

BS5837:2012 trees in relation to design, demolition and construction report

RELATING TO TREE(S) AT

Greengates Farm, Abergele Road, St Asaph

PREPARED FOR

**Mr Melvyn Edwards
Denbighshire County Council**

Caveat Lector

1. Information supplied to the consultant by or on behalf of the client on which this report is based is assumed to be accurate. Any erroneous data supplied to the consultant and contained within this report renders it null and void in its entirety.
2. No liability is assumed by the consultant for the misuse, misinterpretation or misrepresentation of this report.
3. This report is not valid in adverse or unpredictable weather conditions or for any tree failure resultant of 'force majeure'.
4. No responsibility is assumed by the consultant for any works undertaken on the basis of recommendations of this report. Conversely, no responsibility is assumed by the consultant for any legal matters that may arise as a consequence.
5. The consultant will not be required to attend court or give testimony as part of this work instruction.
6. Trees were assessed from the ground only. No climbing inspections were conducted. No wood, root or soil samples were taken for further analysis.
7. Alteration of site conditions in close proximity to trees noted on the date of survey will invalidate this report in its entirety.
8. This report and all its annexes are intended for the sole use of the client. Reproduction and distribution of this report is forbidden unless consent has been given by the author.

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1. Introduction

1.1 Instruction

- 1.1.1 This report has been commissioned by Mr Melvyn Edwards of Denbighshire County Council, for the purposes of identifying tree constraints in contemplation of development at Greengates Farm, St Asaph.
- 1.1.2 The survey and report focus upon all trees within impacting distance of the proposed development, including third party trees located beyond the site boundary.
- 1.1.3 All trees have been surveyed in accordance with BS 5837: 2012 '*Trees in relation to design, demolition and construction – Recommendations*' and the Visual Tree Assessment (VTA) methodology. The site survey is supported by both an Arboricultural Implications Assessment (AIA) and Arboricultural Method Statement (AMS) as well as tree constraints and protection plans.

1.2 Background Information

- 1.2.1 The site currently consists of an agricultural semi-improved grassland field. Access is gained via a gateway to the east of the site, leading off Cwttir Lane.
- 1.2.2 The proposed development to which this report pertains, involves the construction of a gypsy and traveller transit site, which will entail the installation of a new hard surfaced roadway leading off Cwttir Lane, hard surfaced parking areas and associated outbuildings. The installation of new hard and soft landscaping throughout the site is also proposed.

1.3 Documents and Plans

- 1.3.1 The proposed scheme has been supplied in .DWG format. This report has been written in conjunction with this proposed scheme (Drawing No. A104).

- 1.3.2 Trees on or adjacent to the development site have been plotted onto the plan to form a Tree Constraints Plan (TCP). Where necessary, root protection areas (RPA's) have been augmented to mirror restrictions to root development on site. This in turn has been used to create an Incursion Plan (IP-01), on which the proposed scheme has been overlaid to highlight areas where the scheme conflicts with trees on site. A Tree Protection Plan (TPP-01) shows the positioning of protection measures required to ensure retained trees are afforded protection at all stage of the development process. Measures can include protective barrier fencing, ground protection and special engineering solutions such as CellWeb TRP. Plans can be found in Appendix (i).

1.4 Site Visit

- 1.4.1 The site visit took place on 28th August 2018. Trees were assessed and information gained can be found within the survey schedule appended to this report.
- 1.4.2 Weather conditions on the day of survey were fine and dry.

1.5 Wildlife and habitat considerations

As of the 31 January 2001, under the Countryside and Rights of Way Act 2000, it is an offence to disturb bats or damage or obstruct access to any structure or place that bats use for protection or shelter. Where bats are found to be present, the advice of an appropriately qualified ecologist must be sought. Any tree works required, must be undertaken in the presence of a Habitat Regulations license holder where bats are present.

1.6 Limitations

- 1.6.1 Trees were inspected from the ground only; no climbing inspections were conducted. No wood material, soil or root samples were taken for further analysis.
- 1.6.2 This is solely an Arboricultural report and cannot comment upon areas outside of this discipline.
- 1.6.3 This report is valid for a period of one year from the date of inspection. Any building development or changes in soil levels within the vicinity of trees not compliant with this report will invalidate it in its entirety.
- 1.6.4 It is stressed that assessments of tree condition are valid for a limited period only and should be regarded as a 'snapshot' of the trees' condition at the time of inspection. The trees referred to in this report are living organisms and are therefore subject to natural processes. They will also be subject to changes in their natural environment caused by human activities and weather conditions.
- 1.6.5 Information regarding the routing of service lines on site has yet to be determined. In the event that services are to be installed in close proximity to trees, reference should be made to NJUG Volume 4: *Guideline for Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees*.

2. Arboricultural Implications Assessment (AIA)

It is assumed that section 2 of this report will be read in conjunction with the TCP, IP, TPP and survey schedule as appended.

All tree works required to facilitate this development are to be completed prior to the installation of protection measures and the commencement of development activities on site.

2.1 Tree Stock Analysis

2.1.1 A total of 3 individual trees have been surveyed for the purposes of this report. All trees, groups and hedges have been inspected and data collected has been entered into the Survey Schedule appended to this report. Trees/shrubs of less than 7.5cm diameter at breast height (DBH) measured at 1.5m have not been recorded.

2.1.2 Dominant tree stock on site broadly consists of mature ash and oak.

Tree Work Requirements Summary

<i>Tree Removals</i>	<i>Above Ground Constraints</i>	<i>Below Ground Constraints</i>
T1	n/a	n/a
T2		

2.2 Tree Removals as a Consequence of Below Ground Constraints

2.2.1 Tree number T1 is in direct conflict with the proposed scheme. The tree has attained a BS5837 category of 'B', primarily as a result of its scale and visibility from the public highway; however, the tree does exhibit several irredeemable structural defects which limit its suitability for long term retention. In addition to structural defects noted during the survey (please see appendix (ii), survey schedule), the tree is located within very close proximity to a 33kv power line, which has resulted in significant lateral reduction on the southern plane of the tree in order to maintain the required clearance between power lines and vegetation. The structural defects identified, combined with the requirements for continuous pruning interventions in order to maintain clearance of the 33kv power line lead us to conclude that the trees removal is acceptable in this instance. A planned replacement planting scheme will offset some of the amenity lost following removal of this tree.

2.2.2 Tree number T2 is in direct conflict with the proposed scheme. The tree has attained a BS5837 category of 'C', due to its significant irredeemable structural defects. Because of its low quality, it should not constrain the development and its removal is deemed as acceptable in this instance.

2.2.3 All remaining trees are to be retained and protected for the duration of the development process.

2.2.4 All protection measures, including protective barrier fencing (PBF) are to be installed prior to the commencement of development works on site, affording retained trees the highest level of protection during the development process. The location of protection measures are shown on TPP-01. Specifications for PBF can be found within the Arboricultural Method Statement (AMS) section of this report.

2.2.5 Landscaping processes within the RPA's of retained trees must not involve excavations using heavy plant machinery or rotovators. Any lifting of the current ground cover must be done by hand and to a depth no greater than 100mm. Resurfacing within RPA's must mirror current soil levels. Changes to ground levels currently observed within the RPA's of established trees must be avoided.

2.3 Light and Shading

2.3.1 It is not anticipated that shading from retained trees will be an issue in this instance.

3. Arboricultural Method Statement (AMS)

3.1 Trees and Development Principles

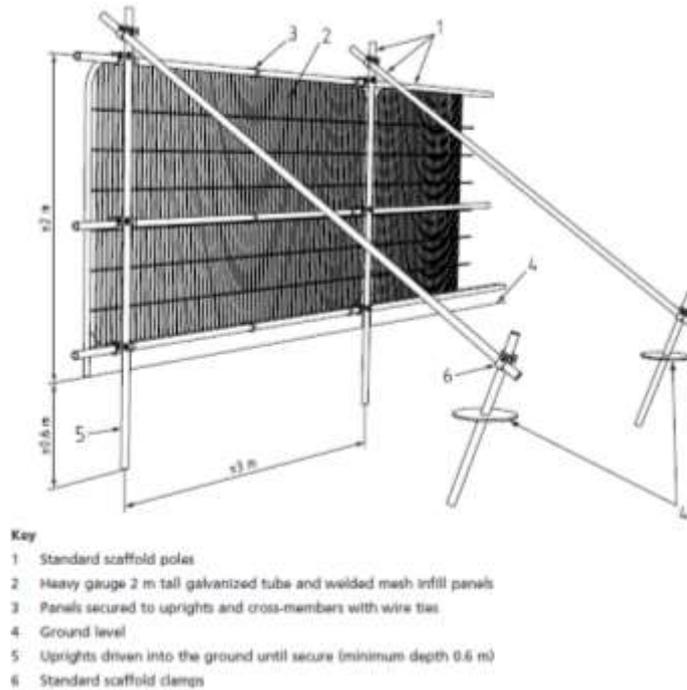
- 3.1.1 Following scheme approval from the local planning authority, all tree works are to be carried out in accordance with BS 3998:2010 '*Tree Work - Recommendations*'. Tree works are to be completed prior to the installation of PBF on site.
- 3.1.2 PBF must be installed prior to the commencement of any building activities/plant movement/materials storage on site and must remain in situ for the duration of works unless otherwise agreed to by both the appointed arboricultural consultant and the local authority tree officer.
- 3.1.3 Care shall be taken when planning site operations in proximity to trees to ensure that wide, tall loads or plant with booms, jibs and counterweights can operate without contacting retained trees. A banksman/supervisor should be used to ensure that adequate clearance from retained trees is maintained during these processes. In the event that additional pruning is required to facilitate access, the advice of appointed arboricultural consultant should be sought.
- 3.1.4 The following activities are not permitted within the RPA's of retained trees:
- No soil disturbance, compaction, raising or lowering of soil levels;
 - No linear mechanical excavation whatsoever;
 - No change in soil level by stripping or filling;
 - No storage of plant or building material;
 - No vehicle/plant machinery parking;
 - No temporary buildings, sheds or offices;
 - No fires within 10m of tree canopies;
 - No Storage, handling or mixing of chemicals (including cement) or washing down of vehicles within an unprotected RPA.

3.2 Protective Barrier Fencing Specification

- 3.2.1 Location of PBF is documented within TPP-01; PBF to remain in situ for the duration of construction works on site. Relocation of PBF to take place only following approval from the project arboricultural consultant and local authority tree officer.

3.2.2 Type 1 PBF will be used to protect high quality retained trees on site (in this instance, T3. Type 1 PBF is to be constructed in accordance with specifications set out in BS 5837 section 9.2.2, namely-

“A scaffold structure comprising a vertical and horizontal framework, well braced to resist impacts, with vertical tubes spaced at maximum intervals of 3m. Onto this, weldmesh panels should be securely fixed with wire or scaffold clamps. Weldmesh panels on rubber or concrete feet are not resistant to impacts and should not be used.”



3.2.3 Should PBF become damaged, impairing its ability to protect retained trees, all work shall cease within the vicinity of the damaged PBF until it has been repaired or replaced. If any tree damage is sustained during the interim period, notification should be given to the appointed arboricultural consultant so prescription of remedial tree works can be given.

3.3 Site Monitoring and Communication

3.3.1 All site personnel are to be provided with a copy of this report and associated plans.

3.3.2 It is advised that site visits from both the appointed arboricultural consultant and tree officer take place at regular intervals during site activity, ensuring recommendations within this report are adhered to.

Appendices

Appendix (i) – Plans (TCP – 01, IP – 01 and TPP – 01)

Appendix (ii) – Survey Schedule