ARBORICULTURAL IMPACT ASSESSMENT

(INC. TREE SURVEY TO BS 5837:2012)

CLIENT -	C/O Dalcour Maclaren
PROJECT -	Milverton School
DOC. REF -	P3391–AIA01 V1
PLANNING REF -	n/a
CREATION DATE -	22/09/2023

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TABLE OF CONTENTS

PURPOSE OF DOCUMENT

This document assesses the anticipated impact that the proposed scheme will have on the surrounding tree population, and outlines possible technical design considerations and mitigation measures that should be implemented in order to minimise the overall arboricultural impact.

ARBORICULTURAL DOCUMENT REGISTER

Planning Documents		Version Issued	
Document	Ref.	Current Version	Document Date
Tree Survey	P3391-TS01	V0	19/09/2023
Arb. Impact Assessment	P3391-AIA01	V1	22/09/2023
Arb. Site Plan (Existing)	P3391-ASP01	V1	22/09/2023
Arb. Site Plan (Proposed)	P3391-ASP02	V1	22/09/2023

1. SUMMARY

1.1 PROPOSED DEVELOPMENT

1.1.1 Widening of existing vehicular access (permanent) and the creation of a new eastern access (temporary for construction) off Lillington Road. Installation of temporary hard standing areas (for construction) and the installation of a flow control chamber.

1.2 TREE SURVEY

1.2.1 The following woody vegetation was considered to be of note in relation to any development of the site: 7 individual trees, 2 groups of trees, and 1 woodland group.

1.3 PROTECTION MEASURES

1.3.1 The implementation of tree protection measures will be required to ensure that the site's retained trees remain undamaged. Information as to the requirements of such can be found in *Section 3.7.*

1.4 TECHNICAL DESIGN CONSIDERATIONS

1.4.1 The design team must consider and implement the design advice provided in *Section 3.8* of this document.

1.5 PROVISION OF NEW TREE PLANTINGS

1.5.1 New tree plantings are not considered to be necessary as part of the proposed scheme.

1.6 CONCLUSION

1.6.1 The table below summarises the trees which will be lost, pruned, or protected by special measures during the development project.

	Tree Category			
	A	B	C	U
Trees/groups to be removed (* groups to have sections removed)	-	-	*G1	-
Hedges/shrubs to be removed (* hedges to have sections removed)	-	-	-	-
Trees/groups/hedges to be pruned	-	T4, T5, T6, G2	-	-

Trees to be subjected to RPA incursions (excl. no-dig techniques)	-	-	-	-
Trees to be protected through arboricultural measures / supervision (other than barriers and ground protection)	-	-	-	
Trees requiring specialist design considerations (for purposes of minimising arboricultural impact)	-	-	-	

1.6.2 Considering the anticipated arboricultural impact from the construction activities associated with the development of the site, and the implementation of the proposed mitigation measures outlined in this document, the proposed development's arboricultural impact is considered to be **negligible**.

2 GENERAL INFORMATION

2.1 BRIEF

2.1.1 Ligna Consultancy Ltd were instructed by the client, C/O Dalcour Maclaren, to undertake a tree survey in accordance with BS 5837:2012 and to prepare an arboricultural impact assessment for the proposed scheme at Milverton School.

2.2 PROPOSED DEVELOPMENT

2.2.1 Widening of existing vehicular access (permanent) and the creation of a new eastern access (temporary for construction) off Lillington Road. Installation of temporary hard standing areas (for construction) and the installation of a flow control chamber.

2.3 SITE

2.3.1 The site discussed within this report is located at:

Milverton School
Milverton School Playing Field
Lillington Avenue
Milverton
CV32 5TS

2.4 PROJECT CONTACT

Role	Name	Telephone	Email
Arboricultural Consultant	Jennifer Sinclair	01284 598008	jennifer@lignaconsultancy.co.uk

2.5 SCOPE OF REPORT

2.5.1 This report consists of the following:

- Appraisal of arboricultural impact
- Outline of tree protection & mitigation measures

2.5.2 Appendices included with this report are:

- Tree Survey
- Site Photos
- Arboricultural Site Plan (Existing) (P3391-ASP01 V1)
- Arboricultural Site Plan (Proposed) (P3391-ASP02 V1)

2.6 DOCUMENTS PROVIDED

2.6.1 The following documents were submitted to Ligna Consultancy Ltd for consideration:

- Topographical Survey

- Proposed Site Plan (A7S14574-WSP-SA-ZZ-DR-C-0004_P03_S2 – Milverton School Access and Works Area Plan)

2.7 AUTHOR

2.7.1 Jennifer Sinclair is a technician member of the Arboricultural Association. She has worked in arboriculture for over twelve years, including supervisory roles undertaking both domestic and commercial arboricultural work. She possesses a level 3 extended diploma in arboriculture, LANTRA Professional Tree Inspection training and is currently furthering her academic knowledge by undertaking a level 6 professional diploma in arboriculture. A full CV and list of experience and CPD is available on request.

2.8 LIMITATIONS

2.8.1 Detailed inspections and recommendations relating to tree condition and health are not included within this report.

2.8.2 Any engineering solutions presented within this document are recommendations for their suitability from an arboricultural viewpoint. The architect and structural engineers should make the final decision on the suitability of the methods advised.

2.8.3 Information provided by third parties, considered in the creation of this report, is assumed to be correct.

2.9 PROTECTED TREES

2.9.1 Details of trees (if any) that are protected by Tree Preservation Orders (TPOs) or are situated within Conservation Area are available upon request.

2.9.2 It is the standard approach of Ligna Consultancy not to obtain this information from the LPA prior to an application, as the LPA will provide details of nearby protected trees as part of the consultation.

2.9.3 It should also be noted that granted planning permission that includes tree work specifications overrides Tree Preservation Orders and Conservation Area protections (approved works only).

2.10 NESTING BIRDS / BATS

2.10.1 Officially, the 'Bird Nesting Season' is between February and August (Natural England). During this time, it is recommended that vegetation works (tree or hedge cutting) or site clearance is avoided if there is a reasonable potential for the disruption of nesting birds.

2.10.2 All parties involved in the management and/or development of a site must actively avoid causing disturbance and disruption to nesting birds. Failure to do this may result in an infringement of the *Wildlife and Countryside Act 1981* and the *European Habitats Directive 1992 / Nesting Birds Directive*.

2.10.3 When tree or vegetation clearance work has to be undertaken during the nesting season, a pre works survey needs to be carried out by a suitably competent person.

2.10.4 Generally, it should be assumed that birds will be nesting in trees, and it is

down to the site/project manager that any activities that have the potential to disturb nesting birds are assessed for their suitability and potential impact, and records are kept that show that any works carried out in the management of trees and other vegetation have not disturbed nesting birds.

2.11 SUMMARY OF TERMS

Term	Definition
Species	The type of tree.
Stem	The main woody upright portion of a tree that is supported by the roots and supports the crown.
Branch Spread	The length of a tree's branches from stem to tip measured from the north, east, south and western sides of the crown.
BS 5837	The commonly used name for the official guidance document relating to trees and development *(BS 5837:2012 - Trees in relation to design, demolition and construction – Recommendations)*
Canopy / Crown	The branches, leaves, and reproductive structures extending from the trunk or main stems of a tree/trees.
DBH	Diameter of a tree's stem, measured as per BS 5837:2012
RPA	The root protection area (RPA) is a 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.
Facilitation Tree Works	Tree pruning/felling required in order to facilitate the implementation of the proposed development.
Tolerance	The relative tolerance the species can show to construction related activities such as root-loss, soil compaction and other development pressures.
Category (Cat.)	Categorisation of the tree's value based on the methodology shown in Appendix 1, A1.4. This rating takes into account the size, quality, condition, estimated remaining life expectancy and legal status of each tree.

2.12 COPYRIGHT

2.12.1 This report was prepared for use by the Clients and their contractors for planning purposes. The report and its appendices may not be copied, modified, or distributed beyond the necessary parties without the written consent of Ligna Consultancy Ltd.

3 ARBORICULTURAL IMPACT ASSESSMENT

ASSESSMENT & APPRAISAL OF IMPACTS

The following section lists and discusses any aspects of the proposed design and its implementation that has the potential to harm nearby trees, and outlines possible mitigation measures:

3.1 TREES TO BE REMOVED TO FACILITATE THE PROPOSED SCHEME

Affected Trees	n/a
Impact Appraisal & Mitigation	No trees are to be removed as part of the proposed scheme.
Significance (with mitigation)	n/a

3.2 PARTIAL REMOVAL OF GROUPS TO FACILITATE THE PROPOSED SCHEME

Affected Trees	Cat. C: - G1 (Mixed group)
Impact Appraisal & Mitigation	As part of the proposed scheme G1 requires 2 sections removing to facilitate the construction of the site entrances. (See ASP02 for exact locations). *Owing to the groups low arboricultural and amenity value, any associated impact resulting from its loss is considered to be negligible, therefore, its removal will not require offsetting through new tree plantings.*
Significance (with mitigation)	Negligible

3.3 TREES TO BE PRUNED AS PART OF THE PROPOSED SCHEME

Affected Trees	Cat. B: - T4, T5, T6 (*Acer platanoides*), G2 (*Tilia platyphyllos*)
Pruning works	As part of the proposed scheme, the aforementioned trees (3 individual trees from within G2) will require their tertiary branches and tips lifting to ensure 4.5m clearance with the ground. This will ensure adequate space below the canopies for vehicles and machinery to access the site and hard standing areas.
Significance (with mitigation)	Negligible

3.4 INSTALLATION OF VEHICLE HARD STANDING

Affected Trees	Cat. B: - T4, T5, T6 (*Acer platanoides*),
Impact Appraisal & Mitigation	An area of 'hard standing' is proposed so that there is suitable space for vehicles to park within the site, and to store materials. This has the potential to cause significant rooting area disturbance for T4, T5 and T6 if traditional methods are used. Therefore, to avoid causing compression damage to the trees and their roots, the area of hard standing will utilise track mats that have an applicable weight limit for the types of vehicles that will use it, these combined with a layer of woodchip below will ensure a stable base and avoid any excavations, or compression into the rooting areas that could cause damage.
Significance *(with mitigation)*	Negligible

3.5 IMPLEMENTATION OF PROPOSED SCHEME

Affected Trees	All retained trees
Impact Appraisal & Mitigation	During the construction process, all retained trees are susceptible to damage from general construction related activities. *In order to reduce the risk of construction damage to the site's retained trees, tree protection barriers, stem protection, and temporary ground protection must be installed before the commencement of any site works.*
Significance *(with mitigation)*	Negligible

TREE RELATED SHADING AND NUISANCES

3.6 LONG-TERM IMPACT OF RETAINED TREES ON PROPOSED SCHEME

3.6.1 Shading

3.6.1.1 The issue of shading is not applicable to this development.

3.6.2 Canopy Growth

3.6.2.1 The layout of the scheme has been designed with consideration of the location and growth potential of nearby trees. Owing to such, no noteworthy contention between tree canopies and property are anticipated.

3.6.3 Nuisances

3.6.3.1 Owing to the tree species present within and around the site, and the layout of the proposed scheme, additional unreasonable tree-related nuisances, such as leaf and fruit-fall, are not thought to exist beyond what might generally be considered as acceptable limits.

MITIGATION PROPOSAL

The following proposals, if approved, should be detailed within an arboricultural method statement and tree protection plan prior to the commencement of any development associated works:

3.7 PROTECTIVE MEASURES

3.7.1 Tree Protection Barriers

3.7.1.1 Barriers shall be erected, and a construction exclusion zone established, to protect all retained trees during the construction of the proposed scheme.

3.7.2 Stem Protection

3.7.2.1 T4, T5, T6, and 2 trees with G2's stems require protection. This should consist of plastic drainage pipe (>100mm in diameter) loosely coiled around the stem and tied in position.

3.7.2.2 A freestanding wooden clad framework should then be constructed around the stem. This must not be attached to the main stem directly.

3.7.3 Height Restriction Barrier

3.7.3.1 A height restriction barrier set to 4.5m should be installed at the site entrances.

3.7.4 Hard Standing Area

3.7.4.1 The hard standing area should consist of suitable track mats with a layer of woodchip below.

3.8 TECHNICAL DESIGN CONSIDERATIONS

3.8.1 Routing and Installation of Utility Apparatus

3.8.1.1 Wherever possible, utility apparatus should be routed outside of any RPAs. Failing this, services should be routed together in common ducts, with any inspection chambers being located outside of the RPA.

3.8.1.2 Where it is necessary for underground services to intersect an RPA, specialist excavation methods should be used.

3.8.1.3 In such situations, the design team should consult with Ligna Consultancy in order to establish a suitable services route, and specify the specialist excavation method most suitable.

3.9 PROVISION OF NEW TREE PLANTINGS

3.9.1 New tree plantings are not considered to be necessary as part of the proposed scheme.

CONCLUSION

3.10 SUMMARY OF THE DEVELOPMENT'S OVERALL IMPACT

3.10.1 The table below summarises the trees which will be lost, pruned, or protected by special measures during the development project.

	Tree Category			
	A	B	C	U
Trees/groups to be removed (* groups to have sections removed)	-	-	*G1	-
Hedges/shrubs to be removed (* hedges to have sections removed)	-	-	-	-
Trees/groups/hedges to be pruned	-	T4, T5, T6, G2	-	-
Trees to be subjected to RPA incursions (excl. no-dig techniques)	-	-	-	-
Trees to be protected through arboricultural measures / supervision (other than barriers and ground protection)	-	-	-	
Trees requiring specialist design considerations (for purposes of minimising arboricultural impact)	-	-	-	

3.10.2 Considering the anticipated arboricultural impact from the construction activities associated with the development of the site, and the implementation of the proposed mitigation measures outlined in this document, the proposed development's arboricultural impact is considered to be **negligible.**

4 APPENDICES

4.1 APPENDICES

4.1.1 The following appendices are included within this document:

Appendix	Document
1	Tree Survey
2	Site Photos
3	Arboricultural Site Plan (Existing) (P3391-ASP01)
4	Arboricultural Site Plan (Proposed) (P3391-ASP02)

APPENDIX 1
TREE SURVEY

APPENDIX 1 – TREE SURVEY

A1.1 SITE VISIT

i) A site visit was undertaken by Jennifer Sinclair of Ligna Consultancy, on the 06/09/2022.

A1.2 METHOD OF DATA COLLECTION

i) Data was collected using the recommendations laid out in British Standard 5837:2012 as a guide. All observations were from ground level without detailed or invasive investigations.

ii) Measurements have been calculated using a laser measurer and diameter tape/calipers. Where this was not possible or reasonably practical, measurements have estimated by eye.

iii) The trees were surveyed and assessed impartially and irrespective of the proposed development. Management recommendations should be implemented regardless of any proposed development for reasons of sound arboricultural management or safety.

iv) The method used for categorising the trees can be seen in section A1.3. This is an improved variation of the method suggested in BS 5837:2012.

v) BS 5837:2012 recommends that better quality (category A and B trees) are retained where possible. Planning permission overrides a Tree Preservation Order and Conservation Area. Furthermore, trees are a material consideration in the UK planning system irrespective of their legal status. Trees in land adjacent to the site are considered where they may be impacted by development; for example, when roots or branches encroach onto the site.

vi) Trees may be recorded as group or woodland where:

- The canopies touch.
- The trees have more group value than individual merit.
- They are part of a formal landscape feature like an avenue.
- It is impractical to record them individually.

vii) Trees within groups or woodlands etc. are recorded individually where it is necessary to distinguish them from others.

A1.3 SURVEY KEY & GLOSSARY OF TERMS

Term	Definition
Ref.	Tree reference number
Tag	Physical tag attached to some trees with unique identification number (not the same as Ref.)
Species	The trees' scientific and common name
Height	The measured/estimated height of the tree (measured in metres)
Branch Spread	The length of a tree's branches from stem to tip measured from the north, east, south and western sides of the crown.
Crown Clearance	Crown clearance is the measurement of height between the trees branches in the outer third of its crown and the floor. Crown clearance has only been recorded where it is considered to be of relevance to the proposed scheme. The height of the first significant branch is also generally recorded and is discussed where relevant.
DBH	Diameter of a trees' stem, measured as per BS 5837:2012
RPA	The root protection area (RPA) is a 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.
Life Stage	A quantification of a trees' state of physical maturity: • Young • Semi-mature • Early-Mature • Mature • Late-mature • Veteran • Dead
Structural	Summary statement relating to the structural condition of a tree: • Good (no apparent problems / normal optimal condition for a tree of its species.) • Fair (minor problems, no instabilities) • Poor (major problems, potential instabilities) • Unstable (extreme problems, likely to result in failure)
Vitality	Summary statement relating to the overall observed vitality of a tree: • Good (no apparent problems / normal optimal vitality for a tree of its species) • Fair (minor / temporary reduction in tree vitality) • Poor (major reduction in tree vitality, often with some branch dieback) • Dead / Dying (extreme / total reduction in tree vitality)
General Management Recommendations	Remedial tree works recommended regardless of whether the site is developed or not.
Facilitation Tree Works	Tree pruning/felling required in order to facilitate the implementation of the proposed development.
Development Related Tree Works	Tree works that are required as part of the proposed scheme.
Tolerance	The relative tolerance the species can show to construction related activities such as root-loss, soil compaction and other development pressures.
Cat.	Categorisation of the tree's value based on the methodology shown in A1.4. This rating takes into account the size, quality, condition, estimated remaining life expectancy and legal status of each tree.

A1.4 TREE CATEGORISATION METHODOLOGY

Category and definition	Criteria / Subcategories			Label on plan
	1 – Mainly arboricultural qualities	2 – Mainly landscape qualities	3 – Mainly cultural values/conservation	
Trees worthy of being a material constraint:				
Category A Trees of high quality, capable of providing a significant contribution to local amenity (usually large in size) and that generally possess an estimated remaining life expectancy of 40+ years.	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	Cat. A
Category B Trees of moderate quality and with an estimated remaining life expectancy of 20+ years, that are capable of providing a notable contribution to local amenity but are lacking the condition of category A trees (usually medium to large in size).	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); or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	Cat. B
Trees worthy of material consideration:				
Category C Trees of a low quality, small size, or incapability to be protected within the legal framework. These trees generally possess an estimated remaining life expectancy of 10+ years.	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	Cat. C
Trees unsuitable for retention owing to condition:				
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			Cat. U

A1.5 SUMMARY OF DATA

i) The following woody vegetation was considered to be of note in relation to any development of the site: 7 individual trees, 2 groups of trees, and 1 woodland group.

ii) The following tables show the category distribution and life stage of the trees distributed within the site:

	Tree Category			
	A	B	C	U
Individual Trees	-	5	2	-
Groups	-	1	1	-
Woodland Groups	1	-	-	-
Hedges	-	-	-	-
Shrubs	-	-	-	-

Table 1 - Table showing category distribution within site.

	Life Stage						
	Young	Semi-Mature	Early-Mature	Mature	Late-Mature	Veteran	Dead
Individual Trees	1	-	1	5	-	-	-
Groups	1	-	-	1	-	-	-
Woodland Groups	-	-	-	1	-	-	-
Hedges	-	-	-	-	-	-	-
Shrubs	-	-	-	-	-	-	-

Table 2 - Table showing life stage distribution within the site.

Ref.	Tag	Species	Height (m)	Crown (N/E/S/W)	Crown Clearance (m)	DBH (mm)	Life Stage	Structural	Vitality	Additional Notes	General Management Recommendations	Priority	Development Related Tree Works	Tolerance	RPA Radius (m)	RPA Area (m^2)	Cat.
T1		Fraxinus excelsior (Ash)	7.5	2 / 2 / 2 / 2	1.8	100	Young	Good	Good	Growing adjacent to existing building. Not suitable for long term retention due to location.	Remove	Optional		Moderate	1.2	4.5	C1
T2		Fraxinus excelsior (Ash)	15.5	7 / 7 / 7 / 7	2	659	Mature	Good	Good	Co-dominant stems with potential for an included bark union at 1.5m, 1.8 and 2m. Low risk posed of future failure due to even weighting of tree and the unlikelihood of the tree being subjected to excessive wind loading on any stem. Minor amount of negligible size deadwood throughout crown - low risk posed due to minimal footfall within target zone.				Moderate	7.9	196.6	B1
T3		Acer platanoides (Norway Maple)	12.5	6.5 / 6.5 / 6.5 / 6.5	4	440	Mature	Good	Good	Tree historically pollarded with mature regrowth. Minor amount of minor size deadwood and tip die back throughout crown, most likely caused by drought related stress owing to trees location within heavily compressed ground. Tarmac driveway adjacent to stem overlaying the RPA.				Moderate - Good	5.3	87.6	B1
T4		Acer platanoides (Norway Maple)	15	6.5 / 6.5 / 6.5 / 6.5	4	610	Mature	Good	Good	Tree historically pollarded with mature regrowth. Minor amount of minor size deadwood and tip die back throughout crown, most likely caused by drought related stress owing to trees location within heavily compressed ground. Tarmac driveway adjacent to stem overlaying the RPA.			Crown lift tertairy branches and tips to provide 4.5m clearance with the ground.	Moderate - Good	7.3	168.3	B1
T5		Acer platanoides (Norway Maple)	16	7 / 7 / 7 / 7	3	650	Mature	Good	Good	Tree historically pollarded with mature regrowth. Minor amount of minor size deadwood and tip die back throughout crown, most likely caused by drought related stress owing to trees location within heavily compressed ground. Tarmac driveway adjacent to stem overlaying the RPA.			Crown lift tertairy branches and tips to provide 4.5m clearance with the ground.	Moderate - Good	7.8	191.1	B1
T6		Acer platanoides (Norway Maple)	16	7 / 7 / 7 / 7	2	600	Mature	Good	Good	Tree historically pollarded with mature regrowth. Minor amount of minor size deadwood and tip die back throughout crown, most likely caused by drought related stress owing to trees location within heavily compressed ground. Tarmac driveway adjacent to stem overlaying the RPA. Branch tips in contact with adjacent building - not considered to be of current concern, however it would be good general practice to reduce branches to provide clearance.	Reduce branches to provide 1-2m clearance with the adjacent building.	optional	Crown lift tertairy branches and tips to provide 4.5m clearance with the ground.	Moderate - Good	7.2	162.9	B1
T7		Picea abies (Norway spruce)	11	3 / 3 / 3 / 3	1.8	160	Early-Mature	Good	Good	Estimated dimensions used as tree located on adjacent site with overhanging branches.				Poor - Moderate	1.9	11.6	C1

Ref.	Tag	Species	Height (m)	Crown (N/E/S/W)	Crown Clearance (m)	DBH (mm)	Life Stage	Structural	Vitality	Additional Notes	General Management Recommendations	Priority	Development Related Tree Works	Tolerance	RPA Radius (m)	RPA Area (m^2)	Cat.
G1		Mixed group	5	2 / 2 / 2 / 2		60	Young	Good	Good	Sparse group of saplings along fence line.			Remove easternmost and south westernmost section. (See ASP02 for exact locations)	-	0.7	1.6	C3
G2		Tilia platyphyllos (Large leaved lime)	16	7 / 7 / 7 / 7		500	Mature	Good	Good	Group of council owned street trees located on adjacent pavement within small planting beds. Branches that overhang site by 1-2.5m. Majority of trees have dense epicormic growth on base, stem and inner crown obscuring survey.			Crown lift tertairy branches and tips to provide 4.5m clearance with the ground. (See ASP02 for indivual trees requiring works)	Moderate - Good	6.0	113.1	B1
WG1		Mixed group	14.5	/ / /		#VALUE!	Mature	Good	Good	Dripline RPA Used. Species include sycamore, ash, hazel, lime, oak, and the occasional pine. Minor amount of minor to moderate size deadwood throughout crown - low risk posed due to minimal footfall within target zones. Dense climber and brambles, elder and buddleia as undergrowth obscuring the base of most trees. Group offers significant arboricultural and amenity contribution to the site and surrounding area. Unable to fully access group due to dense undergrowth and topography of site, therefore, unable to fully assess group, but no obvious immediate defects observed.				-	#VALUE!	#VALUE!	A3

APPENDIX 2
SITE PHOTOGRAPHS

Note - Below is a selection of site photographs intended for general site context. Should you require supplementary site/tree photographs please contact info@lignaconsultancy.co.uk:

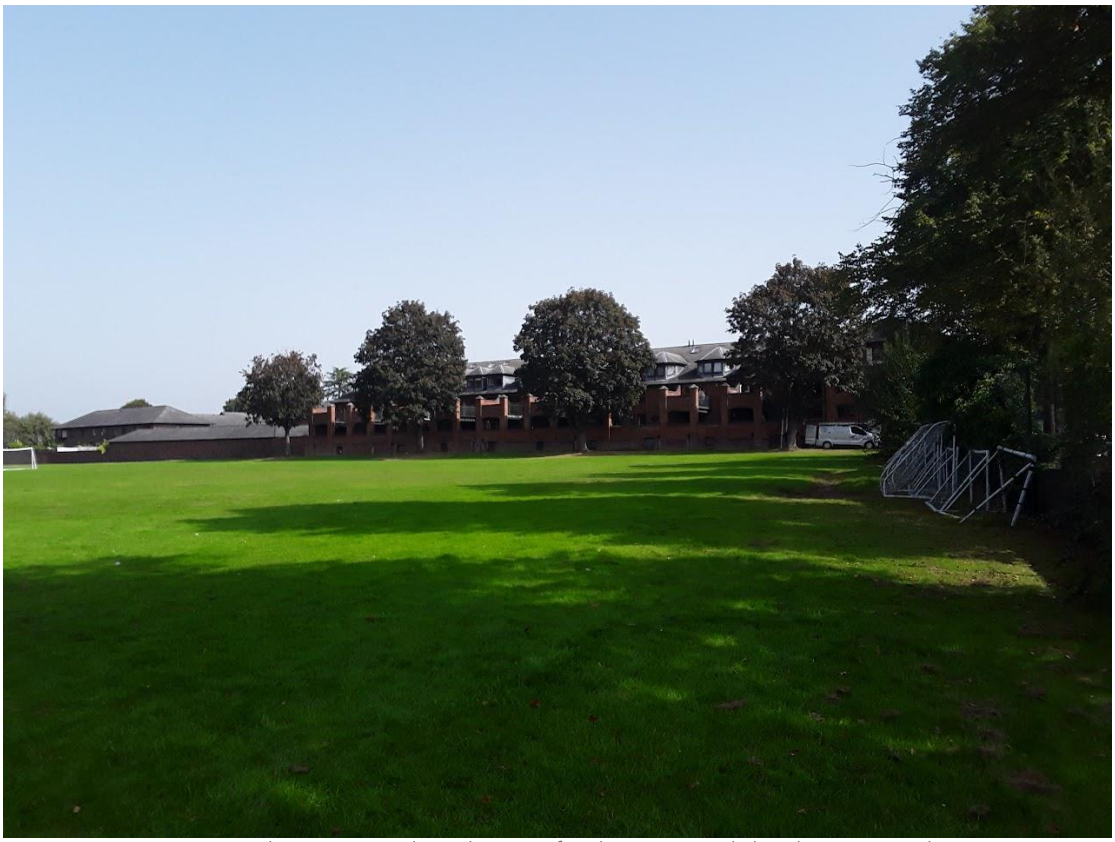

Figure 1 – Looking eastwards at the area for the proposed development and T3-T7.

APPENDIX 2 – SITE PHOTOGRAPHS

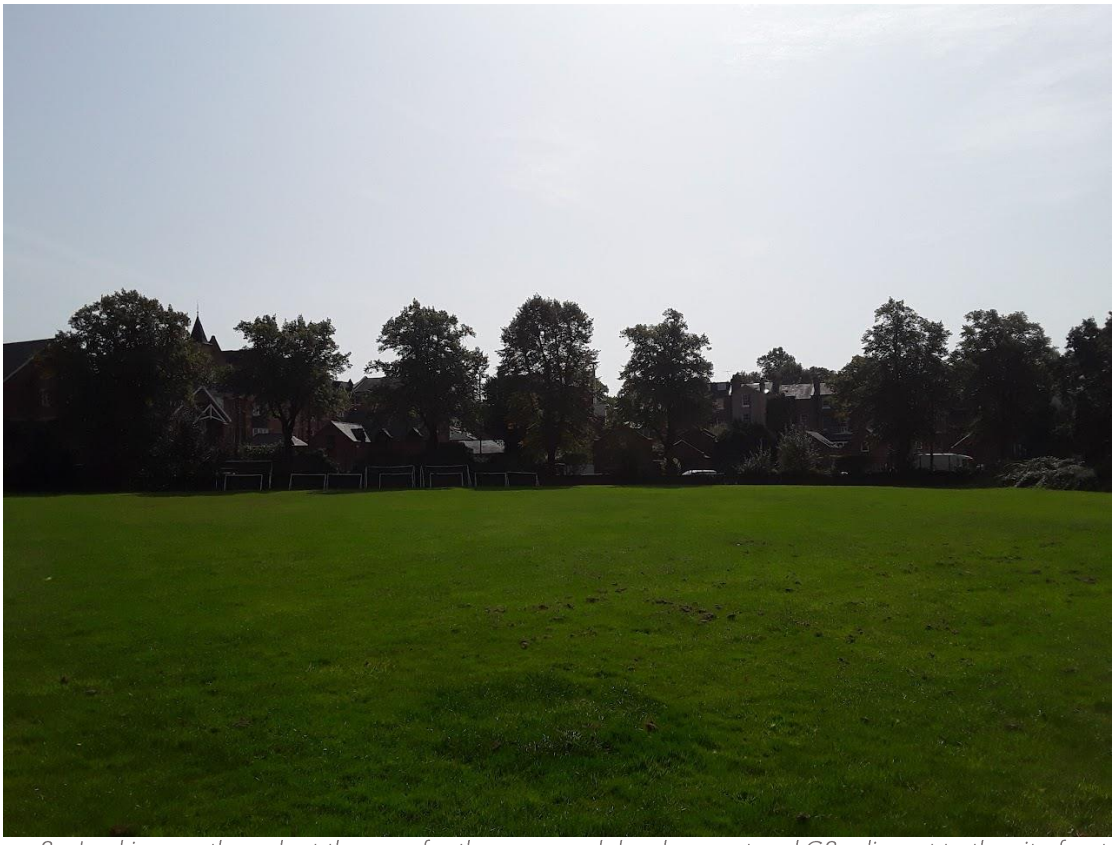

Figure 2 – Looking southwards at the area for the proposed development and G2 adjacent to the site frontage.

APPENDIX 2 – SITE PHOTOGRAPHS

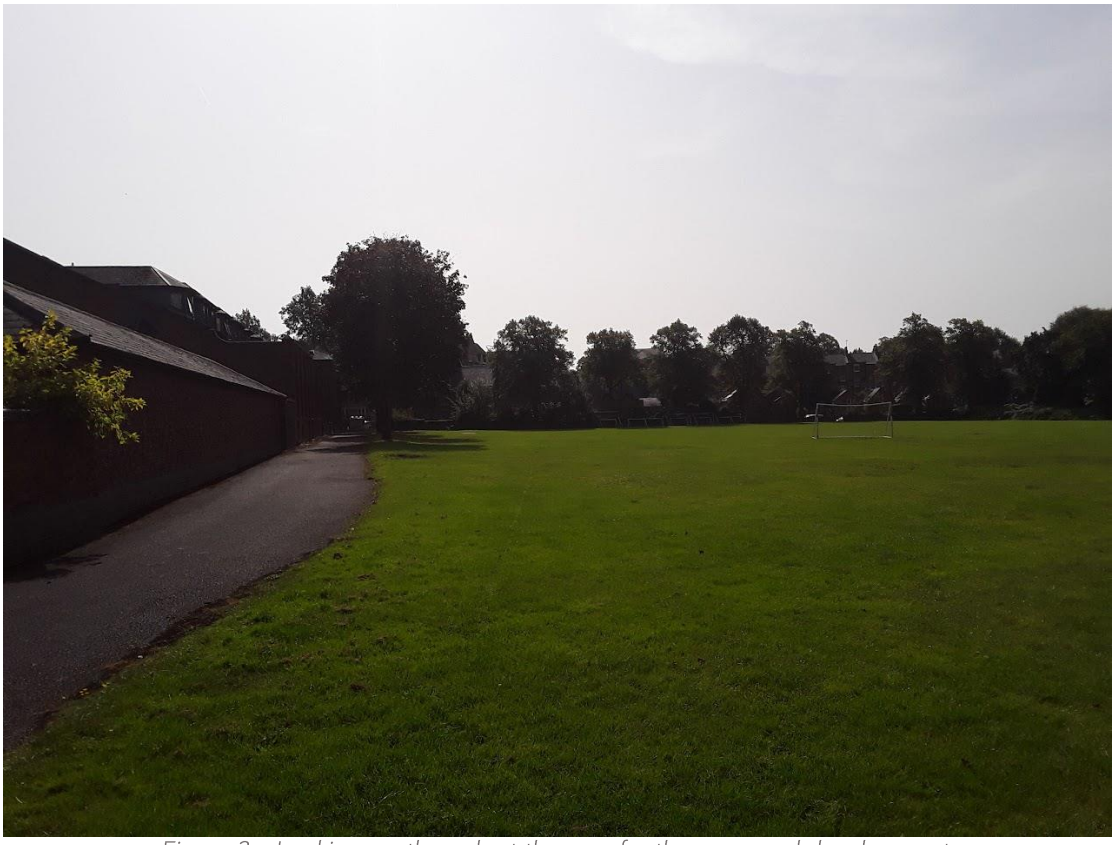

Figure 3 – Looking southwards at the area for the proposed development.

APPENDIX 2 – SITE PHOTOGRAPHS

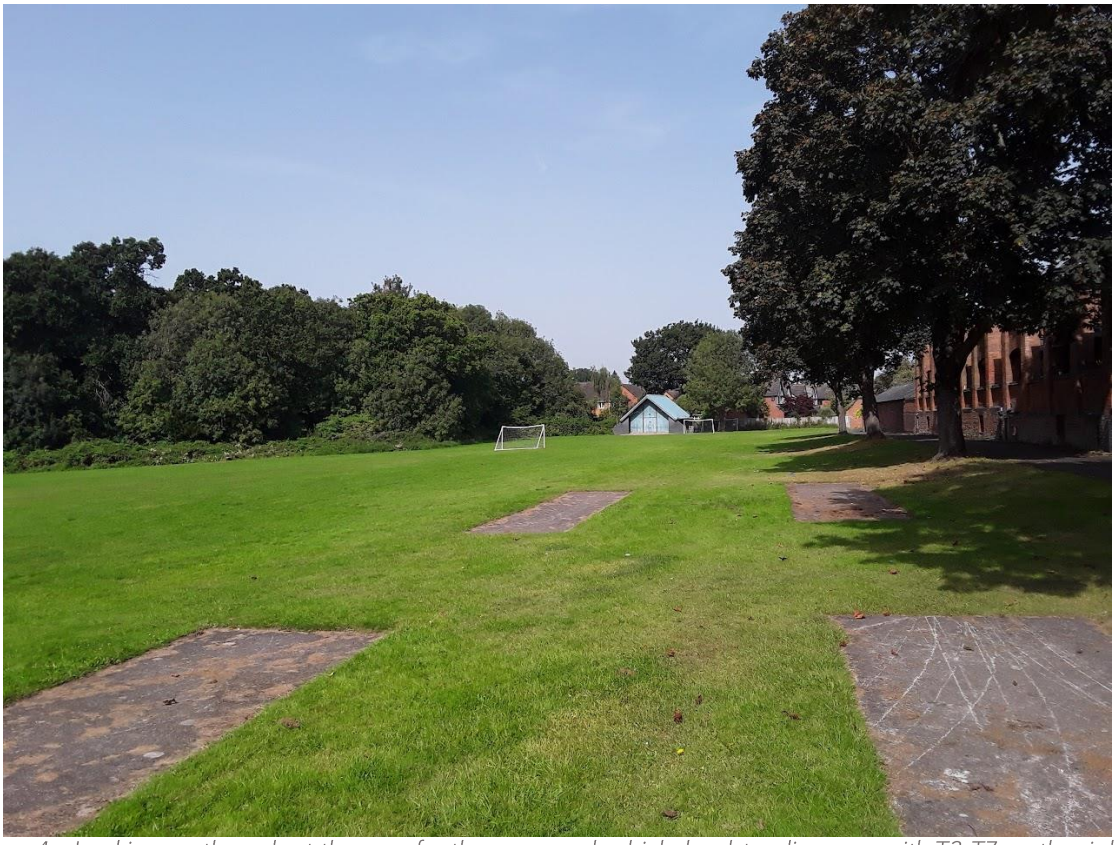

Figure 4 – Looking northwards at the area for the proposed vehicle hardstanding area with T3-T7 on the right of the photo.

APPENDIX 3
ARB. SITE PLAN (EXISTING)

T1 Cat. C1

T2 Cat. B1

T3 Cat. B1

T4 Cat. B1

T5 Cat. B1

T6 Cat. B1

T7 Cat. C1

G1 Cat. C3

G2 Cat. B1

WG1 Cat. A3

EXISTING BUILDING

DENSE VEGETATION UNABLE TO FULLY SURVEY

GRASS

TARMAC

BRICK WALL

RPAs of T3 - T6 have been adjusted to reflect the building adjacent to the stems, and the unlikelihood that any significant roots would be found under the foundations.

RPAs of trees within G2 and part of G1 have been adjusted to reflect the brick wall adjacent to the stems, and the unlikelihood that any significant roots would be found under the foundations.

Use of This Document

This document should be viewed in conjunction with the relevant arboricultural impact assessment and/or tree survey schedule.

Tree Categorisation & Numbering

The method used for categorising the trees can be seen in Appendix 1 of the Tree Survey/Arboricultural Impact Assessment. The categorisation method used is an improved variation of the method suggested in BS 5837:2012.

BS 5837:2012 recommends that better quality trees (Cat. A & B) are retained where possible. Trees in land adjacent to the site are considered where they may be impacted by development.

The trees considered significant within the context of the development are numbered and assigned a prefix of 'T' or 'G' to describe whether they are an individual or a group, and 'S' or 'H' for a shrub or hedge. Using this identification number, further information for each tree/group can be found within the survey schedule.

Category A : High or exceptional aboricultural, landscape or ecological value. (Worthy of being a material constraint.)

Category B : Moderate arboricultural, landscape or ecological value. (Worthy of being a material constraint.)

Category C : Low quality or small in size. (Not worthy of being a material constraint.)

Category U : Such poor quality or condition that renders it unsuitable for retention. (Not worthy of being a material constraint.)

Root Protection Areas

In order to avoid damage to the roots or rooting environment of retained trees, the Root Protection Areas (RPA's) should be plotted around each of the category A, B and C trees. This is a notional depiction of the minimum rooting area in m2 which should be left undisturbed around each tree. The RPA is calculated using the *British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'*, unless otherwise stated within the survey schedule.

Where there appears to be restrictions to root growth the root protection area is reshaped to more accurately reflect the likely distribution of the roots.

Root Protection Area (RPA): The notional area around each tree which should be left undisturbed during the development of the site

RPA Incursion: Anticipated incursion into the root protection area of a proposed tree which may result in root loss/damage.

Arboriculturally Sensitive Demolition/ Removal: A structure or surfacing is to be removed using special methods to avoid damage to trees.

Specialist Foundations: Low impact foundations to be used to preserve underlying tree roots.

Further Object Key

Tree Stem / Stem line: Diameter of stem at ~1.5m

Tree Removal: Trees designated for removal will comprise of a red filled canopy.

Site Boundary: Extent of site boundary (illustrative only)

Buildings/Surfacing to be Removed: Buildings or surfacing to be removed will generally be depicted with a dashed red line

Ligna Consultancy

Project:	Milverton School
Client:	C/O Dalcour Maclaren
Drawing:	Arboricultural Site Plan (Existing)
Drawing Ref:	P3391-ASP01
Rev:	V1
Date:	19/09/2023
Scale:	1:250 - A1
Drawn By:	J. Sinclair
Based on:	Topographical Survey

All dimensions should be checked on site. No dimensions to be scaled from this drawing. Please notify us of any discrepancies found. Ligna Consultancy Ltd. cannot be held responsible for inaccuracies in the base drawing in which this plan is based. This drawing is designed to reflect the principles of the layout or design only, and relates only to the protection of retained trees.

An architect or structural engineer should be contacted over any matters of construction, detailing or specification and for any standards or regulatory requirements relating to proposed structures, hard surfacing or underground services.

This drawing was produced in colour - a monochrome copy should not be relied upon.

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APPENDIX 4
ARB. SITE PLAN (PROPOSED)

T1 Cat. C1

T2 Cat. B1

T3 Cat. B1

T4 Cat. B1

T5 Cat. B1

T6 Cat. B1

T7 Cat. C1

WG1 Cat. A3

WG1 Cat. A3
TOPSOIL/MATERIAL STORAGE

MILVERTON SCHOOL FIELD - BELOW GROUND STORAGE VOLUME CIRCA 1900m DESIGN TBC

VEHICLE HARDSANDING

ADDITIONAL 4m SECTION OF WALL TO BE REMOVED TEMPORARILY AND REINSTATED UPON COMPLETION

LOCATION OF ACCESS UTILISING EXISTING OPENING IN BRICKWORK CURRENT PEDESTRIAN ACCESS TO BE MADE WIDER - WALL AND FENCLINEGATE TO BE REMOVED FOR DURATION OF WORKS AND REINSTATED ONCE WORKS COMPLETED

Area for vehicle hard standing must utilise a no-dig system that has an applicable weighting limit for the types of vehicles likely to be entering the site, track mats with a base layer of woodchip below is a suitable option for the site.

Crown lift tertiary branches and tips of T4-T6 to provide 4.5m clearance with the ground.

A height restriction bar will need to be installed at the site entrance.

RPAs of T3 - T6 have been adjusted to reflect the building adjacent to the stems, and the unlikelihood that any significant roots would be found under the foundations.

VEHICLE HARDSANDING

SECTION OF BRICKWORK WALL TO BE REMOVED TEMPORARILY FOR ACCESS. WALL TO BE REINSTATED. 314574-WSP-SA-ZZ-DR-C-0005

A height restriction bar will need to be installed at the site entrance.

Existing site entrance will be used so any perceived impact on the individual tree within G2 is non existent due to the existing hard surfacing within the RPA.

G2 Cat. B1

LOCATION OF ACCESS GATE AND METAL FENCELINE TO BE REMOVED TEMPORARILY FOR THE DURATION OF THE CONSTRUCTION WORKS AND REINSTATED UPON COMPLETION

Remove this section of G1. This removal does not require offsetting through new plantings owing to the low value of the group.

G1 Cat. C2

Crown lift tertiary branches and tips of individual tree to allow for 4.5m clearance with the ground.

G1 Cat. C2

G2 Cat. B1

G2 Cat. B1

G2 Cat. B1

G2 Cat. B1

Crown lift tertiary branches and tips of 2 south westernmost trees within G2 to provide 4.5m clearance with the ground.

RPAs of trees within G2 and part of G1 have been adjusted to reflect the brick wall adjacent to the stems, and the unlikelihood that any significant roots would be found under the foundations.

A height restriction bar will need to be installed at the site entrance.

G1 Cat. C2

Remove this section of G1. This removal does not require offsetting through new plantings owing to the low value of the group.

266700N

266550N

431600E

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RPA — **Root Protection Area (RPA)**: The notional area around each tree which should be left undisturbed during the development of the site

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Ligna Consultancy

Project:	Milverton School
Client:	C/O Dalcour Maclaren
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Rev:	V1
Date:	22/09/2023
Scale:	1:250 - A1
Drawn By:	J. Sinclair
Based on:	Proposed Site Plan

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