

Ballyfeeny Green Energy Project



Environmental Impact Assessment Report Volume III Appendix 6.4 - Habitats September 2025

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Ballyfeeny Green Energy Limited

Ballyfeeny Green Energy Project

Appendix 6.4: Habitats Technical Appendix

September 2025

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4	Habitats	4
4.1	Habitat Survey Results	4
4.1.1	Wind Farm Site and Grid Connection Route	4
4.1.2	The Turbine Delivery Route (TDR)	5
4.2	Importance of Habitats and Sensitivity to Change	7
4.2.1	Active quarries and mines (ED4)	7
4.2.2	Amenity grassland (GA2)	7
4.2.3	Buildings and artificial surfaces (BL3)	7
4.2.4	Buildings and artificial surfaces/Amenity grassland (BL3/GA2)	7
4.2.5	Buildings and artificial surfaces/Spoil and bare ground/Recolonising bare ground (BL3/ED2/ED3)	7
4.2.6	Conifer plantation (WD4)	7
4.2.7	Drainage ditch (FW4)	8
4.2.8	Drainage ditch/Hedgerows (FW4/WL1)	8
4.2.9	Dry meadows and grassy verges (GS2)	8
4.2.10	Dry meadows and grassy verges/Scrub (GS2/WS1)	8
4.2.11	Eroding/upland rivers (FW1)	8
4.2.12	Flower beds and borders (BC4)	9
4.2.13	Hedgerows (WL1)	9
4.2.14	Hedgerows/Treelines (WL1/WL2)	9
4.2.15	Hedgerows/Treelines/Drainage ditch (WL1/WL2/FW4)	9
4.2.16	Improved agricultural grassland (GA1)	9
4.2.17	Improved agricultural grassland/Wet grassland mosaic (GA1/GS4)	9
4.2.18	Mixed broadleaved woodland (WD1)	9
4.2.19	Oak-ash-hazel woodland (WN2)	10
4.2.20	Other artificial lakes and ponds (FL8)	10
4.2.21	Recently-felled woodland (WS5)	10
4.2.22	Recolonising bare ground (ED3)	10
4.2.23	Scrub (WS1)	10
4.2.24	Scrub/Treelines (WS1/WL2)	10
4.2.25	Scrub/ Wet willow-alder-ash woodland (WS1/WN6)	10
4.2.26	Spoil and bare ground (ED2)	10
4.2.27	Stone walls and other stonework (BL1)	11
4.2.28	Treelines (WL2)	11
4.2.29	Treeline/Eroding/upland rivers (WL2/FW1)	11
4.2.30	Wet grassland (GS4)	11
4.2.31	Wet willow-alder-ash woodland (WN6)	11
4.3	Occurrence of Flora Protection Order Species	11
4.4	Invasive Alien Plant Species (IAPS)	11
4.5	Summary of Ecological Features	12
4.6	Figures	15

List of Tables

Table 4.1: Habitats present and areas.....	5
Table 4.2: Linear habitats present and lengths.	5
Table 4.3: Habitats present and areas at TDR nodes.....	6
Table 4.4: Linear habitat present and length at TDR nodes	6
Table 4.5: Summary of habitat importance and identification of Key Ecological Receptors (KERs).	12

List of Figures

Figure 4.1: Proposed Project habitats overview.	16
Figure 4.2: TDR overview.	17
Figure 4.3: TDR overview via N5 Roscommon.	18
Figure 4.4: Proposed Project habitats (Map 1).	19
Figure 4.5: Proposed Project habitats (Map 2).	20
Figure 4.6: Proposed Project habitats (Map 3).	21
Figure 4.7: Proposed Project habitats (Map 4).	22
Figure 4.8: Proposed Project habitats (Map 5).	23
Figure 4.9: TDR habitats (Node 2020).....	24
Figure 4.10: TDR habitats (Node 2055).	25
Figure 4.11: TDR habitats (Node 2060).	26
Figure 4.12: TDR habitats (Node 3020).	27
Figure 4.13: TDR habitats (Node 3155).	28
Figure 4.14: TDR habitats (Node 3165).	29
Figure 4.15: TDR habitats (Node 3170).	30
Figure 4.16: TDR invasives – Cherry Laurel.	31

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4 HABITATS

The habitat survey area was selected based on professional judgement and as per Best Practice (CIEEM, 2024) and all habitats within the likely ZOI of this study area were surveyed and mapped according to Best Practice methods (Fossitt, 2000; Smith *et al.*, 2011). All habitats within the red-line boundary and 50m from the red-line boundary were surveyed and classified using Fossitt (2000). Aerial photography assisted habitat delineation and interpretation. The predominant plant species for each habitat type were recorded to accurately determine habitats present within the study area. These surveys also included the search for any Invasive Alien Plant Species (IAPS) listed under the Third Schedule of the European Communities Regulations 2011 (S.I. 477 of 2015, as amended), the First Schedule of the European Union (Invasive Alien Species) Regulations 2024 (S.I. 347) and any other high Impact invasive species. The surveys were carried out in good weather with no constraints. Habitat surveys were undertaken for the Project in July 2023 and September 2024. Habitat surveys were undertaken on the GCR and TDR during May 2024.

During habitat surveys of the Site, particular attention was paid to searching suitable habitat for rare or protected flora species, to determine whether they were present within, or close to, the Site.

4.1 Habitat Survey Results

4.1.1 Wind Farm Site and Grid Connection Route

A total of 23 habitat types, comprising 141.58ha in total, were recorded within the proposed wind farm Site. All habitats present within the survey area and the area occupied by each habitat type are presented in **Table 4.1**.

The dominant habitats present include Conifer plantation (WD4), Improved agricultural grassland (GA1), Wet grassland (GS4) and Buildings and artificial surfaces (BL3) which make up 33.61%, 22.62%, 10.49% and 8.49% the total area respectively.

A total of 14,681m of linear habitats were recorded within the Project boundary (see **Table 4.2**). Dominant habitats include hedgerows, treelines and drainage ditches.

Table 4.1: *Habitats present and areas.*

Fossitt Code	Area (ha)
Active quarries and mines (ED4)	2.193
Amenity grassland (GA2)	2.742
Buildings and artificial surfaces (BL3)	12.017
Buildings and artificial surfaces/Spoil and bare ground/Recolonising bare ground (BL3/ED2/ED3)	0.567
Conifer plantation (WD4)	47.582
Dry meadows and grassy verges (GS2)	0.340
Eroding/upland rivers (FW1)	0.115
Improved agricultural grassland (GA1)	32.029
Improved agricultural grassland/Wet grassland (GA1/GS4)	15.163
Mixed broadleaved woodland (WD1)	3.528
Oak-ash-hazel woodland (WN2)	1.479
Other artificial lakes and ponds (FL8)	0.007
Recently-felled woodland (WS5)	4.627
Scrub (WS1)	4.033
Scrub/Wet willow-alder-ash woodland (WS1/WN6)	0.052
Wet grassland (GS4)	14.850
Wet willow-alder-ash woodland (WN6)	0.253
Total	141.576

Table 4.2: *Linear habitats present and lengths.*

Fossitt Code	Length (m)
Drainage ditch (FW4)	507
Drainage ditch/Hedgerows (FW4/WL1)	374
Hedgerows (WL1)	11,334
Hedgerows/Treelines (WL1/WL2)	1,167
Hedgerows/Treelines/Drainage ditch (WL1/WL2/FW4)	168
Treelines (WL2)	793
Treelines/Eroding/upland rivers (WL2/FW1)	338
Total	14,681

4.1.2 The Turbine Delivery Route (TDR)

A total of 15 habitat types, comprising 77.37ha in total, occur along the TDR, six linear habitat types, comprising 3,689m also occur along the TDR. All habitats present within the survey area and the area and length occupied by each habitat type are presented in **Table 4.3** and **Table 4.4**. Habitats where works are proposed (e.g. hedge cutting, removal of street furniture) and pinch points along the TDR were surveyed.

Dominant habitats recorded along the TDR include Buildings and artificial surfaces (BL3), Improved agricultural grassland (GA1) and Conifer plantation (WD4) within which the footprint of the TDR works is located. Buildings and artificial surfaces (BL3) have the highest cover of the habitats in the survey

area (28.05%), these mostly consisted of: the main roads along which the TDR is proposed, buildings and surrounding infrastructure within the towns of Strokestown, Bellanagare, Frenchpark, Tuam and Galway city.

Table 4.3: Habitats present and areas at TDR nodes.

Fossitt Code	Area (ha)
Amenity grassland (GA2)	2.69
Building and artificial surfaces (BL3)	21.71
Building and artificial surfaces/Amenity grassland (BL3/GA2)	2.65
Conifer plantation (WD4)	7.67
Dry meadows and grassy verges (GS2)	5.56
Dry meadows and grassy verges/Scrub (GS2/WS1)	0.52
Flower beds and borders (BC4)	0.09
Improved agricultural grassland (GA1)	12.81
Improved agricultural grassland/Wet grassland (GA1/GS4)	0.50
Mixed broadleaved woodland (WD1)	6.61
Recolonising bare ground (ED3)	2.60
Scrub (WS1)	5.79
Scrub/Treelines (WS1/WL2)	1.57
Spoil and bare ground (ED2)	0.26
Wet grassland (GS4)	6.89
Total	77.37

Table 4.4: Linear habitat present and length at TDR nodes

Fossitt Code	Length (m)
Drainage ditch (FW4)	290
Dry meadows and grassy verges (GS2)	69
Hedgerows (WL1)	626
Scrub/Treelines (WS1/WL2)	656
Stone walls and other stonework (BL1)	652
Treelines (WL2)	1,396
Total	3,689

4.2 Importance of Habitats and Sensitivity to Change

Terrestrial habitats in general, are sensitive to direct land take, pollution, and environmental changes resulting from modification such as increased drainage. Groundwater dependant habitats such as Wet grassland habitats may be sensitive to changes in groundwater regimes or changes in ground water quality. The diversity of habitats is particularly sensitive to encroachment from invasive species which may out-compete local native species. Habitats are also sensitive to human activities such as burning and recreational use.

An active quarry (ED4) is considered to be of **National Importance** due to its suitability for Peregrine, which have used the habitat for nesting for two consecutive breeding seasons (2023 and 2024). No other habitats were determined to be of County Importance or higher. However, it should be noted that Oak-ash-hazel woodland was recorded within the Project boundary and is recognised as a habitat of high ecological value and has a limited extent in Ireland (Fossitt, 2000).

Habitats and their importance in accordance with best practice guidance (NRA, 2009) are outlined below.

4.2.1 Active quarries and mines (ED4)

This habitat was recorded to be actively used by Peregrines (*Falco peregrinus*), an Annex I species of the EC Birds Directive. However, the quarry is not located within the Project boundary and therefore no habitat loss will occur. Therefore, although the quarry is assessed as being of **National Importance**, it is not considered to be a KER as it does not occur within the Project boundary.

4.2.2 Amenity grassland (GA2)

This habitat is of little importance to local biodiversity; it is therefore evaluated as being of Local Importance (Lower Value) and is not considered to be a KER.

4.2.3 Buildings and artificial surfaces (BL3)

This habitat is common and widespread through the receiving environment and is of little importance to local biodiversity, it is therefore evaluated as being of Local Importance (Lower Value) and is not considered to be a KER.

4.2.4 Buildings and artificial surfaces/Amenity grassland (BL3/GA2)

This habitat is of little importance to local biodiversity. It is therefore evaluated as being of Local Importance (Lower Value) and is not considered to be a KER.

4.2.5 Buildings and artificial surfaces/Spoil and bare ground/Recolonising bare ground (BL3/ED2/ED3)

This habitat is of little importance to local biodiversity. It is therefore evaluated as being of Local Importance (Lower Value) and is not considered to be a KER.

4.2.6 Conifer plantation (WD4)

This category is used for areas that support dense stands of planted conifers where the broadleaved component is less than 25% and the overriding interest is commercial timber production. Conifer

plantations are characterised by even-aged stands of trees that are usually planted in regular rows, frequently within angular blocks. Species diversity is low and single species stands are common (Fossitt, 2000). The most common species recorded within the habitat was Sitka spruce (*Picea sitchensis*). This habitat covers significant areas of the proposed Project, including the footprints of T03, T04 and associated hardstand areas throughout the proposed wind farm Site boundary.

Conifer plantation is of potential value to certain notable species; namely bird species such as Woodcock (*Scolopax rusticola*), and terrestrial mammal species such as Pine Marten (*Martes martes*). However, as this habitat is of commercial nature, it provides limited ecological value to these species and will eventually undergo clear-felling. As such, this habitat is a Local Importance (Lower Value) and is not considered a KER.

4.2.7 Drainage ditch (FW4)

This habitat has a high level of ecological value to birds, mammals (including bats), amphibians and reptiles for foraging and commuting purposes. The habitat was sparsely recorded within the Project boundary and provides negligible to low levels of suitability to aquatic species. It is assessed as having **Local Importance (Higher Value)**. It is considered to be a KER.

4.2.8 Drainage ditch/Hedgerows (FW4/WL1)

This habitat has a high level of ecological value to birds, mammals (including bats), amphibians and reptiles for foraging and commuting purposes. This mosaic habitat was recorded within the Project boundary, partially within the footprint of the T05 hardstand, which will result in habitat loss. It is assessed as having **Local Importance (Higher Value)**. It is considered to be a KER.

4.2.9 Dry meadows and grassy verges (GS2)

This habitat is common and widespread through the receiving environment. The habitat occurred sparsely within the Project boundary and GCR; it is assessed as having Local Importance (Lower Value) due to its importance to local biodiversity. It is not considered to be a KER.

4.2.10 Dry meadows and grassy verges/Scrub (GS2/WS1)

This mosaic habitat has a high level of high ecological value to birds and mammals (including bats), for foraging and commuting purposes. This habitat was recorded along the TDR, adjacent to R371, 137.5m north of the Project Site Entrance 1 (SE1). The area is subjected to high disturbance via road traffic and is therefore unsuitable habitat for local biodiversity. It is assessed as having Local Importance (Lower Value) and is not considered to be a KER.

4.2.11 Eroding/upland rivers (FW1)

This habitat has a high level of ecological value to birds and mammals (including bats) for foraging and commuting purposes. This habitat was recorded on the GCR, which crosses a small stream. It is assessed as having **Local Importance (Higher Value)**. It is considered to be a KER.

4.2.12 Flower beds and borders (BC4)

This habitat is of little importance to local biodiversity, it is therefore evaluated as being of having Local Importance (Lower Value) and is not considered to be a KER.

4.2.13 Hedgerows (WL1)

This habitat has a high level of high ecological value to birds and mammals (including bats) for foraging and commuting purposes. Significant cover of this habitat was recorded within the Project boundary, within proposed works which will result in habitat loss. It is assessed as having **Local Importance (Higher Value)**. It is considered to be a KER.

4.2.14 Hedgerows/Treelines (WL1/WL2)

This habitat has a high level of high ecological value to birds and mammals (including bats) for foraging and commuting purposes. Treelines can also provide day roosting for bats. Significant cover of this habitat was recorded within the Project boundary, notably, the habitat was recorded within the footprint of T05 which will result in habitat loss. It is assessed as having **Local Importance (Higher Value)**. It is considered to be a KER.

4.2.15 Hedgerows/Treelines/Drainage ditch (WL1/WL2/FW4)

This mosaic habitat has a high level of ecological value to birds, mammals (including bats), amphibians and reptiles for foraging and commuting purposes. This mosaic habitat was recorded within the Project boundary, partially within the footprint of the T05 hardstand, which will result in habitat loss. It is assessed as having **Local Importance (Higher Value)**. It is considered to be a KER.

4.2.16 Improved agricultural grassland (GA1)

This habitat occurs within the footprints of T02, T05 and T01, the Onsite Substation and associated Turbine Hardstands. A total of 7.69ha of this habitat type occurred within the Project boundary.

This habitat is highly modified, common and widespread throughout the receiving environment and provides suitable habitat to local biodiversity. It is assessed as having Local Importance (Lower Value) and is not considered to be a KER.

4.2.17 Improved agricultural grassland/Wet grassland mosaic (GA1/GS4)

This habitat is of potential value to certain notable species, namely bird species, mammals, amphibians and reptiles. This mosaic habitat occurs within the footprints of T02, T05 and T01, the Onsite Substation and associated Turbine Hardstands. Due to the highly modified nature of this mosaic habitat, it is assessed as having Local Importance (Lower Value) due to its importance to local biodiversity. It is not considered to be a KER.

4.2.18 Mixed broadleaved woodland (WD1)

Mixed broadleaved woodland is recognised as a habitat of high ecological value, supporting protected and notable species of flora and fauna. This habitat is assessed as having **Local Importance (Higher Value)** due to its importance to local biodiversity. It is considered to be a KER.

4.2.19 Oak-ash-hazel woodland (WN2)

Oak-ash-hazel woodland is recognised as a habitat of high ecological value, supporting protected and notable species of flora and fauna, namely birds and mammals. This habitat is proposed to be subject to habitat loss during construction of the Project, resulting in habitat loss and fragmentation. It is assessed as having **Local Importance (Higher Value)** due to its importance to local biodiversity and limited extent in Ireland (Fossitt, 2000). It is considered to be a KER.

4.2.20 Other artificial lakes and ponds (FL8)

This habitat is of little importance to local biodiversity, it is therefore evaluated as being of Local Importance (Lower Value) and is not considered to be a KER.

4.2.21 Recently-felled woodland (WS5)

This habitat is of potential value to certain notable species, namely bird species and mammals. This habitat is assessed as having **Local Importance (Higher Value)** due to its importance to local biodiversity. It is considered to be a KER.

4.2.22 Recolonising bare ground (ED3)

This habitat is of little importance to local biodiversity, it is therefore evaluated as being of Local Importance (Lower Value) and is not considered to be a KER.

4.2.23 Scrub (WS1)

Scrub is recognised as a habitat of high ecological value, supporting protected and notable species of flora and fauna, namely birds and mammals. This habitat is assessed as having **Local Importance (Higher Value)** due to its importance to local biodiversity. It is considered to be a KER.

4.2.24 Scrub/Treelines (WS1/WL2)

This mosaic habitat has a high level of high ecological value to birds and mammals (including bats), for foraging and commuting purposes. The habitat was recorded along the TDR, on both sides of the N5, 50.69m east of the Bracklagh Roundabout. As a result, the area is subjected to high disturbance via road traffic and is therefore unsuitable habitat for local biodiversity. It is assessed as having Local Importance (Lower Value) and is not considered to be a KER.

4.2.25 Scrub/ Wet willow-alder-ash woodland (WS1/WN6)

This habitat recognised as a habitat of high ecological value, supporting protected and notable species of flora and fauna, namely birds and mammals. However, the habitat occurred sparsely within the Project boundary and is not located within the footprint of proposed works, it is assessed as having **Local Importance (Higher Value)**. It is therefore considered to be a KER.

4.2.26 Spoil and bare ground (ED2)

This habitat is of little importance to local biodiversity, it is therefore evaluated as being of Local Importance (Lower Value) and is not considered to be a KER.

4.2.27 Stone walls and other stonework (BL1)

This habitat has potential ecological value to support a diverse flora with abundant lichens, mosses and ferns. This habitat was recorded alongside the Tuam Road, bordering the Riverside Commercial Estate, west and east of the Mountpotter Roundabout, both sides of the N17, 2.5km south of Knock Airport. Due to the high levels of disturbance within the area, it is assessed as having Local Importance (Lower Value) and is not considered to be a KER.

4.2.28 Treelines (WL2)

This habitat has a high level of high ecological value to birds and mammals (including bats) for foraging and commuting purposes. Treelines can also provide day roosting for bats. This habitat was recorded within the Project boundary, within the footprint of proposed works, which will result in habitat loss. It is assessed as having **Local Importance (Higher Value)**. It is considered to be a KER.

4.2.29 Treeline/Eroding/upland rivers (WL2/FW1)

This mosaic habitat has a high level of ecological value to birds and mammals (including bats) for foraging and commuting purposes. This mosaic habitat was recorded within the Project boundary, intersecting the T04 hardstand, which will result in habitat loss. It is assessed as having **Local Importance (Higher Value)**. It is considered to be a KER.

4.2.30 Wet grassland (GS4)

Wet grassland is of potential value to certain notable species, namely bird species, mammals and amphibians. This habitat is common and widespread through the receiving environment and is assessed as having **Local Importance (Higher Value)** due to its importance to local biodiversity it is considered to be a KER.

4.2.31 Wet willow-alder-ash woodland (WN6)

Any mixed broadleaved woodland is recognised as a habitat of high ecological value, supporting protected and notable species of flora and fauna, namely birds and mammals. The habitat occurred sparsely within the Project boundary and is assessed as **having Local Importance (Higher Value)**. It is therefore considered to be a KER.

4.3 Occurrence of Flora Protection Order Species

No Flora Protection Order species were recorded during habitat walkover surveys.

4.4 Invasive Alien Plant Species (IAPS)

The field surveys undertaken for the proposed Project identified no evidence of Invasive Alien Plant Species listed under the third schedule of S.I. 477 or the first schedule of S.I. 347 EU Regulations.

Cherry Laurel (*Prunus laurocerasus*), a high impact invasive species, was recorded along the TDR (**Figure 4.16**). Cherry Laurel can have the potential for negative impacts on native plants and habitats outcompeting native species. The stand is not located within any proposed works areas along the TDR. Therefore, it is **not** considered for further consideration as a negative indicator on KERs.

4.5 Summary of Ecological Features

Table 4.5: Summary of habitat importance and identification of Key Ecological Receptors (KERs).

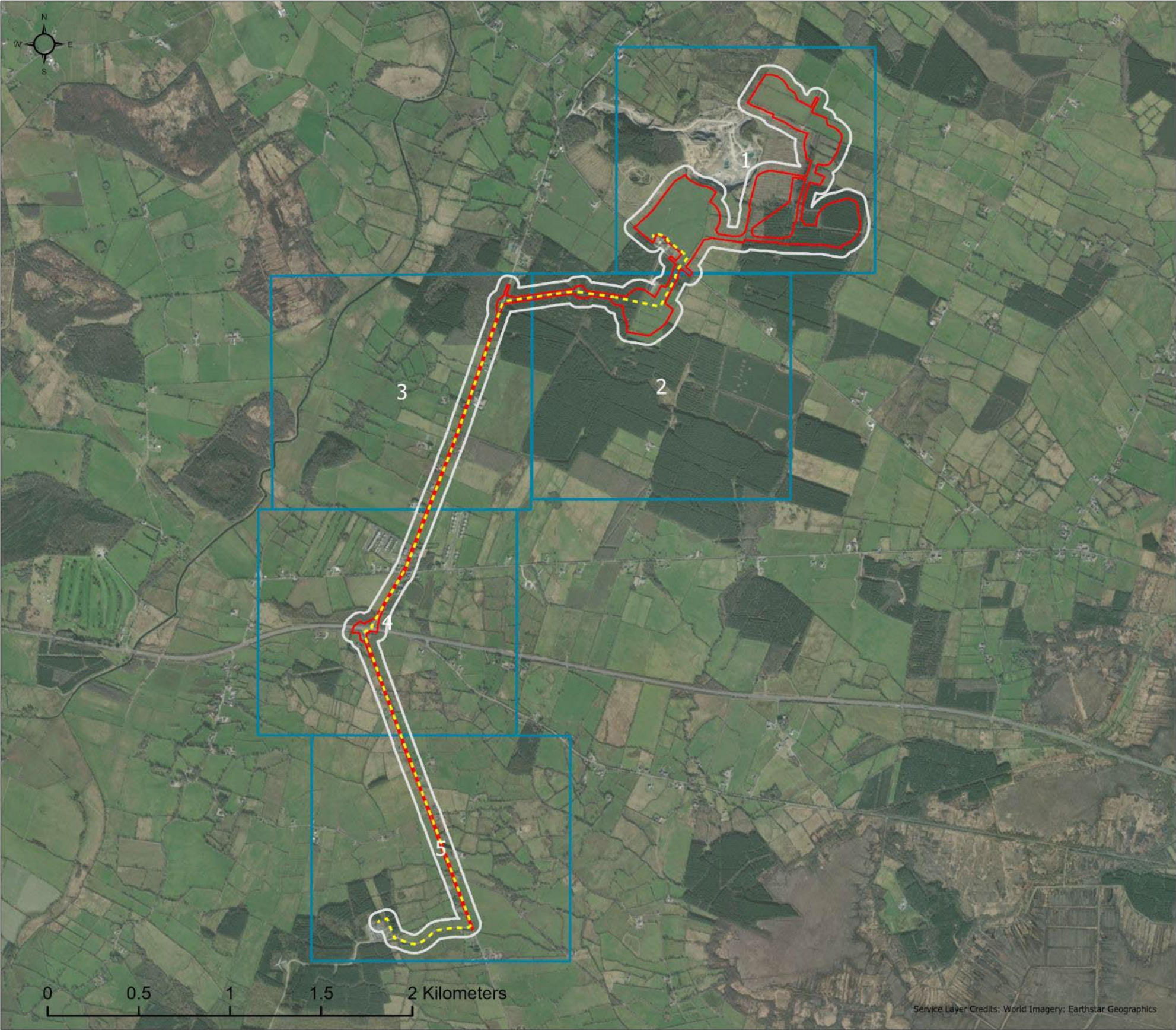
Habitat	Importance	KER (yes/no)	Rationale
Active quarries and mines (ED4)	National Importance	No	This habitat was recorded to be actively used by Peregrines, an Annex I species of the EC Birds Directive. However, the quarry is not located within the Project boundary and therefore no habitat loss will occur
Amenity grassland (GA2)	Local Importance (Lower Value)	No	This habitat is of little importance to local biodiversity.
Building and artificial surfaces (BL3)	Local Importance (Lower Value)	No	This habitat is common and widespread through the receiving environment and is of little importance to local biodiversity.
Building and artificial surfaces/Amenity grassland (BL3/GA2)	Local Importance (Lower Value)	No	This habitat is of little importance to local biodiversity.
Buildings and artificial surfaces/Spoil and bare ground/Recolonising bare ground (BL3/ED2/ED3)	Local Importance (Lower Value)	No	This habitat is of little importance to local biodiversity.
Conifer plantation (WD4)	Local Importance (Higher Value)	No	Conifer plantation of low biodiversity value. This aligns with the geographic valuation: <i>“Sites or features containing non-native species that are of some importance in maintaining habitat links”</i> .
Drainage ditch (FW4)	Local Importance (Higher Value)	Yes	This habitat has level of high ecological value to birds, mammals (including bats), amphibians and reptiles for foraging and commuting purposes.
Drainage ditch/Hedgerows (FW4/WL1)	Local Importance (Higher Value)	Yes	This mosaic habitat has a high level of ecological value to birds and mammals (including bats) for foraging and commuting purposes.
Dry meadows and grassy verges (GS2)	Local Importance (Higher Value)	No	This habitat is common and widespread through the receiving environment and is of little importance to local biodiversity.
Dry meadows and grassy verges/Scrub (GS2/WS1)	Local Importance (Higher Value)	No	Although this mosaic habitat has some ecological value, its occurrence on the Project (TDR) is subject to very high levels of disturbance and would be of little value to biodiversity
Eroding/upland rivers (FW1)	Local Importance (Higher Value)	Yes	This habitat has level of high ecological value to birds, mammals (including bats), amphibians and reptiles for foraging and commuting purposes.

Habitat	Importance	KER (yes/no)	Rationale
Flower beds and borders (BC4)	Local Importance (Lower Value)	No	This habitat is of little importance to local biodiversity.
Hedgerows (WL1)	Local Importance (Higher Value)	Yes	This habitat has a high level of high ecological value to birds and mammals (including bats) for foraging, nesting, roosting and commuting purposes.
Hedgerows/Treelines (WL1/WL2)	Local Importance (Higher Value)	Yes	This habitat has a high level of high ecological value to birds and mammals (including bats) for foraging, nesting, roosting and commuting purposes.
Hedgerows/Treelines/ Drainage ditch (WL1/WL2/FW4)	Local Importance (Higher Value)	Yes	This habitat has a high level of high ecological value to birds and mammals (including bats) for foraging, nesting, roosting and commuting purposes.
Improved agricultural grassland (GA1)	Local Importance (Lower Value)	No	Improved grassland of low biodiversity value. This habitat is highly modified, common and widespread throughout the receiving environment and provides limited habitat to local biodiversity
Improved agricultural grassland/Wet grassland (GA1/GS4)	Local Importance (Higher Value)	No	This habitat is of limited biodiversity value, due to the influence of agricultural management.
Mixed broadleaved woodland (WD1)	Local Importance (Higher Value)	Yes	Mixed broadleaved woodland is recognised as a habitat of high ecological value, supporting protected and notable species of flora and fauna, namely birds and mammals.
Oak-ash-hazel woodland (WN2)	Local Importance (Higher Value)	Yes	This habitat is of high ecological value, supporting protected and notable species of flora and fauna, namely birds and mammals
Other artificial lakes and ponds (FL8)	Local Importance (Higher Value)	No	This habitat is of little importance to local biodiversity.
Recently-felled woodland (WS5)	Local Importance (Higher Value)	Yes	This habitat is of potential value to certain notable species, namely bird species and mammals.
Recolonising bare ground (ED3)	Local Importance (Lower Value)	No	This habitat is of little importance to local biodiversity.
Scrub (WS1)	Local Importance (Higher Value)	Yes	Scrub is a habitat of high ecological value, supporting protected and notable species of flora and fauna.
Scrub/Treelines (WS1/WL2)	Local Importance (Higher Value)	Yes	This mosaic habitat has a high level of ecological value to birds and mammals (including bats) for foraging and commuting purposes.

Habitat	Importance	KER (yes/no)	Rationale
Scrub/Wet willow-alder-ash woodland (WS1/WN6)	Local Importance (Higher Value)	Yes	Mosaics of mixed broadleaved woodlands are recognised as a habitat of high ecological value, supporting protected and notable species of flora and fauna, namely birds and mammals.
Spoil and bare ground (ED2)	Local Importance (Lower Value)	No	This habitat is of little importance to local biodiversity.
Stone walls and other stonework (BL1)	Local Importance (Higher Value)	No	This habitat has potential ecological value to support a limited species, such as lichens, mosses and ferns.
Treelines (WL2)	Local Importance (Higher Value)	Yes	This habitat has a high level of high ecological value to birds and mammals (including bats) for foraging, nesting, roosting and commuting purposes.
Treelines/Eroding/upland rivers (WL2/FW1)	Local Importance (Higher Value)	Yes	This mosaic habitat has a high level of high ecological value to birds and mammals (including bats) for foraging and commuting purposes.
Wet grassland (GS4)	Local Importance (Higher Value)	Yes	Wet grassland is of potential value to certain species, particularly birds, mammals and amphibians. This habitat is common and widespread through the receiving environment
Wet willow-alder-ash woodland (WN6)	Local Importance (Higher Value)	Yes	Mixed broadleaved woodland is recognised as a habitat of high ecological value, supporting protected and notable species of flora and fauna.

4.6 Figures

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Client: Ballyfeeny Green Energy Limited

Project: Ballyfeeny Green Energy Project

Figure: 6.4-4.1 Habitats Overview Map



- Legend:
- Grid Connection Route
 - Redline Boundary
 - Habitats Study Area
 - Map Extents

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Figure 4.1: Proposed Project habitats overview.



Client: Ballyfeeny Green Energy Limited

Project: Ballyfeeny Green Energy Project

Figure: 6.4-4.2 TDR Overview



Legend:
TDR Oversail Areas

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Figure 4.2: TDR overview.



Client: Ballyfeeny Green Energy Limited

Project: Ballyfeeny Green Energy Project

Figure: 6.4-4.3 TDR Habitats - N5 Roscommon



Legend:
Nodes Option 1B

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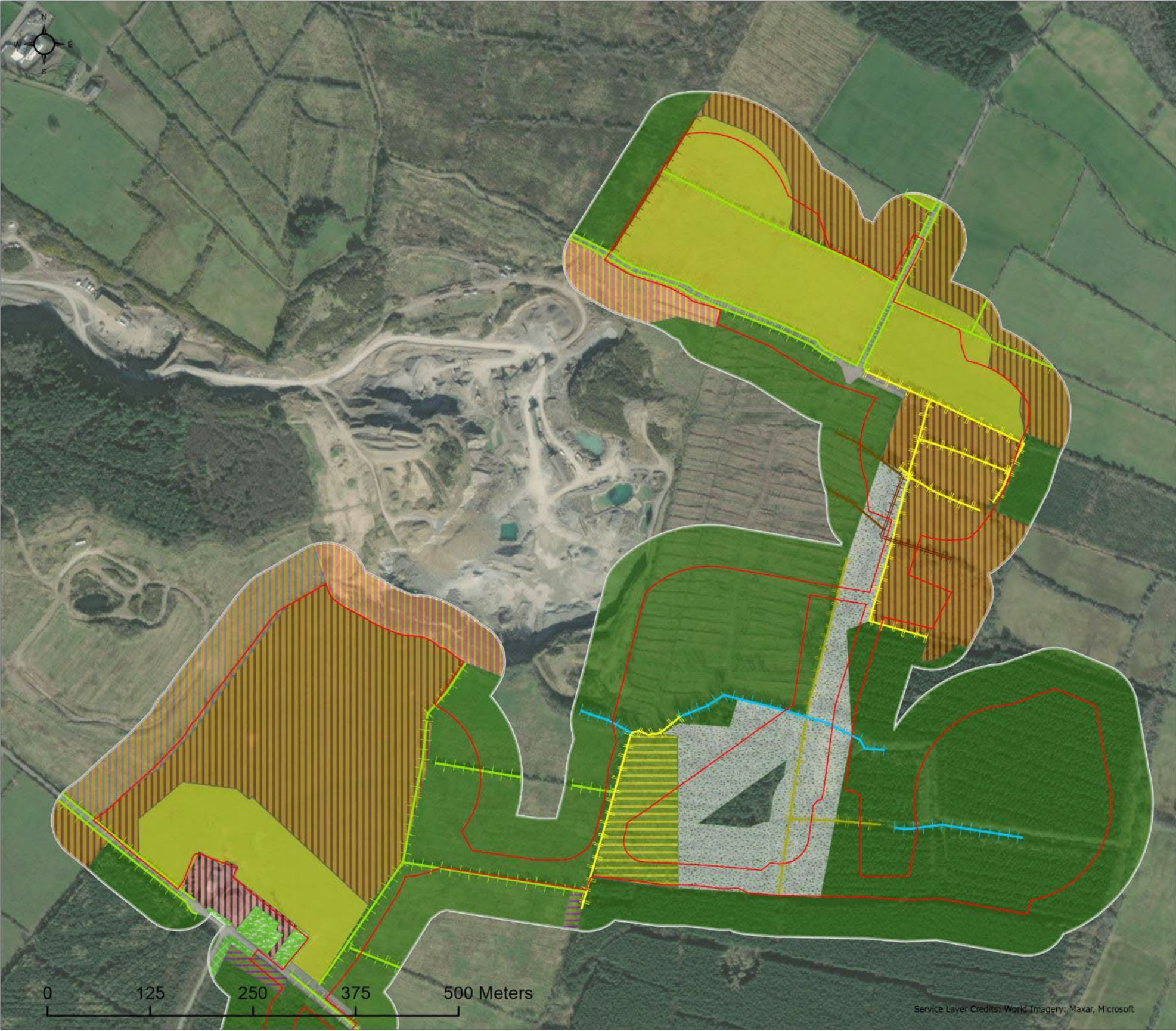
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Figure 4.3: TDR overview via N5 Roscommon.



Client: Ballyfeeny Green Energy Limited

Project: Ballyfeeny Green Energy Project

Figure: 6.4-4.4 Habitats Map 1 of 5

Boyle

Elphin

Strokestown

Roscommon

Mohill

Longford

GA1 Improved agricultural grassland

GA1 / GS4 Improved agricultural grassland / Wet grassland

GA2 Amenity grassland

GS2 Dry meadows and grassy verges

GS4 Wet grassland

WD1 Mixed broadleaved woodland

WD4 Conifer plantation

WN2 Oak-ash-hazel woodland

WN6 Wet willow-alder-ash woodland

WS1 Scrub

WS1 / WN6 Scrub / Wet willow-alder-ash woodland

WS5 Recently-felled woodland

Habitats Study Area

Redline Boundary

FW4 Drainage ditches

FW4 / WL1 Drainage ditches / Hedgerows

WL1 Hedgerows

WL1 / WL2 Hedgerows / Treelines

WL1 / WL2 / FW4 Hedgerows / Treelines / Drainage ditches

WL2 Treelines

WL2 / FW1 Treelines / Eroding/upland rivers

BL3 Buildings and artificial surfaces

BL3 / ED2 / ED3 Buildings and artificial surfaces / Spoil and bare ground / Recolonising bare ground

ED4 Active quarries and mines

FL8 Other artificial lakes and ponds

FW1 Eroding/upland rivers

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Figure 4.4: Proposed Project habitats (Map 1).

19



Client: Ballyfeeny Green Energy Limited

Project: Ballyfeeny Green Energy Project

Figure: 6.4-4.5 Habitats Map 2 of 5

Boyle

Elphin

Strokestown

Roscommon

Mohill

Longford

Legend:

Redline Boundary

FW4 Drainage ditches

FW4 / WL1 Drainage ditches / Hedgerows

WL1 Hedgerows

WL1 / WL2 Hedgerows / Treelines

WL1 / WL2 / FW4 Hedgerows / Treelines / Drainage ditches

WL2 Treelines

WN4 / FW1 Wet pedunculate oak-ash woodland / Drainage ditches

BL3 Buildings and artificial surfaces

BL3 / ED2 / ED3 Buildings and artificial surfaces / Spoil and bare ground / Recolonising bare ground

ED4 Active quarries and mines

FL8 Other artificial lakes and ponds

FW1 Eroding/upland rivers

GA1 Improved agricultural grassland

GA1 / GS4 Improved agricultural grassland / Wet grassland

GA2 Amenity grassland

GS2 Dry meadows and grassy verges

GS4 Wet grassland

WD1 Mixed broadleaved woodland

WD4 Conifer plantation

WN2 Oak-ash-hazel woodland

WN6 Wet willow-alder-ash woodland

WS1 Scrub

WS1 / WN6 Scrub / Wet willow-alder-ash woodland

WS5 Recently-felled woodland

Habitats Study Area

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Figure 4.5: Proposed Project habitats (Map 2).

20



Client: Ballyfeeny Green Energy Limited

Project: Ballyfeeny Green Energy Project

Figure: 6.4-4.6 Habitats Map 3 of 5

Legend:

Redline Boundary	FW1 Eroding/upland rivers
FW4 Drainage ditches	GA1 Improved agricultural grassland
FW4 / WL1 Drainage ditches / Hedgerows	GA1 / GS4 Improved agricultural grassland / Wet grassland
WL1 Hedgerows	GA2 Amenity grassland
WL1 / WL2 Hedgerows / Treelines	GS2 Dry meadows and grassy verges
WL1 / WL2 / FW4 Hedgerows / Treelines / Drainage ditches	GS4 Wet grassland
WL2 Treelines	WD1 Mixed broadleaved woodland
WN4 / FW1 Wet pedunculate oak-ash woodland / Drainage ditches	WD4 Conifer plantation
BL3 Buildings and artificial surfaces	WN2 Oak-ash-hazel woodland
BL3 / ED2 / ED3 Buildings and artificial surfaces / Spoil and bare ground / Recolonising bare ground	WN6 Wet willow-alder-ash woodland
ED4 Active quarries and mines	WS1 Scrub
FL8 Other artificial lakes and ponds	WS1 / WN6 Scrub / Wet willow-alder-ash woodland
	WS5 Recently-felled woodland
	Habitats Study Area

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Figure 4.6: Proposed Project habitats (Map 3).



Client: Ballyfeeny Green Energy Limited

Project: Ballyfeeny Green Energy Project

Figure: 6.4-4.7 Habitats Map 4 of 5

Legend:

Redline Boundary	FW1 Eroding/upland rivers
Fossitt Code	GA1 Improved agricultural grassland
FW4 Drainage ditches	GA1 / GS4 Improved agricultural grassland / Wet grassland
FW4 / WL1 Drainage ditches / Hedgerows	GA2 Amenity grassland
WL1 Hedgerows	GS2 Dry meadows and grassy verges
WL1 / WL2 Hedgerows / Treelines	GS4 Wet grassland
WL1 / WL2 / FW4 Hedgerows / Treelines / Drainage ditches	WD1 Mixed broadleaved woodland
WL2 Treelines	WD4 Conifer plantation
WN4 / FW1 Wet pedunculate oak-ash woodland / Drainage ditches	WN2 Oak-ash-hazel woodland
BL3 Buildings and artificial surfaces	WN6 Wet willow-alder-ash woodland
BL3 / ED2 / ED3 Buildings and artificial surfaces / Spoil and bare ground / Recolonising bare ground	WS1 Scrub
ED4 Active quarries and mines	WS1 / WN6 Scrub / Wet willow-alder-ash woodland
FL8 Other artificial lakes and ponds	WS5 Recently-felled woodland
	Habitats Study Area

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Figure 4.7: Proposed Project habitats (Map 4).



Client: Ballyfeeny Green Energy Limited

Project: Ballyfeeny Green Energy Project

Figure: 6.4-4.8 Habitats Map 5 of 5



- Legend:**
- Redline Boundary
 - Fossitt Code
 - FW4 Drainage ditches
 - FW4 / WL1 Drainage ditches / Hedgerows
 - WL1 Hedgerows
 - WL1 / WL2 Hedgerows / Treelines
 - WL1 / WL2 / FW4 Hedgerows / Treelines / Drainage ditches
 - WL2 Treelines
 - WL2 / FW1
 - BL3 Buildings and artificial surfaces
 - BL3 / ED2 / ED3 Buildings and artificial surfaces / Spoil and bare ground / Recolonising bare ground
 - ED4 Active quarries and mines
 - FL8 Other artificial lakes and ponds
 - FW1 Eroding/upland rivers
 - GA1 Improved agricultural grassland
 - GA1 / GS4 Improved agricultural grassland / Wet grassland
 - GA2 Amenity grassland
 - GS2 Dry meadows and grassy verges
 - GS4 Wet grassland
 - WD1 Mixed broadleaved woodland
 - WD4 Conifer plantation
 - WN2 Oak-ash-hazel woodland
 - WN6 Wet willow-alder-ash woodland
 - WS1 Scrub
 - WS1 / WN6 Scrub / Wet willow-alder-ash woodland
 - WS5 Recently-felled woodland
 - Habitats Study Area

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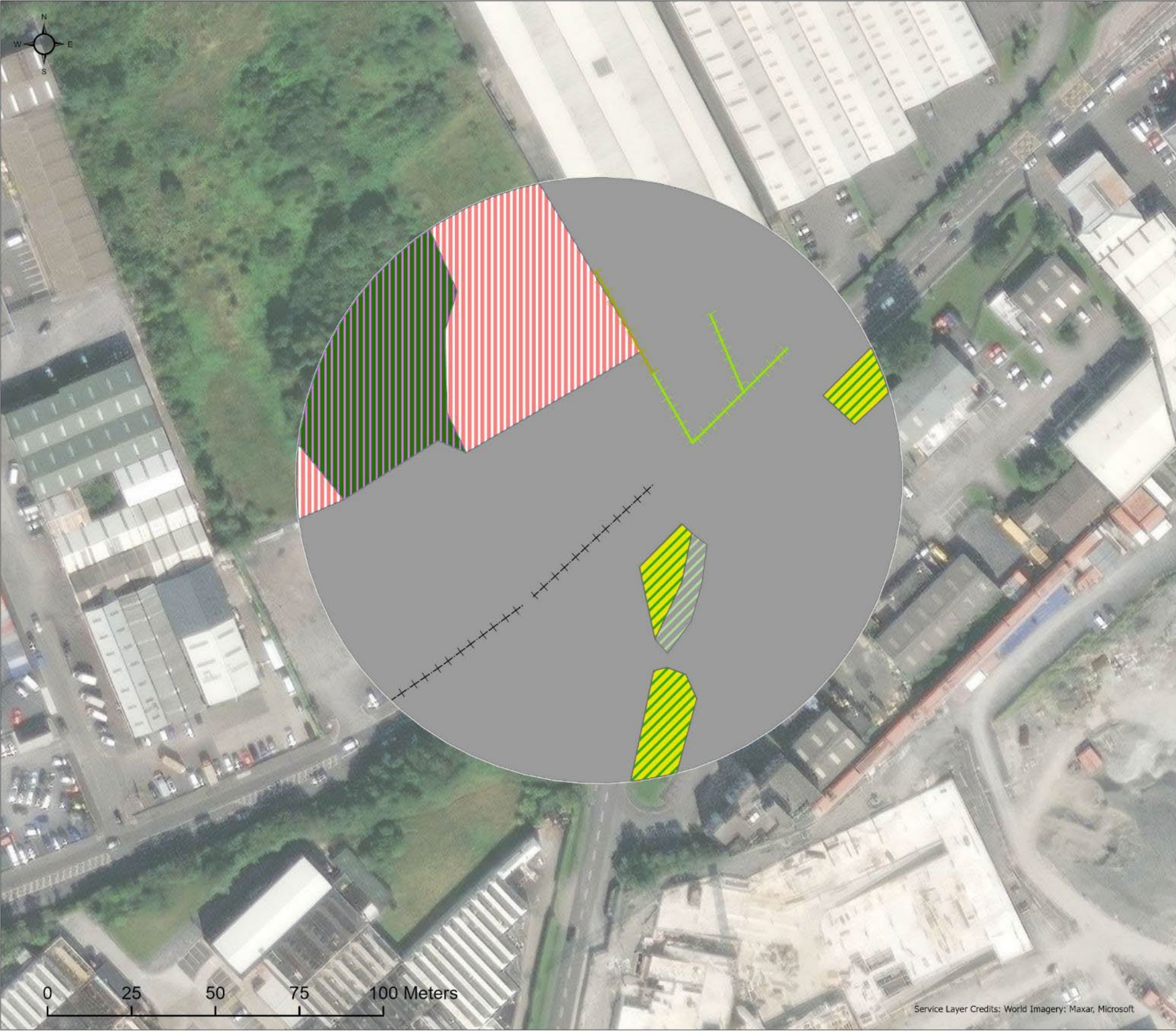
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Figure 4.8: Proposed Project habitats (Map 5).



Client: Ballyfeeny Green Energy Limited

Project: Ballyfeeny Green Energy Project

Figure: 6.4-4.9 TDR Habitats - Node 2020



Legend:

Fossitt Code

- BL1 Stone walls and other stonework
- WL1 Hedgerows
- WL2 Treelines
- BC4 Flower beds and borders
- BL3 Buildings and other artificial surfaces
- ED3 Recolonising bare ground
- GA2 Amenity grassland
- WD1 Mixed broadleaved woodland
- Nodes Option 1B

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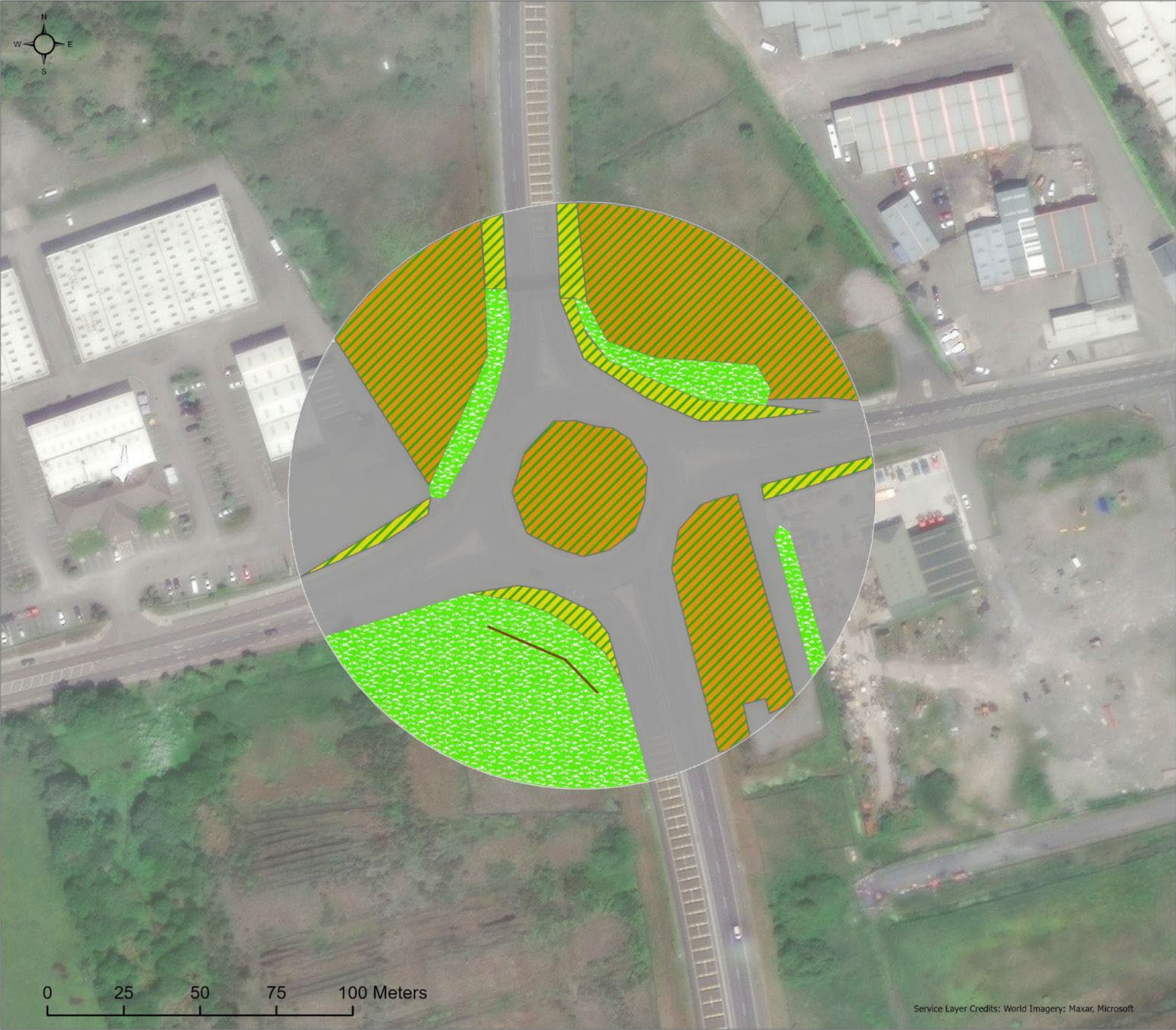
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Figure 4.9: TDR habitats (Node 2020).



Client: Ballyfeeny Green Energy Limited

Project: Ballyfeeny Green Energy Project

Figure: 6.4-4.10 TDR Habitats - Node 2055



- Legend:
- Fossitt Code
- FW4 Drainage ditches
 - BL3 Buildings and other artificial surfaces
 - GA2 Amenity grassland
 - GS2 Dry meadows and grassy verges
 - WS1 Scrub
 - Nodes Option 1B

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Figure 4.10: TDR habitats (Node 2055).



Client: Ballyfeeny Green Energy Limited

Project: Ballyfeeny Green Energy Project

Figure: 6.4-4.11 TDR Habitats - Node 2060

Legend:

Fossitt Code

- BL1 Stone walls and other stonework
- WL2 Treelines
- BL3 Buildings and other artificial surfaces
- GA1 Improved agricultural grassland
- GA2 Amenity grassland
- GS2 Dry meadows and grassy verges
- WS1 Scrub
- Nodes Option 1B

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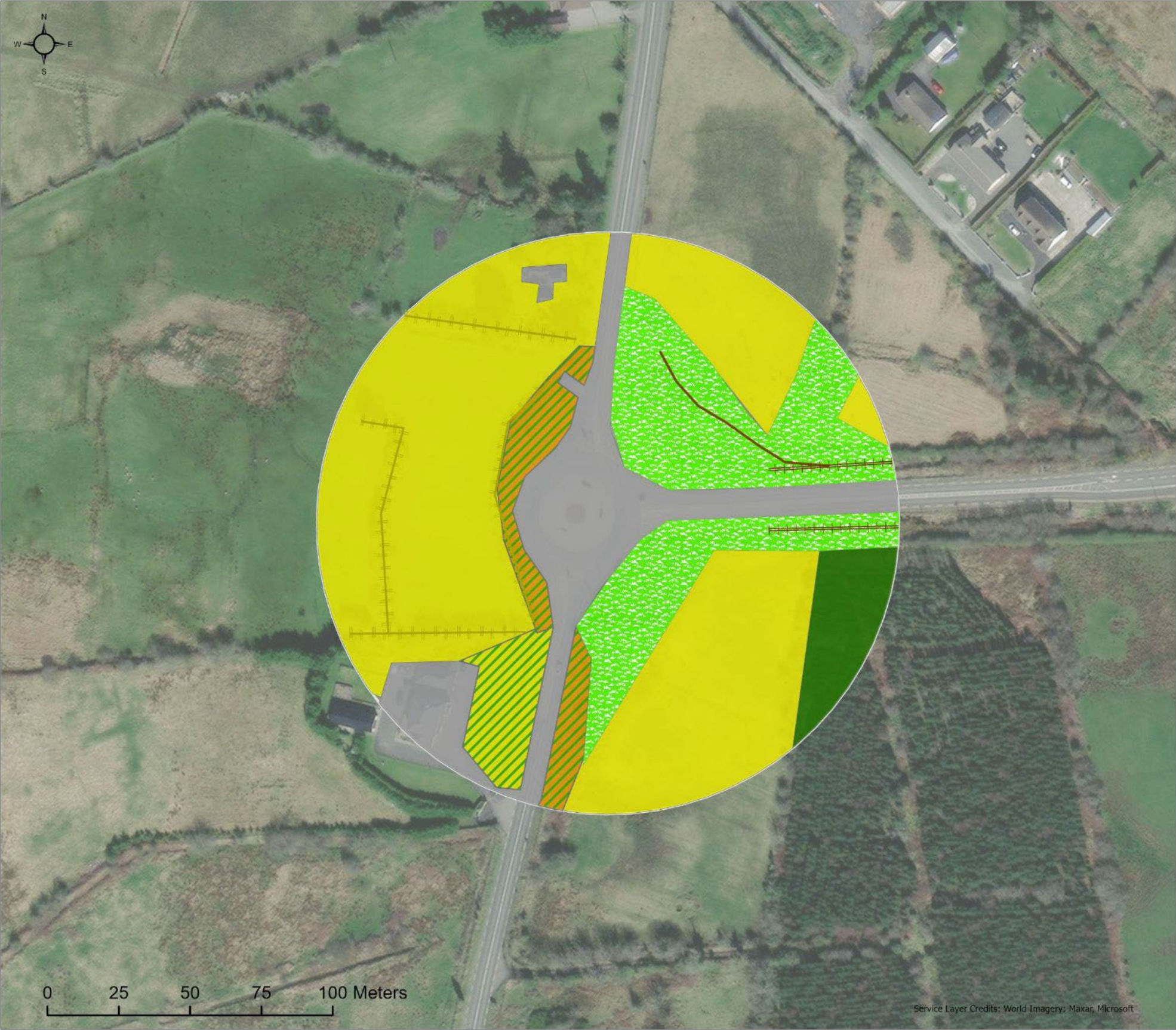
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Figure 4.11: TDR habitats (Node 2060).



Client: Ballyfeeny Green Energy Limited

Project: Ballyfeeny Green Energy Project

Figure: 6.4-4.12 TDR Habitats - Node 3020



Legend:

Fossitt Code

- FW4 Drainage ditches
- WL2 Treelines
- WS1/WL2 Scrub/Treelines
- BL3 Buildings and other artificial surfaces
- GA1 Improved agricultural grassland
- GA2 Amenity grassland
- GS2 Dry meadows and grassy verges
- WD4 Conifer plantation
- WS1 Scrub
- Nodes Option 1B

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Figure 4.12: TDR habitats (Node 3020).



Client: Ballyfeeny Green Energy Limited

Project: Ballyfeeny Green Energy Project

Figure: 6.4-4.13 TDR Habitats - Node 3155



- Legend:
- BL3 Buildings and other artificial surfaces
 - GA2 Amenity grassland
 - WS1 Scrub
 - Nodes Option 1B

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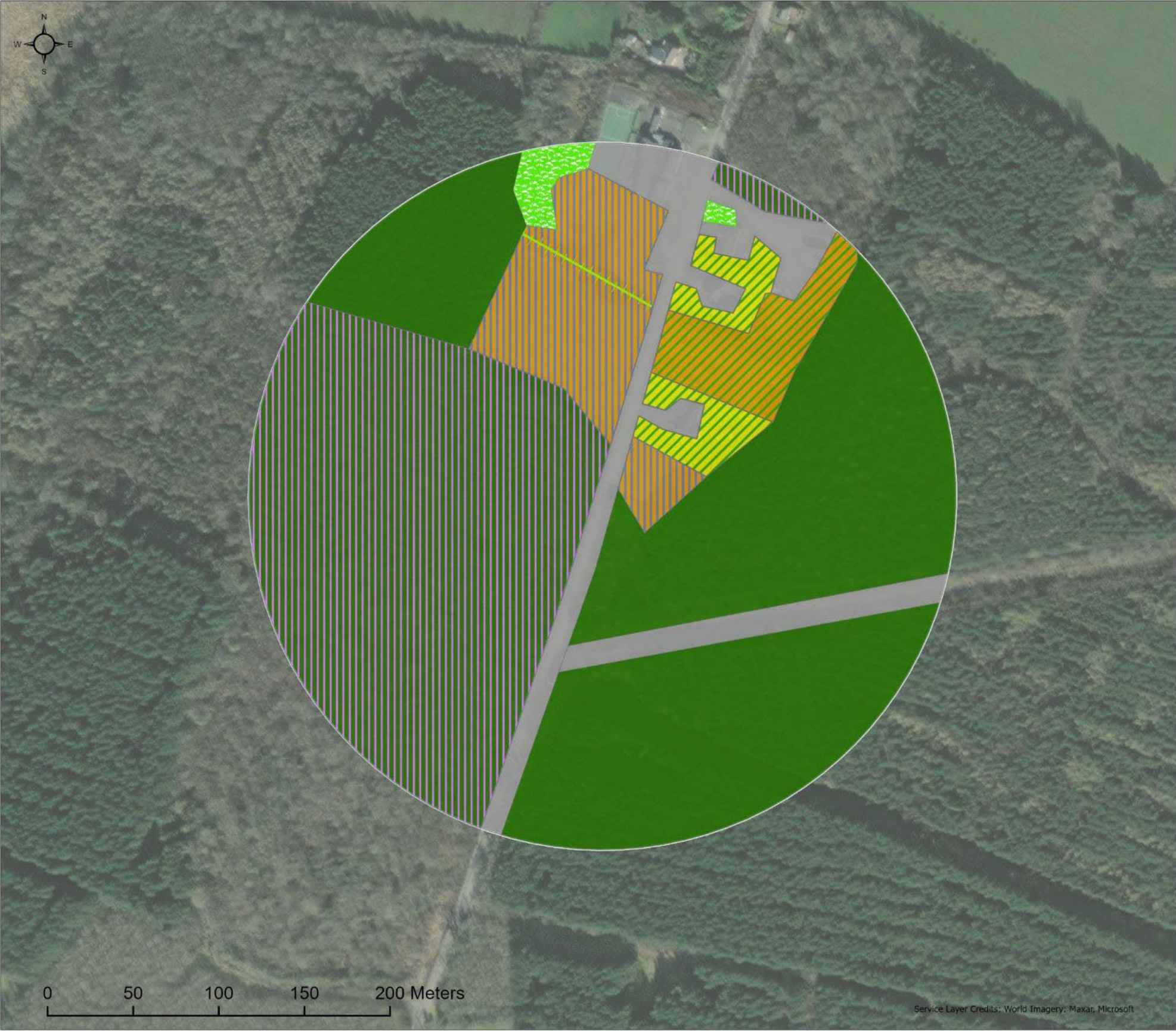
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Figure 4.13: TDR habitats (Node 3155).



Figure 4.14: TDR habitats (Node 3165).



Client: Ballyfeeny Green Energy Limited

Project: Ballyfeeny Green Energy Project

Figure: 6.4-4.15 TDR Habitats - Node 3170

Elphin

Strokestown

Legend:

Fossitt Code

- WL1 Hedgerows
- BL3 Buildings and other artificial surfaces
- GA2 Amenity grassland
- GS2 Dry meadows and grassy verges
- GS4 Wet grassland
- WD1 Mixed broadleaved woodland
- WD4 Conifer plantation
- WS1 Scrub
- Nodes Option 1B

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Figure 4.15: TDR habitats (Node 3170).

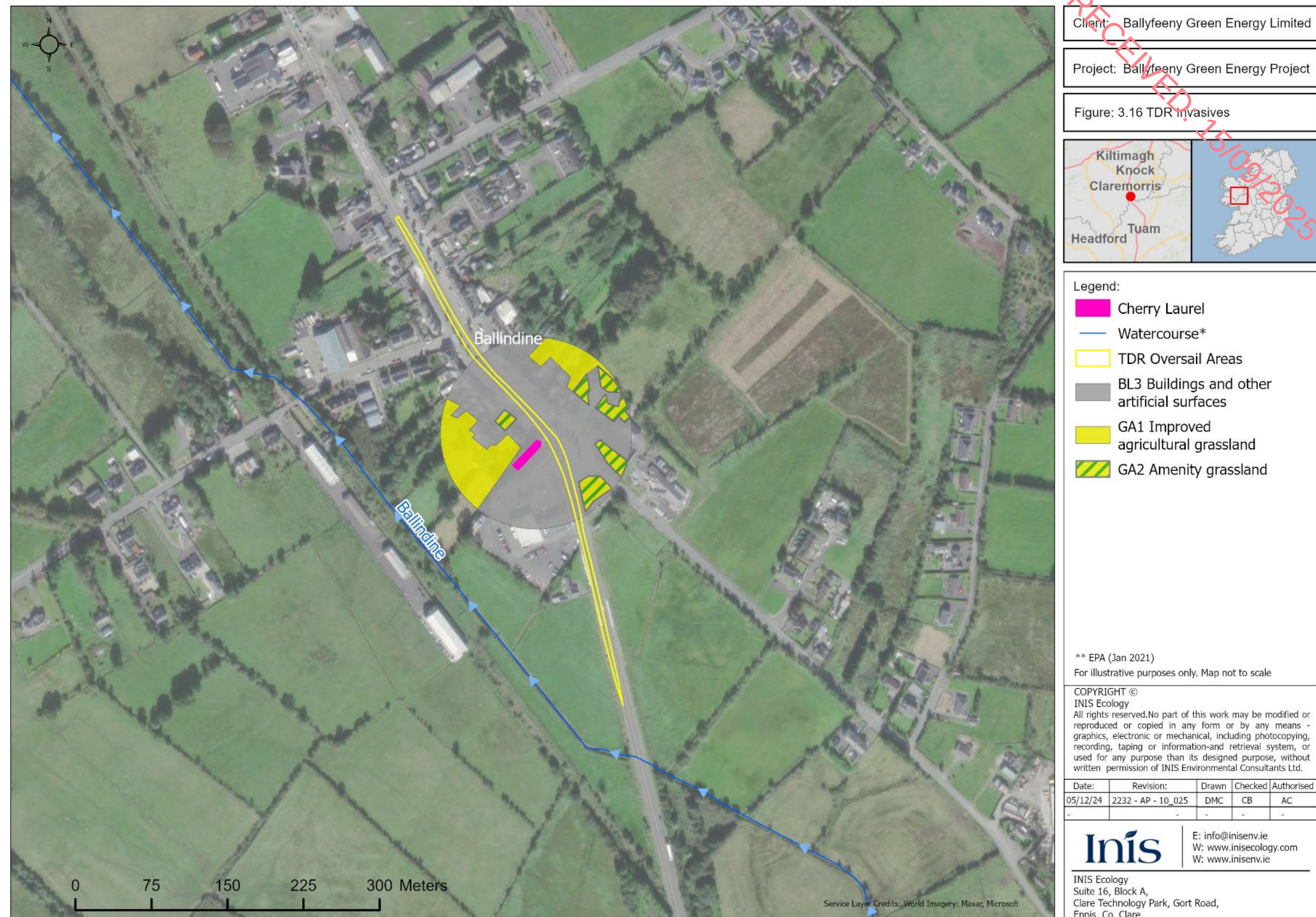


Figure 4.16: TDR invasives – Cherry Laurel.