

Gwersyllt Working Mens Club
Arboricultural Implication Study
September 2010

Client:

Cornerstone Team C/o
Mono Consultants Ltd
Victoria Building
1 - 7 Princess Street
Manchester
M2 4DF

Consultant:

ACS Consulting
9 – 11 Princess Street
Knutsford
WA16 6BY

Gwersyllt Working Mens Club
Arboricultural Implication Study
September 2010

Report Reference: 2348/DR.10

	Name	Signature	Date
Originator	IRM		Sept 2010
Checked By			
Approved By			

Document Revision Record

Issue No	Date	Details of Revisions
1	September 2010	Original issue

LIMITATION

ACS Consulting (ACS) has prepared this Report for the sole use of the Cornerstone Team and Mono Consultants in accordance with the Agreement under which our services were performed. No other warranty, expressed or implied, is made as to the professional advice included in this Report or any other services provided by us. This Report may not be relied upon by any other party without the prior and express written agreement of ACS. Unless otherwise stated in this Report, the assessments made assume that the sites and facilities will continue to be used for their current purpose without significant change. The conclusions and recommendations contained in this Report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from third parties has not been independently verified by ACS, unless otherwise stated in the Report.

C O N T E N T S

Chapter 1	Introduction
Chapter 2	Background
Chapter 3	Tree Survey
Chapter 4	Development Aspects
Chapter 5	Conclusions

DRAWING(S)

2348_01	Arboricultural Layout Plan
----------------	-----------------------------------

APPENDICES

1	Spread Sheets
2	Method Statement

1.0 INTRODUCTION

1.01 A. C. S. Consulting is instructed by Mono Consultants Ltd, Manchester on behalf of the Cornerstone Team, to advise on trees and the implications of development at Gwersyllt Working Mens Club, Gwersyllt, Wrexham.

1.02 In accordance with the Department for Communities and Local Government Circular 02/2008 and its guidance document Validation of Planning Applications, this report fulfils the recommended national list criteria for tree survey/arboricultural information. More specifically, it contains the following:

- *A full tree survey to the requirements of BS5837(2005) Trees in Relation to Construction – Recommendations,*
- *A plan showing tree survey information, retention categorisation and root protection areas,*
- *An assessment of the arboricultural implications of development detailing trees to be retained/removed and appropriate protection measures,*
- *An arboricultural method statement detailing the means of tree protection, implementation and phasing of works.*

1.03 The site was visited on 29th September 2010 and a survey of the trees was completed recording; *species type, age, height, crown spread, diameter-at-breast-height, and condition.*

Copyright of ACS Consulting. All rights described in Chapter IV of the Copyright, Designs and Patents Act 1988 have been generally asserted ©, September 2010.

2.0 BACKGROUND

The Site

- 2.01** The site is located in the village of Gwersyllt to the north west of Wrexham town centre. The site is to the rear of the Gwersyllt Working Mens Club. The application site comprises a corner plot with an existing mast and ancillary equipment, a rectangular shaped building and a number of trees. The application is to erect a Cornerstone 15.0 m High CU Phosco Phase 4 Monopole on a new combined concrete base and associated infrastructure replacing the existing structure.

Statutory Protection/Planning Policies

- 2.02** The application is subject to the Planning Policies of Wrexham Borough Council.

3.0 TREE SURVEY

3.01 The tree data can be found at Appendix 1. There is no requirement in BS 5837 to repeat the details of the Constraints information save for confirming that the trees were surveyed for *species type, age, height, crown spread, diameter-at-breast-height, condition*, and their suitability for retention from ground level. Heights were measured with a Nikon Forestry 550 Hypsometer and diameters were taken, where possible, with a diameter tape to give an average stem measurement. Canopy spreads have been measured at the cardinal points or where they significantly extend in other directions. Each tree has been assessed using the BS 5837 2005 category ratings (a copy can be found in Appendix 1). Consideration has been given to any Supplementary Planning Documents. The data collection is compliant with the advice set out at Subsection 4.6.6 of BS 5837:2005.

4.0 DEVELOPMENT IMPLICATIONS

- 4.01** The application is to install a Cornerstone 15.0 m High CU Phosco Phase 4 Monopole on a new combined concrete base. An Arboricultural Layout Plan (2348_01) has been produced.

Development Implications

- 4.02** An examination of the proposals shows no implications for the trees at the site. The current site comprise a large amount of rubble and general rubbish around the location. The intention is to remove the existing mast and ancillary equipment and replace them with a new concrete base, cabinets and a Cornerstone 15.0 m High CU Phosco Phase 4 Monopole on a new combined concrete base. There are no implications either through root severance, canopy spread or the height of the trees resulting in signal interference. Services are to be installed to NJUG Regulations.

All trees have restricted root development due to their growing location. However, the new concrete base is located outside the RPA of T2. There is the possibility of tracking over the RPA of T2. This is overcome with a temporary structure as detailed in the Method Statement in Appendix 2. De-commissioning can be undertaken from the large area of tarmac to the west of the block work wall with materials and equipment delivered by the same route.

The trees are located to the east and due south. Antenna orientation is shown on the drawing by Mono and ACS. There is no interference with the signal now or during the lease period.

5.0 CONCLUSIONS

Summary

- 5.01** The site is located in the village of Gwersyllt, Wrexham. The site is an existing mast station at the rear of Gwersyllt Working Mens Club. The application is to de-commission the existing base station and mast and erect a new Cornerstone 15.0 m High CU Phosco Phase 4 Monopole on a new combined concrete base. The application has no implications for the trees.

Conclusions

- 5.02** The development has no implications either through de-commissioning, or construction of the new facility. The antennae orientation has no implications for trees. Their orientation is such that there is no interference with the signal now or during the site lease period.
- 5.03** Appropriately worded planning conditions should specify the requirement for detailed method statements associated with the following issues: earth works, fencing, site storage/compounds/site cabins, tree works, special engineering works, monitoring and reporting.

**ACS Consulting
September 2010**

Appendix 1

CONTENTS

Key

BS5837: 2005

Tree Tables

KEY

Age	Y – Young: Out-planted 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 of 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
Physiological Condition	Good – Very few defects a reasonable long life expectancy depending on age class Adequate – Some defects giving the tree a shortened life expectancy Poor – Limited life with major problems
Structural Condition	Good – Very few defects Adequate – Some defects rectifiable with minor tree surgery Poor – Significant defects only rectifiable with major tree surgery or felling

Table 1 – Cascade chart for tree quality assessment

TREES FOR REMOVAL				
Category and definition	Criteria			Identification on Plan
Category R 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 a bat box in nearby tree).			DARK RED
TREES TO BE CONSIDERED FOR RETENTION				
Category and definition	Criteria – Subcategories			Identification on Plan
	1 Mainly arboricultural values	2 Mainly landscape values	3 Mainly cultural values, including conservation.	
Category A Those of high quality and value: in such a condition as to be able to make a substantial contribution (a minimum of 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 arboricultural features (e.g. the dormant and/or principal trees within an avenue)	Trees, groups or woodlands that 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)	LIGHT GREEN
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 remedial 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 arboricultural features (e.g. trees of moderate quality within an avenue that includes better, A category specimens), or trees situated mainly internally to the site, therefore individually having little visual impact on the wider locality	Trees with clearly identifiable conservation or other cultural benefits	MID BLUE
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 of 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	GREY
	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.			

Gwersyllt Working Mens Club

Tree Ref No.	Species	Height M	Stem Diameter MM	Branch Spread M	Height of Crown Clearance M	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations/ Comments	Estimated Remaining Contribution Years	Category Grading
1	Birch	10	500	N 5 E 5 S 5 W 5	2	M	Good	Good	Reasonable specimen. Retain.	10 - 20	C1/2
2	Willow	10	550	N 4 E 5 S 4 W 3.5	2	M	Good	Good	Restricted root development. Retainable.	10	C1/2
3	Group	16	550	N 4 E 5 S 4 W 4	2	M	Good	Good	3 birch as one linear group. Restricted root development. Retain.	20	B1/2

Appendix 2

CONTENTS

Arboricultural Method Statement

	No: 2348/SPEC
	Page: 1
Arboricultural Method Statement Gwersyllt Working Mens Club	Issue: 1
	Date: Sept 2010

Main Activity/Area of Work

The works will be within the site boundaries.

Drawing/Specification References

2348_01

Barriers/Fences/Warning Signs

A.C.S. Consulting has marked the limits of all Root Protection Areas on **Plan No.2348_01**. The following fencing is to be erected after the tree works have been completed and before any top soil stripping/demolition/hard surface removal: Heras fencing supported by a braced metal frame. The fence panels shall butt together and be fixed by two clamps. Each panel will be supported by a 45° section of scaffold tube from the top of the fence panel. The base will be fixed to two sections of 1000 mm long scaffold tube driven at least 500 mm into the ground.

Site Office/Storage Compound

The site office and storage compound shall not be located within the protection zones detailed on Plan 2348_01

The following work must be accomplished before any demolition or site-clearing activity occurs within 10 metres of trees. A flow chart at page 5 details the sequence of events.

- 1.1) The principal contractor is required to liaise with A.C.S. Consulting (the Arboricultural Consultant) throughout the project which include additional site visits. The critical operations requiring liaison are as follows:
 - Erection of fencing – whole site
 - Installation of temporary access T2.

	No: 2348/SPEC
	Page: 2
Arboricultural Method Statement Gwersyllt Working Mens Club	Issue: 1
	Date: Sept 2010

- 1.2) The demolition/site clearance contractor is required to submit details, prior to beginning work, of all procedures, access and haul routes, storage and tree protection measures in the form of a Method Statement to the Engineer/ACS, with time for the Engineer/ACS to review and consider before the work starts on site.

Tree Felling – Plan 2348_01

- 2) None.
- 3) Any brush clearing required within a tree protection zone shall be accomplished with hand-operated equipment.

Tree Pruning

- 4) None.

Tree Work General

- 5) Trees to be removed shall be felled so as to fall away from Root Protection Areas and to avoid pulling and breaking of roots of trees to remain. If roots are entwined, the Consultant may first require the major woody root mass severing before extracting the trees. This may be accomplished by cutting through the roots by hand, with a vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root pruning equipment.

	No: 2348/SPEC
	Page: 3
Arboricultural Method Statement Gwersyllt Working Mens Club	Issue: 1
	Date: Sept 2010

- 6) All felled brush and trees shall be removed from the tree protection zone either by hand or with equipment sitting outside the tree protection zone. Extraction shall occur by lifting the material out or by ‘skidding’ it across the ground. Any damage to trees due to demolition activities shall be reported to A.C.S. Consulting **within one hour** so that remedial action can be taken. The principal contractor shall also notify the Engineer of any damage to the trees.

Temporary Working Surfaces Access through RPA T2

- 7) The ground is to be covered in a suitable geo-textile as described in BS 5837:2005 and stone placed over to allow access. The voids are to be filled with sharp sand or washed road stone to allow access.

Hard surfaces

- 8) Consultant may monitor any grading, construction, demolition or other work that is expected to encounter tree roots. The surface is to be broken by hand held tools and the spoil loaded into barrows. The soil is to be removed using a ‘super sonic’ soil pick. The exposed roots are to be severed at a root hair or junction with a sharp implement – preferably a pruning knife. The severed roots will be kept moist with Hessian sacking.
- 9) Spoil from trenches, basements or other excavations shall not be place within the Root Protection Area. Details of site storage of demolition and building materials are to be agreed with the A.C.S. Consulting.
- 10) Construction vehicles and storage areas must remain **outside** the Root Protection Area at all times.
- 11) No materials, equipment, spoil or washout water may be deposited, stored or parked within the Root Protection Area.

 Arboricultural Method Statement Gwersyllt Working Mens Club	No: 2348/SPEC
	Page: 4
	Issue: 1
	Date: Sept 2010

- 12) Tree contractors and not construction personnel must perform additional tree pruning required for clearance during construction.
- 13) If injury should occur to any tree during construction the Consultant should evaluate it as soon as possible.

Services

- 14) All services shall be installed in accordance with NJUG 10. Exposed roots shall be covered in Hessian sacking and kept moist throughout the construction operations until they can be covered in high-grade topsoil.
- 15) Any roots damaged during grading or construction shall be exposed to sound tissue and cut cleanly with a saw.
- 16) The Contractor shall report to A.C.S. that the works have been completed satisfactory. A.C.S. will be given the opportunity to inspect the works.

The contact details of A.C.S. Consulting are:

A.C.S. Consulting
 FAO Mr Ian Murat
 Suite 1
 9/11 Princess Street
 Knutsford
 WA16 6BY

Tel No: 01565 755422
 Email: ian.murat@acsconsulting.co.uk

A.C.S. are acting as Agent to Mono Consultants and as such cannot instruct Sub-Contractors to undertake additional work or delete work from the Contract between the Client/Principal Contractor.

 Arboricultural Method Statement Gwersyllt Working Mens Club	No: 2348/SPEC
	Page: 5
	Issue: 1
	Date: Sept 2010

Protection of Trees on Development Sites

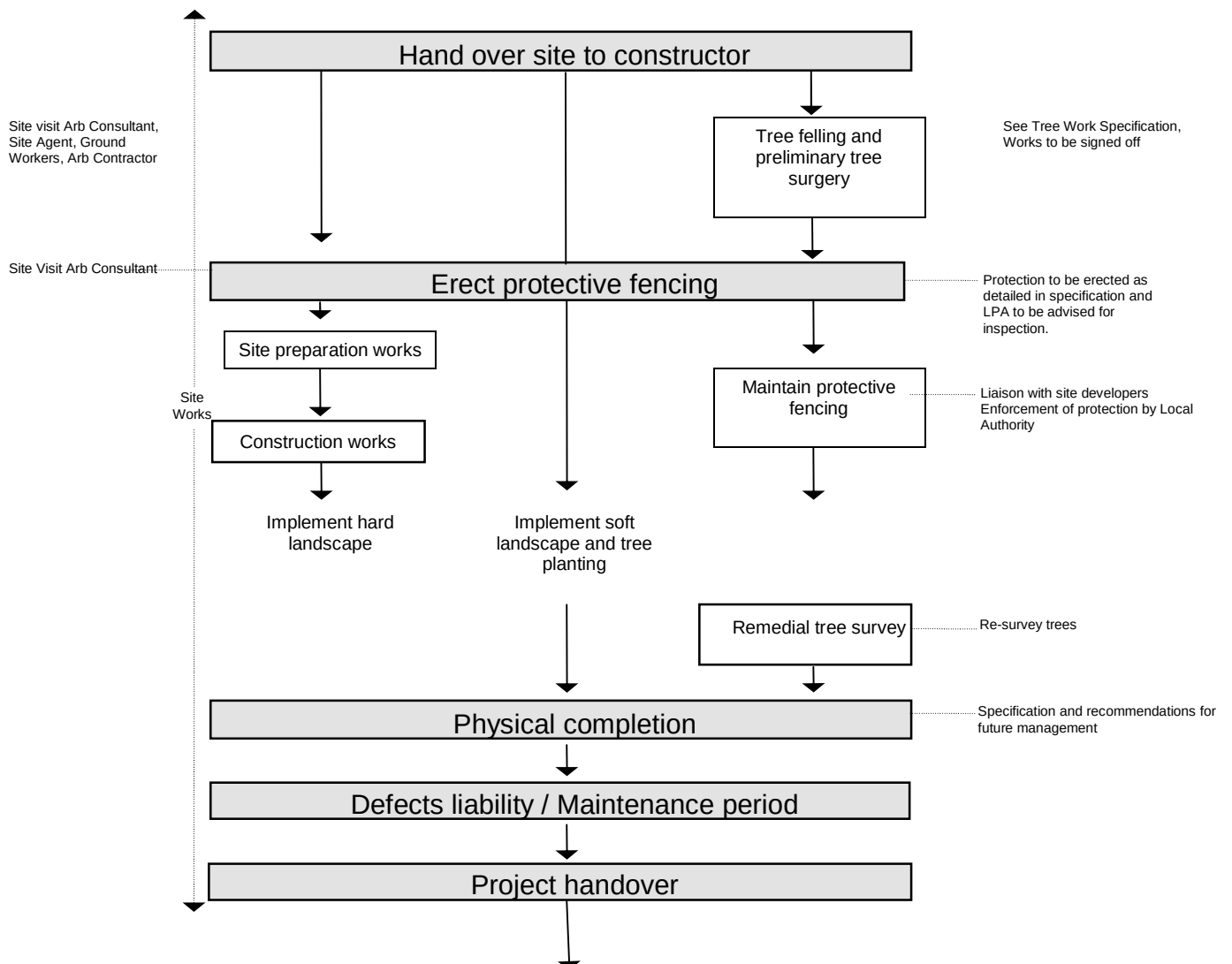
Stage in Development

Tree Care Process

New Planting

Existing Trees

Factors for Consideration



ACS Consulting
Suite One
9-11 Princess Street
Knutsford
Cheshire
WA16 6BY

