ARBORICULTURAL IMPACT ASSESSMENT

Belvoir Solar Farm

December 2021

Barton Hyett Associates
Arboricultural Consultants

Summary table		
Site Name:	Belvoir Solar Farm	
Project reference:	J.3834	
Site Address:	Bottesford, Melton, Leicestershire	
Nearest Postcode:	NG13 0FG	
Central Grid reference:	SK 82145 37527	
Local Planning Authority:	Melton Borough Council	
Relevant planning policies:	Melton Local Plan 2011-2036, adopted October 10th 2018; Policy EN1, Landscape, Policy EN2, Biodiversity and Geodiversity, Policy EN3, The Melton Green Infrastructure Network, Policy EN6, Settlement Character, Policy EN7, Open Space, Sport and Recreation, Policy EN9, Ensuring Energy Efficient and Low Carbon Development, Policy EN10, Energy Generation from Renewable and Low Carbon Sources, Policy EN12, Sustainable Drainage Systems, Policy D1, Raising the Standard of Design	
Statutory Controls:	**Tree Preservation Order**	**Conservation Area**
	None	No
Soil Type: **(Source: BGS online soils map © NERC 2021)**	**Superficial/Drift**	**Bedrock**
	None recorded	Foston Member - Mudstone And Limestone, Interbedded.
Topographical Survey:	20017-001, 19.02.2021	
Site Layout	20210630_49_1MIP540_export	
Report author:	Ellen Boardman *MSc, BSc (Hons), TechCert (ArborA), MArborA*	
Checked by:	Richard Hyett *MSc, BSc (Hons), MICFor, MArborA*	
Revision B Date of issue:	3/12/2021	

Arboricultural Association
Professional Member
PR2257

Institute of Chartered Foresters
registered

Barton Hyett
Arboricultural Consultants

REPORT CONTENTS:

1. INSTRUCTION

1.1. Barton Hyett Associates Ltd have been instructed by JBM Solar Projects 10 Ltd to survey trees located at Belvoir Solar Farm ('the site') in accordance with the recommendations of British Standard 5837:2012 '*Trees in relation to design, demolition and construction - Recommendations*'.

1.2. The scope of the instruction was to inspect trees relevant to a planning application at the site and provide written advice on how they inform feasibility and design options for the site. The instruction also required an assessment of the potential impact (the arboricultural impact assessment) of the proposed development on the site's arboricultural resource to be undertaken.

2. SITE DESCRIPTION

2.1. The site is located to the south of the A52 approximately 5.5 miles to the north-west of the town of Grantham. The village of Muston is to the north-east of the site, Bottesford to the north-west and the Belvoir Estate to the south of the site. The Muston Meadows National Nature Reserve is to the south-east of the site.

2.2. The site and field boundaries are defined by well maintained hedgerows with sporadic trees.

2.3. The surrounding landscape is predominantly agricultural with with field boundary hedgerows and trees. There are sections of woodland to the south of the site and villages, single houses and farm buildings are located within the wider landscape.

2.4. The site is gently undulating with gradual slopes. The highest point is located to the centre of the site.

2.5. Access to the site is currently from a farm access track from the A52 to the north-west of the site, to the east from Easthorpe Lane in the village of Muston and from farm access tracks to the south-east and south-west.

3. TREE SURVEY FINDINGS

3.1. A total of 98 trees, 24 groups of trees and 60 hedgerows were surveyed. These are summarised in terms of their quality in accordance with the recommendations of BS5837 below, and shown in more detail on the Tree Survey and Constraints Plan (**Section 2**) and within the Tree Survey Schedule (**Section 3**).

	Total	A - High quality trees whose retention is most desirable.	B - Moderate quality trees whose retention is desirable.	C - Low quality trees which could be retained but should not significantly constrain the proposal.	U - Very poor quality trees that should be removed unless they have high conservation value.
Trees	**98**	**1**	**29**	**61**	**7**
Groups	**24**	**-**	**7**	**17**	**-**
Hedgerows	**60**	**-**	**53**	**7**	**-**
Total	**182**	**1**	**89**	**85**	**7**

Table 1: summary of arboricultural features of each BS5837 quality category

4. KEY ARBORICULTURAL FEATURES

4.1. T15, common ash, is a moderate-quality (quality category B) tree located to the north-west of the site. It is classed as an emerging veteran due to its characteristics including its hollow stem and deadwood habitat.

4.2. T28, English oak is a high-quality (quality category A) tree located to the north-east of the site, T51, T58, and T65, English oak, located towards the central and south-eastern parts of the site are moderate-quality. They are classed as emerging veterans due to characteristics including previous branch failure and crown deadwood.

4.3. Trees T66, T67, T68, T70, T88, T89, T90, T91, T92 (all common ash and moderate-quality trees) and T69, ash, a low-quality (Category C) tree are located alongside the access tracks to the south-east and south-west of the site. They are classed as emerging veterans due to characteristics including branch failure, necrotic bark and decay.

5. DEVELOPMENT PROPOSAL

5.1. The development proposal for:

> *"Installation and operation of a renewable energy generating station comprising ground mounted photovoltaic solar arrays together with switchgear container, inverter/transformer units, DNO Substation, Site access, internal access tracks, security measures, access gates, other ancillary infrastructure and landscaping and biodiversity enhancements."*

6. IMPACT ASSESSMENT

6.1. The AIA considers the effects of any tree loss required to implement the proposed development as well as any reasonably foreseeable potentially damaging activities proposed in the vicinity of retained trees. This is undertaken with reference to BS5837:2012 and considering the nature of the proposals. This can include tree removal to facilitate design, demolition of buildings and removal of existing hard surfacing, soil compaction in close proximity to trees and direct impact damage to canopy and roots of retained trees from construction activities. A summary of anticipated impacts resulting from the proposed development is provided below.

<u>Tree and Hedgerow Removals</u>

6.2. There are no significant individual trees to be removed to facilitate the proposed development. The proposed development has been designed to avoid rooting areas of trees within the site.

6.3. Hedgerow removals are limited to sectional removals to allow for the construction of perimeter fencing and an access track. 2 meter sections of H5, H6, H13, H23, H27, H28, H33, H43, H58 and H59 will need to be removed to allow for the construction of the perimeter security fencing. Circa 5m to the north of H6 and a

circa 8m section of H23, and H37 will require removal to allow for the construction of the site access and maintenance track. In total, the hedgerow removal will total circa 41 linear metres.

6.4. Circa 170m of a newly planted and unestablished hedgerow H61 is also required to be removed to the south of the substation. Due to the limited maturity of this hedgerow the associated arboricultural impact will remain low.

6.5. A section at the southern extent of low quality tree group G23 will be removed to widen the access to the site. This is anticipated to be limited to six linear metres of the group and therefore only constitutes a low arboricultural impact.

6.6. The above hedgerow and tree group removals are not considered to be significant across the site as a whole and it will be possible to mitigate for the loss through considered new tree and hedgerow planting as part of an approved Landscape Plan for the site.

Potential Impacts upon Retained Trees

6.7. There is ample space outside of the RPA's of retained trees to undertake any required service installation, including interconnecting below ground cable installation.

6.8. There are no proposed ground level changes within the RPA's of any retained trees.

6.9. Soft landscaping will be undertaken on completion of the construction phase. No intensive soft landscaping is proposed within the RPAs of retained trees. Any soft landscaping within RPAs is likely to result in an enhancement to the rooting area of the retained trees.

6.10. The proposal is feasible from an arboricultural perspective, and if carefully implemented according to an approved arboricultural method statement there would be no or only a low potential negative impact on the retained trees. A Combined Tree Retention and Removal and Tree Protection Plan is included in **Section 3**.

7. TREE PROTECTION BARRIERS

7.1. The proposed site security fence (standard deer fence on timber posts), which is to be erected around the periphery of the site, will act as an effective tree protection barrier if erected before any construction works commence on site. This will remove the need to install BS5837:2012 fencing along the outer perimeters of the site. However, the perimeter fencing will only protect trees located around the periphery of the site. Trees and hedgerows contained within the interior of the site could be impacted during the construction phase of the development and some will require protection.

7.2. Where more significant, high-value trees (of moderate or high quality) are located within the site interior, specific robust tree protection barriers have been proposed (BS5837:2012 Figure 3.) For less significant vegetation such as hedgerows, or trees remote from construction, a lower specification of barrier (Euromesh style barrier) or no fence at all is deemed to be adequate.

7.3. The location of the temporary tree protection fencing, and the specification proposed, is shown on the Combined Tree Retention/Removal and Protection Plan in **Section 3**.

8. HEADS OF TERMS FOR AN ARBORICULTURAL METHOD STATEMENT (AMS)

8.1. BS5837:2012 (Figure 1) recommends that detailed/technical design of tree protection and arboricultural methodologies should be resolved and finalised following on from the approval of the feasibility of a scheme by the Local Planning Authority.

8.2. Annex B and Table B.1 of BS5837:2012, an informative, advises that arboricultural method statement heads of terms are a sufficient level of information in order to deliver tree-related information into the planning system. The table also advises that a detailed arboricultural method statement might reasonably be required as a pre-commencement planning condition.

8.3. In relation to the site, it is anticipated that arboricultural working methods are likely to be quite straightforward. A brief summary of the principles of tree protection on development sites is included in Section 7. A draft, 'heads of terms' for an arboricultural method statement is set out below:

- Pre commencement site meeting - Site manager and arboriculturist to agree locations for temporary protective fencing and setting out (and phasing) of perimeter fence
- Hedgerow removals - to allow for the construction of the perimeter fencing and access tracks
- Erection of temporary tree protection barriers- as agreed at the pre-commencement meeting
- Main construction phase
- Removal of tree protection barriers - on completion of all construction works on site and move to maintenance phase
- Final landscaping including tree planting.

9. RECOMMENDATION AND SUMMARY

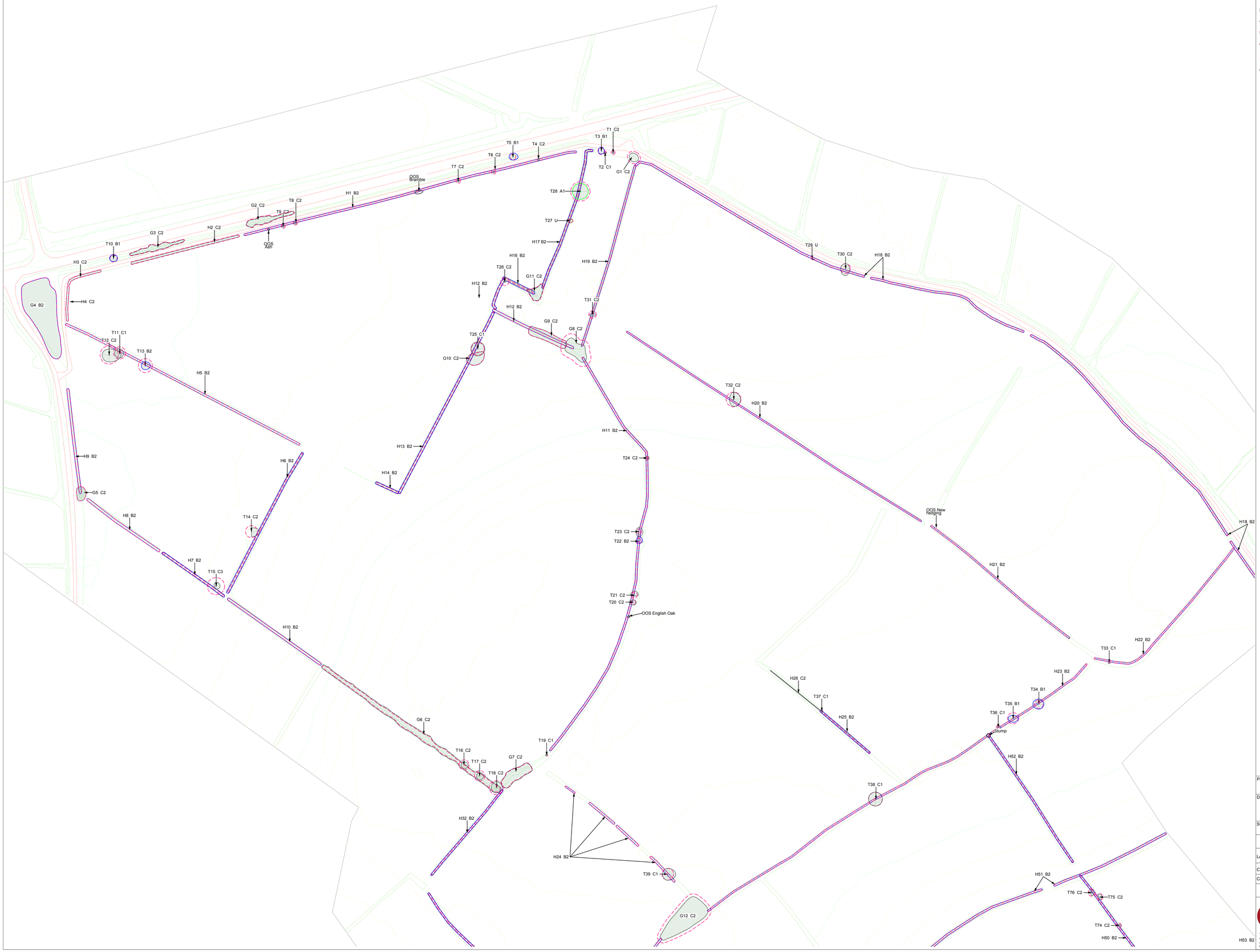
9.1. The proposed hedgerow removal has been kept to a minimum, with the exception of the newly planted and unestablished hedgerow H61, and the arboricultural impact of these removals across the site as a whole will remain low. The loss of hedgerow can be readily mitigated by replanting and enhancement of existing hedgerows as demonstrated within the submitted Landscape Plan. The retained trees and hedgerows can be adequately protected during construction activities to sustain their health and longevity.

9.2. Subject to the implementation of the advice contained within this report the proposed development is acceptable from an arboricultural perspective.

9.3. An arboricultural method statement and finalised tree protection plan will need to be produced. Where the feasibility of a scheme has been agreed by the Local Planning Authority, this detail can be agreed upon and submitted at a later a pre-commencement planning condition (by agreement with the applicant).

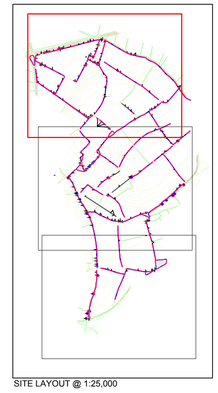
Ellen Boardman - Arboriculturist

TS - 'Section 2'



KEY

- Category A Tree - High quality (Retention highly desirable)
- Category A - Hedgerow, Group, Woodland - High quality (Retention highly desirable)
- Category B Tree - Moderate quality (Retention desirable)
- Category B - Hedgerow, Group, Woodland - Moderate quality (Retention desirable)
- Category C Tree - Low quality (May be retained but should not constrain development)
- Category C - Hedgerow, Group, Woodland - Low quality (May be retained but should not constrain development)
- Category U Tree - Very low quality (Mostly unsuitable for retention)
- Category U - Hedgerow, Group, Woodland - Very low quality (Mostly unsuitable for retention)
- Root Protection Area (RPA) - Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and soil volume to maintain the tree's viability
- Shrub mass/offsite tree/out of scope (OOS)



SITE LAYOUT @ 1:25,000

Note: The original of this drawing was produced in colour – a monochrome copy should not be relied upon. This drawing should be interpreted with reference to the accompanying tree schedule and written advice

N
GRID NORTH

0 10 20 30 40 50
Meters

PROJECT TITLE	**Belvoir, Melton**
DRAWING TITLE	Tree Survey & Constraints Plan
SCALE	**1:1750 @ A1**
DRAWING NUMBER	**BHA_1035_01**
DRAWN BY	**DV**
APPROVED BY	**EB**
REVISION	**-**
SHEET	**1/3**
DATE	**03/12/2020**
LAYOUT USED WITHIN DRAWING	**xxxxxxxxxx**
CLIENT	**JBM Solar**
COORDINATE SYSTEM / DATUM	**British National Grid / Newlyn Datum (AOD)**

Barton Hyett Associates
Arboricultural Consultants

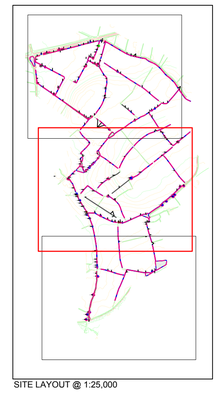
Tel: 01386 576161 Website: www.barton-hyett.co.uk
Address: Barn 2, Oxpens Farm, Yanworth, Cheltenham, Gloucestershire, GL54 3QE

TS - 'Section 2'

T39 C1
G12 C2
H31 B2
H27 B2
T46 C2
Stump
OOS Ash
G13 C2
T40 C1
G16 B2
H30 C2
T41 B1
G15 C2
T42 B1
H28 B2
H29 B2
T43 B1
G14 B2
T44 C2
T45 C1
H34 B2
Pylon
T47 C2
G17 C2
H33 B2
H40 B2
H51 B2
T76 C2
T75 C2
T74 C2
H50 B2
T73 C2
H53 B2
T77 C1
T72 C2
H49 B2
T71 C1
H48 B2
H42 B2
H39 C2
T50 C2
T51 B1
H38 B2
H41 C2
H35 B2
H36 B2
H37 B2
T48 B1
T49 C2
G18 C2
G18 C2
Pylon
H43 B2
T52 B2
H44 B2
T53 C2
T54 U
T55 C2
T56 B1
T57 C2
T58 B1
H61 C2
Pylon
T59 U
T98 C1
H45 B2
T60 C2
T61 U
T62 U
T63 B2
H46 B2
T64 C1
G20 B2
T79 C1
T78 C1
T80 C1
T81 C1
T82 C1
T83 C1
Pylon
H58 B2
H54 B2
T97 C1
T96 C1
T69 C3
T70 B3
H47 B2
T68 B3
T67 B3
T66 B3
T65 B3

KEY

- Category A Tree - High quality (Retention highly desirable)
- Category A - Hedgerow, Group, Woodland - High quality (Retention highly desirable)
- Category B Tree - Moderate quality (Retention desirable)
- Category B - Hedgerow, Group, Woodland - Moderate quality (Retention desirable)
- Category C Tree - Low quality (May be retained but should not constrain development)
- Category C - Hedgerow, Group, Woodland - Low quality (May be retained but should not constrain development)
- Category U Tree - Very low quality (Mostly unsuitable for retention)
- Category U - Hedgerow, Group, Woodland - Very low quality (Mostly unsuitable for retention)
- Root Protection Area (RPA) - Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and soil volume to maintain the tree's viability
- Shrub mass/offsite tree/out of scope (OOS)



SITE LAYOUT @ 1:25,000

Note: The original of this drawing was produced in colour – a monochrome copy should not be relied upon. This drawing should be interpreted with reference to the accompanying tree schedule and written advice

N
GRID NORTH

0 5 10 15 20 25
Metres

PROJECT TITLE
Belvoir, Melton

DRAWING TITLE
Tree Survey & Constraints Plan

SCALE		DRAWING NUMBER
1:1750 @ A1		BHA_1035_01

DRAWN BY	APPROVED BY	REVISION	SHEET	DATE
DV	EB	-	2/3	03/12/2020

LAYOUT USED WITHIN DRAWING **xxxxxxxxxx**

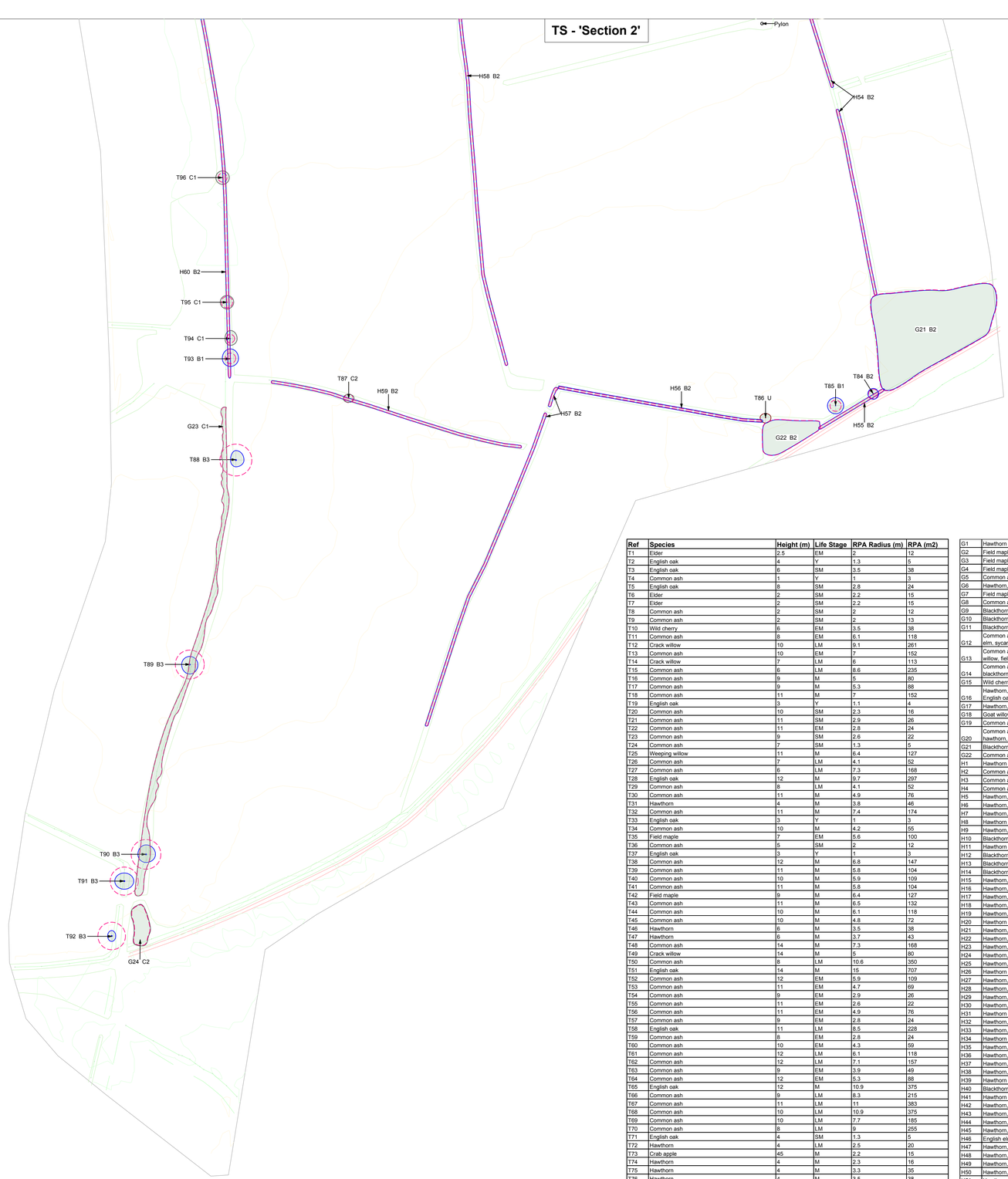
CLIENT **JBM Solar**

COORDINATE SYSTEM / DATUM **British National Grid / Newlyn Datum (AOD)**

Barton Hyett Associates
Arboricultural Consultants

Tel: 01386 576161 Website:
www.barton-hyett.co.uk
Address: Barn 2, Oxpens Farm, Yanworth,
Cheltenham, Gloucestershire, GL54 3QE

TS - 'Section 2'

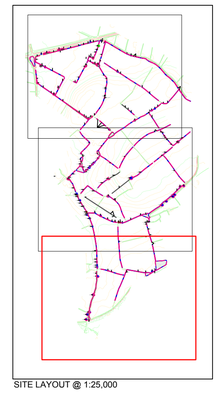


Ref	Species	Height (m)	Life Stage	RPA Radius (m)	RPA (m2)
T1	Elder	2.5	EM	2	12
T2	English oak	4	Y	1.3	5
T3	English oak	6	SM	3.5	38
T4	Common ash	1	Y	1	3
T5	English oak	8	SM	2.8	24
T6	Elder	2	SM	2.2	15
T7	Elder	2	SM	2.2	15
T8	Common ash	2	SM	2	12
T9	Common ash	2	SM	2	13
T10	Wild cherry	6	EM	3.5	38
T11	Common ash	8	EM	6.1	118
T12	Crack willow	10	LM	9.1	261
T13	Common ash	10	EM	7	152
T14	Crack willow	7	LM	6	113
T15	Common ash	6	LM	8.6	235
T16	Common ash	9	M	5	80
T17	Common ash	9	M	5.3	88
T18	Common ash	11	M	7	152
T19	English oak	3	Y	1.1	4
T20	Common ash	10	SM	2.3	16
T21	Common ash	11	SM	2.9	26
T22	Common ash	11	EM	2.8	24
T23	Common ash	9	SM	2.6	22
T24	Common ash	7	SM	1.3	5
T25	Weeping willow	11	M	6.4	127
T26	Common ash	7	LM	4.1	52
T27	Common ash	6	LM	7.3	168
T28	English oak	12	M	9.7	297
T29	Common ash	8	LM	4.1	52
T30	Common ash	11	M	4.9	76
T31	Hawthorn	4	M	3.8	46
T32	Common ash	11	M	7.4	174
T33	English oak	3	Y	1	3
T34	Common ash	10	M	4.2	55
T35	Field maple	7	EM	5.6	100
T36	Common ash	5	SM	2	12
T37	English oak	3	Y	1	3
T38	Common ash	12	M	6.8	147
T39	Common ash	11	M	5.8	104
T40	Common ash	10	M	5.9	109
T41	Common ash	11	M	5.8	104
T42	Field maple	9	M	6.4	127
T43	Common ash	11	M	6.5	132
T44	Common ash	10	M	6.1	118
T45	Common ash	10	M	4.8	72
T46	Hawthorn	6	M	3.5	38
T47	Hawthorn	6	M	3.7	43
T48	Common ash	14	M	7.3	168
T49	Crack willow	14	M	5	80
T50	Common ash	8	LM	10.6	350
T51	English oak	14	M	15	707
T52	Common ash	12	EM	5.9	109
T53	Common ash	11	EM	4.7	69
T54	Common ash	9	EM	2.9	26
T55	Common ash	11	EM	2.6	22
T56	Common ash	11	EM	4.9	76
T57	Common ash	9	EM	2.8	24
T58	English oak	11	LM	8.5	228
T59	Common ash	8	EM	2.8	24
T60	Common ash	10	EM	4.3	59
T61	Common ash	12	LM	6.1	118
T62	Common ash	12	LM	7.1	157
T63	Common ash	9	EM	3.9	49
T64	Common ash	12	EM	5.3	88
T65	English oak	12	M	10.9	375
T66	Common ash	9	LM	8.3	215
T67	Common ash	11	LM	11	383
T68	Common ash	10	LM	10.9	375
T69	Common ash	10	LM	7.7	185
T70	Common ash	8	LM	9	255
T71	English oak	4	SM	1.3	5
T72	Hawthorn	4	LM	2.5	20
T73	Crab apple	45	M	2.2	15
T74	Hawthorn	4	M	2.3	16
T75	Hawthorn	4	M	3.3	35
T76	Hawthorn	4	M	3.5	38
T77	Common ash	11	LM	9.7	297
T78	English oak	6	SM	2.6	22
T79	Common ash	6	SM	2.2	15
T80	English oak	4	SM	2.2	15
T81	English oak	4	SM	1.5	7
T82	English oak	4	SM	1.8	10
T83	English oak	5	SM	1.7	9
T84	Common ash	12	SM	3.5	38
T85	English oak	11	SM	4.1	52
T86	Common ash	11	LM	5.4	92
T87	Common ash	10	EM	3.2	33
T88	Common ash	10	LM	11.8	435
T89	Common ash	14	LM	10.7	358
T90	Common ash	13	LM	11	383
T91	Common ash	13	LM	10.4	342
T92	Common ash	10	LM	10.2	327
T93	Common ash	11	EM	3.9	49
T94	Common ash	10	EM	3.1	31
T95	Common ash	10	EM	4.2	55
T96	Common ash	10	EM	3.3	35
T97	Common ash	9	EM	3.1	31
T98	Common ash	10	M	5.8	104

G1	Hawthorn	4-5	EM	3.8	46
G2	Field maple, hawthorn, English oak, wild cherry	3-5	SM	2.5	20
G3	Field maple, hawthorn, English oak, wild cherry		SM	2.4	18
G4	Field maple, elder, hawthorn, blackthorn	4-11	EM	4.1	52
G5	Common ash	7	EM	2.5	20
G6	Hawthorn, blackthorn, common ash	4-7	M	2.2	15
G7	Field maple, common ash, hawthorn, blackthorn	6-9	EM	2.6	22
G8	Common ash, blackthorn	3-10	M	8.3	215
G9	Blackthorn	4-5	EM	1.3	5
G10	Blackthorn	2-4	EM	0.8	2
G11	Blackthorn	4	M	1.5	7
G12	Common ash, blackthorn, hawthorn, English elm, sycamore, elder	4-11	M	4.9	76
G13	Common ash, hawthorn, blackthorn, crack willow, field maple, wild cherry	4-10	M	5.3	88
G14	Common ash, field maple, English oak hawthorn, blackthorn	4-12	EM	2.8	24
G15	Wild cherry, blackthorn, hawthorn,field maple	5-8	EM	2.8	24
G16	Hawthorn, common ash, blackthorn, wild cherry, English oak	4-9	EM	2.8	24
G17	Hawthorn, blackthorn	4	EM	2.2	15
G18	Goat willow, hawthorn	3-5	M	2	12
G19	Common ash, field maple, hawthorn	4-11	EM	4.8	72
G20	Common ash, English oak, field maple, hawthorn, blackthorn	5-11	EM	4.2	55
G21	Blackthorn, hawthorn, English oak	5-12	EM	2.3	16
G22	Common ash, English oak, hawthorn, blackthorn	4-11	EM	2.2	15
H1	Hawthorn	2	SM	0.8	2
H2	Common ash, elder	2	SM	1.3	5
H3	Common ash	2	SM	1.1	4
H4	Common ash	2	SM	1.1	4
H5	Hawthorn, elder	2	SM	1	3
H6	Hawthorn, blackthorn	3	SM	0.6	1
H7	Hawthorn, blackthorn, field maple,	2.5	SM	0.8	2
H8	Hawthorn	2.5	M	1.3	5
H9	Hawthorn, common ash,	2.5	EM	1.1	4
H10	Blackthorn, hawthorn, field maple	3	M	1.1	4
H11	Hawthorn	2	M	0.8	2
H12	Blackthorn	3	EM	1.1	4
H13	Blackthorn, hawthorn, common ash	3	EM	0.8	2
H14	Blackthorn, common ash	3	EM	0.8	2
H15	Hawthorn, blackthorn	3	EM	0.8	2
H16	Hawthorn, blackthorn	3	EM	0.6	1
H17	Hawthorn, blackthorn	2.5	EM	0.8	2
H18	Hawthorn, field maple, hazel, dogwood	2	EM	0.8	2
H19	Hawthorn, common ash, dogwood, field maple, haz	1.5	EM	0.8	2
H20	Hawthorn	1.5	M	0.6	1
H21	Hawthorn, common ash field maple, dogwood	1.5	EM	0.8	2
H22	Hawthorn, common ash, field maple	1.5	EM	0.8	2
H23	Hawthorn, blackthorn, field maple,	1.5	EM	0.8	2
H24	Hawthorn, blackthorn, field maple,	1.5	EM	0.8	2
H25	Hawthorn, blackthorn, common ash,	2	SM	0.6	1
H26	Hawthorn	0.5	Y	0	0
H27	Hawthorn, blackthorn, field maple, common ash	2	EM	0.8	2
H28	Hawthorn, blackthorn,field maple	2	EM	0.6	1
H29	Hawthorn, blackthorn	2	EM	0.8	2
H30	Hawthorn, blackthorn	2	SM	0.6	1
H31	Hawthorn	2	SM	0.6	1
H32	Hawthorn, blackthorn	2	SM	0.6	1
H33	Hawthorn, blackthorn, hazel	2	EM	0.6	1
H34	Hawthorn	1.5	EM	0.6	0
H35	Hawthorn, elder	2	M	1.1	4
H36	Hawthorn, blackthorn, field maple	2	M	1.3	5
H37	Hawthorn, blackthorn	2	M	1.1	4
H38	Hawthorn, blackthorn	2	M	1	3
H39	Hawthorn	1	Y	0	0
H40	Blackthorn, hawthorn, field maple, elder	2	M	1.5	7
H41	Hawthorn	1	Y	0	0
H42	Hawthorn, field maple	2	M	1.1	4
H43	Hawthorn, blackthorn, field maple	1.5	SM	0.8	2
H44	Hawthorn, blackthorn, English elm,	2	M	1.1	4
H45	Hawthorn, blackthorn, sycamore, hazel	2	EM	0.8	2
H46	English elm, crab apple, hawthorn,	2	EM	0.8	2
H47	Hawthorn, blackthorn, field maple, common ash	2	EM	0.8	2
H48	Hawthorn, blackthorn, crab apple, field maple	1.5	EM	0.8	2
H49	Hawthorn, blackthorn	2	M	1	3
H50	Hawthorn, blackthorn, field maple, crab apple	2	M	0.6	1
H51	Hawthorn, blackthorn	2	M	0.8	2
H52	Hawthorn, blackthorn	2	EM	0.6	1
H53	Hawthorn, blackthorn	2	M	0.8	2
H54	Hawthorn, blackthorn, crab apple	2	EM	0.8	2
H55	Hawthorn, blackthorn	3	EM	0.8	2
H56	Hawthorn, blackthorn	2	EM	0.6	1
H57	Hawthorn, blackthorn	2	EM	0.8	2
H58	Hawthorn, blackthorn	2	EM	0.8	2
H59	Hawthorn, blackthorn	2	EM	0.8	2
H60	Hawthorn, blackthorn	2	EM	0.8	2
H61	Hawthorn	1.5	Y	0	0

KEY

- Category A Tree - High quality (Retention highly desirable)
- Category A - Hedgerow, Group, Woodland - High quality (Retention highly desirable)
- Category B Tree - Moderate quality (Retention desirable)
- Category B - Hedgerow, Group, Woodland - Moderate quality (Retention desirable)
- Category C Tree - Low quality (May be retained but should not constrain development)
- Category C - Hedgerow, Group, Woodland - Low quality (May be retained but should not constrain development)
- Category U Tree - Very low quality (Mostly unsuitable for retention)
- Category U - Hedgerow, Group, Woodland - Very low quality (Mostly unsuitable for retention)
- Root Protection Area (RPA) - Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and soil volume to maintain the tree's viability
- Shrub mass/offsite tree/out of scope (OOS)



SITE LAYOUT @ 1:25,000

Note: The original of this drawing was produced in colour – a monochrome copy should not be relied upon. This drawing should be interpreted with reference to the accompanying tree schedule and written advice

N
GRID NORTH

0 10 20 30 40 50
Meters

PROJECT TITLE
Belvoir, Melton

DRAWING TITLE
Tree Survey & Constraints Plan

SCALE		DRAWING NUMBER			
1:1750	@ A1	BHA_1035_01			
DRAWN BY	APPROVED BY	REVISION	SHEET	DATE	
DV	EB	-	3/3	03/12/2020	

LAYOUT USED WITHIN DRAWING **XXXXXXXXXX**

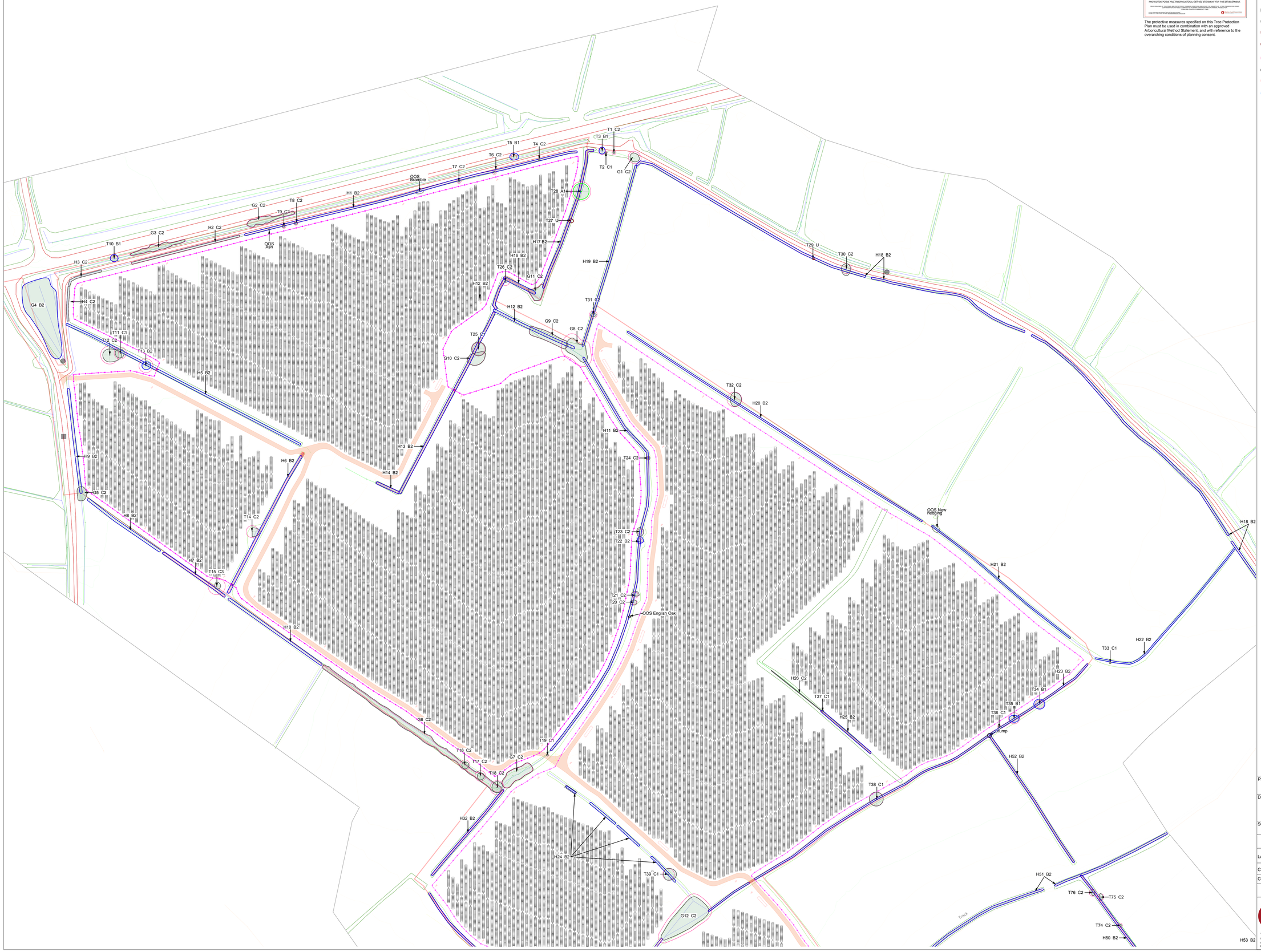
CLIENT **JBM Solar**

COORDINATE SYSTEM / DATUM **British National Grid / Newlyn Datum (AOD)**

Barton Hyett Associates
Arboricultural Consultants

Tel: 01386 576161 Website:
www.barton-hyett.co.uk
Address: Barn 2, Oxpens Farm, Yanworth,
Cheltenham, Gloucestershire, GL54 3QE

TRR - 'Section 3'



CONSTRUCTION EXCLUSION ZONE - NO ENTRY

TREE PROTECTION FENCING

THIS FENCE MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED TREE PROTECTION PLANS AND ARBORICULTURAL METHOD STATEMENT FOR THIS DEVELOPMENT.

There may be times when the Tree Protection Barrier/Ground Protection may be subject to an approved temporary variation. Such variations will be clearly marked on site and must not be altered in any way.

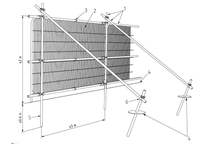
Under the Planning (Trees) Regulations 1999 it is an offence to wilfully damage or destroy trees protected by a Tree Preservation Order or trees in a Conservation Area.

The protective measures specified on this Tree Protection Plan must be used in combination with an approved Arboricultural Method Statement, and with reference to the overarching conditions of planning consent.

KEY

- Category A Tree - High quality (Retention highly desirable)
- Category A - Hedgerow, Group, Woodland - High quality (Retention highly desirable)
- Category B Tree - Moderate quality (Retention desirable)
- Category B - Hedgerow, Group, Woodland - Moderate quality (Retention desirable)
- Category C Tree - Low quality (May be retained but should not constrain development)
- Category C - Hedgerow, Group, Woodland - Low quality (May be retained but should not constrain development)
- Category U Tree - Very low quality (Mostly unsuitable for retention)
- Category U - Hedgerow, Group, Woodland - Very low quality (Mostly unsuitable for retention)
- Root Protection Area (RPA) - Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and soil volume to maintain the tree's viability
- Shrub mass/offsite tree/out of scope (OOS)
- Tree / Hedgerow / Group to be removed
- Tree Protection Barrier (Figure 3)

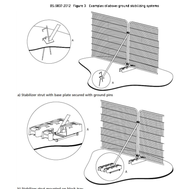
BS 5837:2012 Figure 2 Default specification for protective barrier



Key
1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

For more details refer to BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations p.37

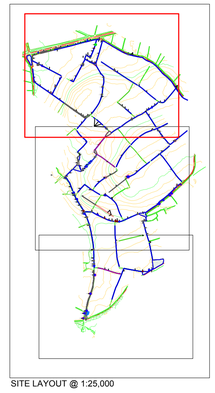
BS 5837:2012 Figure 3 Examples of above-ground stabilizing systems



a) Stabilizer strut with base plate secured with ground pins

b) Stabilizer strut mounted on block tray

For more details refer to BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations p.37



SITE LAYOUT @ 1:25,000

Note: The original of this drawing was produced in colour – a monochrome copy should not be relied upon. This drawing should be interpreted with reference to the accompanying tree schedule and written advice

N
GRID NORTH

0 5 10 15 20 25 30 Metres

PROJECT TITLE
Belvoir, Melton

DRAWING TITLE
Tree Retention, Removal & Protection Plan

SCALE	DRAWING NUMBER
1:1750 @ A1	BHA_1035_02

DRAWN BY	APPROVED BY	REVISION	SHEET	DATE
DV	EB	C	1/3	03/12/2021

LAYOUT USED WITHIN DRAWING **20210630_49_1MIP540_export**

CLIENT **JBM Solar**

COORDINATE SYSTEM / DATUM **British National Grid / Newlyn Datum (AOD)**

Barton Hyett Associates
Arboricultural Consultants
Tel: 01386 576161 Website: www.barton-hyett.co.uk
Address: Barn 2, Oxpens Farm, Yanworth, Cheltenham, Gloucestershire, GL54 3QE