PAP/2023/0071

IAIN TAVENDALE F.Arbor.A.

ARBORICULTURAL CONSULTANT

Arboricultural Impact Assessment

Site;

Land at Nailcote Farm, Fillongley, Coventry, CV7 8DW

"Construction of a temporary Solar Farm providing 48.1 MW (AC) output, to include the installation of ground-mounted solar panels together with associated works, equipment and necessary infrastructure."

Client:

Enviromena Project Management Ltd

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Tree Survey and Methodology Considerations.

A tree survey of the site was prepared on the 13th November 2022 in consideration of BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations and in the knowledge of the proposals for the necessary works.

A topographical survey had also been prepared upon which all relevant data has been added for identification purposes.

The survey was undertaken from ground level. No excavations were carried out or soil or root samples taken. Should a more detailed assessment / inspection of a particular item be deemed necessary it has been noted in the survey schedule. No aerial inspections or invasive probings or drillings have been undertaken.

Retention values were evaluated following guidance within Table 1 of BS5837 – 'Cascade Chart for Tree Quality Assessment.' This specifies four main categories.

1. *CAT A – Trees of high quality with an estimated remaining life expectancy of at least 40 years whereby they could make a substantial long term contribution to the area.*
2. *CAT B – Trees of moderate quality with an estimated remaining life expectancy of at least 20 years that are still of sufficient quality to make a substantial contribution to the area.*
3. *CAT C – Trees of low quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150mm. All items within this category could be retained but would not be expected to impose a significant constraint on development.*
4. *CAT U – Trees in such a condition that they cannot be realistically retained as living trees in the context of the current land use for longer than 10 years. They may however have existing or potential conservation value which it might be desirable to preserve.*

It is understood that the Client proposes to retain all trees and hedges across the site and the solar panel arrays and associated cabling / infrastructure have been specifically designed to avoid conflicts. All arrays will also ensure a reasonable stand off from retained features in excess of 3m both for access and necessary management of existing retained features (hedge cutting or similar),

As such, it was considered unnecessary to fully assess every tree in each hedgerow, group or similar, as retention could be achieved without conflict. Furthermore, due to the presence of growing crops and various hazards, access to all areas was not fully achievable. Occasional (average) trees were however identified randomly across the site to indicate all relevant tree data should such information be required for examples of shadow patterns, theoretical root protection areas or canopy overhangs.

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If any particular trees were noted as being in poor condition and that would be recommended for removal regardless of any proposed site operations, such details have been noted in the survey or on associated drawings. Such removals may however be discussed with Ecologists and habitat features considered for retention for wildlife.

It was also noted that all sections of the site have had deep cultivation undertaken for agricultural purposes in very close proximity of all trees and hedges for a considerable number of years.

Such operations will have significantly controlled root morphology within the soils and experience has shown that if roots exist within the fields, they would be at considerable depth.

The proposed solar arrays will be constructed on frames driven into soils and as such, excavations are effectively minimal and the possibility root damage / disturbance negligible.

It is accepted that machinery will be required to implement all operations but such equipment will be appropriate to the site and soil conditions and would be expected to have low ground pressure tyres / tracks to provide stability and avoid unnecessary ground disturbance. Such equipment would have no greater impacts on soils than the large agricultural equipment that has worked across the land.

Cabling will be required to be buried in certain locations and again, in general these would be within cultivated land where any root material would be minimal. Should main cables be required to cross hedge lines containing trees, these will attempt to be located where there are appropriate gaps so as to only cause minimal disturbance.

In consideration of all such observations and the advice obtained, it is considered that the tree data collected is appropriate for the site and will enable a reasonable and balanced assessment of the proposals to be achieved.

Management recommendations have been indicated where considered appropriate and necessary to promote tree health and viability and maintain an acceptable level of safety in respect of existing site conditions and the knowledge that some construction works are proposed.

It should be noted that the BS5837 is the only nationally recognised document which provides guidance and recommendations on the relationship between trees and design, demolition and construction processes. It expects that appropriately qualified and experienced persons will be entrusted with the execution of its provisions.

The British Standard does not provide specific distances for any trees in relation to structures (other than for new plantings and potential damage from incremental

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growth) and whilst it may recommend that no construction should occur within the expected root protection areas of retained trees (the default position), the Standards provide detailed guidance on how construction could occur if all appropriate factors and methodologies can be addressed.

They clearly expect that an informed, qualified and experienced person applies due consideration to all issues to achieve a satisfactory design appropriate for any particular site and the identified constraints.

It should also be noted that the Standards advise that they are a form of guidance and recommendations and should not be quoted as if it were a specification.

General Description of Site and Surroundings

The site and surroundings have been described in detail within other submissions.

In respect of arboricultural issues, the majority of the trees exist on the site boundaries and frequently to the far side of existing water courses.

Two groups run through the main body of the site; G2 & G3 and several individual specimens and one woodland exist randomly through the area.

The majority of all hedgerows have generally been flail cut on a regular basis. Where they are within the farmland formal features have been created, where hedgerows abut the land, faces have simply been cut back to facilitate agricultural operations.

All trees (or sections of their canopies) are probably visible from public areas outside the site and therefore contribute to visual amenity.

An inspection of the site and consideration of the submitted tree survey will indicate that the trees are in the mature age category with no replanting having been implemented in recent times.

Soils within the area and / or the site have not been analysed however, the successful establishment of trees, hedgerows and crops within the area indicate soils are probably within the neutral to acid range and not waterlogged. The size and growth rates of the general tree population also suggest that soils are reasonably fertile and the local micro climates relatively mild and / or sheltered.

Description of Proposed Construction

Again, all such issues have been fully addressed in other submissions.

The General Layout (Draft) Plan Dwg. No: P.Nailcote Farm_01_General Layout Rev. B is appended for illustrative purposes.

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Designation Relating to Trees

There is no interactive Tree Preservation Order Mapping service available on the Council's web site. Direct contact can be made with any enquiries but at present this hasn't been pursued.

Should any trees be protected, if any works are necessary that are not directly necessary to implement any approved development the submission of a Tree Works Application to the LPA will be required.

However, it is always recommended that no tree works should be undertaken within a site without contacting the Local Authority and if necessary, due notification being given to and any necessary consent being received from the Authority.

The potential effect of development on trees whether statutorily protected or not is a material consideration that is taken into account in dealing with planning applications.

Even should items be afforded statutory protection, such orders impose no duty on the owners of the trees and woodlands affected to carry out pruning or other maintenance, either to any particular standard or at all.

This must be a matter for the owners' decision, subject to the duties laid upon him or her by the common law. If a local authority wishes to encourage such works to be carried out, it must do so by permission, through the offer of grants or possibly by the imposition of conditions on consents.

Current Situation

At present the trees identified exist either within or immediately adjacent to the site where no detailed management appears to have been undertaken in recent years other than pruning to provide reasonable clearances for agricultural operations.

It has been indicated within the survey however that regardless of construction proposals, some management may be appropriate to several items so as to avoid conflict during current usage.

Such actions are however entirely dependent upon the owner's requirements.

Implications of Development

1. Direct Loss of Trees.

To physically construct the proposed solar arrays and associated ground works, no trees will require removal:

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BS5837 CAT	TREE No's	TOTAL
Cat – A High Quality	None	0
Cat – B Moderate Quality	None.	0
Cat – C Low Quality	None	0
Cat – U Poor Quality	None	0

There will therefore be no impacts upon any visual amenity derived from public areas outside the site.

2. Indirect Loss of Trees

There will be no indirect losses of trees as a result of the proposed works.

BS5837 CAT	TREE No's	TOTAL
Cat – A High Quality	None	0
Cat – B Moderate Quality	None.	0
Cat – C Low Quality	None	0
Cat – U Poor Quality	None	0

There will therefore be no impacts upon any visual amenity derived from public areas outside the site.

3. Major Pruning of Trees.

No pruning works would be required to physically construct the proposed solar arrays and associated ground works.

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BS5837 CAT	TREE No's	TOTAL
Cat – A High Quality	None	0
Cat – B Moderate Quality	None	0
Cat – C Low Quality	None	0
Cat – U Poor Quality	None	0

There will therefore be no impacts upon the environment as a direct result of the proposals.

4. Indirect Impacts on Trees.

It is not considered at this time that there would be any indirect impacts on trees to physically construct the proposed solar arrays and associated ground works.

BS5837 CAT	TREE No's	TOTAL
Cat – A High Quality	None	0
Cat – B Moderate Quality	None	0
Cat – C Low Quality	None	0
Cat – U Poor Quality	None	0

There will therefore be no impacts upon the environment as a direct result of the proposals.

Construction Methodology / Arboricultural Method Statement.

It may be requested that an Arboricultural Method Statement be conditioned to any approval for development / construction within the site. As discussed previously however, no solar arrays or associated infrastructure is proposed to be sited near retained trees and / or hedges all as indicated within their General Layout.

Existing access points will be retained and arrays aligned so as to avoid major shade issues and maximise efficiency.

Furthermore, historic land usage has resulted in deep and repeated cultivation of all soils tight up to trees hedges and site boundaries. It is highly probable therefore that

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there are no significant tree roots within the site and no harm will be caused by the proposed operations.

In consideration of all such factors it is unlikely that an Arboricultural Method Statement would be required.

Should for whatever reason it be decided that a Arboricultural Method Statement is necessary, in accordance with BS5837 Figure 1, once the feasibility and planning/design section is complete and Scheme Design Approvals are obtained from Clients and Regulatory bodies, the detailed/technical design stage should be implemented.

In arboricultural terms this will basically involve the preparation and submission of a detailed and comprehensive document to discharge the relevant conditions.

The Arboricultural Method Statement would normally consider the following issues:

- Protection of retained trees / hedges before any materials or machinery are brought onto the site and before any construction or excavations commence.

  Note: Whilst tree protection fencing may be proposed, site security arrangements may require a substantial fencing / hoarding to be erected around the site on the approximate line of any appropriate tree protection fencing which, may be equal or superior to the BS 5837 specification. Site security and tree protection may therefore be combined and can, if required, be agreed with the LPA in due course.

- Removal of any relevant areas of hard surfacing.

- Construction methodology to indicate storage areas, location of welfare units etc.

- Installation of any new surfacing.

- Installation of root friendly surfacing in proximity of any tree root protection areas all in accordance with Arboricultural Association Guidance Note 12, The Use of Cellular Confinement Systems Near Trees: A Guide to Good Practice.

- Specialist foundations, installation techniques and similar.

- Retaining structures.

- Auditable / audited system of arboricultural site monitoring, including a schedule of specific site events requiring input or supervision.

- Contact details for all relevant parties.

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- Appointment of a Project Arboriculturalist or similar.

Proximity of Trees to Structures.

The proposed solar arrays and associated works have been designed to adhere to guidance within BS5837:2012 in that they are located outside the root protection areas of trees to be retained. Such an assessment has considered root morphology and constraints imposed by agricultural cultivation.

Space has also been permitted to allow future growth of retained trees although most items are in the mature age category and substantial increases in size / spread would not be expected.

The proposals have been designed to take account of existing trees, their size and density and the effect that these will have on sunlight availability. All areas would be expected to achieve direct sunlight for substantial parts of the day as the sun rotates through its natural arc.

The relationship of structures to large trees can cause apprehension. The layout has considered such factors and the design minimises any potential conflicts. Such locations and juxtapositions will also avoid the need for frequent pruning.

The design creates new environments that will be appropriately managed to the client's / occupiers requirements and may be used for grazing agricultural livestock at a stocking density that is consistent with any biodiversity enhancement measures.

In respect of seasonal nuisances: leaf fall, fruit, honeydew or similar, it is not considered that conflicts would arise, adequate clearances from trees being afforded and the angle of the arrays would naturally shed any detritus.

In consideration of the foregoing assessments it is considered that there will be negligible impacts caused to retained trees by the proximity of the structures or vice versa.

Services

Services into or out of the site would be expected to follow existing routes or be located at an acceptable distance from trees thereby avoiding their expected root protection areas.

All services will be fully assessed and if for whatever reason it becomes necessary to encroach nearer to any trees than currently exist, any excavations will be undertaken manually or alternative techniques such as drilling or thrust boring utilised all as per guidance in BS5837:2012 or the NJUG publication Volume 4 – Guidelines for the Planning, Installation and Maintenance of utility Apparatus in Proximity to Trees – 2007.

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There will therefore be neutral / negligible impact caused by the provision of services.

Post Construction

Should development proceed, neighbouring trees will be expected to be managed to maintain acceptable levels of safety. Such actions would also promote tree health and viability and will maximise the potential of the treescape.

Items may be lost in the future due for example to age, infection, suppression or proposed management as would be expected in any environment but, it would be expected that all such operations would be agreed or consented by the Local Planning Authority and replanting encouraged or conditioned.

It is reasonable to conclude therefore that as a result of the proposed construction there would be no appreciable post development pressure to undertake either inappropriate or undesirable tree works to the detriment of the visual amenity currently afforded from public areas outside the site.

It is therefore considered that any post construction pressures would have a negligible to moderately beneficial impact.

Conclusions

From the foregoing information it can be reasonably concluded that no trees require removal to implement the installation of the solar arrays and associated infrastructure.

Various items in proximity to the site have been identified as being at theoretical risk from indirect impacts but due to historic deep and repeated cultivation of the land, it has been comprehensively indicated that any such risks are negligible.

The design and layout of the proposals have considered all arboricultural issues and will permit construction to proceed without conflict with retained trees. The juxtaposition of the structure to trees will also ensure there is good sunlight availability, the need for regular pruning regimes will be avoided and seasonal nuisances minimised.

All services can be connected and / or installed without impacting upon retained trees or should it be necessary, installed using accepted techniques that avoid damage or disturbance to rooting environments.

Post construction impacts have been considered which indicate that by creating a new environment with greater levels of activity and management, any vegetation will be positively managed resulting in improved health and viability to the overall treescape.

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It is reasonable to conclude therefore that in respect of arboricultural issues should the proposed construction proceed there is likely to be a moderately beneficial impact to the existing treescape and its future viability.

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January 2023.

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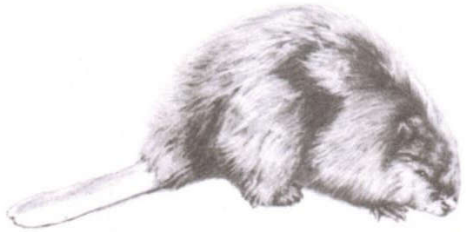

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SURVEY DETAILS FOR TREES AT NAILCOTE FARM, FILLONGLEY, COVENTRY, CV7 8DW

Issued to: Enviromena Project Management Ltd

13 November 2022

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Note:

All tree surgery and felling works detailed should be carried out to a standard, the minimum of which is specified in BS3998:2010 Tree Work - Recommendations.

Contractors should be suitably qualified and experienced to an acceptable standard. They should also be aware that if during operations any defects become apparent that would not have been immediately obvious to the Consultant, that such defects should be notified immediately and confirmed in writing within a reasonable period.

All observations and recommendations only relate to the site and the trees as they were at the time of inspection. Should severe climatic or environmental events or changes take place, it may be necessary to reassess the situation so as to ensure an acceptable and continuing level of safety.

The report does not provide a full health and safety inspection of the trees surveyed. It is not a Tree Hazard Assessment that is specific to minimising the risks and liabilities associated with trees.

Should the inspection have taken place during the dormant season, this will have simplified the inspection of the high crowns and canopies. It will not have been possible however to ascertain either leaf size, colour or density which, can be classic indicators of stress or root associated disorders.

The survey has also been prepared in the knowledge that some form of development may occur on the site. As such, some of the recommendations put forward could be considered unnecessary were the site simply left as it presently exists.

Furthermore, should development be approved, it may be necessary to reassess and amend this document upon completion of all construction operations to ensure that trees, properties and people can all safely co-exist.

All tree numbers refer to those indicated on the attached site drawing. Dimensions of any trees off site may have been estimated if access was not possible.

The report unless stated otherwise, is of a preliminary nature in that the trees were not climbed but inspected from ground level, and no soil or timber samples have been taken for analysis.

A copy of the Consultant's General Conditions of Contract are attached. These form the basis upon which all services and information are provided.

KEY:

Tree No. - Tree Number – to be recorded on tree survey plan where necessary.

Species – common and scientific names, where possible.

Height – overall height of the tree in metres

Stem Dia - Stem diameter – in millimetres at 1.5m above adjacent ground level (on sloping ground to be taken on the upslope side of the tree base) or immediately above the root flare for multi stemmed trees.

Branch spread – in metres taken at the four cardinal points to derive an accurate representation of the crown (to be recorded on the tree survey plan where necessary).

Height of cc - Height of crown clearance – in metres above adjacent ground level to inform on ground clearance, crown stem ratio and shading). Where considered desirable, first significant branch and direction of growth e.g. 2.4-N

Age class – young (Y), Middle aged (MA), mature (M), over mature (OM) & veteran (V).

Physiological condition – e.g. good (g), fair (f), poor (p) & dead (d).

Structural condition – e.g. collapsing, the presence of decay and any physical defect.

Preliminary management recommendations – including further investigations of suspected defects that require more detailed assessment and potential for wildlife habitat.

ERC - Estimated remaining contribution – in years, <10, 10+, 20+, 40+.

Cat grade - Category grade – U or A to C (see Table 1) to be recorded in plan on the tree survey plan where appropriate.

RPA – Root protection area calculated from BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations in sq/m's. Where indicated, dimensions of radius of circle or sides of square based around centre point of trunk calculated for design purposes.

RP – Remedially prune: remove significant dead wood, basal & epicormic shoots, broken, crossing and rubbing branches etc and undertake light reshaping if necessary to improve form and balance/ abate actual or potential nuisance. Ensure adequate clearances over highway (5.2m) and footpath (2.4m)

- estimated dimensions (e.g. for off-site or otherwise inaccessible trees where accurate data cannot be recovered).

Table 1 **Cascade chart for tree quality assessment**

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
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 *NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see **4.5.7**.*			See Table 2
	1 Mainly arboricultural qualities	**2 Mainly landscape qualities**	**3 Mainly cultural values, including conservation**	
Trees to be considered for retention				
Category A **Trees of high quality** with an estimated remaining life expectancy of at least 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)	See Table 2
Category B **Trees of moderate quality** with an estimated remaining life expectancy of at least 20 years	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), such that they are unlikely to be suitable for retention for beyond 40 years; 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	See Table 2
Category C **Trees of low quality** with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	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	See Table 2

Tree No.	Species	H'gt.	Stem Dia.	Branch Spread		H'gt of C.C.	1st Branch @	Age Class	PC	Structural Condition	Preliminary Management Recommendations	ERC	Cat Grade	RPA Sq.m's	RPA Circle of Radii / m's
T1	Oak	15	875	N E S W	5.8 5.9 7 5	5	5.7S	OM	F/P	Major die back stag headed. Extensive bark loss. Possibly approaching veteran status.	No action at present. Monitor.	20	B1	346.41	10.5
T2	Holly	8	450	N E S W	5 5 5 5	0		M	F	Multi stemmed, coppice type or simply regularly cut by flail and now grown out. Reasonable vitality.	Continue normal field boundary management operations.	20	B2	91.62	5.4
T3	Alder	10	600	N E S W	6.1 7 6.2 5.2	3.5		M	F	Multi stemmed coppice type material. Reasonable vitality. Minor dead wood, old branch stumps and similar all typical of species.	No action at present. Monitor.	20	B1	162.88	7.2
T4	Ash	18	1150	N E S W	7.7 12 8.6 7.2	7	10SE	OM	P	Very low vitality. Extensive decay around original branch break at 4m. Minimal safe useful life expectancy.	Either fell and remove or, reduce to retain trunk as habitat feature.	0/10	U	598.36	13.8
T5	Oak	17	750	N E S W	10 10 10 10	5.5	4S	M	G	All to far side of drainage ditch. Reasonable vitality. Minor dead wood, old branch stumps and similar all typical of species.	No action at present. Monitor.	20	B2	254.50	9
T6	Oak	16	950	N E S W	10.8 11.1 10.9 10.7	6	4S	M	F	Has been crown lifted for agricultural operations. Reasonable vitality. Minor dead wood, old branch stumps and similar all typical of species. Measured as an example within G2.	No action at present. Monitor.	20+	B2	408.33	11.4
T7	Alder	15	750	N E S W	6.7 over site	5		M	F	Multi stemmed coppice type material to far side of water course. Reasonable vitality. Minor dead wood, old branch stumps and similar all typical of species.	No action at present. Monitor.	20	B2	254.50	9
T8	Ash	20	1000	N E S W	12 over site.	5	7.6SW	M/OM	F	Example of edge tree. Reasonable vitality. Ivy clad inspection restricted. Minor limb shedding. All to far side of water course.	No action at present. Monitor.	20	B2	452.45	12

T9	Oak	21	900	N E S W	12.1 12 13.5 12.8	5	5N	M	F	Off site to far side of water course. Reasonable vitality. Minor dead wood, old branch stumps and similar all typical of species. Minor cavities observed - reasonable for size and age.	No action at present. Monitor.	20	B2	366.48	10.8
T10	Oak	17	700	N E S W	10 7.9 9.6 10.6	5	6.7S	M	F	Example of edge tree. Reasonable vitality. Minor dead wood, old branch stumps and similar all typical of species.	No action at present. Monitor.	20	B2	221.70	8.4
T11	Ash	17	700	N E S W	10.4 10 7.3 10	5	6SW	M/OM	F/P	Low vitality. Early limb shedding. Minor cavities from past crown lifting	No action at present. Monitor.	10	C1	221.70	8.4
T12	Oak	18	975	N E S W	12 12 12.5 12	6	6SW	M	F	Two trees / twin stemmed from ground level. Reasonable vitality. Minor dead wood, old branch stumps and similar all typical of species. Poor crown lifting - stumps. Minor limb shedding.	No action at present. Monitor.	20+	B2	430.11	11.7
T13	Ash	16	1125	N E S W	9 10.7 10.2 10	5		M/OM	F/P	Stem bifurcates at 1.8m with acute included bark union. Very low vitality. Some die back. Various cavities & old pruning wounds. Fungal fruiting bodies present indicating internal decay.	Either fell and remove or, reduce to retain trunk as habitat feature.	10	C2	572.63	13.5
T14	Ash	18	1200	N E S W	10.5 11.4 10 10	6		M	F	Fungal fruiting bodies present indicating extensive internal decay. Very low vitality. Failure reasonable foreseeable. Major wounds and cavities present. Stem bifurcates at 3.2m	Either fell and remove or, reduce to retain trunk as habitat feature.	0/10	U	651.53	14.4
T15	Oak	11	1100	N E S W	8.3 8.3 6.6 7	5		M	F	Major limb removed to South with decay present at wound. Compact decurrent form. Reasonable vitality. Minor dead wood, old branch stumps and similar all typical of species.	No action at present. Monitor.	20+	b1	547.46	13.2

T16	Oak	17.5	1250	N E S W	11.7 12.8 14 11	6	5NW	EM	F	Old branch stumps and pruning wounds present. Minor limb shedding. Reasonable vitality.	No action at present. Monitor.	20+	B1	706.95	15
T17	Oak	18	1100	N E S W	10.9 12 11 11	5	2.5S	M	F	Ivy clad inspection restricted. Reasonable vitality. Minor dead wood, old branch stumps and similar all typical of species. Fungal fruiting body at base of Ganoderma.	No action at present. Monitor.	20	B2	547.46	13.2
T18	Oak	17	850	N E S W	10 9.2 10.8 7.5	5	6.2S	M	F	Reasonable vitality.. Minor dead wood, old branch stumps and similar all typical of species. Various old pruning wounds. Minor cavities and early stag heading.	No action at present. Monitor.	20+	B2	326.89	10.2
T19	Alder	16	600	N E S W	6 over site.	5	2W	M	F	All to far side of water course. Minor ivy clad. Reasonable vitality..	No action at present. Monitor.	20	B2	162.88	7.2
G1	Willow /Ash	22	650	N E S W	12	10		M	F	To edge of water course. Some branch failure within willow all classic shedding due to level of maturity. Reasonable vitality.. Minor dead wood, old branch stumps and similar all typical of species.	No action at present. Monitor.	20	B2	191.16	7.8
G2	Oak	16	950	N E S W	10	6		M	F	Group within field boundary feature. Some recent pruning / crown lifting for agricultural clearances.	No action at present. Monitor.	20+	B2	408.33	11.4
G3	Oak, Ash Alder	17	800	N E S W	10	5		M	F	Field dividing feature on bank. Reasonable vitality.. Minor dead wood, old branch stumps and similar all typical of species.	No action at present. Monitor.	20+	B2	289.57	9.6
H1	Holly, Elder & Hawthorn	2	150	N E S W	1	0		M	F	Flail cut hedgerow feature. Relatively entire at western end, becomes very gappy to eastern section. Reasonable vitality.	Continue normal field boundary management operations.	20	C2	10.18	1.8

H2	Mixed native deciduous.	8	200	N E S W	3 over site.	0		EM	F	Off site in Mast enclosure. Reasonable vitality. Face to site cut back up to 4m otherwise unmanaged.	Continue normal field boundary management operations.	20	C2	18.10	2.4
H3	Mixed native deciduous.	12	350	N E S W	5.6 over site.	0		EM	F	Off site on banking to Motorway. Reasonable vitality. Minor dead wood, old branch stumps and similar all typical of species.	No action at present. Monitor.	20	B2	55.42	4.2
H4	Predominantly Sloe.	2	100	N E S W	1	0		M	F	Reasonably well cut boundary feature.	Continue normal field boundary management operations.	20	C2	4.52	1.2
H5	Hawthorn & Sloe	8	350	N E S W	4	0		M	F	Remnant hedgerow feature to edge of water course.	Continue normal field boundary management operations.	20	C2	55.42	4.2
H6	Predominantly Hawthorn with Oak & Field Maple Standards.	2 hedge & 10 tree	425	N E S W	7.8 over site tree.	6 tree		M	F	All to far side of dry ditch. Hedge cut hard back to create formal face. Reasonable vitality..	Continue normal field boundary management operations.	20	B2	81.72	5.1
H7	Mixed native deciduous.	8	150	N E S W	0 over site,	0		M	F	Unmanaged feature all to far side of drainage ditch.	No action at present. Monitor.	20	C2	10.18	1.8
H8	Mixed native deciduous.	1.6	200	N E S W	1	0		M	F	Well cut boundary feature	Continue normal field boundary management operations.	20	C2	18.10	2.4
W1	Willow, Ash, Alder.	20	400	N E S W	9.5 over site.	2		M	F	Reasonable vitality. Minor dead wood, old branch stumps and similar all typical of species. Minor failures, some coppicing. Probable ecological value.	No action at present. Monitor.	20+	B2	72.39	4.8
W2	Mixed native.	18	350	N E S W	6.5 over site	5		EM	F	All off site to rear of managed hedgerow and / or water course. Reasonable vitality. Minor dead wood, old branch stumps and similar all typical of species.	No action at present. Monitor.	20+	B2	55.42	4.2

A1	Oak, Ash, Sloe, Hawthorn.	10	400	N E S W	0 over site.	0		EM	F	Off site. Rising ground to rear. Reasonable vitality.	No action at present. Monitor.	20	B2	72.39	4.8

IAIN TAVENDALE F.Arbor.A
ARBORICULTURAL CONSULTANT
General Conditions of Contract

1. DEFINITIONS

In these Conditions:

"Consultant" means Iain Tavendale F.Arbor.A.

"Contract" means the contract for the provision of Services.

"Employer" means the person whose request for the provision of the Services is accepted by the Consultant or who accepts a written quotation of the Consultant.

"Site" means the area in which the Services are to be carried out as specified in writing to the Consultant prior to his commencing the provision of the Services.

"Services" means the services of arboricultural consultant to be supplied to the Employer by the Consultant in accordance with these Conditions.

2. BASIS OF THE CONTRACT

The consultant shall provide to the Employer and the Employer shall accept the Services in accordance with any written quotation of the Consultant which is accepted by the Employer or any request to provide services of the Employer which is accepted by the Consultant to appropriate British Standards and within a reasonable time. Time shall not be of the essence of the Contract. These conditions shall govern the Contract to the exclusion of any other terms and conditions and no variation to these Conditions shall be binding unless agreed between the Employer and the Consultant. No variation of the Services will be made without prior agreement in writing between the Employer and the Consultant. (The Consultant's employees or agents are not authorised to make any representations concerning the Services unless confirmed by the Consultant in writing.)

3. THE CONSULTANT SHALL:

a) be entitled to subcontract assign or transfer any or all of the Contract without informing the Employer. The Consultant shall be responsible for its obligations under the Contract where sub-contracting takes place.

b) be responsible for making good at his own cost any damage caused as a result solely of his own work.

c) on completion of the Contract leave the site reasonably clean and tidy from his own work.

4. THE EMPLOYER SHALL:

a) be responsible for ensuring that the Consultant is notified of all Tree Preservation or Conservation Area Orders, Private Covenants, the need for Felling Licences, or Planning Legislation that is applicable to the Contract.

b) be responsible for ensuring that the Consultant is notified of all springs, wells, service pipes and cables, sewage or land drains, or any other hazards or obstructions which are not discoverable upon immediate visual inspection of the surface of the site. Any breach of this responsibility shall entitle the Consultant to make a reasonable charge for any additional work caused by such hazards or obstructions.

5. CONTRACT PRICES

The price for the Services shall not include Value Added Tax which the Employer shall be additionally liable to pay to the Consultant. The price which the Employer shall be liable to pay shall be determined by reference to the Consultants hourly charge rate current at the date of completion of the Services. In addition the Employer shall be liable to reimburse the Consultant for such expenses as may reasonably and properly be incurred by him in the performance of the services as Consultant. Written details of the Consultant's hourly charge rate will be provided to the Employer on written request by the Employer.

6. METHOD OF PAYMENT

a) Subject to any special terms agreed in writing between the Employer and the Consultant the Consultant shall be entitled to invoice the Employer for the price of the Services on or at any time after the Services have been completed.

b) The Employer undertakes to pay the Consultant within 28 days of the date of the Consultant's invoice. The time of payment of the price shall be of the essence of the Contract.

c) Failure by the Employer to make payment on the due date, will entitle the Consultant to interest on the amount unpaid at 3% per annum above the base rate of Barclays Bank plc from time to time until payment in full is made and will further enable the Consultant to cancel the contract or suspend any further provision of Services to the Employer.

d) If the Consultant fails to perform the Services for any reason other than any cause beyond the Consultant's reasonable control or the Employer's fault and the Consultant is accordingly liable to the Employer, the Consultant's liability shall be limited to the excess (if any) of the cost to the Employer (in the cheapest available market) of services to replace those not completed over the price of the Services.

7. DISPUTES

a) Where disputes arising from the Contract cannot be resolved by the Employer and the Consultant, then an independent single arbitrator agreeable to both parties (or in default of agreement nominated on the application of either party by the Chairman of the Professional Committee of the Arboricultural Association for the time being) shall be employed.

b) The losing party will pay the resulting costs, unless otherwise decided by the arbitrator.

c) The Contract shall be governed by the Laws of England.

8. THE SITE

Access

i) The Consultant will have free and reasonable access within the Site. Any areas that are to be excluded from this should be notified in writing to the Consultant prior to the date on which the Services are commenced.

ii) The Employer shall ensure that the Consultant has access to private areas outside the site reasonably necessary in order that the Services can be carried out.

iii) The Employer shall indemnify the Consultant against any liability incurred by the Consultant (of whatsoever nature) due to his having entered on private areas without permission of the owner when the Employer has stated free access has been negotiated.

9. LIABILITY

a) The Consultant shall not be liable to the Employer or be deemed to be in breach of the Contract by reason of any delay in performing the Services, if the delay or failure was due to any cause beyond the Consultant's reasonable control. Without prejudice to the generality of the foregoing, the following shall be regarded as causes beyond the Consultant's reasonable control:

i) Act of God, explosion, flood, tempest, fire or accident;

ii) acts, restrictions, regulations, bye-laws, prohibitions or measures of any kind on the part of any governmental, parliamentary or local authority;

iii) strikes, lock-outs or other industrial actions or trade disputes.

b) The Consultant shall not be responsible or liable for any work undertaken as a result of recommendations by the Consultant unless, or until, such work is carried out and both supervised and approved by the Consultant.

10. QUOTATION

a) Any quotation given by the Consultant to the Employer shall remain open for acceptance for 30 days from the date of such quotation and thereafter lapses automatically.

b) Acceptance of such quotation involves acceptance of these conditions.It should be noted that any attempted or actual cancellation thereof by the Employer may involve the Employer in a claim for recovery by the Consultant of any loss or expense incurred as a result.

c) The Consultant is the owner of the copyright existing in any such quotation and it shall not be copied without the prior written consent of the Consultant. Any reproduction before obtaining the Consultant's consent constitutes an infringement of copyright and a breach of the Contract entitling the Consultant inter alia to rescind the Contract and rendering the Employer liable for payment of damages.

11. INSOLVENCY OF EMPLOYER

This clause applies if:

a) the employer makes any voluntary arrangement with its creditors or becomes subject to an administration order or (being an individual or firm) becomes bankrupt or (being a company) goes into liquidation (otherwise than for the purposes of amalgamation or reconstruction); or

b) an encumbrancer takes possession, or a receiver is appointed, of any of the property or assets of the Employer; or

c) the Employer ceases, or threatens to cease, to carry on business; or

d) the Consultant reasonably apprehends that any of the events mentioned above is about to occur in relation to the Employer and notifies the Employer accordingly.

If this clause applies then without prejudice to any other right or remedy available to the Consultant, the Consultant shall be entitled to cancel the Contract or suspend any further provision of Services under the Contract without any liability to the Employer, and if the services have been completed but not paid for the price shall become immediately due and payable notwithstanding any previous agreement or arrangement to the contrary.

12. OWNERSHIP/COPYRIGHT

The Consultant is the owner of the copyright in any report tender documentation and/or recommendations and all associated information submitted to the Employer by the Consultant. The report recommendations tender documentation and all associated information submitted to the Employer shall not be copied without prior written consent of the Consultant. Any reproduction before obtaining the Consultant's consent constitutes an infringement of copyright and a breach of the Contract entitling the Consultant, inter alia, to rescind the Contract and rendering the Employer liable for payment of damages.

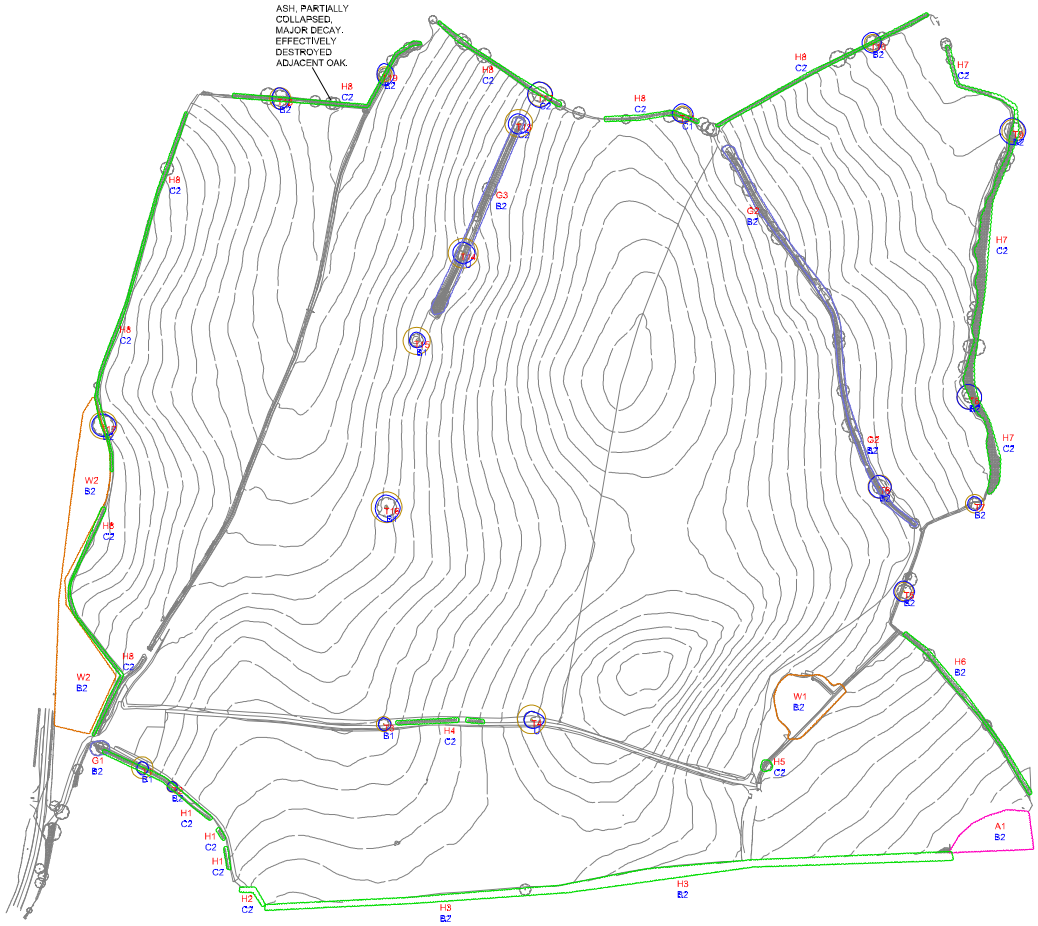
13. GENERAL

a) Any notice required or permitted to be given by either party to the other under these Conditions shall be in writing addressed to that other party at its registered office or principal place of business or such other address as may at the relevant time have been notified pursuant to this provision to the party giving notice.

b) No waiver by the Consultant of any breach of the Contract by the Employer shall be considered as a waiver of any subsequent breach of the same or any other provision.

c) If any provision of these conditions is held by any competent authority to be invalid or unenforceable in whole or in part the validity of the other provisions of these Conditions and the remainder of the provision in question shall not be affected thereby.

d) The headings in these Conditions are for convenience only and shall not affect their interpretation.



N

0 20 40 60 80 100 120m
Scale 1:2500

General Notes

LEGEND

AREA
GROUP
HEDGE
WOOD

TRUNK LOCATION
TREE SHADE (24 hr)

A1 AREA REFERENCE
G1 GROUP REFERENCE
H1 HEDGE REFERENCE
T1 TREE REFERENCE
W1 WOOD REFERENCE
BZ CATEGORY GRADE

TREE CANOPY GRADES
CATEGORY A
CATEGORY B
CATEGORY C
CATEGORY U
ROOT PROTECTION AREA

No.	Revision/Issue	Date

IAIN TAVENDALE F.Arbor.A.
ARBORICULTURAL CONSULTANT

Project Name and Address

NAILCOTE FARM

Drawn by www.YourCad.co.uk
Checked IT
Date JAN 2023
Scale 1:2500 @ A1

N

Scale 1:2500

General Notes

LEGEND

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GROUP
HEDGE
WOOD

TRUNK LOCATION
TREE SHADE (24 hr)

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H1 HEDGE REFERENCE
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W1 WOOD REFERENCE
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TREE CANOPY GRADES
CATEGORY A
CATEGORY B
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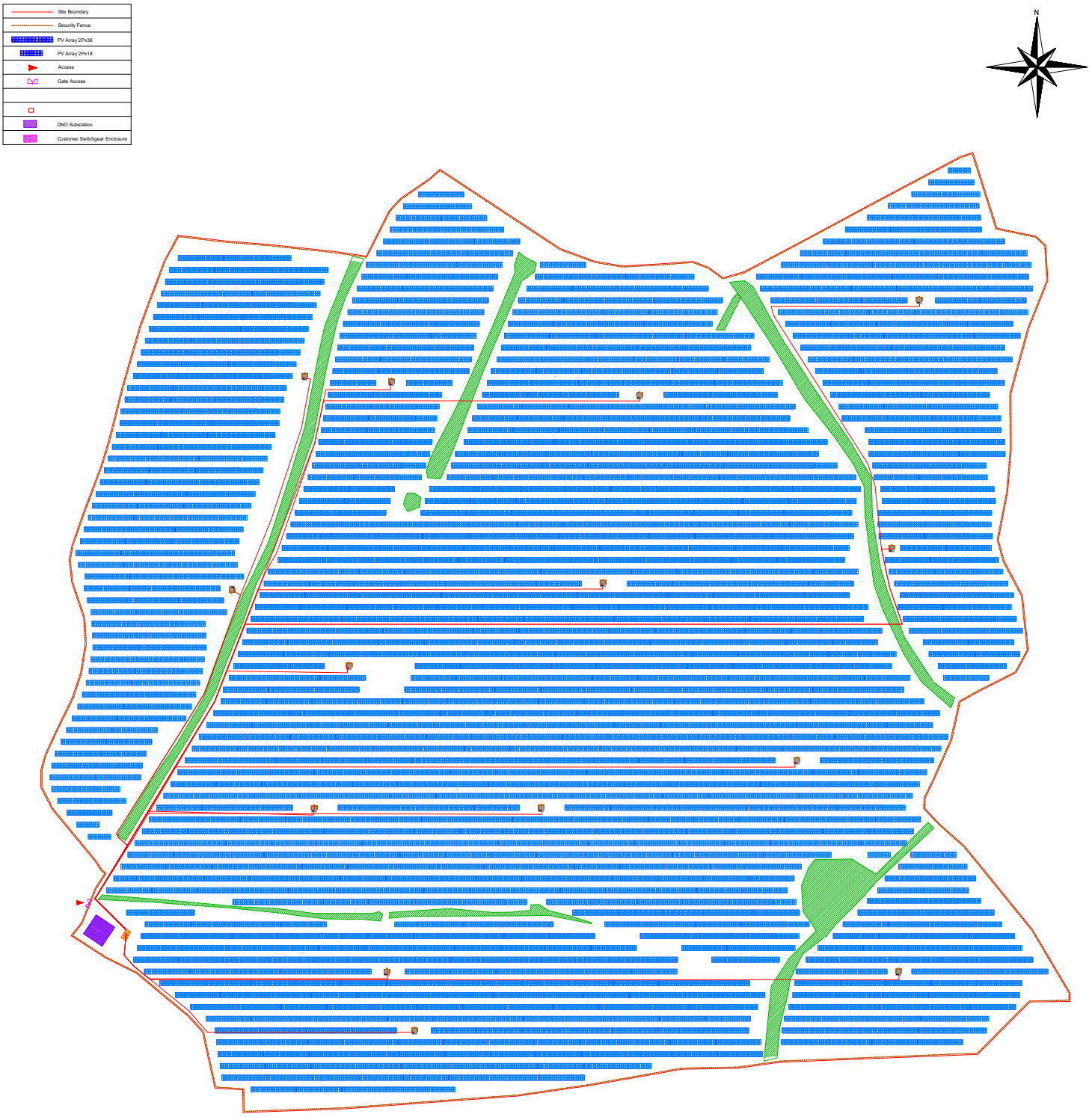
CATEGORY U
ROOT PROTECTION AREA

No.	Revision/Issue	Date

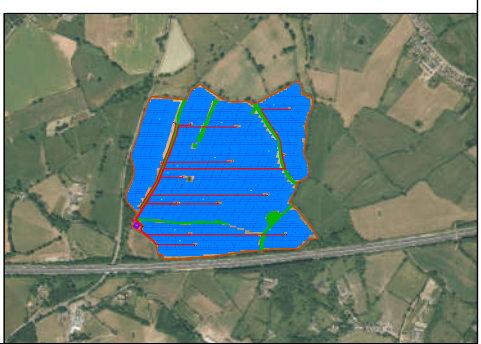
IAIN TAVENDALE F.Arbor.A.

NAILCOTE FARM

Drawn by www.YourCad.co.uk
Checked IT
Date JAN 2023
Scale 1:2500 @ A1



Total DC Power (kW)	48,074
Total AC Power 20° (kVA)	44,075
Total AC Power 40° (kVA)	41,000
Power Grid Limitation	TBC
Power factor	TBC
Module Power (Wp)	550
No. of strings	2,428
Modules per string	36
No. of modules	87,408
No. of Inverter Stations	205
No. of TX/FP	TBD
Mounting system	Fix, 2Px36 & 2Px18
Tilt	25°
Pitch (m)	10.50



COMMENTS:

REVISION:	DESCRIPTION:	REVISED BY:	APPROVED BY:	DATE:
Rev A	Fix structure , tilt 25 degrees, pitch 10.5m	AMS		02/06/2022
Rev B	Transformers station, changed DC	AMS		07/07/2022

REVISION:	DESCRIPTION:	REVISED BY:	APPROVED BY:	DATE:

Scale: 1:1250 | Drawn by: AMS | Checked by: | Signed by PM: | Date checked: | Page: 1 of 1 | Sheet size: A0

SITE ADDRESS:
Nailcote Farm
Nailcote Lane
Berkswell, Coventry

CV7 7DE

PROJECT NAME: Nailcote Farm

TITLE: General Layout DRAFT

DRAWING No.: P.NailcoteFarm_01_GeneralLayout

REV: Rev B

ENVIROMENA

ADDRESS:
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Reading, RG7 1JQ, United Kingdom