3.1 The following information, as with the prior contents of this report, should be read with the appended tree data table and tree constraints plan (Edgar Wood Academy /TCP/01).

3.2 General Considerations for Tree Retention / Removal

3.2.1 Based on the boundary line location/neighbouring site location of T3, T4 and G1 their retention and protection is to be assumed as part of the scheme.

3.2.2 The tree survey and objective assessment resulted in BS5837 quality/retention categories 'B - moderate' and 'C - low' being attributed to trees and groups.

3.2.3 There are well established features on site, most notable the high quality 'moderate quality 'B' category trees.

3.2.4 The smaller scale, declining or limited contribution trees/groups are categorised as low quality 'C' category trees. These may be suitable for retention for the most part but should not present a significant constraint to the scheme as mitigation planting can replicate and enhance their contribution.

4. SCHEME / IMPLICATIONS ASSESSMENT

4.1 For this assessment, the proposed scheme has been considered (see; s.2.2 herein). This includes consideration for arboricultural management / tree works for H&S tree risk management, tree removal and pruning options, design solutions, tree protection and sensitive measures to account for trees. As per s.1.6 and s.2.2 herein, the TPP scheme overlay illustrates the proposed scheme.

4.2 It is understood that the following trees will need to be removed in order to facilitate the scheme; T1, G2, G3, G4 and G5. Partial pruning is required for G1, T4, G6, G7, G8 and G9

4.3 The remaining trees will be retained and protected throughout the development. The specific considerations and implications for these are as follows

4.3.1 *Consideration for G1, T4, G6, G7, G8 and G9*

4.3.2 Groups G1, G7, G8 and G9 will be pruned back to the boundary retaining the portion that is within adjacent land. T4 will be pruned crown lifted. These operations are to accommodate the intended boundary fence. G6 will be partially retained on site. Room to construct the boundary fence will be required and the location will need to be pruned to accommodate it as shown on the scheme overlay drawing (shaded green).

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4.3.2 *Consideration for T6, T7, T8, T9, G10 and G11-*

4.3.3 Proposed drainage strategy document (EWA-CUR-00-XX-RP-C-92001) will require access through existing trees. Currently the group G11 (Goat Willow group). is the only tree feature that will require removal Small trees, shrubs and undergrowth may also be affected but the path of the drainage run has been considered to minimise the impact on more mature trees. It is understood that the Local Authority Tree officer has been approached and that the current drainage solution principle has received acceptance.

4.3.4 *Consideration for T2, T5, G12 T10, T11, T12, T13 G13, G14, G15, G16 G17-*

4.3.5 Remaining trees groups and group remnants will be protected by avoidance and temporary protective fencing as shown on the TPP. It is understood that the boundary treatment may be carried out in the initial phases before main construction. If this is the case temporary fencing/hording will not be required.

5. METHOD STATEMENT 'CONSIDERATIONS'

5.1 Arboricultural Construction Restrictions

5.1.1 The following restrictions are considered relevant for tree protection purposes which are illustrated on the appended Tree Protection Plan:

a) ***Tree Works*** **-** are to be completed prior to any and all site works: no tree works not specified within this AIA (or leaning against or attaching of objects to a tree) are permitted unless agreed in writing by the council (subject to standard exemptions).

b) ***Tree Protection*** **-** a site compound will be set up within the application boundary, excluding the surveyed trees as per the TPP, or Protective Barrier Fencing (PBF) is to be installed as per the TPP with works clearance, i.e. 1.5-2.0m to prevent RPA, stem or crown impact; to be installed after tree works and prior to site works.

c) ***Construction Exclusion*** **-** the fenced off areas are Construction Exclusion Zones (CEZ).

d) ***Site Restrictions*** **-** no chemicals/materials are to be transported/stored/used/mixed within the CEZ, and no fires are to be lit and no machinery, plant or vehicles are to be washed down within 10m of the tree's canopy or in a CEZ.

e) ***Ground Works*** **-** during site works RPAs/CEZ may not be breached, i.e. no surface works, without the consultant's prior advice and council consent, and no mechanical digging or scraping is permitted within RPAs/CEZ;

e) ***Sensitive Landscape*** **-** the PBF may be temporarily moved to allow pedestrian access to start sensitive soft landscape works within RPA, i.e. turf removal, retained soil levels, new planting, mulch borders.

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a) ***Completion*** **-** only following construction and hard landscape completion can PBF be removed and remaining soft landscape works undertaken within RPAs / CEZ (ground levels to be retained and works undertaken manually with non driven machinery).

5.2 Arboricultural Site Monitoring / Supervision

5.2.1 The appointed site contractor and project manager will be provided with an approved AMS and TPP and will need to be briefed as to prohibited works and tree protection.

5.2.2 A record of each site visit will be kept and a summary letter drafted for the client, the site manager and the local authority (to be sent to the client for distribution), thus -

- (1) ***Pre-commencement*** to confirm approved tree works, site hoarding / tree protection fence line, ground protection and construction restrictions for ground works;
- (2) ***Construction Phase*** *T*o confirm maintained tree protection, no tree damage and exclusion of RPA access;
- (3) ***After-main construction*** to discuss tree protection requirements with the landscape team.
- (4) ***Development completion*** after all hard landscape works and tree and shrub planting is complete to sign off the site as having adhered to the AMS.

5.3 Tree Works

5.3.1 All approved tree works must be undertaken with the council's written permission (subject to statutory exemption) and undertaken to BS3998 (Tree Work) by a tree service contractor who is suitably qualified, experienced and insured for arboricultural contracting.

5.3.2 In accordance with the proposed scheme and the tree related planning condition on the planning permission the following tree works are recommended in conjunction with the scheme (additional tree works must only be undertaken with the full and written permission of the council):

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TREE WORK SUMMARY

NUMBER	TREE REMOVALS / PRUNING WORKS	
T1, G2, G3, G4 and G5,	Remove	Remove in conjunction with the scheme: Replacements to be provided within the landscape scheme.
G1, G6, G7, G8 and G9	Pruning	To be pruned to allow the construction of the proposed boundary treatment and fence. Extents of pruning works to be marked on site for tree work operatives
T4	Pruning	To be pruned (crown lift) to allow the construction of the boundary fence
Retained trees		Protection by placement of fixed BS5837 specification Heras panels around the crown / RPA extents to have no access during construction and manually operative sensitive surface works and retained soil levels within RPAs.

5.4 Protective Barrier Fencing (PBF) Specification

5.4.1 Barrier fencing is to be installed (and signed off by way of arboricultural supervision) following the completion of the tree works. It is illustrated on the Tree Protection Plan and is to remain in situ for the entire duration of preparation/construction processes unless otherwise agreed in writing by the council.

5.4.2 The barrier fencing is to consist of a series of Heras panels secured in place by driven scaffold posts or a scaffold frame to ensure that the fencing lines are well braced to resist impact, and site hoarding around the application boundary to prevent access to the RPA/CEZ areas around the approved works.

5.5 Underground utilities

5.5.1 Underground utilities are to be installed as per a dedicated plan and be clear of RPA by design. Otherwise, and if RPAs cannot be avoided, the following restrictions are recommended for underground utilities within RPAs:

- Any necessary excavations to be undertaken sensitively using either a no-dig method (e.g. Air-Spade) and/or under arboricultural supervision;
- Any exposed roots shall be packed with a clean damp sand (not builders sand) and wrapped in hessian sacking to protect them;

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- Small roots which are identified (those less than 25mm diameter) may be carefully pruned back with a clean sharp tree saw; and
- Larger roots which are identified (those greater than 25mm in diameter) are to be retained and protected as they may be necessary for a tree's health and stability.

5.6 Landscape Detail

5.6.1 The landscape is to follow the submitted plans EWA-ALA-00-XX-DR-L-0001-Landscape Illustrative Masterplan (attached)

5.7 Report Handling

5.7.1 This report is released to the client and architect to be distributed at their discretion and the consultant is available for queries relating to this report and/or trees.

5.7.2 The proposed scheme is reviewed in respect of the arboricultural constraints and is considered to be achievable in line with the BS5837 guidance. The tree protection methods herein may be approved by the council.

5.7.3 This AMS and the TPP are requirements of the outline planning permission as a means of tree protection measures; all site personnel will have access to a copy and the tree work and protection details are to be inspected as per s.5.2 for Arboricultural Monitoring / Supervision.

This concludes our advice.

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Appendix I

Caveat

Any and all information supplied to Indigo Surveys Ltd by/on behalf of the client is assumed to be accurate unless otherwise informed. | This advice is limited to the observations made on the date of inspection as detailed herein and any deletion, editing or alteration will result in the advice being null and void in its entirety. | This advice in its entirety may be deemed null and void if remedial works are undertaken on any area of the site, on or after the date of the survey. | No liability is assumed by the author or by Indigo Surveys Ltd for any misuse, misinterpretation or misrepresentation of this advice. | This advice is not valid in adverse or unpredictable weather conditions or for any failure due to 'force majeure' or unpredictable events. | No responsibility is assumed either by the author of this advice or by Indigo Surveys Ltd for any legal matters that may arise as a consequence. | Neither the author nor Indigo Surveys Ltd will be required to attend court or give testimony as part of this agreement. | The responsibility for any works undertaken on the basis of the recommendations of this advice does not form part of this agreement.

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Appendix II

Terms and Definitions

"Arboriculturist" - person who has, through relevant education, training and experience, gained expertise in the field of trees in relation to construction.

"Competent Person" - person who has training and experience relevant to the matter being addressed and an understanding of the requirements of the particular task being approached.

"Topographical survey" - an accurately measured land survey undertaken to show all relevant existing site features. *A method of carrying out topographical surveys is given in RICS specification* Surveys of land buildings and utility services at scales of 1:500 and larger.

"BS5837 Tree survey" - should be undertaken by an arboriculturist to record information about the trees on or adjacent to a site. The results of the tree survey, including material constraints arising from existing trees that merit retention, should be used (along with any other relevant baseline data) to inform feasibility studies and design options. For this reason, the tree survey should be completed and made available to designers prior to and/or independently of any specific proposals for development.

"Tree categorisation method" - trees should be categorised in accordance with the BS5837 cascade chart by an arboriculturist. This is to identify the quality and value (in a non-fiscal sense) of the existing tree stock, allowing informed decisions to be made concerning which trees should be removed or retained in the event of development occurring.

"Root protection area (RPA)" - layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority, shown as an arboricultural constraint in m^2. The radius is calculated using the BS5837 calculation method. An arboriculturist may change the shape of an RPA but not reduce its area.

"Arboricultural implications assessment" - a study, undertaken by an arboriculturist, to identify, evaluate and possibly mitigate the extent of direct and indirect impacts on existing trees that may arise as a result of the implementation of any site layout proposal.

"Arboricultural method statement" - methodology for the implementation of any aspect of development that is within the root protection area, or has the potential to result in loss of or damage to a tree to be retained.

"Tree protection plan" - a scale drawing, informed by descriptive text where necessary, based upon the finalised proposals, showing trees for retention and illustrating the tree and landscape protection measures.

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Appendix III

Data Table:	As appended (BS5837 Tree Survey Key & Table)
Tree Constraints Plan: (TCP / Scheme Overlay/)	As appended (Edgar Wood Academy/TCP/01)
Tree Protection Plan: (Application Stage)	As appended (Edgar Wood Academy/TPP/01)

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TREE SURVEY IN ACCORDANCE WITH BRITISH STANDARD 5837:2012 'TREES IN RELATION TO DESIGN, DEMOLITION & CONSTRUCTION - RECOMMENDATIONS'

CLIENT: Edgar Wood Academy ***PROJECT REF:*** Edgar Wood Academy ***SITE:*** Edgar Wood Academy, Land east of Heywood Old Road, Middleton, Rochdale

CONTACT: / ***SURVEY DATE:*** 18 November 2020 ***ARB CONSULTANT:*** Rod Benzies *BSc, ND Arb, MArborA*

TREE REF. #	SPECIES	AGE	HEIGHT (in m)	CANOPY (in m) N	S	E	W	STEM (in mm)	RPA (in m)	CLEARANCE (in m)	1st BRANCH (in m)	VITALITY	LIFE EXPEC.	NOTES	BS CAT.		MANAGEMENT
T1	Sycamore; Acer psuedoplatanus; Aceraceae	M	10	5	4.5	5	3.5	400	4.8	4	4	Norm	20-40	Council maintained tree. Set in road verge. Managed by crown lifting. Highway within RPA	B	1	
T2	Sycamore; Acer psuedoplatanus; Aceraceae	M	12	6	5	6	6	520	6.2	4	4	Norm	10_20	Council maintained tree. Set in road verge. Managed by crown lifting. Highway within RPA. Decay at base level . Excessive stem taper, indicates internal issues	C	1	Monitor tree condition
T3	Elm; Ulmus (species); Ulmaceae	M	10	5.5	5.5	5	5	290, 150, 170, 110	4.6	2.25	0	Norm	20-40	Coppice stool. Part of hedgerow	C	2	
T4	Common Ash; Fraxinus excelsior; Oleaceae	SM	6.5	4	4	4	6	150	1.8	2	2.25	Norm	20-40	Part of hedgerow. Bowed main stem	C	2	
T5	English Oak; Quercus robur; Fagaceae	Y	5.5	1.5	1.5	1.5	1.5	90	1.1	1	1	Norm	20-40	Young tree with good future potential . Retain or transplant if possible	B	1	
T6	Common Ash; Fraxinus excelsior; Oleaceae	SM/EM	12	6	1.5	5	5.5	230	2.8	2	3	Norm	20-40	Part of contiguous group	B	2	
T7	Birch; Betula (species); betulaceae	SM/EM	12	4	4.5	4	4.5	450*	5.4	2	3	Norm	20-40	Part of contiguous group. Bifurcates at 1.5m to 3m	B	2	
T8	Birch; Betula (species); betulaceae	SM/EM	12	2.5	1.5	1	2.5	190	2.3	2	1.5	Norm	20-40	Part of contiguous group. Woodland tree	B	2	
T9	Goat Willow; Salix capreae; Saliaceae	EM	11	4	3	3.5	2.5	330	4.0	1.5	1.5	Norm	20-40	Part of contiguous group. Woodland tree. Bifurcates at 1.5m to 3m	C	2	
T10	Goat Willow; Salix capreae; Saliaceae	EM	9.5	5	4.5	5	5.5	540*	6.5	0	1.5	Norm	20-40	Part of contiguous group. Set on steep brook embankment. Part of brook bank structure	B	2	
T11	English Oak; Quercus robur; Fagaceae	EM	9.5	5	4.5	5	5.5	800*	9.6	0	0.25	Low	20-40	Part of contiguous group. Set on steep brook embankment. Part of brook bank structure. Roots exposed due to erosion. Heavily burred in places	B	2	
T12	Common Ash; Fraxinus excelsior; Oleaceae	Y	12	1.5	1.5	1.5	1.5	120, 90	1.8	0	0	Norm	20-40	Set within neighbouring property	C	2	
T13	Pine; Pinus (species); Pinaceae	Y/SM	10	2.5	2.5	2.5	2.5	300*	3.6	0	0.25	Norm	20-40	Set within neighbouring property. Ivy on stem	B	2	
G1	Elm; Ulmus (species); Ulmaceae;Hawthorn; Crataegus monogyna; Rosaceae	M	5	/	/	/	/	100	1.2	0	0	Norm	20-40	Field boundary hedge. Not stock proof with gaps between stems	C	2	
G2	Hawthorn; Crataegus monogyna; Rosaceae;Elderberry; Sambucus nigra; Adoxaceae	M	5.5	/	/	/	/	300	3.6	0	0	Norm	20-40	Two interspersed trees. Multistemmed	C	2	

G3	Hawthorn; Crataegus monogyna; Rosaceae;Elderberry; Sambucus nigra; Adoxaceae	M	5.5	/	/	/	/	120	1.4	0	0	Norm	20-40	Lapsed field boundary hedge	C	2	
G4	Hawthorn; Crataegus monogyna; Rosaceae;Elderberry; Sambucus nigra; Adoxaceae	M	5.5	/	/	/	/	120	1.4	0	0	Norm	20-40	Lapsed field boundary hedge. Some dead stems. Some gaps in between	C	2	
G5	Hybrid Holly; Ilex alterclarensis; Aquifoliaceae;Elderberry; Sambucus nigra; Adoxaceae;Hawthorn; Crataegus monogyna; Rosaceae	M	5.5	/	/	/	/	120	1.4	0	0	Norm	20-40	Diffuse group . Some dead stems. Lapsed field boundary hedge. Large gaps in hedge. Marked with sandstone slabs	C	2	
G6	Cherry; Prunus (species); Rosaceae;Goat Willow; Salix capreae; Saliaceae	M	7	/	/	/	/	120	1.4	0	0	Norm	20-40	Lapsed field boundary hedge. Group incorporates a pond remnant	C	2	
G7	Cherry; Prunus (species); Rosaceae;Goat Willow; Salix capreae; Saliaceae;Hawthorn; Crataegus monogyna; Rosaceae;Elderberry; Sambucus nigra; Adoxaceae	SM/EM ;EM/M	5.5	/	/	/	/	120	1.4	0	0	Norm	20-40	Lapsed field boundary hedge. Large gaps in hedge. Not stock proof with gaps between stems	C	2	
G8	Hawthorn; Crataegus monogyna; Rosaceae;Elderberry; Sambucus nigra; Adoxaceae	SM/EM ;EM/M	5.5	/	/	/	/	120	1.4	0	0	Norm	20-40	Woodland edge group. Forms the edge of woodland off site to the east	C	2	
G9	Hawthorn; Crataegus monogyna; Rosaceae;Elderberry; Sambucus nigra; Adoxaceae	SM/EM ;EM/M	5.5	/	/	/	/	120	1.4	0	0	Norm	20-40		C	2	
G10	Hawthorn; Crataegus monogyna; Rosaceae;Elderberry; Sambucus nigra; Adoxaceae	SM/EM ;EM/M	5.5	/	/	/	/	120	1.4	0	0	Norm	20-40	Forms the edge of woodland off site to the east	C	2	
G11	Saliaceae;Goat Willow; Salix capreae; Saliaceae	SM/EM	10	/	/	/	/	500*	6.0	0	0	Norm	20-40	Multistemmed coppice stool. Deer grazed on lower stems	C	2	
G12	Hawthorn; Crataegus monogyna; Rosaceae	EM	5.5	/	/	/	/	120	1.4	0	0	Norm	20-40	Lapsed field boundary hedge	C	2	
G13	Hawthorn; Crataegus monogyna; Rosaceae;Sycamore; Acer psuedoplatanus; Aceraceae;Birch; Betula (species); betulaceae	EM	11	/	/	/	/	210	2.5	0	0	Low	20-40	Prevents brook bank erosion. Set on steep brook embankment	B	2	
G14	Hawthorn; Crataegus monogyna; Rosaceae	M	11	/	/	/	/	380	4.6	0	0	Norm	20-40	Multistemmed with many stems . Multistemmed coppice stool	C	2	

G15	Goat Willow; Salix capreae; Saliaceae	M	4.5	/	/	/	/	150	1.8	0	0	Norm	20-40	Young group self seeded adjacent to Brook	C	2	Offsite tree, to me managed by land owner / council highways dept.
G16	Crataegus monogyna; Rosaceae;Common Ash; Fraxinus excelsior; Oleaceae;Sycamore; Acer psuedoplatanus; Aceraceae	M	12	/	/	/	/	260	3.1	0	0	Norm	20-40	Set on steep brook embankment. Prevents brook bank erosion	B	2	Offsite tree, to me managed by land owner / council highways dept.
G17	Sycamore; Acer psuedoplatanus; Aceraceae	EM	5	/	/	/	/	300*	3.6	0	0	Norm	20-40	Set within neighbouring property. epicormic growth. Heavily loped/pollarded	C	2	Offsite tree, to me managed by land owner / council highways dept.

TREE SURVEY 'KEY' - BRITISH STANDARD 5837:2012 'TREES IN RELATION TO DESIGN, DEMOLITION & CONSTRUCTION - RECOMMENDATIONS'

TPO/CA	-	On client request: presence of Tree Preservation Orders (TPO) / site location within a Conservation Area (CA) & date checked;
TREE REF. #	-	Tree reference number: tag or plan number (T - individual tree, G - group of trees/shrubs, H - hedge);
SPECIES	-	Genus, species and/or common name;
AGE	-	Age classification (NP - new planting, Y - young, EM - Early-Mature, SM - semi mature, M - mature, LM - late mature, OM - over mature);
HEIGHT (in m)	-	Approximate height of tree in metres;
CANOPY (in m) N - S - E - W	-	Approximate branch spread in metres of the four principal compass points;
STEM (in mm)	-	Stem diameter in millimetres: measured in accordance with s.4.6 of BS5837;
RPA (in m)	-	Circle radius of the Root Protection Area: calculated using the stem diameter (single/multiple stem variant, as outlined within BS5837);
CLEARANCE (in m)	-	Crown clearance in metres above the adjacent ground level;
IST BRANCH (in m)	-	Clearance in metres to first significant branch and direction of growth (where relevant);
VITALITY	-	Physiological condition typically gauged from canopy cover and annual extension growth (good, fair, poor, dead);
ESTIMATED REMAINING CONTRIBUTION	-	Approximate number of years a tree will continue to contribute without the need for oppressive arboricultural intervention, categorised in years as <10, 10-20, 20-40 and >40;
NOTES	-	Structural and physiological condition observations;
BS CAT.	-	BS5837 tree quality assessment category: resulting from structural/physiological condition and remaining contribution (approximate useful life expectancy);
	-	Standard retention category **U**: in such a condition that any existing value would be lost within 10 years;
	-	Standard retention category **A**: high quality and value, in such a condition as to be able to make substantial contribution of 40+ years;
	-	Standard retention category **B**: moderate quality and value, in such a condition as to make a significant contribution of 20+ years;
	-	Standard retention category **C**: low quality and value, currently in adequate condition to remain until new planting could be established 10+ years;
	-	Standard retention sub-category, mainly due to: **1**- Arboricultural values, **2**- Landscape values, **3**- Cultural values, including conservation;
MANAGEMENT	-	Preliminary management recommendations (as appropriate);
' * '	-	Within the survey schedule denotes an estimate



KEY

- Tree Crown Spread
- Root Protection Area (RPA)
- Tree Stem
- T1 Tree No.
- Removed Tree

Tree Condition Category

- A
- B
- C
- U

The surveyed trees are illustrated on this Constraints Plan which is prepared in accordance with British Standard BS5837: 2012 'Trees in Relation to Design, Demolition and Construction – Recommendations'

Indicative

DO NOT SCALE FROM DRAWING

The original of this drawing was produced in colour – a monochrome copy should not be relied upon.

REV.	DESCRIPTION	DWN	CHK'D	DATE
A		RB	TB	17/2/20

CLIENT
Edgar Wood Academy

PROJECT
Edgar Wood Academy/A1
Edgar Wood Academy, Land to the east of Heywood Old Road, Middleton, Rochdale

TITLE
Tree Constraints Plan

DWN	DATE	CHK'D	DATE	APP'D	DATE	SCALE
RPHB	26/11/2020	AT	26/11/2020			1–400

Indigo Surveys Ltd
(Mail) Second Floor, 1 Hunter's Walk, Canal Street, Chester. CH1 4EB
Telephone: 0333 123 7080 www.indigosurveys.co.uk

Drawing Number
Edgar Wood Academy/A1/TCP/01

AO

REV.

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KEY

- Tree Crown Spread
- Root Protection Area (RPA)
- Tree Stem
- T1 Tree No.
- Removed Tree

Tree Condition Category

- A
- B
- C
- U

The surveyed trees are illustrated on this Constraints Plan which is prepared in accordance with British Standard BS5837: 2012 'Trees in Relation to Design, Demolition and Construction – Recommendations'

Indicative

DO NOT SCALE FROM DRAWING

The original of this drawing was produced in colour – a monochrome copy should not be relied upon.

REV.	DESCRIPTION	DWN	CHK'D	DATE
A	Based on EWA-ALA-00-XX-M2-L-0003-Landscape General Arrangement-P04	RB	TB	17/12/20
	Based on EWA-ALA-00-XX-M2-L-0003-Landscape General Arrangement-P02	RB	TB	2/12/20

CLIENT
Edgar Wood Academy

PROJECT
Edgar Wood Academy/A1
Edgar Wood Academy, Land to the east of Heywood Old Road, Middleton, Rochdale

TITLE
Tree Constraints Plan
Scheme Overlay

DWN	DATE	CHK'D	DATE	APP'D	DATE	SCALE
RPHB	02/12/2020	AT	02/12/2020			1–400

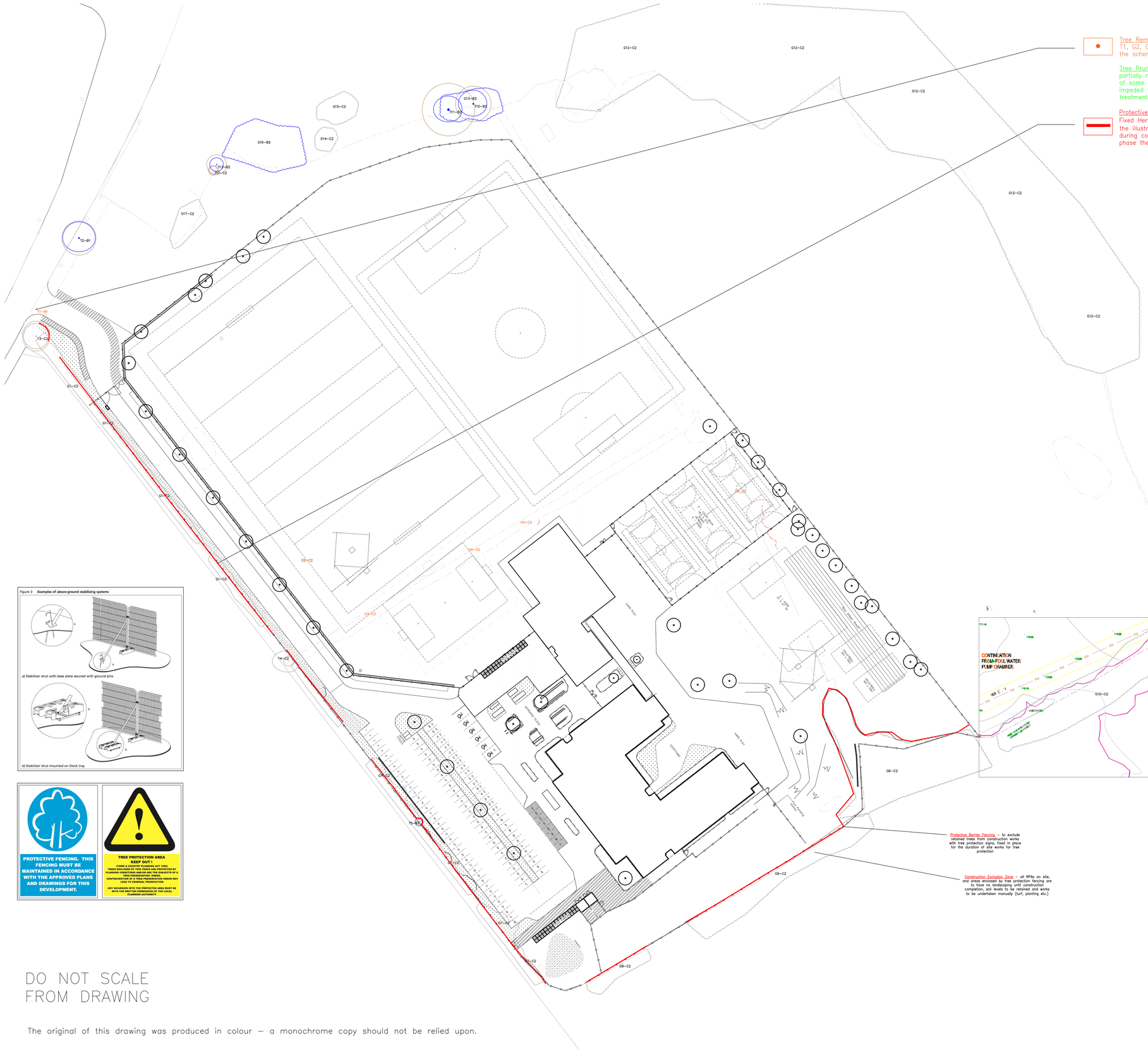
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Tree Removals
T1, G2, G3, G4 and G5 to be removed to facilitate the scheme.

Tree Pruning – G1, T4 G6, G7 G8 and G9 can be partially retained with some pruning work or removal of some constituent stems. These trees will impeded the construction of the schemes boundary treatment. Tree groups now represented post pruning

Protective Barrier Fencing (PBF):
Fixed Heras panels to be installed (Location as per the illustraton on this plan). To be kept in place during construction until final boundary treatment phase then removed.

Protective Barrier Fencing – to exclude retained trees from construction works with tree protection signs, fixed in place for the duration of site works for tree protection

Construction Exclusion Zone – all RPAs on site, and areas enclosed by tree protection fencing are to have no landscaping until construction completion, soil levels to be retained and works to be undertaken manually (turf, planting etc.)

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CLIENT
Edgar Wood Academy

PROJECT
Edgar Wood Academy/A1
Edgar Wood Academy, Land to the east of Heywood Old Road, Middleton, Rochdale

TITLE
Tree Protection Plan

DWN	DATE	CHK'D	DATE	APP'D	DATE	SCALE
RPHB	02/12/2020	AT	02/12/2020			1–400

Indigo Surveys Ltd
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Drawing Number
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Notes

1. Do not scale from this drawing
2. To be read in conjunction with Project Risk Register REF: XXX
3. To be read in conjunction with all other Landscape Architect"s drawings

KEY

- Reserved Matters Application Boundary
- Proposed Building
- Canopy / Building Overhang
- Existing Tree
- Existing Tree to be removed

Planting

- Proposed Tree — Refer to Planting Plan
- Grass Seed — Refer to Planting Plan
- Amenity Planting — Refer to Planting Plan
- Hedge Planting — Refer to Planting Plan
- Swale Meadow Planting — Refer to Planting Plan

Paving

- Pedestrian Tarmac — To Engineer's Specification
- Vehicular Tarmac — To Engineer's Specification
- Concrete Block Paving — Refer to Outline Specification 0052
- Blister Paving — Supplier: Tobermore or similar approved; Size: 400 x 400 x 50mm; Colour: Buff
- Permeable Tarmac Surface MUGA and footpath — Refer to Engineer's specification
- S1 Cycle Shelter and Stands — Brosse or similar approved; Apollo Cycle Shelter 5020 x 2753mm; 12 Cycle Capacity - 6 Stands per canopy
- S2 Door Protection Barrier — 1020x450mm; Specification TBC
- S3 Cycle Stands — Specification TBC

Fencing and Structures

- Proposed Fencing — Refer to Fencing General Arrangement for details
- Proposed Gates — Refer to Fencing General Arrangement for details
- Retaining Wall — Refer to Curlew information

RESIDUAL PROJECT RISKS

ID	RISK	MITIGATION	Date Mitigated

REVISIONS

DATE	REV	DESCRIPTION OF REVISION	DRAWN BY	APPROVED BY
16/12/2020	P04	Issued for Planning	DF	SB
07/12/2020	P03	Updated for Draft CPs - foul pumping station unit size altered	DF	SB
24/11/2020	P02	Contract Boundary updated and Issued for Draft CPs	SB	SB

STATUS

S2 - *FOR PLANNING*

ares LANDSCAPE ARCHITECTS

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CLIENT :

Wates Construction

PROJECT TITLE :

Edgar Wood Academy

DRAWING TITLE :

Landscape Illustrative Masterplan

DRAWING SCALE :	DRAWN BY :	DRAWN DATE :
1:500	SH	20/11/2020
PAPER SIZE :	APPROVED BY :	ALA PROJECT CODE :
A1	SB	ALA633

DRAWING NUMBER :	STATUS :	REVISION :
EWA-ALA-00-XX-DR-L-0001	**S2**	**P04**