



- NOTES**
- This tree survey information has been prepared for planning purposes only. Additional detail will be needed for foundation design. The original of this drawing was produced in colour - a monochrome copy should not be relied upon.
 - Scale for planning purposes only.
 - All dimensions to be checked on site.
 - The copyright of this document resides with Keen Consultants unless assigned in writing by the company.
 - Details shown on this drawing are devised with reference to BS5837:2012: Trees in relation to design, demolition and construction Recommendations.
 - Check if Tree Preservation Order or Conservation Area protection applies to trees before undertaking tree works.
 - Topographical survey based on AIMS drawing number Sp12/DWD/HV/002.
 - Where trees were not identified on the topographical survey they have been plotted by eye.
 - Proposed Site Layout based on Statkraft Revision No. 06 dated 29/01/2025.

- KEY**
- Existing site features
 - Proposed site layout
 - Trees retained (Green-coloured line indicates extent of canopy)
 - Trees for removal (Red-coloured dash line indicates extent of canopy)
 - 2.0m high barrier as detail in Figure 1

- KEY TO TREE SCHEDULE**
- | Column Heading | Explanation |
|--|--|
| Tree No. | Unique number corresponding with number on plan |
| Species | English names |
| Ht (m) | Height in metres |
| Branch Spread | Crown radius in metres to cardinal points of the compass |
| Stem Dia | All measurements conform to Annex C of BS 5837:2012 |
| | Single stem - Stem diameter in centimetres measured at 1.5m above ground level. |
| | Multi-stemmed tree with 2 to 5 stems - Diameter of each stem |
| | Multi-stemmed tree with more than 5 stems - Average stem diameter and number of stems |
| Height of crown clearance | Height in metres between the ground and underside of canopy |
| Height of first major branch and direction of growth | Height from ground level to base of first major branch and the approximate direction of growth |
| Abbreviations as suffix to a dimension | Suffix 'x' denotes an estimated dimension |
| Age Class | Suffix 'av' denotes an average dimension |
| Category grading | Age Class definitions:
Y = Young
S = Semi-mature
E = Early mature
M = Mature
O = Over mature
Summary of BS 5837: 2012 categorisation:
1. Trees unsuitable for retention:
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
2. Trees to be considered for retention:
A1, 2 or 3 = trees of high quality (substantial contribution >40 yrs)
B1, 2 or 3 = trees of moderate quality (significant contribution >20 yrs)
C1, 2 or 3 = trees of low quality (but adequate, i.e. <10 yrs or young trees - until new planting can be established)
Note: Useful estimated remaining contribution of the tree or tree group based on figures stated in BS5837:2012 |
| Estimated remaining contribution (yrs) | Brief description including physiological and structural defects |
| Condition | Works required to be undertaken to the trees to facilitate the construction or remediate a defect encountered during the survey |
| Tree Works | Radius of minimum root protection area in metres calculated from section 4.6 and Annex D of BS5837:2012 |
| Root Protection Radius | Total area of minimum root protection area extrapolated from root protection radius |
| Root Protection Area | |

0 Preliminary issue 31.01.25

Rev	Description	Date
1		

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Client
STATKRAFT

Project
SWANSEA BESS, ADJACENT TO SWANSEA GREENER GRID PARK, SWANSEA

Title
TREE PROTECTION PLAN

Date
JANUARY 2025

Scale
1:1000@A1

Drawn by
MJE

Checked by
JTK

Drawing Number
2403-KC-XX-YTREE-TPP01Rev0

Schedule of trees at proposed Swansea BESS, adjacent to Swansea Greener Grid Park, Swansea

Tree No.	Species	Ht (m)	Branch Spread (m)				Stem diameters (cm)					Condition Physiological / Structural	Tree Works to BS5998	Root protection radius	Root protection area						
			N	E	S	W	Single Stem	2-5 stems	More than 5 stems	Height of crown clearance (m)	Height of first major branch (m)					Age class	Category grading	Estimated remaining contribution (yrs)			
1	Hawthorn hedge	7av		3av			20av						E B2	>20	Established section of hedgerow between fields. Predominantly hawthorn with some hazel and holly.		2.40	18			
2	Group of mixed broadleaves	7av		3av			25av						Y B2	>20	Linear collection of trees between fields. Species include hawthorn, sycamore and holly.		3.00	28			
3	Pedunculate oak	17	8	9	8	8	74						3E	E B2	>20	Larger component of hedge line.		8.88	248		
4	Pedunculate oak	15	7	8	8	9	70						2N	S B2	>20	Stands close to fence line. Some broken branches within crown.		8.40	222		
5	Pedunculate oak	13	6	7	6	6	49						3S	S B1	>20	Established tree growing close to fence line.		5.88	109		
6	Pedunculate oak	14	3	8	8	6	53						4	4S	S B2	>20	One of a close growing pair of trees on raised mound. Some hollowing at base. Crown compromised due to neighbouring tree.		6.36	127	
7	Pedunculate oak	15	7	8	7	8	76						2N	S B2	>20	One of a pair of close growing trees on raised bank. Some decay at base. Crown development compromised due to neighbouring tree.		9.12	261		
8	Pedunculate oak	15	4	9	9	6		51	57				2	2S	S B2	>20	Established tree growing on raised bank. Some damage to buttress roots. Twin stemmed from circa 1m above ground level.		9.18	265	
9	Pedunculate oak	16	9	7	9	8	79						3	3N	S B2	>20	Stands along fence line at edge of site. Some lower branches have been removed.		9.48	282	
10	Pedunculate oak	14	5	7	4	1	46						2	2E	S B2	>20	Stands along fence line at edge of site. Development compromised by adjoining larger tree.		5.52	96	
11	Pedunculate oak	9	3	3	4	3	25e						2	2N	Y C1	>10	Small tree growing along fence line. Main stem smothered in ivy.		3.00	28	
12	Pedunculate oak	11	5	4	6	6	44						2	2S	Y B2	>20	Established tree growing along fence line.		5.28	88	
13	Pedunculate oak	5	2	2	2	3	26						2	2S	Y C1	>10	Small tree growing along fence line. Under power lines so will be controlled in dimensions.		3.12	31	
14	Group of mixed broadleaves	8av		3av			20av							Y	C2	>10	Group of small trees along fence line. Species include holly, goat willow, pedunculate oak, silver birch and rowan. Contributing to hedge line between fields. Partial smothering of ivy on main stem.		2.40	18	
15	Silver birch	15	8	7	8	5		47	45				1.2	1.2E	S B2	>20	Stands in field just south of fence line.		7.81	192	
16	Pedunculate oak	15	9	8	8	7	56						2	2SW	S B2	>20	Stands in field just south of fence line.		6.72	142	
17	Goat willow	10	7	6	6	5				20	7	2	2N	S C2	>10	Multi stemmed form and growing toward base of ditch. One stem has partially failed.		6.35	127		
18	Group of mixed broadleaves	9av		4av			15av							S	B2	>20	Linear collection of trees growing along ditch line. Species include goat willow, silver birch, crab apple.		1.80	10	
19	Pedunculate oak	12	8	7	8	9	60e						2	2W	S B2	>20	Larger component of hedge line. Main stem smothered in ivy.		7.20	163	
20	Pedunculate oak	14	8	7	8	7	60e						2	2E	S B2	>20	Growing along ditch line. Main stem and much of crown smothered in ivy.	Crown lift to 3m above proposed access.	7.20	163	
21	Silver birch	15	5	3	6	5	40e						2	2S	S B2	>20	Established tree growing along hedge line.	Crown lift to 3m above proposed access.	4.80	72	
22	Goat willow	10	8	6	6	4				12	10	0		Y	C2	>10	Established tree growing along ditch line. Some stems have collapsed. Coppicing would promote low level regeneration.		4.55	65	
23	Pedunculate oak	16	9	9	9	7	70e						2	2S	E B2	>20	Established tree growing along ditch line. Main stem and crown covered in ivy. Growing in close competition with neighbouring tree.	Crown lift to 3m above proposed access.	8.40	222	
24	Pedunculate oak	16	7	2	9	7	49						2	2W	E B2	>20	Growing in close competition with neighbouring tree.	Crown lift to 3m above proposed access.	5.88	109	
25	Pedunculate oak	17	7	8	6	7	73	65					3	3E	E B2	>20	Established tree growing on raised bank. Some hollowing at base.	Remove.	11.73	432	
26	Pedunculate oak	14	7	8	7	60							2	2E	E B2	>20	Established tree growing on mound within field.	Remove.	7.20	163	
27	Pedunculate oak	17	9	8	7	59							3	3W	E B2	>20	Established tree growing on mound within field.	Remove.	7.08	157	
28	Pedunculate oak	13	10	9	9	8	75e						2	2S	E B2	>20	Established tree growing in field to north of application site.	Crown lift to 3m above proposed access.	9.00	255	
29	Pedunculate oak	17	11	10	10	7	74						2	2E	E B2	>20	Established tree growing along ditch line. Main stem and crown covered in ivy. Growing in close competition with neighbouring tree.	Remove.	8.88	248	
30	Pedunculate oak	16	9	9	8	8	61	31					4	4S	E B1	>20	Twin stemmed tree growing on bank adjoining ditch.	Crown lift to 3m above proposed access.	8.21	212	
31	Silver birch	9	2	2	2	2	19						1.2	1.2N	Y C1	>10	Small tree growing on bank adjoining ditch.	Remove.	2.28	16	
32	Silver birch	8	2	2	2	3		17	13				1	1S	Y C1	>10	Small tree growing on bank adjoining ditch.	Remove.	2.57	21	
33	Group of silver birch	12av		5av			35av								Y	C2	>10	Cluster of small trees along fence line.		4.20	55
34	Mixed broadleaf woodland	15av		7av			60av							S	B2	>20	Established block of woodland outside northern boundary of site. Predominantly pedunculate oak. Understorey of holly and hazel.		7.20	163	
35	Pedunculate oak	10	3	5	3	4	36						2	2N	Y B2	>20	Established tree growing on raised bank.	Crown lift to 3m above proposed access.	4.32	59	
36	Group of mixed broadleaves	7av		3av			15av							Y	C2	>10	Collection of small trees on raised bank. Species include hawthorn, holly and sycamore. Located close to overhead wires that might need to be cut back to control height.		1.80	10	
37	Mixed broadleaf hedgerow	6av		2av			15av							S	C2	>10	Remnants of former hedgerow growing on bank. Predominantly hawthorn, pedunculate oak and holly with some blackthorn.		1.80	10	
38	Pedunculate oak	13	5	5	3	7	39						4	4W	S B2	>20	Forms part of hedgerow. Smothered in ivy.		4.68	69	
39	Pedunculate oak	17	7	8	9	53							4	4S	S B2	>20	Larger component of hedge line.		6.36	127	
40	Pedunculate oak	14	7	8	7	67							5	5N	E B2	>20	Established tree growing in hedge line. Some hollowing between buttresses.		8.04	203	
41	Pedunculate oak	15	8	9	9	59							5	5S	S B2	>20	Standing on bank between fields.		7.08	157	
42	Holly	10	3	3	3			12	6	1			1.5	S	B2	>20	Standing on bank between fields.		3.53	39	
43	Pedunculate oak	13	6	7	8	7	49						2	2S	S B2	>20	Standing on bank between fields.		5.88	109	
44	Pedunculate oak	12	7	7	6	47							2	2E	S B2	>20	Standing on bank between fields.		5.64	100	
45	Sycamore	16	6	7	7	67							3	3E	S B2	>20	Stands on bank between fields. Broad spreading form.		8.04	203	
46	Hawthorn hedge	5	2	3	3	3				10	6	0		S	C2	>10	Small tree growing on bank.		2.94	27	
47	Pedunculate oak	5	3	4	2	3	24						1	1N	Y C1	>10	Small tree growing on bank.		2.88	26	
48	Group of holly	10av		3av			35av							S	C2	>10	Linear collection of stems growing on bank. Most stems lacking vitality. Includes occasional hawthorn.		4.20	55	
49	Pedunculate oak	16	9	8	7	8	59e						5	5W	S B2	>20	Larger tree growing on bank between fields. Main stem and much of crown smothered in ivy.		7.08	157	
50	Pedunculate oak	15	7	7	8	7	69						2	2N	S B2	>20	Established tree growing on bank between fields.		8.28	215	
51	Pedunculate oak	17	9	8	8	79							4	4N	E B2	>20	Larger tree growing on bank between fields. Broad spreading form.		9.48	282	
52	Pedunculate oak	16	7	5	8	7	67						5	5N	S B2	>20	Established tree growing on bank between fields.		8.04	203	
53	Group of holly	9av		3av			35av							S	B2	>20	Collection of trees growing on bank. Some lacking vitality.		4.20	55	
54	Pair of ash	15av		7av			55av						2	2N	S C2	>10	Pair of close growing trees growing on bank. Some decay at base. Appear to have been previously managed as hedgerow and then allowed to out grow. Showing early signs of Ash Dieback. Unsuitable to long term retention.		6.60	137	
55	Pedunculate oak	17	8	9	8	8	71						4	4W	E B2	>20	Established tree growing on bank between fields.		8.52	228	
56	Pedunculate oak	17	8	6	8	8	57						5	5W	E B2	>20	Established tree growing on bank between fields.		8.84	147	
57	Pedunculate oak	13	4	3	4	39							2	2N	Y B2	>20	One of a line of trees along fence line between fields.		4.68	69	
58	Ash	14	3	6	5	6	34						5	5W	S C2	>10	Forms part of a line of trees along fence line between fields.		4.08	52	
59	Pedunculate oak	17	7	8	5	7	69						2	2S	S B2	>20	Forms part of a line of trees along fence line between fields.		8.28	215	
60	Pedunculate oak																				