



WE KNOW SERVICES

ARBORICULTURAL IMPACT ASSESSMENT

Address

Woodlands, Lodge Lane, Widnes

Client

Mr and Mrs Crosby

Report Date

September 2021

Version

First Issue

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Arboricultural Impact Assessment – Woodlands, Lodge Lane, Widnes



A northern view of the site showing G3 (Left), G5 (Central) and part of G6 (Right).

Quality Assurance

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1 Introduction

We Know Services were instructed by Mr and Mrs Crosby to undertake an arboricultural survey of the tree features on land at Woodlands, Lodge Lane, Widnes WA8 4QB.

This report details the arboricultural implications of developing the site, including:

A survey of the trees on and near the development which may impact the proposal from ground level, noting their location, species and all relevant parameters, i.e. stem diameter, height, crown spread, condition etc.

- a) A tree schedule.
- b) Advice on the removal, retention, and management of trees.
- c) Assessment of the potential effects of the proposal on retained trees and vice versa.
- d) Assessment of the requirement for tree protection for the duration of the works; and
- e) A mitigation proposal for any loss.

The survey was carried out on Friday 3rd September 2021 by means of visual inspection from ground level by an experienced and qualified arboriculturalist. The inspection can be restricted in cases where trees were Ivy clad or surrounded by vegetation.

Under *BS5837: 2012 Trees in Relation to Construction - Recommendations*, the assessment of trees is made objectively. The tree categorisation method identifies the quality and value of the existing tree stock, allowing informed decisions to be made concerning development design layout.

The following documents have been made available by the client:

- Drawing - 1704 00_02 EXISTING PLANS AND ELEVATIONS
- Drawing - 1704 02_01 PROPOSED PLANS AND ELEVATIONS

All trees have been added to the drawing indicatively. Any dimensions regarding tree positions and protective fencing must be checked on site.

The survey was carried out noting the conditions of the trees at the time of inspection. As trees are part of the natural environment, conditions can naturally change; therefore, the contents of this report are valid for one year only. After this period, re-inspection may be required.

2 Statutory Designations

A check for tree preservation orders and conservation areas was undertaken on 07/09/21 using Knowsley Councils My Neighbourhood Map, the results showed that there are no preservation orders on site and the site is not within a conservation area.

3 Survey Methodology

The trees were surveyed (prefixed T, or G for group) and recorded in the tree schedule in Appendix 1.0. Where groups are recorded, average height and diameter at breast height (DBH) of the trees in the group are reported. Where access to the base of any trees was limited, stem size was estimated.

All the trees were assessed using: a grading A to C (retention) and U (removal); condition and age class as defined in Appendix 2.0.

Where appropriate, canopy spread for each tree was recorded at four cardinal points to reproduce an accurate representation of the crown shape of the tree on the tree plan in Appendix 3.0.

The survey included all trees within the proposal area and trees near to the proposal.

4 Survey Results

The survey identified seven tree features on site consisting of four individual trees and three groups.

Of these, five tree features were classed as category B, the remaining three tree features were classed as category C.

Most trees on site were found to be in good condition with only minor defects that require no works to rectify defects.

There are some Apple (*Malus sp.*) within G5 that are in early decline, in the lands current use these do not pose any major risk. However, if the land use changes and the footfall underneath the trees increases, it is recommended that management plans are put into place to manage the trees decline.

5 Impact Assessment

Table 5.1: Impact Table

Tree No.	RPA Radius	Distance to Proposed Development (m)	RPA Incursion (m ²)	RPA Incursion (%)	Can the tree/s be successfully retained?
T1	1.68	0	5.8	65.4%	No
T2	1.68	2.5	0.5	5.6%	Yes
G3	2.40	1.4	0	0.0%	Yes
T4	2.40	38.5	0	0.0%	Yes
G5	4.80	43.5	0	0.0%	Yes
G6	4.80	2	19	2.6%	Yes
T7	4.85	3.1	39.1	52.9%	No

Table 5.2 Impact Assessment

	Trees to be retained		Trees to be removed	
	With no impact	With detailed construction	Due to condition	Due to development
Tree No.	T2, G3, T4, G5, G6			T1, T7

Due to the proposals, a total of two individual trees are proposed for removal.

Table 5.1 has raised concerns about T1, a Juniper, which currently resides within a raised plant bed. The proposals will impact 65.4% of the root protection area (RPA), therefore the retention of this tree is not considered suitable, and it is recommended that the tree is removed to accommodate the proposals.

Table 5.1 has raised concerns about T7, a Nookta Cypress, which currently resides adjacent to an outbuilding. The proposals will impact 52.9% of the root protection area

(RPA), therefore the retention of this tree is not considered suitable, and it is recommended that the tree is removed to accommodate the proposals.

The Arboricultural Impact Assessment Plan (Ref: 21/00064/AIA) has raised concerns about the distance of a section of G3 to the proposals, therefore it is recommended that a small section of the group is removed as highlighted on the Tree Protection Plan (Re:21/000/64/TPP). Because the section that is recommended for removal consists of the canopy and is outside of the RPA, it is considered that the removal of this section will not have any detrimental effects to the group.

The construction of the new dwelling will encroach into the root protection area of T2 and G6 (by 5.6% and 2.6%). Due to the species and condition of these tree features, it is not considered necessary to use special measures as the encroachments are minimal and are unlikely to have an adverse impact on the tree.

The Arboricultural Impact Assessment Plan (Ref: 21/00064/AIA) has raised concerns about the removal of existing outbuildings located at the southeast and southwestern areas of the site. The removal of these outbuildings could have a detrimental effect on some of the features on site, therefore a special methodology as outlined in the accompanying Arboricultural Method Statement (Ref: 21/00064/AMS) should be followed. The implementation of this special method will reduce the impact the removal of the outbuildings present to the trees, and will ensure that the trees can remain in situ.

The remaining trees, as highlighted in *Table 5.2*, can remain without any impact.

Precautionary measures including supervision by the project arboricultural consultant during the works are detailed in the accompanying method statement (Ref: 21/00064/AMS).

6 Mitigation Proposals

6.1 Replacement Tree Planting

Due to the loss of the trees identified in the Impact Table, it is recommended that replacement trees are planted as part of the proposed landscaping scheme. The extent of mitigation planting required will need to be confirmed in agreement with the Local Planning Authority once the development proposal is finalised.

Requirements usually involve replacement of trees on a two for one basis. This is based on tree sizes of 12-14cm girth, however for replacements that are significantly larger (20-25cm girth), it is considered that an increased size will mitigate for the tree loss in the form of replacements on a one for one basis.

This will have several benefits for the development and the character of the area. These being:

- Give a greater diversity of age class on the site which in turn will increasing sustainability.
- Give a greater diversity of species and therefore wildlife habitat.
- As the trees proposed for removal are to the rear of the site some of the replacement planting will be situated to the front of the development. Therefore, the tree cover and amenity value in the locality will increase.

The trees proposed are listed in *Table 5.3: Replacement Tree Specifications*

Table 5.3: Recommendations for Replacement Tree Specification

Tree Species	Tree Size
Field Maple - <i>Acer campestre</i>	20-25 cm girth
Silver Birch - <i>Betula pendula</i>	20-25 cm girth
Scots Pine - <i>Pinus sylvestris</i>	20-25 cm girth
English Oak - <i>Quercus robur</i>	20-25 cm girth
Rowan - <i>Sorbus aucuparia</i>	20-25 cm girth

7 Summary and Conclusion

The survey identified seven tree features on site consisting of four individual trees and three groups.

Of these, five tree features were classed as category B, the remaining three tree features were classed as category C.

The tree categorisation method identifies the quality and value of the existing tree stock, but it is not meant to be interpreted rigidly and is presented in order to form a balanced judgement on tree retention and removal.

The proposals have impacted two tree features on site, of these both are recommended for removal. The remaining tree features on site can be retained.

A precautionary method of working near trees is detailed in the accompanying Arboricultural Method Statement (Ref: 21/00064/AMS).

Following site development, regular (annual or biannual) inspections of all retained trees should be undertaken by a qualified arboricultural consultant.

It is considered that in following the advice in this document, any negative factors affecting the remaining trees on site will be minimised.

Appendix I.0

Tree Survey Schedule

Arboricultural Impact Assessment – Woodlands, Lodge Lane, Widnes

Arboricultural Data Sheet: Woodlands					Date of Survey: 03/09/21					Surveyor: Jonathan Henderson			
Tree No.	Species	DBH (mm)	Height (m)	Age	Crown Spread (m)				Crown clearance	Condition rating	Comments and preliminary management recommendations	Estimated remaining contribution	Tree quality category rating
					N	E	S	W					
T1	Juniper	140	4	EM	1	1	1	1	1	Good	Reasonable shape and form. Minor deadwood in crown. No major visible defects.	10+	C1
T2	Juniper	140	3	EM	1	1	1	1	0.5	Good	Reasonable shape and form. Minor deadwood in crown. No major visible defects.	10+	C1
G3	Mixed Broadleaf	200 AVG	5 MAX	EM - FM	See Plan				0+	Good	Reasonable shape and forms. Good screening value. Most have dense ivy growth. Limited views of stems, Minor deadwood in most. Individually of lower value	20+	B2
T4	White Spruce	200 EST	3	EM	1	1	1	1	0+	Good	Good shape and form. No view of stem due to dense foliage. Minor deadwood in crown.	10+	C1
G5	Mixed Broadleaf and Conifer	400 AVG	14 MAX	EM - OM	See Plan				0+	Fair	Reasonable shapes and forms. Orchard style planting with surrounding off site boundary trees. Some apple within group are in early stages of decline. Minor deadwood	20+	B2

Arboricultural Impact Assessment – Woodlands, Lodge Lane, Widnes

Arboricultural Data Sheet: Woodlands					Date of Survey: 03/09/21					Surveyor: Jonathan Henderson			
Tree No.	Species	DBH (mm)	Height (m)	Age	Crown Spread (m)				Crown clearance	Condition rating	Comments and preliminary management recommendations	Estimated remaining contribution	Tree quality category rating
					N	E	S	W					
											in most. Individually of lower value (C1).		
G6	Mixed Broadleaf and Conifer	400 AVG	15 MAX	FM	See Plan				0+	Good	Reasonable shapes and forms. Most off site, situated along boundary. Good screening value Most have minor deadwood in crowns. Ivy on most broadleaves limiting the view of the stems.	20+	B2
T7	Nookta Cypress	230, 210, 210, 150	14	FM	2.5	2	3	3	1	Good	Good shape and form. Multi stemmed from 1m. Minor deadwood in crown. No major visible defects.	20+	B1

Appendix 2.0

Tree Survey Key

Arboricultural Impact Assessment – Woodlands, Lodge Lane, Widnes

Trees for removal			
Category and definition	Criteria		
Category U Those in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management	Trees that 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 R category trees (i.e. 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 (e.g. Dutch elm disease), or very low quality trees suppressing adjacent trees of better quality Note – Habitat reinstatement may be appropriate (e.g. R category tree used as a bat roost: installation of bat box in nearby tree).		
Trees to be considered for retention			
Category and definition	Criteria - Subcategories		
	1 Arboriculture values	2 Landscape values	3 Conservation values
Category A Those of high quality and value: in such a condition as to be able to make a substantial contribution (a minimum 40 years is suggested)	Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboriculture features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands which provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance (e.g. avenues or other arboricultural features assessed as groups)	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood pasture)
Category B Those of moderate quality and value: those in such a condition as to make a significant contribution (a minimum of 20 years is suggested)	Trees that might be included in the high category, but are downgraded because of impaired condition (e.g. presence of remediable defects including unsympathetic past management and minor storm damage)	Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals but which are not, individually, essential components of formal or semi-formal arboriculture features (e.g. trees of moderate quality within avenue that includes better, A category specimens), or trees situated mainly internally to the site, therefore individually having little impact on the wider locality	Trees with clearly identifiable conservation or other cultural benefits
Category C Those of low quality and value: currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150 mm	Trees not qualifying in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit	Trees with very limited conservation or other cultural benefits
	Note - Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150 mm should be considered for relocation		

Age Class

Y	Young	Trees that have not yet established
SM	Semi-Mature	Established trees up to 1/3 of expected height and crown
EM	Early mature	Between 1/3 and 2/3 expected height and crown
M	Mature	Between 2/3 and full expected height and crown
FM	Fully Mature	Full expected height and crown
OM	Over-Mature	Crown beginning to break up and decrease in size
S	Senescent	Crown in advanced stage of break-up

Condition

1	Good
2	Fair
3	Poor
4	Dead

Appendix 3.0

Proposed Development Plans

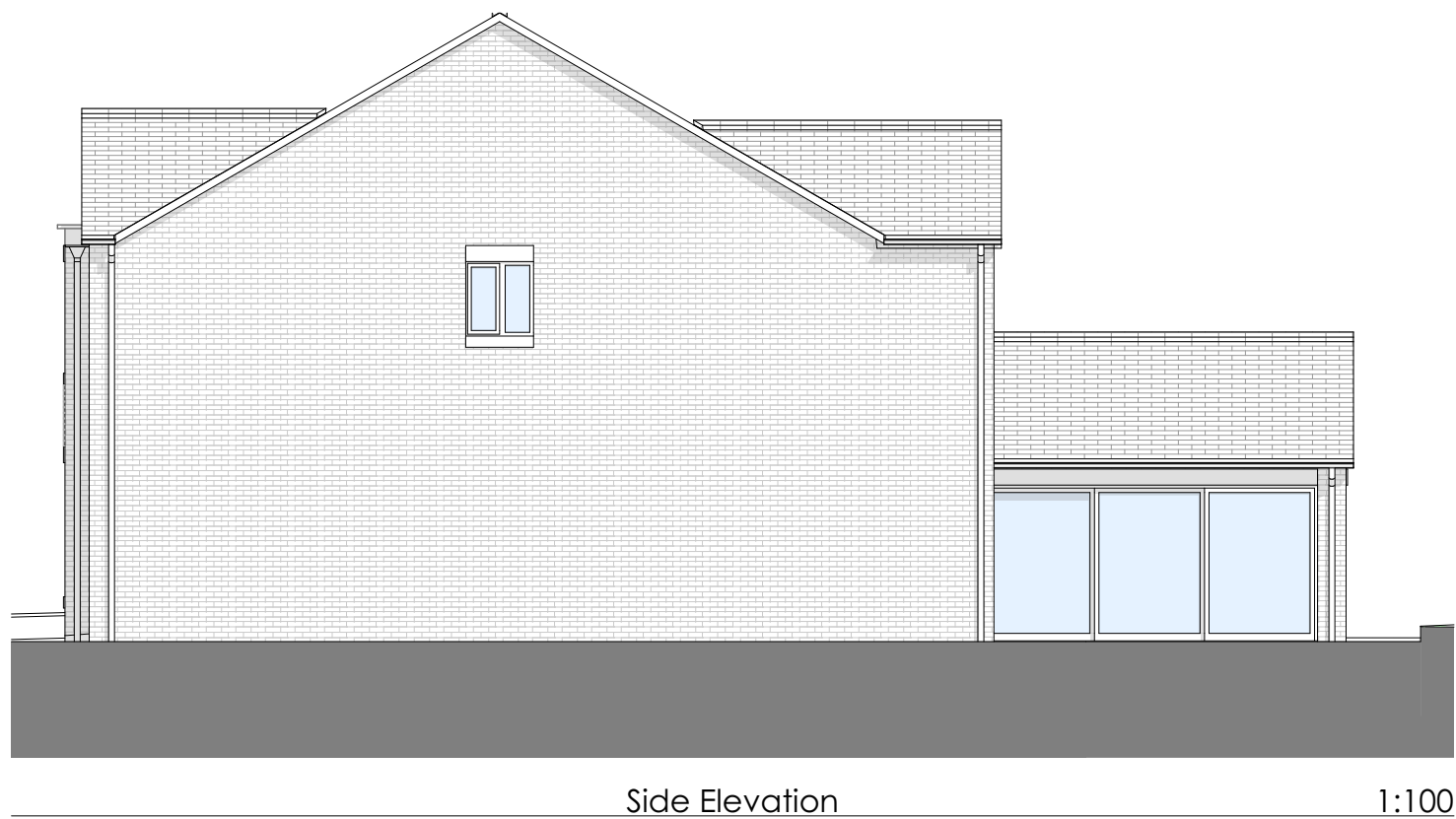


Site Plan



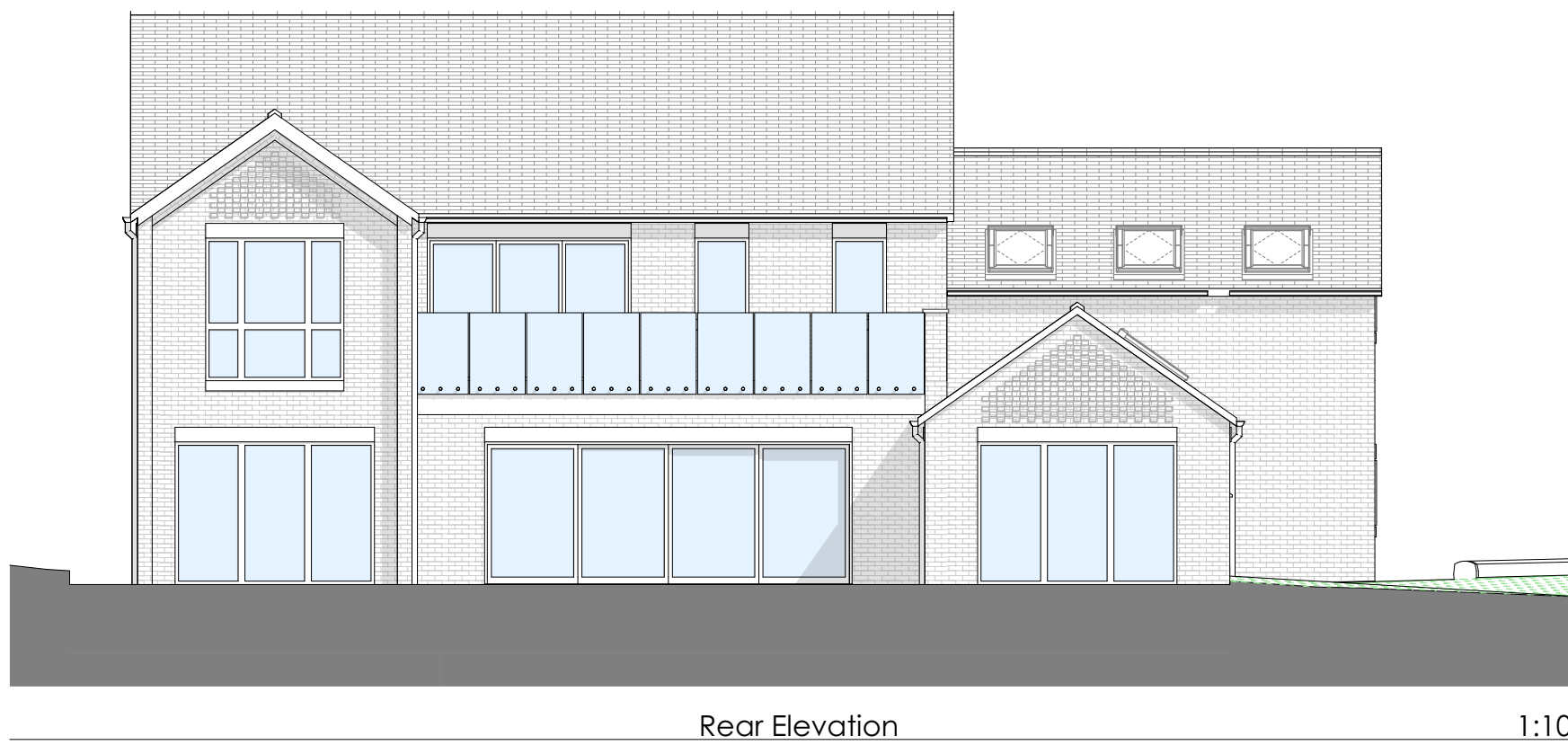
Front Elevation

1:100



Side Elevation

1:100



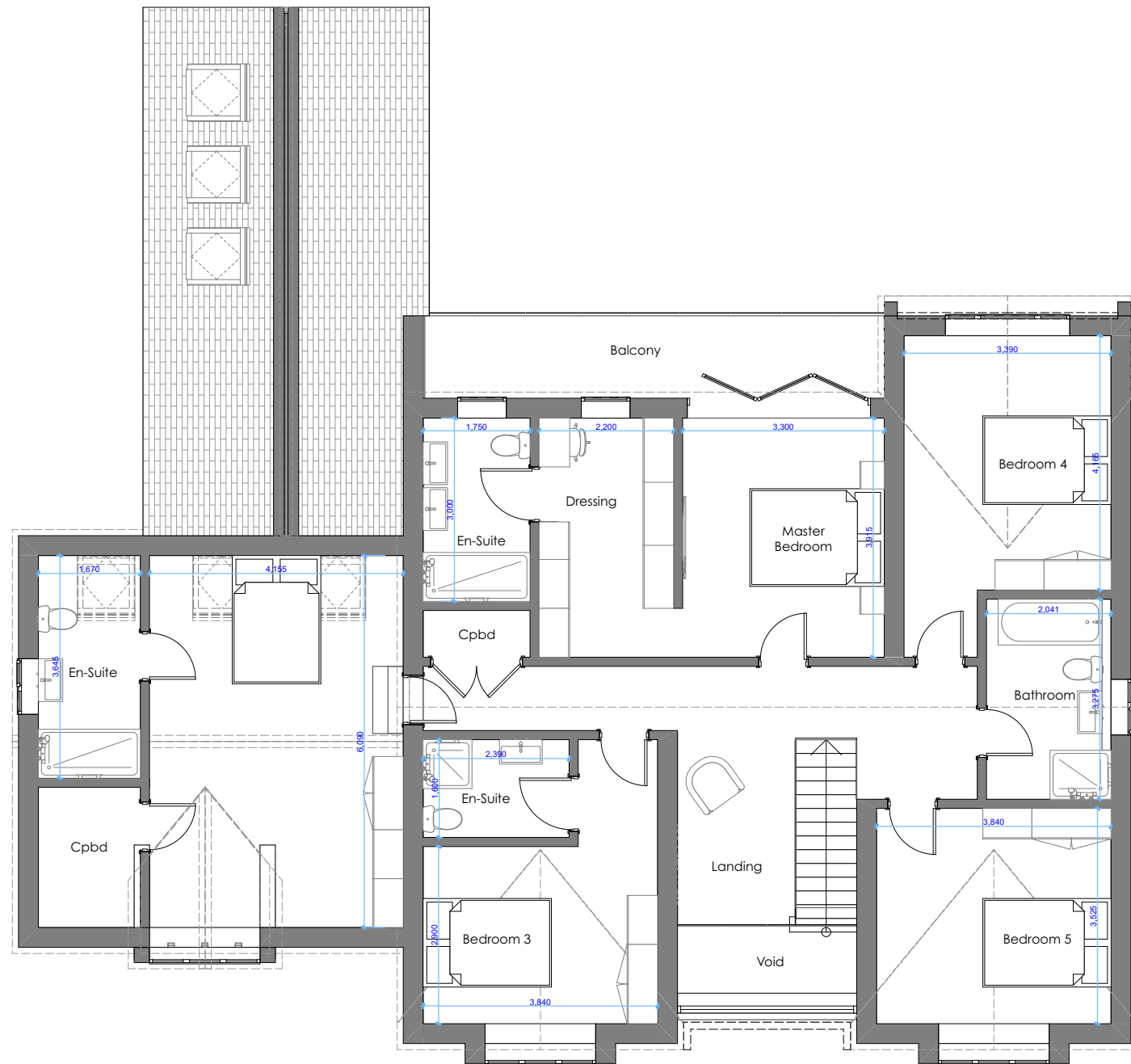
Rear Elevation

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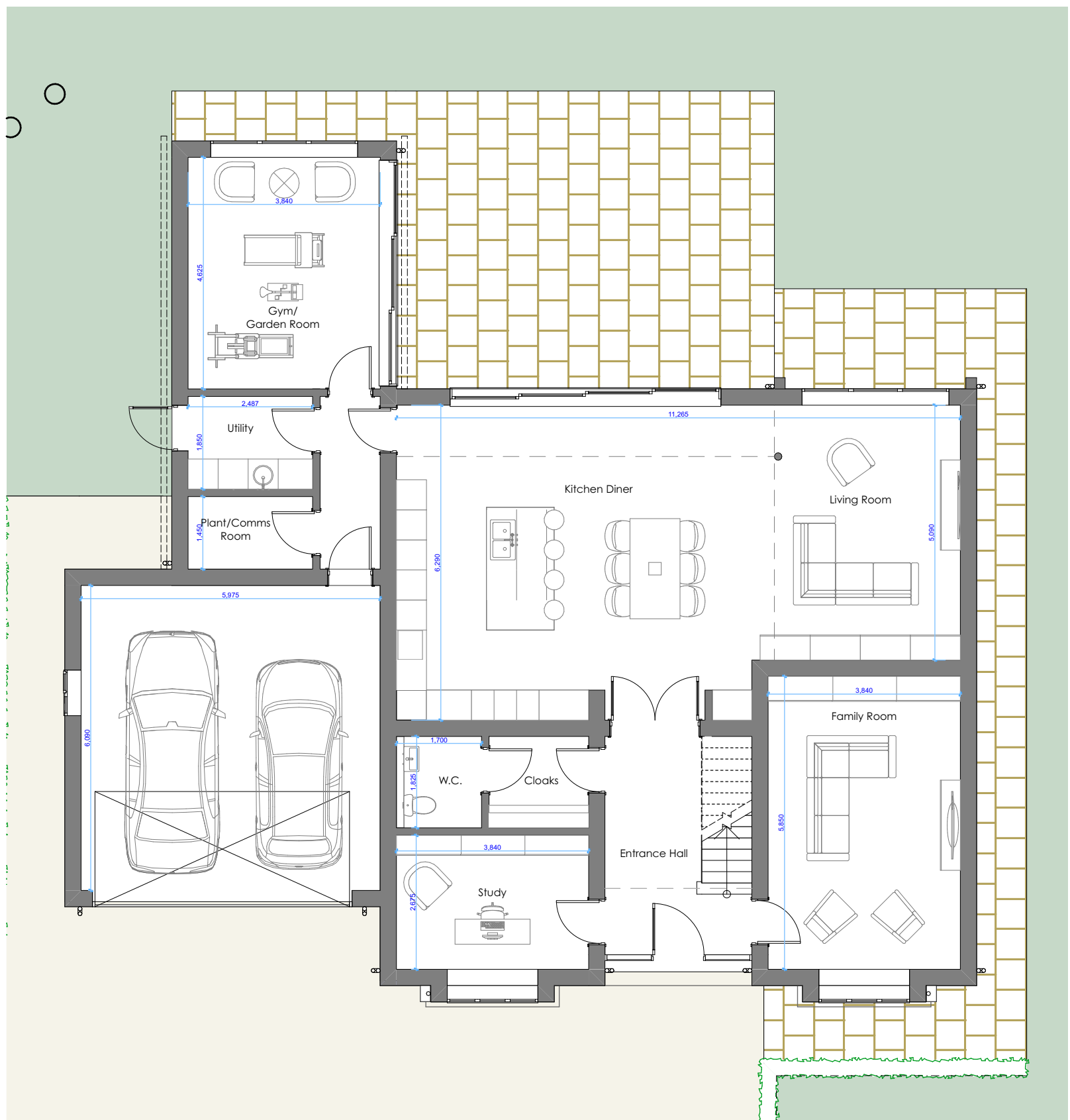
Side Elevation

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First Floor

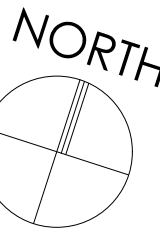
1:100



Ground Floor

1:100

General Notes



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ALL DIMENSIONS MUST BE CHECKED AND VERIFIED ON SITE PRIOR TO COMMENCEMENT OF WORK AND ARCHITECT TO BE NOTIFIED OF ANY DISCREPANCIES.

THE PARTY WALL ETC ACT 1996 CAME INTO FORCE ON 1ST JULY 1997 THROUGHOUT ENGLAND & WALES. IF YOU INTEND TO CARRY OUT BUILDING WORK WHICH INVOLVES ONE OF THE FOLLOWING CATEGORIES:
• WORK ON AN EXISTING WALL OR STRUCTURE SHARED WITH ANOTHER PROPERTY (SECTION 2 OF THE ACT)
• BUILDING A FREE STANDING WALL OR WALLS OF A BUILDING UP TO OR ASTRIDE THE BOUNDARY WITH A NEIGHBOURING PROPERTY (SECTION 1 OF THE ACT)
• EXCAVATING NEAR A NEIGHBOURING BUILDING (SECTION 6 OF THE ACT)
YOU MUST FIND OUT WHETHER THAT WORK FALLS WITHIN THE ACT (YOUR PROJECT MANAGER WILL BE ABLE TO ADVISE YOU ON THIS). IF IT DOES, YOU MUST NOTIFY ALL AFFECTED NEIGHBOURS. A NOTICE MUST BE GIVEN EVEN WHERE THAT WORK WILL NOT EXTEND BEYOND THE CENTRE LINE OF A PARTY WALL.

ALL CONSTRUCTION PROJECTS, COMMERCIAL OR DOMESTIC, ARE SUBJECT TO THE CDM REGULATIONS (2015). IT IS THE RESPONSIBILITY OF THE CLIENT TO ENSURE THAT WHERE MORE THAN ONE CONTRACTOR IS INVOLVED IN THE PROJECT THAT A 'PRINCIPAL DESIGNER' IS APPOINTED TO UNDERTAKE CDM RESPONSIBILITIES ON THEIR BEHALF. ANY PROJECT REQUIRING MORE THAN 30 DAYS WORK AND 20 OR MORE WORKERS ON SITE SIMULTANEOUSLY AT ANY GIVEN TIME, OR WHICH REQUIRES MORE THAN 500 WORKING MAN HOURS MUST BE NOTIFIED BY THE CLIENT TO THE HSE USING AN F10 NOTIFICATION PRIOR TO WORK COMMENCING ON SITE.

BEFORE STARTING WORK YOU NEED TO CHECK IF ANY ASBESTOS IS PRESENT. IN COMMERCIAL PROPERTIES THERE SHOULD BE A PLAN/REGISTER ASK TO SEE IT. YOU NEED TO CHECK THAT THE PLAN COVERS THE AREA OF THE BUILDING THAT YOU WILL BE WORKING IN AND IF YOU ARE DOING REFURBISHMENT WORK THAT IT INCLUDES A SURVEY THAT TELLS YOU WHAT TYPES OF ASBESTOS IS PRESENT AND ITS CONDITION. IF THERE IS NO REGISTER OR SURVEY OR THE REPORT IS NOT CLEAR-DO NOT START WORK.

NO WORKS ARE TO START ON SITE PRIOR TO DISCHARGE OF ANY / ALL PRE-START PLANNING CONDITIONS.

THE CLIENT IS AT RISK IF ANY WORKS ARE STARTED PRIOR TO APPROVAL BY APPOINTED BUILDING CONTROL BODY.

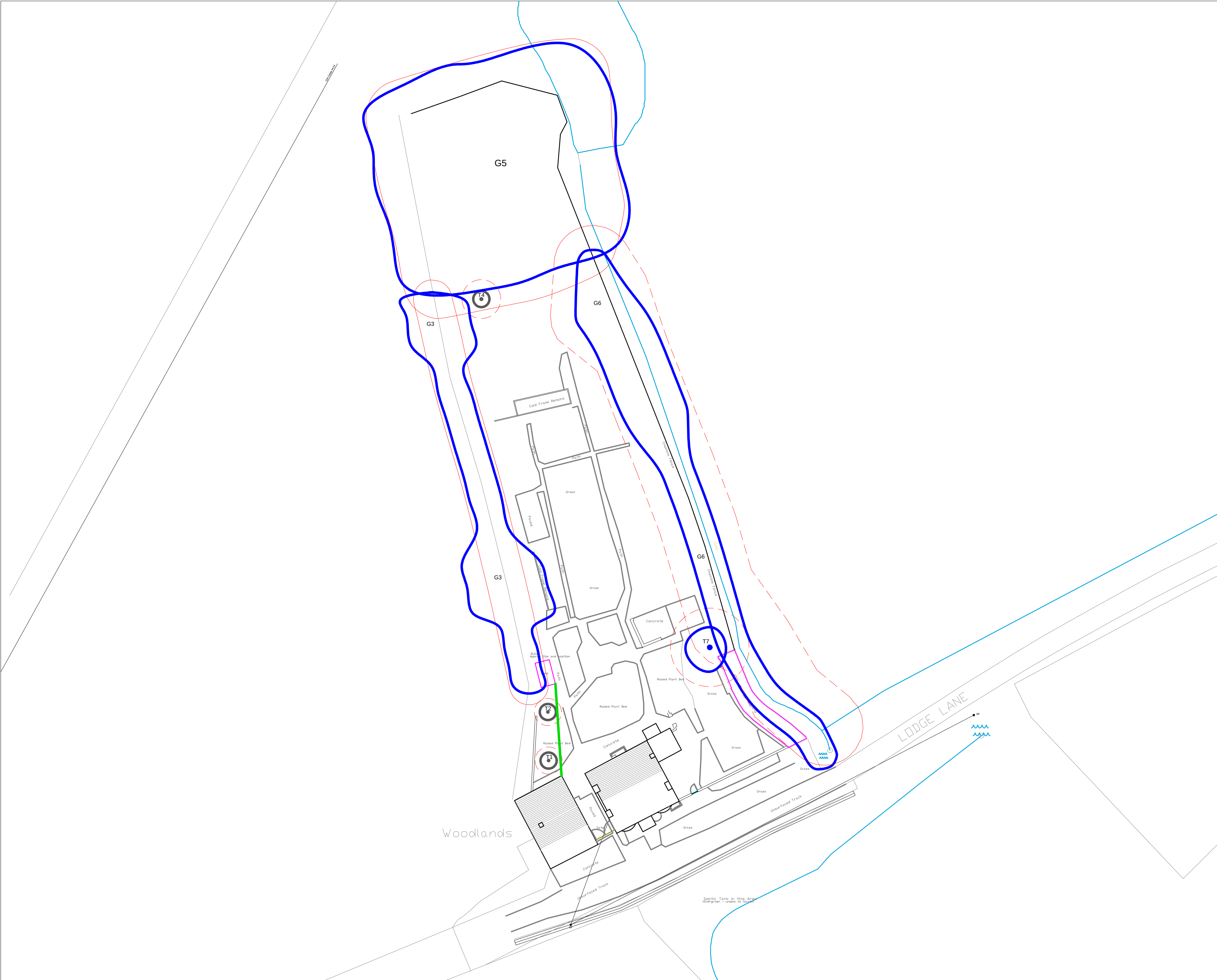
Key Plan

Revisions

Rev	Description	Drw	Chk	Date
Drawing Status:				
Client:				
MR AND MRS CROSSBY.				
Project:				
WOODLANDS, LODGE LANE, WIDNES, WA8 4QB				
Drawing:				
PROPOSED PLANS AND ELEVATIONS.				
Project No:		Drawing No:		
1704		02_01		
Scale:		Date:		Checked by:
1:100/200		JUL 21		DW

Appendix 4.0

Arboricultural Impact Assessment Plans



-  Category A Trees
-  Category B Trees
-  Category C Trees
-  Category U Trees
-  Root protection area

 WE KNOW SERVICES

Court Hey Park
Roby Road
Huyton
L16 3NA

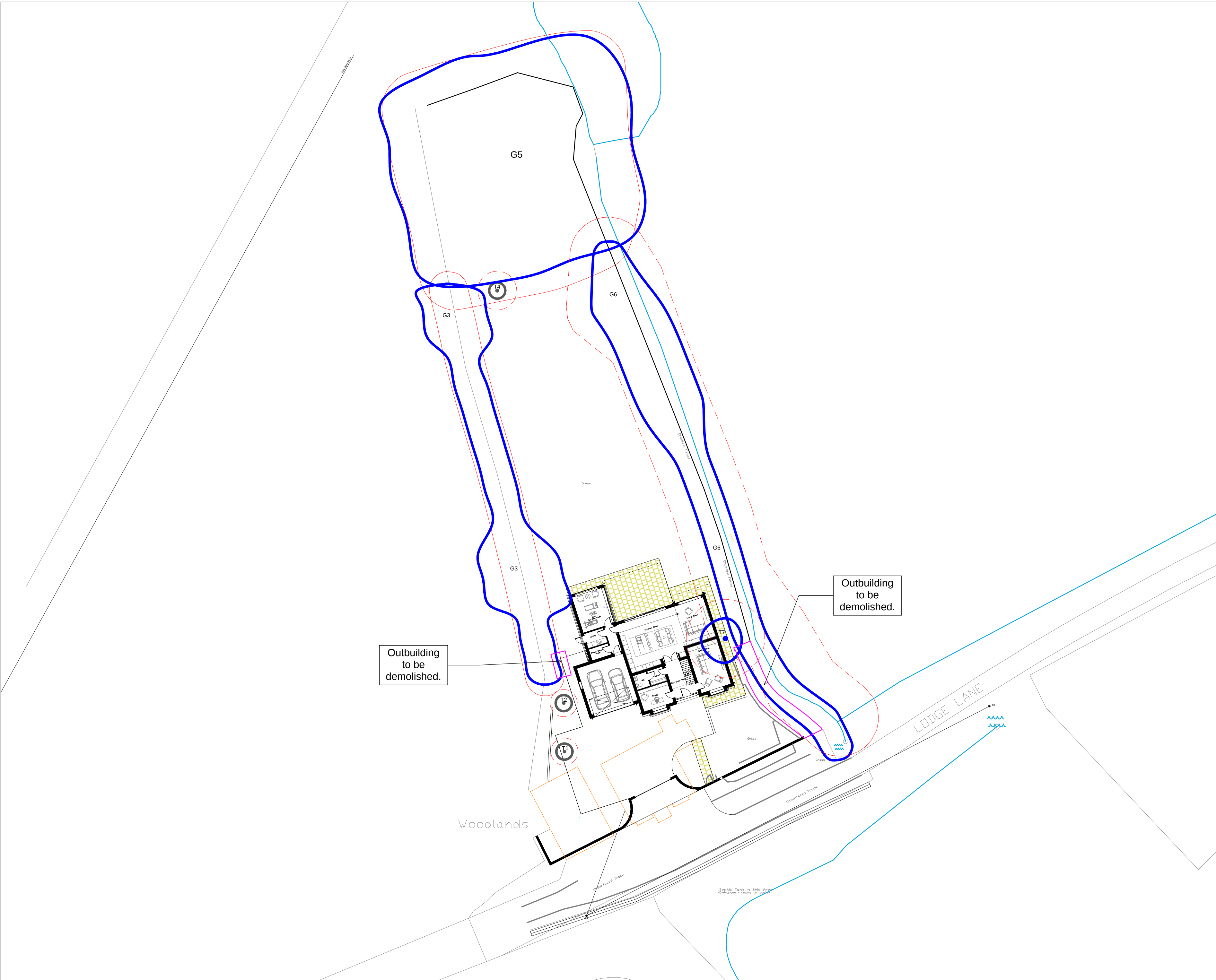
Tel: 0151 443 2308
Email: info@weknowservices.co.uk

Client:
Mr & Mrs Crosby

Site Address:
Woodlands
Lodge Lane
Widnes
WA8 4QB

Drawing Title: BS5837 Plan	Drawing No: 21/00064/BSP
Date: 07/09/2021	Scale: 1:300@A2
	Drawn by: JH

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-  Category A Trees
-  Category B Trees
-  Category C Trees
-  Category U Trees
-  Root protection area



Court Hey Park
Roby Road
Huyton
L16 3NA

Tel: 0151 443 2308
Email: info@weknowservices.co.uk

Client:
Mr and Mrs Crosby

Site Address:
Woodlands
Lodge Lane
Widnes
WA8 4QB

Drawing Title: AIA Plan	Drawing No: 21/00064/AIA
Date: 07/09/2021	Scale: 1:300@A2
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