

MONA OFFSHORE WIND PROJECT

Environmental Statement

**Volume 7, Annex 6.6: Tree survey and arboricultural impact assessment
Part 8 - Appendix C**

Reference Number: MOCNS-J3303-RPS-10202

Document Reference: F7.6.6

APFP Regulations: 5(2)(a)

February 2024

F01



Image of an offshore wind farm

MONA OFFSHORE WIND PROJECT

Document status					
Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
F01	Application	RPS	Mona Offshore Wind Limited	Mona Offshore Wind Limited	Feb 2024
Prepared by:		Prepared for:			
RPS		Mona Offshore Wind Ltd.			



LEGEND

Project boundary.

Tree with numbered reference.
Canopy spread and coloured BS5837:2012 tree quality category as shown below.
= Tree details estimate (inaccessible tree)
• = Tree in off site location

Vegetation group with numbered reference.
Canopy extents and coloured BS5837:2012 tree quality category as shown below.

Hedge with numbered reference.
Canopy extents and coloured BS5837:2012 tree quality category as shown below.

Woodland with numbered reference.
Canopy extents and coloured BS5837:2012 tree quality category as shown below.

BS 5837:2012 Tree Quality Categories - Table 1

- Category A - High quality
- Category B - Moderate quality
- Category C - Low quality
- Category U - Unsuitable for retention

Tree or vegetation to be removed with numbered reference. Canopy spread and BS5837:2012 tree quality category.

Root protection area (RPA)
Calculated in accordance with Section 4.6 - BS5837:2012

Precautionary Root protection area (RPA)
Added to un-surveyed trees, preliminary 15mØ RPA added as preventative buffer

Tree protected by Conwy Council or Denbighshire Tree Preservation Order (TBC). Bracketted number reference relates to the TPO Schedule.

Veteran tree buffer (15 x stem Ø)
(as per standing advice produced by Natural Resource Wales)

Designated Ancient Woodland and buffer (15m offset, as per Natural Resource Wales woodland inventory, via open data publication)

Arboricultural BRAG Assessment
Based on quantitative and professional assessment.
The ranking is defined as:

- Black: Significant arboreal asset within development;
- Red: High potential to constrain development;
- Amber: Moderate potential to constrain development; and
- Green: Low potential to constrain development

Construction Compound or Access Area
Arboricultural constraint based on providing a construction exclusion zone (CEZ).

Black: At all times, compound should avoid entering this area;
Red: In nearly all circumstances, compound should avoid entering this area;
Amber: In most circumstances, compound should avoid entering this area;
Green: Little or no arboricultural constraint which would affect compound location.

Cable Crossing Technique

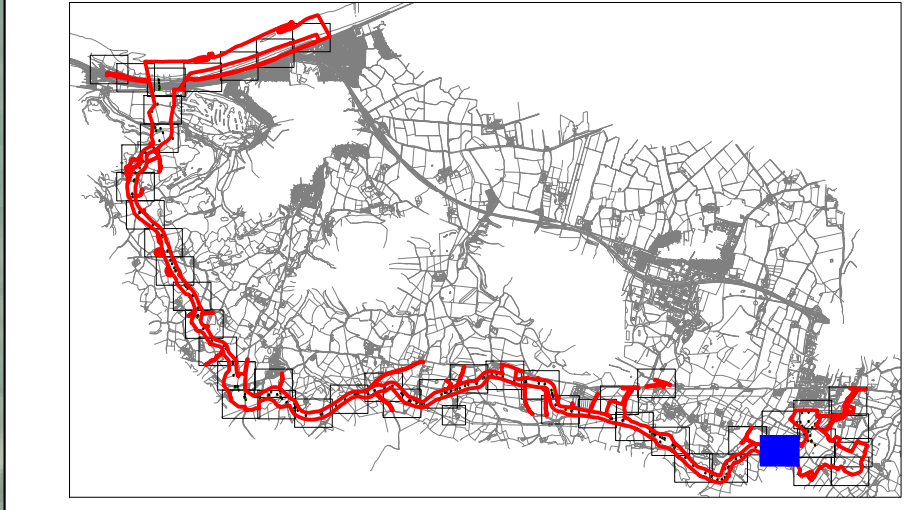
- Trenchless
- Trenching / Trenchless
- Trenched

Temporary protective fencing in accordance with Section 6.2 - BS5837:2012. See example, also shown within supporting report.

Temporary visual warning barrier. See example detail, also shown within supporting report.

NOTES:

- Refer to RPS Tree Survey & Arboricultural Impact Assessment Report for further details.
- Survey based on a visual inspection from the ground and is not intended as a full arboricultural inspection.
- Plan produced in accordance with recommendations set out in BS 5837:2012 - 'Trees in Relation to design, demolition and construction'.
- Due to the level protection afforded to breeding birds vegetation removal should not take place during the bird nesting period, generally, although not restricted to, March - August inclusive.
- Survey based upon aerial photography, therefore tree locations should be deemed as approximate, and not digitally accurate.
- Pedestrian/vehicular emergency access routes to be maintained at all times.
- All protective fencing to be completed and approved by LPA / CA prior to commencement of any site works.
- All works to conform with requirements of:
BS 5837:2012 - Tree Works
BS 5837:2012 - Trees in relation to design, demolition and construction



Rev	Description	By	CB	Date



Drawing Number:
7139

Project Name:
MONA OFFSHORE WIND PROJECT

Drawing Title:
TREE AND HEDGEROW PROTECTION PLAN

Scale
Scale@A0: 1:500
0 50m

Geodetic Information:
Datum: ETRS 1989
Projection: British National Grid






Data Sources: Client

Service Layer Credits: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

VER	DATE	DETAILS	BY	CHECK
01	Jan/24	Comment	RC	DC
02	Feb/24	Information	RC	DC









LEGEND




-  Project boundary.
-  Tree with numbered reference.
Canopy spread and coloured BS5837:2012 tree quality category as shown below.
= Tree details estimate (‘inaccessible tree’)
* = Tree in off site location
-  Vegetation group with numbered reference.
Canopy extents and coloured BS5837:2012 tree quality category as shown below.
-  Hedge with numbered reference.
Canopy extents and coloured BS5837:2012 tree quality category as shown below.
-  Woodland with numbered reference.
Canopy extents and coloured BS5837:2012 tree quality category as shown below.

BS 5837:2012 Tree Quality Categories - Table 1

- Category A - High quality
- Category B - Moderate quality
- Category C - Low quality
- Category U - Unsuitable for retention

- | | |
|---|---|
|  | Tree of vegetation to be removed with numerical reference. Canopy spread and BS5857/2012 true quality category. |
|  | Tree protection area (RPA) established in accordance with Section 4.6 - BS5857/2012 |
|  | Preculatory RPO protection area (RPA) added to un-surveyed trees, preliminary 15m RPA added as preventative buffer |
|  | Tree protected by Conwy Council or Designated Tree Preservation Order (TBC). Bracketted number reference relates to the TPO Schedule. |
|  | Veteran tree buffer (15 x stem Ø) (as a standing service produced by Natural Resource Wales) |
|  | Designated Ancient Woodland and buffer (15m offset, as per Natural Resource Wales woodland inventory, via open data publication) |

Arboricultural BRAG Assessment
Based on quantitative and professional assessment
The ranking is defined as:

-  Black: Significant arboreal asset within development;
 Red: High potential to constrain development;
 Amber: Moderate potential to constrain development; and
 Green: Low potential to constrain development




Construction Compound or Access Area



Arboricultural constraint based on providing a constant exclusion zone (CEZ):

Exclusion Zone (EZ):

- Black:** At all times, compound should avoid entering this area;
- Red:** In nearly all circumstances, compound should avoid entering this area;
- Amber:** In most circumstances, compound should avoid entering this area;
- Green:** Little or no arboreal constraint which would affect compound location.

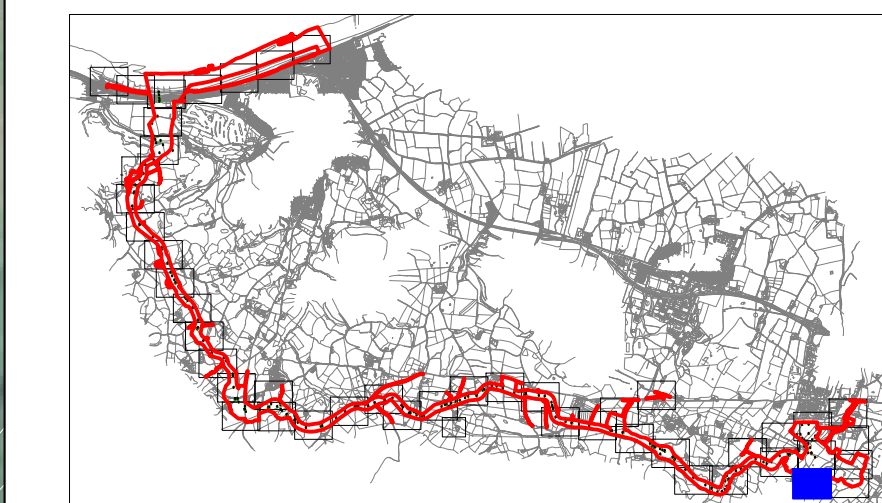
Cable Crossing Technique

-  Trenchless
-  Trenching / Trenchless
-  Trenched

-  Temporary protective fencing in accordance with Section 6.2 - BS5837:2012. See example, also shown within supporting report.
-  Temporary visual warning barrier. See example detail, also shown within supporting report.

NOTES

- Survey to RPS Tree Survey & Arboricultural Impact Assessment Report for future reference
- Survey based on a visual inspection from the ground and is not intended as a full arboricultural inspection.
- Plan produced in accordance with recommendations set out in BS 5837:2012 - "Trees in relation to design, demolition and construction"
- Due to the legal protection afforded to breeding birds vegetation removal should not take place during the bird nesting period, generally, although not restricted to March - August inclusive.
- Sites based on aerial photography, therefore tree locations should be deemed as approximate and not totally accurate.
- Pedestrian's vehicular emergency access routes to be maintained at all times.
- All active planning to be completed and approved by LPA / CA prior to commencement of any site works
- All works to conform with requirements of:
 - BS 3998:2010 - Tree Works
 - BS 5837:2012 - Trees in relation to design, demolition and construction



Rev	Description	By	CB	Date



Drawing Number:

7141

VER	DATE	DETAILS	BY	CHECK
01	Jan/24	Comment	RC	DC
02	Feb/24	Information	RC	DC

Project Name:
MONA OFFSHORE WIND PROJECT

Drawing Title:
TREE AND HEDGEROW PROTECTION PLAN

Scale
Scale@A0: 1:500



Geodetic Information:
Datum: ETRS 1989
Projection: British National Grid

Data Sources: Client

Service Layer Credits: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



LEGEND

Project boundary.

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= Tree details estimate (inaccessible tree)
+ = Tree in off site location

Vegetation group with numbered reference.
Canopy extents and coloured BS5837:2012 tree quality category as shown below.

Hedge with numbered reference.
Canopy extents and coloured BS5837:2012 tree quality category as shown below.

Woodland with numbered reference.
Canopy extents and coloured BS5837:2012 tree quality category as shown below.

BS 5837:2012 Tree Quality Categories - Table 1

Category A - High quality

Category B - Moderate quality

Category C - Low quality

Category U - Unsuitable for retention

Tree or vegetation to be removed with numbered reference. Canopy spread and BS5837:2012 tree quality category.

Root protection area (RPA)
Calculated in accordance with Section 4.6 - BS5837:2012

Precautionary Root protection area (RPA)
Added to un-surveyed trees, preliminary 15mØ RPA added as preventative buffer

Tree protected by Conwy Council or Denbighshire Tree Preservation Order (TBC). Bracketed number reference relates to the TPO Schedule.

Veteran tree buffer (15 x stem Ø)
(as per standing advice produced by Natural Resource Wales)

Designated Ancient Woodland and buffer (15m offset, as per Natural Resource Wales woodland inventory, via open data publication)

Arboricultural BRAG Assessment
Based on quantitative and professional assessment.
The ranking is defined as:

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Construction Compound or Access Area
Arboricultural constraint based on providing a construction exclusion zone (CEZ):

Black: At all times, compound should avoid entering this area;

Red: In nearly all circumstances, compound should avoid entering this area;

Amber: In most circumstances, compound should avoid entering this area;

Green: Little or no arboricultural constraint which would affect compound location.

Cable Crossing Technique

Trenchless

Trenching / Trenchless

Trenched

Temporary protective fencing in accordance with Section 6.2 - BS5837:2012. See example, also shown within supporting report.

Temporary visual warning barrier. See example detail, also shown within supporting report.

NOTES:

- Refer to RPS Tree Survey & Arboricultural Impact Assessment Report for further details
- Survey based on a visual inspection from the ground and is not intended as a full arboricultural inspection
- Plan produced in accordance with recommendations set out in BS 5837:2012 - 'Trees in Relation to design, demolition and construction'
- Due to the legal protection afforded to breeding birds vegetation removal should not take place during the bird nesting period, generally, although not restricted to, March - August inclusive.
- Survey based upon aerial photography, therefore tree locations should be deemed as approximate, and not digitally accurate
- Pedestrian/vehicular emergency access routes to be maintained at all times.
- All protective fencing to be completed and approved by LPA / CA prior to commencement of any site works
- All works to conform with requirements of:
 - BS 5838:2010 - Tree Works
 - BS 5837:2012 - Trees in relation to design, demolition and construction

Rev	Description	By	CB	Date

Partners in UK offshore wind

Drawing Number:
7142

VER	DATE	DETAILS	BY	CHECK
01	Jan/24	Comment	RC	DC
02	Feb/24	Information	RC	DC

Project Name:
MONA OFFSHORE WIND PROJECT

Drawing Title:
TREE AND HEDGEROW PROTECTION PLAN

Scale
Scale@A0: 1:500
0 50m

Geodetic Information:
Datum: ETRS 1989
Projection: British National Grid

Data Sources: Client

Service Layer Credits: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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LEGEND

Project boundary.

T1

Tree with numbered reference.
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G1

Vegetation group with numbered reference.
Canopy extents and coloured BS5837:2012 tree quality category as shown below.

H1

Hedge with numbered reference.
Canopy extents and coloured BS5837:2012 tree quality category as shown below.

W1

Woodland with numbered reference.
Canopy extents and coloured BS5837:2012 tree quality category as shown below.

BS 5837:2012 Tree Quality Categories - Table 1

Category A - High quality

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Category C - Low quality

Category U - Unsuitable for retention

T1

Tree or vegetation to be removed with
numbered reference. Canopy spread and
BS5837:2012 tree quality category.

Root protection area (RPA)
Calculated in accordance with Section
4.6 - BS5837:2012

Precautionary Root protection area (RPA)
Added to un-surveyed trees, preliminary
15mØ RPA added as preventative buffer

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to the TPO Schedule.

Veteran tree buffer (15 x stem Ø)
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Natural Resource Wales)

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woodland inventory, via open data
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Cable Crossing Technique

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7143

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Canopy extents and coloured BS5837:2012 tree quality category as shown below.

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Woodland with numbered reference.
Canopy extents and coloured BS5837:2012 tree quality category as shown below.

BS 5837:2012 Tree Quality Categories - Table 1

●

Category A - High quality

●

Category B - Moderate quality

●

Category C - Low quality

●

Category U - Unsuitable for retention

T1

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numbered reference. Canopy spread and
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should avoid entering this area;

Green: Little or no arboricultural constraint
which would affect compound location.

Cable Crossing Technique

●

Trenchless

●

Trenching / Trenchless

●

Trenched

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Rev	Description	By	CB	Date

EnBW

bp

RPS

Partners in UK offshore wind

Drawing Number:
7144

VER	DATE	DETAILS	BY	CHECK
01	Jan/24	Comment	RC	DC
02	Feb/24	Information	RC	DC

Project Name:
MONA OFFSHORE WIND PROJECT

Drawing Title:
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