

Condition Sheet: DITCH Habitat Type																
Habitat Type																
Watercourses - Ditches																
Habitat Description																
See the Statutory Biodiversity Metric User Guide.																
Seven ditches located between the A17 (start of Bespoke Access Road) and boundary of the Solar Array Area. Ditches form part of a system of drains which are typical of fen landscape.																
On-site or off-site, site name and location		Watercourses located on-site in the Bespoke Access Road section of the Proposed Development			Survey date and Surveyor name			Watercourses were initially assessed during the PEA walkover by a WA Ecologist in Spring 2024. Further details on habitats and condition were recorded during further surveys for the watercourses (riparian mammal and botanical surveys) undertaken by WA ecologists in late Spring/ Summer 2024.								
Limitations (if applicable)					Survey reference (if relating to a wider survey)			Surveys relating to biodiversity assessment for Beacon Fen Energy Park								
					Habitat parcel reference											
					FID 4	FID 5	FID 7	FID 14	FID 16	FID 19	FID 20					
Grid reference																
TF 11234	TF 12292 46186	TF 12481	TF 11313	TF 12020	TF 12912	TF 12075										
Condition Assessment Criteria					Criterion passed (Yes or No)			Notes (such as justification)								
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	N	Y	Y	Y	Y	Y	N				See evidence document for notes on justification for each watercourse				
B	A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.	N	N	N	Y	N	N	N								
C	There is less than 10% cover of filamentous algae and or duckweed <i>Lemna</i> spp. (these are signs of eutrophication).	Y	Y	Y	Y	Y	Y	Y								
D	A fringe of aquatic marginal vegetation is present along more than 75% of the ditch.	N	N	Y	Y	N	N	N								
E	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities.	Y	Y	Y	Y	Y	Y	Y								
F	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	N	N	N	N	N	N	N								
G	Less than 10% of the ditch is heavily shaded.	Y	Y	Y	N	N	Y	N								

H	There is an absence of non-native plant and animal species ¹ .	Y	Y	Y	Y	Y	Y	Y				
Number of criteria passed		4	5	6	6	4	5	3				
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved ×/√										
Passes 8 criteria	Good (3)											
Passes 6 or 7 criteria	Moderate (2)			x	x							
Passes 5 or fewer criteria	Poor (1)	x	x			x	x	x				
Suggested enhancement interventions to improve condition score												
Footnotes												

Condition Sheet: DITCH Habitat Type												
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Habitat Description												
See the Statutory Biodiversity Metric User Guide.												
Ditches located between within the Cable Route Corridor which is located between the boundary of the Solar Array Area and the Grid Connection Substation. Ditches form part of a system of drains which are typical of fen landscape.												
On-site or off-site, site name and location	Watercourses located on-site in the Cable Route Corridor section of the Proposed Development			Survey date and Surveyor name	Watercourses were initially assessed during the PEA walkover by a WA Ecologist in Spring 2024. Further details on habitats and condition were recorded during further surveys for the watercourses (riparian mammal and botanical surveys) undertaken by WA ecologists in late Spring/ Summer 2024.							
Limitations (if applicable)	Survey reference (if relating to a wider survey)	Surveys relating to biodiversity assessment for Beacon Fen Energy Park										
	Habitat parcel reference	OID 83	OID 55	OID 135	*OID 99 -	OID 18	OID 25	OID 42	OID 65	OID 7	OID 30	
	Grid reference	TF 15513 46540	TF 15507 46541	TF 15807 46164	TF 15661 46047	TF 15661 46028	TF 16451 45070	TF 16186 44823	TF 16442 44728	TF 16733 44697	TF 16909 44492	
Condition Assessment Criteria		Criterion passed (Yes or No)										Notes (such as justification)
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	See evidence document for notes on justification for each watercourse
B	A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.	N	N	N	Y	N	N	N	N	N	N	
C	There is less than 10% cover of filamentous algae and or duckweed <i>Lemna</i> spp. (these are signs of eutrophication).	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
D	A fringe of aquatic marginal vegetation is present along more than 75% of the ditch.	N	N	Y	Y	N	N	N	N	N	N	
E	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
F	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	N	N	Y	Y	Y	Y	N	N	N	N	
G	Less than 10% of the ditch is heavily shaded.	Y	Y	Y	Y	Y	Y	N	Y	N	Y	
H	There is an absence of non-native plant and animal species ¹ .	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Number of criteria passed		5	5	7	7	6	6	4	5	4	5	
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved x/√										
Passes 8 criteria	Good (3)											
Passes 6 or 7 criteria	Moderate (2)			x	x	x	x					

Passes 5 or fewer criteria	Poor (1)	x	x					x	x	x	x	
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Suggested enhancement interventions to improve condition score

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Footnotes

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Ditches located between within the Cable Route Corridor which is located between the boundary of the Solar Array Area and the Grid Connection Substation. Ditches form part of a system of drains which are typical of fen landscape.															
On-site or off-site, site name and location	Watercourses located on-site in the Cable Route Corridor section of the Proposed Development				Survey date and Surveyor name	Watercourses were initially assessed during the PEA walkover by a WA Ecologist in Spring 2024. Further details on habitats and condition were recorded during further surveys for the watercourses (riparian mammal and botanial surveys) undertaken by WA ecologists in late Spring/ Summer 2024.									
Limitations (if applicable)					Survey reference (if relating to a wider survey)	Surveys relating to biodiversity assessment for Beacon Fen Energy Park									
					Habitat parcel reference										
					OID - 67	OID - 79	OID -34	OID - 3	OID- 53	OID-75	OID-49	OID -98	OID -22	OID - 71	
Condition Assessment Criteria					Grid reference										
					TF 16914	TF 16777	TF 16620	TF 16679	TF 16808	TF 16900	TF 17064		TF 17151	TF 17083	TF 17335
					44028	43318	43239	43126	43192	43075	42714		42983	42771	42373
					Criterion passed (Yes or No)						Notes (such as justification)				
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.				N	Y	N	Y	Y	Y	Y	Y	Y	Y	See evidence document for notes on justification for each watercourse
B	A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.				N	N	N	N	N	N	N	N	N	N	
C	There is less than 10% cover of filamentous algae and or duckweed <i>Lemna</i> spp. (these are signs of eutrophication).				Y	Y	Y	N	Y	Y	Y	Y	Y	Y	
D	A fringe of aquatic marginal vegetation is present along more than 75% of the ditch.				N	Y	N	N	N	N	N	N	N	N	
E	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities.				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
F	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.				N	N	N	N	N	Y	Y	N	N	N	
G	Less than 10% of the ditch is heavily shaded.				Y	Y	Y	Y	N	Y	Y	Y	Y	Y	

H	There is an absence of non-native plant and animal species ¹ .	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Number of criteria passed		4	6	4	4	4	6	6	5	5	5	
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved ×/√										
Passes 8 criteria	Good (3)											
Passes 6 or 7 criteria	Moderate (2)		x				x	x				
Passes 5 or fewer criteria	Poor (1)	x		x	x	x			x	x	x	
Suggested enhancement interventions to improve condition score												
Footnotes												

Number of criteria passed		6	5	7	7	7	5	4	4	5	4
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved ×/√									
Passes 8 criteria	Good (3)										
Passes 6 or 7 criteria	Moderate (2)	x		x	x	x					
Passes 5 or fewer criteria	Poor (1)		x				x	x	x	x	x
Suggested enhancement interventions to improve condition score											
Footnotes											

Number of criteria passed		6	5	7	3	7	5	4	4	5	4
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved ×/√									
Passes 8 criteria	Good (3)										
Passes 6 or 7 criteria	Moderate (2)	x		x		x					
Passes 5 or fewer criteria	Poor (1)		x		x		x	x	x	x	x
Suggested enhancement interventions to improve condition score											
Footnotes											

Number of criteria passed		5	3	4	4	4	4	4	6	4	7	
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved ×/√										
Passes 8 criteria	Good (3)											
Passes 6 or 7 criteria	Moderate (2)								x		x	
Passes 5 or fewer criteria	Poor (1)	x	x	x	x	x	x	x		x		
Suggested enhancement interventions to improve condition score												
Footnotes												

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Habitat Description														
See the Statutory Biodiversity Metric User Guide.														
Ditches located between within the Cable Route Corridor which is located between the boundary of the Solar Array Area and the Grid Connection Substation. Ditches form part of a system of drains which are typical of fen landscape.														
On-site or off-site, site name and location	Watercourses located on-site in the Cable Route Corridor section of the Proposed Development				Survey date and Surveyor name	Watercourses were initially assessed during the PEA walkover by WA Ecologist in Spring 2024. Further details on habitats and condition were recorded during further surveys for the watercourses (riparian mammal and botanical surveys) undertaken by WA ecologists in late Spring/ Summer 2024.								
Limitations (if applicable)					Survey reference (if relating to a wider survey)	Surveys relating to biodiversity assessment for Beacon Fen Energy Park								
					Habitat parcel reference									
					OID - 23									
					Grid reference									
Condition Assessment Criteria					TF 19741 38799									
					Criterion passed (Yes or No)								Notes (such as justification)	
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.				Y									
B	A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.				N									
C	There is less than 10% cover of filamentous algae and or duckweed <i>Lemna</i> spp. (these are signs of eutrophication).				Y									
D	A fringe of aquatic marginal vegetation is present along more than 75% of the ditch.				Y									
E	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities.				Y									
F	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.				N									
G	Less than 10% of the ditch is heavily shaded.				N									
H	There is an absence of non-native plant and animal species ¹ .				Y									

Number of criteria passed		5											
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved ×/√											
Passes 8 criteria	Good (3)												
Passes 6 or 7 criteria	Moderate (2)												
Passes 5 or fewer criteria	Poor (1)	x											
Suggested enhancement interventions to improve condition score													
Footnotes													

Number of criteria passed		5	4	4	5	3	5	3	3	2	4
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved ×/√									
Passes 8 criteria	Good (3)										
Passes 6 or 7 criteria	Moderate (2)										
Passes 5 or fewer criteria	Poor (1)	X	X	X	X	X	X	X	X	X	X
Suggested enhancement interventions to improve condition score											
Footnotes											

Condition Sheet: DITCH Habitat Type													
Habitat Type													
Watercourses - Ditches													
Habitat Description													
See the Statutory Biodiversity Metric User Guide.													
Ditches located between within Solar Array Area of the Beacon Fen Energy Park Proposed Development Area. Ditches form part of a system of drains which are typical of fen landscape.													
On-site or off-site, site name and location		Survey date and Surveyor name											
Limitations (if applicable)		Survey reference (if relating to a wider survey)											
		Habitat parcel reference											
		WA=25	WA=26	WA=36	WA=37	WA=38	WA=40	WA=45	WA=46	WA=47			
Grid reference													
Condition Assessment Criteria				Criterion passed (Yes or No)								Notes (such as justification)	
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	N	N	Y	Y	Y	Y	Y	Y	Y	Y		
B	A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.	N	N	N	N	N	Y	N	N	N			
C	There is less than 10% cover of filamentous algae and or duckweed <i>Lemna</i> spp. (these are signs of eutrophication).	N	N	N	Y	Y	N	N	Y	N			
D	A fringe of aquatic marginal vegetation is present along more than 75% of the ditch.	N	N	N	N	N	N	N	N	N			
E	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities.	Y	Y	Y	Y	Y	Y	Y	Y	Y			
F	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	N	N	N	N	N	N	N	N	N			
G	Less than 10% of the ditch is heavily shaded.	Y	Y	N	N	N	Y	N	N	N			
H	There is an absence of non-native plant and animal species ¹ .	Y	Y	Y	Y	Y	Y	Y	Y	Y			

Number of criteria passed		3	3	3	4	4	5	3	4	3		
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved ×/√										
Passes 8 criteria	Good (3)											
Passes 6 or 7 criteria	Moderate (2)											
Passes 5 or fewer criteria	Poor (1)	X	X	X	X	X	X	X	X	X	X	X
Suggested enhancement interventions to improve condition score												
Footnotes												

Number of criteria passed		4	6	5	5	4	4	3	4	4	5
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved ×/√									
Passes 8 criteria	Good (3)										
Passes 6 or 7 criteria	Moderate (2)		X								
Passes 5 or fewer criteria	Poor (1)	X		X	X	X	X	X	X	X	X
Suggested enhancement interventions to improve condition score											
Footnotes											

Condition Sheet: DITCH Habitat Type													
Habitat Type													
Watercourses - Ditches													
Habitat Description													
See the Statutory Biodiversity Metric User Guide.													
Ditches located between within Solar Array Area of the Beacon Fen Energy Park Proposed Development Area. Ditches form part of a system of drains which are typical of fen landscape.													
On-site or off-site, site name and location		Survey date and Surveyor name											
Limitations (if applicable)		Survey reference (if relating to a wider survey)											
		Habitat parcel reference											
		WA=65	WA=68	WA=69	WA=70	WA=71	WA=72						
Grid reference													
Condition Assessment Criteria													
				Criterion passed (Yes or No)							Notes (such as justification)		
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.			Y	Y	Y	Y	Y	Y				
B	A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.			N	N	N	N	N	N				
C	There is less than 10% cover of filamentous algae and or duckweed <i>Lemna</i> spp. (these are signs of eutrophication).			N	Y	Y	Y	Y	Y				
D	A fringe of aquatic marginal vegetation is present along more than 75% of the ditch.			N	N	N	N	N	N				
E	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities.			Y	Y	Y	Y	Y	Y				
F	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.			Y	N	N	N	N	N				
G	Less than 10% of the ditch is heavily shaded.			Y	N	N	N	N	Y				
H	There is an absence of non-native plant and animal species ¹ .			Y	Y	Y	Y	Y	Y				

Number of criteria passed		5	4	4	4	5	5					
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved ×/√										
Passes 8 criteria	Good (3)											
Passes 6 or 7 criteria	Moderate (2)											
Passes 5 or fewer criteria	Poor (1)	X	X	X	X	X	X					
Suggested enhancement interventions to improve condition score												
Footnotes												

Condition sheet: HEDGEROW Habitat Types

Habitat Type

Native hedgerow
 Native hedgerow - associated with bank or ditch
 Native hedgerow with trees
 Native hedgerow with trees - associated with bank or ditch
 Species-rich native hedgerow
 Species-rich native hedgerow - associated with bank or ditch
 Species-rich native hedgerow with trees
 Species-rich native hedgerow with trees - associated with bank or ditch

Habitat Description

Hedgerows located within the Access Route Corridor which is located between the boundary of the Solar Array Area and the A17.

[ukhab – UK Habitat Classification](#)

On-site or off-site, site name and location	Hedgerows located on-site in the Access Route Corridor section of the Proposed Development	Survey date and Surveyor name	Surveys relating to biodiversity assessment for Beacon Fen Energy Park
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Limitations (if applicable)		Survey reference (if relating to a wider survey)	
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Condition Assessment Details

A series of ten attributes, representing key physical characteristics are used for this assessment. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.

This assessment is based on the Hedgerow Survey Handbook¹ and Favourable Conservation Status document². For further clarification please refer to the Hedgerow Survey Handbook.

Best practice would be to record the species, age, spacing and other key information about all trees present along a hedgerow within the 'Habitat Description' box, as well as other key features of the hedgerow.

Hedgerow favourable condition attributes

Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Habitat parcel reference										
			FID 1	FID 2	FID 3	FID 6	FID 8	FID 9	FID 10	FID 11	FID 12	FID 13	
			Grid reference										
			TF	TF	TF	TF	TF	TF	TF	TF	TF	TF	
			13436	12397	11253	11528	1111	1205	1231	1181	1186	11403	
			46903	46310	45141	45629	5	4	3	1	1	45710	

Core groups - applicable to all hedgerow types				Criterion passed (Yes or No)										Notes (such as justification)
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A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	See evidence document for notes on justification for each hedgerows
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A2.	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	N	N	Y	Y	Y	N	Y	Y	N	N	
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Condition sheet: HEDGEROW Habitat Types														
Habitat Type														
Native hedgerow Native hedgerow - associated with bank or ditch Native hedgerow with trees Native hedgerow with trees - associated with bank or ditch Species-rich native hedgerow Species-rich native hedgerow - associated with bank or ditch Species-rich native hedgerow with trees Species-rich native hedgerow with trees - associated with bank or ditch														
Habitat Description														
Hedgerows located within the Access Route Corridor which is located between the boundary of the Solar Array Area and the A17.														
ukhab – UK Habitat Classification														
On-site or off-site, site name and location	Hedgerows located on-site in the Access Route Corridor section of the Proposed Development					Survey date and Surveyor name	Surveys relating to biodiversity assessment for Beacon Fen Energy Park							
Limitations (if applicable)						Survey reference (if relating to a wider survey)								
Condition Assessment Details														
A series of ten attributes, representing key physical characteristics are used for this assessment. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria. This assessment is based on the Hedgerow Survey Handbook ¹ and Favourable Conservation Status document ² . For further clarification please refer to the Hedgerow Survey Handbook. Best practice would be to record the species, age, spacing and other key information about all trees present along a hedgerow within the 'Habitat Description' box, as well as other key features of the hedgerow.														
Hedgerow favourable condition attributes														
Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Habitat parcel reference											
			FID 15	FID 17	FID 18	FID 21	FID 22	FID 23						
			Grid reference											
TF	TF	TF	TF	TF	TF									
12040	12236	11666	11204	1181	1245									
46153	46178	45870	45149	1	1									
Core groups - applicable to all hedgerow types						Criterion passed (Yes or No)						Notes (such as justification)		
A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).	Y	Y	Y	Y	Y	N					See evidence document for notes on justification for each hedgerows
A2.	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	N	N	N	Y	Y	N					

E2.	Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.																	
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The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.

Condition categories for hedgerows without trees			Score achieved							
Category	Category Requirements	Metric Score								
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3								
Moderate	No more than 4 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	2								
Poor	Fails a total of more than 4 attributes; OR <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1								
Score achieved:										
Condition categories for hedgerows with trees			Score achieved							
Category	Category Requirements	Metric score								
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3								
Moderate	No more than 5 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2								
Poor	Fails a total of more than 5 attributes; OR <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1								
Score achieved:										

Suggested enhancement interventions to improve condition score

B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	Y	N	Y	Y	Y	Y	N	Y	Y	Y	
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).	Y	N	Y	N	Y	Y	N	Y	Y	Y	
C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · Measured from outer edge of hedgerow; and · Is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
C2.	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles <i>Urtica</i> spp., cleavers <i>Galium aparine</i> and docks <i>Rumex</i> spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	N	N	N	N	N	N	N	N	N	N	
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA ³) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website ⁴ , as well as the BSBI website ⁵ where the 'Online Atlas of the British and Irish Flora' ⁶ contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website ⁷ .	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	
Additional group - applicable to hedgerows with trees only														
E1.	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient ⁸), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	N	Y	Y	N			Y	N	N		

E2.	Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.	Y	Y	Y	Y											
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The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.

Condition categories for hedgerows without trees			Score achieved					
Category	Category Requirements	Metric Score						
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3						
Moderate	No more than 4 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	2						
Poor	Fails a total of more than 4 attributes; OR <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1						
Score achieved:								
Condition categories for hedgerows with trees			Score achieved					
Category	Category Requirements	Metric score						
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3						
Moderate	No more than 5 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2						
Poor	Fails a total of more than 5 attributes; OR <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1						
Score achieved:								

Suggested enhancement interventions to improve condition score

Condition sheet: HEDGEROW Habitat Types

Habitat Type	
<p>Native hedgerow Native hedgerow - associated with bank or ditch Native hedgerow with trees Native hedgerow with trees - associated with bank or ditch Species-rich native hedgerow Species-rich native hedgerow - associated with bank or ditch Species-rich native hedgerow with trees Species-rich native hedgerow with trees - associated with bank or ditch</p>	
Habitat Description	
<p>Hedgerows located between within the Cable Route Corridor which is located between the boundary of the Solar Array Area and the Grid Connection Substation.</p>	

[ukhab – UK Habitat Classification](#)

On-site or off-site, site name and location	Hedgerows located on-site in the Cable Route Corridor section of the Proposed Development	Survey date and Surveyor name	Surveys relating to biodiversity assessment for Beacon Fen Energy Park
Limitations (if applicable)		Survey reference (if relating to a wider survey)	

Condition Assessment Details

A series of ten attributes, representing key physical characteristics are used for this assessment. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.

This assessment is based on the Hedgerow Survey Handbook¹ and Favourable Conservation Status document². For further clarification please refer to the Hedgerow Survey Handbook.

Best practice would be to record the species, age, spacing and other key information about all trees present along a hedgerow within the 'Habitat Description' box, as well as other key features of the hedgerow.

Hedgerow favourable condition attributes

Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Habitat parcel reference									
			OID 1	OID 5	OID 8	OID 9	OID 10	OID 13	OID 19	OID 20	OID 21	OID 33
			Grid reference									
			TF 19755	TF 15036	TF 19995	TF 19782	TF 16736	TF 16236	TF 20125	TF 16619	TF 19782	TF 16018
			41733	47006	38516	38432	43013	44612	38910	44621	38432	45239

Core groups - applicable to all hedgerow types			Criterion passed (Yes or No)										Notes (such as justification)
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A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	See evidence document for notes on justification for each hedgerows
A2.	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	N	N	Y	N	N	N	Y	N	N	N	N	