

MONA OFFSHORE WIND PROJECT

Environmental Statement

Volume 7, Annex 3.9: Bat roost survey technical report (Part 1)

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Image of an offshore wind farm

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Glossary

Term	Meaning
Expert Working Group (EWG)	Expert working groups set up with relevant stakeholders as part of the Evidence Plan process.
Species of Principle Importance (SPI)	Species recognised in Welsh policy and afforded due regard in the planning system by the Environment (Wales) Act 2016, Section 7. Public bodies have a legal duty to conserve such species through their work.

Acronyms

Acronym	Description
EWG	Expert Working Group
GLRA	Ground Level Roost Assessment
MAGIC	Multi-Agency Geographic Information for the Countryside
MLWS	Mean Low Water Springs
NRW	Natural Resources Wales
PRA	Preliminary Roost Assessment
PRF	Potential Roost Feature
SAC	Special Area of Conservation
SSSI	Site of Special Scientific Interest

Units

Unit	Description
km	Kilometre
m	Metre

1 Bat roost survey technical report

1.1 Introduction

- 1.1.1.1 This document forms Volume 7, Annex 3.9: Bat roost survey technical report of the Environmental Statement for the Mona Offshore Wind Project.
- 1.1.1.2 This technical report presents the results of bat roost surveys undertaken between April and September 2023 to inform Volume 3, Chapter 3: Onshore ecology of the Environmental Statement.
- 1.1.1.3 Two separate areas have been defined for the purposes of this technical report. These include the 'study area', which described the geographical extent subject to the desk based research, and the 'survey area', which describes the area of land subject to the site-specific surveys. The extent of the study area and the survey area were selected to ensure data was collected for the Mona Onshore Development Area and the surroundings that may support this species group and may reasonably be affected by the Mona Offshore Wind Project. The extent of the study area and the survey area were discussed and agreed with the onshore ecology Expert Working Group (EWG).

1.2 Study area

- 1.2.1.1 The study area comprises the Mona Onshore Development Area, landward of Mean Low Water Springs (MLWS) and a 2 km buffer ('the bat roost study area').
- 1.2.1.2 The location and geographical extent of the bat roost study area is presented in Figure 1.1 of this technical report.

1.3 Survey area

- 1.3.1.1 Following the commencement of bat surveys, the Mona Onshore Development Area has been refined and now occupies a smaller geographical area. As such, the area of land subject to bat roost surveys ('the bat roost survey area') extends beyond the Mona Onshore Development Area. The results from surveys undertaken beyond the Mona Onshore Development Area (i.e. surveys undertaken based on an earlier design iteration) have been included in this technical report because they provide further context regarding the ecological sensitivity of the wider area and to inform Volume 3, Chapter 3: Onshore ecology of the Environmental Statement (where relevant). All the ecological data collected as part of the Environmental Statement for the Mona Offshore Wind Project has been made publicly available through the relevant data records centre.
- 1.3.1.2 Adopting a survey area that is greater in extent than the Mona Onshore Development Area is in accordance with the precautionary approach. It ensures that the Environmental Statement is accurately informed with data from within the Mona Onshore Development Area (i.e. that may be subject to direct impacts) and data from outside the Mona Onshore Development Area (i.e. that may be subject to indirect impacts).
- 1.3.1.3 The location and geographic extent of the bat roost survey area is presented in Figure 1.1 of this technical report.

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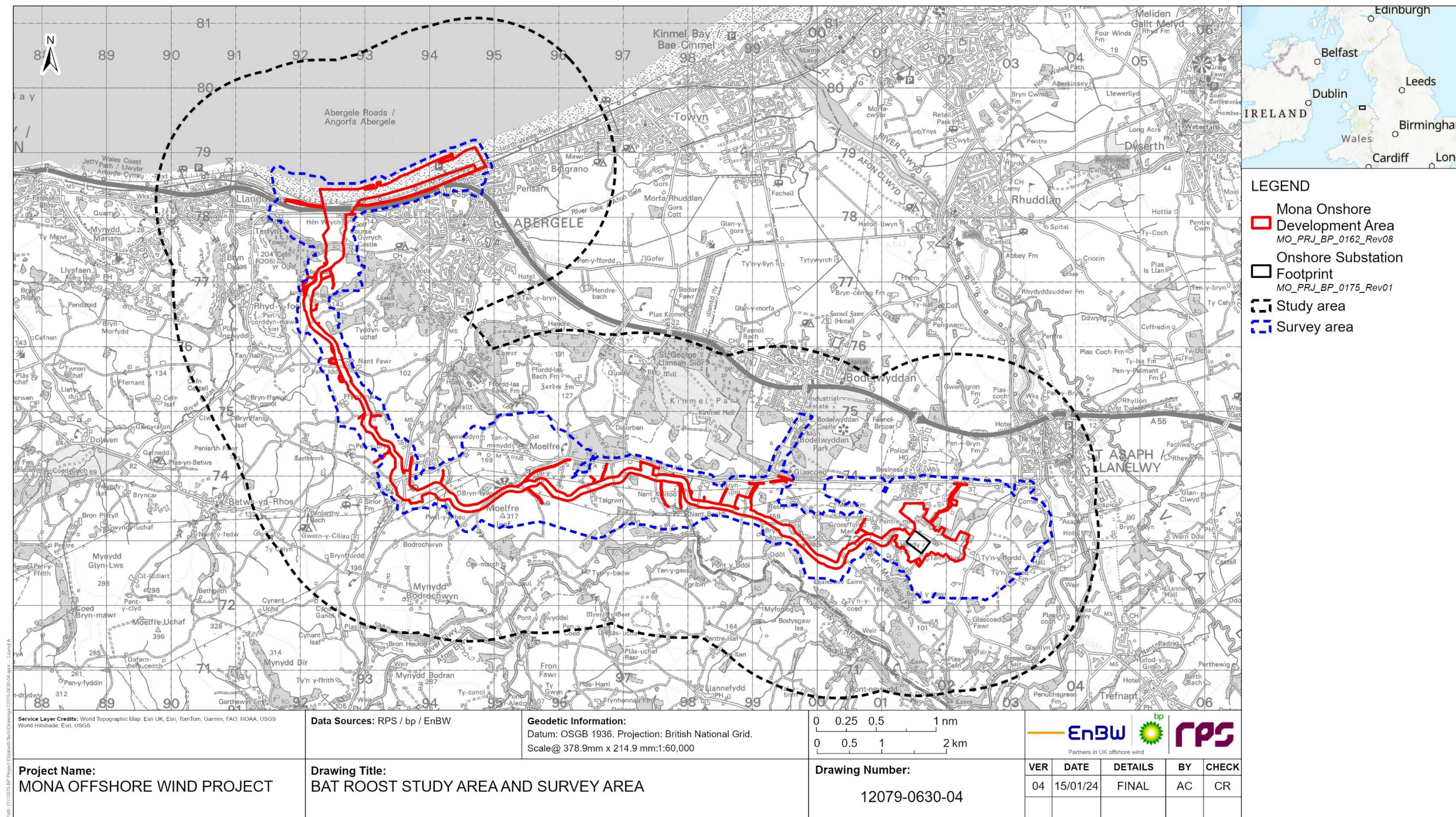


Figure 1.1: Bat roost study area and survey area.

1.4 Relevant legislation

- 1.4.1.1 Three key pieces of legislation are relevant for bats under Welsh and UK law: the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations), the Wildlife and Countryside Act 1981 (as amended) and the Environment (Wales) Act 2016.
- 1.4.1.2 All bat species are listed under Schedule 2 of the Habitats Regulations. As such, they are European protected species. This makes it an offence to:
- Deliberately capture, injure, or kill a bat
 - Deliberately disturb a bat
 - Damage or destroy a breeding site or resting place of a bat.
- 1.4.1.3 All bat species are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). As such, under Section 9 of the Wildlife and Countryside Act 1981 (as amended) it is an offence to:
- Intentionally kill, injure or take a bat
 - Possess or control any live or dead specimen or anything derived from a bat
 - Intentionally or recklessly damage, destroy or obstruct any structure or place used for shelter or protection by a bat
 - Intentionally or recklessly disturb a bat while it is occupying a structure or place, which it uses for that purpose.
- 1.4.1.4 In Wales Section 7 of the Environment (Wales) Act 2016 affords certain bat species due regard in the planning system. Section 7 lists barbastelle *Barbastella barbastellus*, Bechstein's bat *Myotis bechsteinii*, noctule *Nyctalus noctula*, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared bat *Plecotus auritus*, greater horseshoe bat *Rhinolophus ferrumequinum*, and lesser horseshoe bat *Rhinolophus hipposideros*. All species listed under Section 7 of the Environment (Wales) Act 2016 are Species of Principal Importance (SPI), giving public bodies and local planning authorities a legal duty to have regard for conserving a SPI when exercising their duties.

1.5 Consultation

- 1.5.1.1 The scope, methodology and findings of the bat roost surveys, including those undertaken beyond the current Mona Onshore Development Area, were discussed and agreed with stakeholders via regular Onshore Ecology EWG meetings. Further detail regarding consultation undertaken with respect to onshore ecology, including bat roost surveys can be found in Volume 3, Chapter 3: Onshore ecology of the Environmental Statement and the Consultation Report (Document reference: E.3).

1.6 Methodology

- 1.6.1.1 A combination of desktop studies and site-specific surveys have been undertaken to establish a baseline for the potential receptors within the bat survey area. The results of the desktop studies are described in Volume 7, Annex 3.1: Onshore ecology desk study technical report of the Environmental Statement. The results of the bat roost surveys undertaken in 2023 are detailed in section 1.6.5 of this technical report.

1.6.2 Desk study

1.6.2.1 Species data from within the bat roost study area was collected from existing studies and datasets. These are summarised in Table 1.1 below.

Table 1.1: Summary of key desktop sources.

Title	Source	Year	Author
Historical biological records	Cofnod	2023	Cofnod
DataMapWales	Welsh Government	2023	Welsh Government
Multi-Agency Geographic Information for the Countryside (MAGIC)	Defra	2023	Defra
UK Protected Area Joint Nature Conservation Committee (JNCC)	JNCC website	2023	JNCC
UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats	CIEEM	2023	Reason and Wray

1.6.3 Site-specific surveys

1.6.3.1 Extended phase 1 habitat surveys undertaken between May 2022 and September 2023 were used to identify the requirement for bat roost surveys within the bat survey area. The following bat roost surveys were undertaken, where appropriate:

- Ground Level Roost Assessments (GLRA)
- Aerial tree inspections
- Preliminary Roost Assessments (PRAs) of buildings
- Dawn re-entry surveys
- Dusk emergence surveys.

1.6.3.2 Survey methodologies were informed by the Bat Surveys for Professional Ecologists: Good Practice Guidelines 4th edition (Collins, 2016). All field surveyors were suitably trained and experienced in undertaking the survey methodologies set out in the following sections of this report. It is acknowledged that the Guidelines were updated in October 2023, after the bat roost surveys had been completed. However, upon review of the updated guidelines, the data collected is valid.

Ground Level Roost Assessments

1.6.3.3 GLRAs aimed to determine whether the trees within the bat survey area were suitable for roosting bats. One daytime visit to all accessible land was undertaken between

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April and September 2023 in optimal conditions (i.e. dry and calm conditions) to maximise chances of seeing Potential Roost Features (PRFs) on trees.

- 1.6.3.4 All trees with a diameter of 0.25 m or above (at breast height) were subject to GLRA by a suitably experienced ecologist. However, some trees with a diameter of less than 0.25 m (at breast height) were also subject to GLRA, where features suitable for bats were identified during GLRA surveys of adjacent trees.
- 1.6.3.5 GLRAs comprise surveyors inspecting all trees with binoculars, a high powered torch, and an endoscope (where licenced to do so and considered necessary) to identify features suitable for bats to roost in. The GLRAs were undertaken for all accessible features of the tree.
- 1.6.3.6 Following the GLRAs, trees were subsequently graded based on their suitability for roosting bats in accordance with the Bat Surveys for Professional Ecologists Good Practice Guidelines (Collins, 2016). The criteria used for grading the suitability of trees for roosting bats is presented in Table 1.2 below.

Table 1.2: Suitability of trees for roosting bats (Collins, 2016).

Suitability	Description of roosting habitat
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat.

- 1.6.3.7 Where possible, surveyors also recorded the type of roost the feature is considered most likely to support based on current evidence (Collins, 2016). Types of roost include summer maternity roosts, transitory roosts, feeding perches, swarming sites or hibernation roosts. The number of bats it may support on a three-point scale of small, medium or large was also recorded. It is acknowledged that for many features, classification under these criteria was not possible based on the initial inspection alone.

Aerial tree inspection

- 1.6.3.8 Aerial tree inspections comprised trained surveyors climbing trees and completing a detailed inspection of all PRFs using an endoscope and torch. Any trees where the presence of a bat roost had been confirmed during the initial GLRA were not subject to aerial tree inspections and progressed directly to emergence survey.
- 1.6.3.9 Following the GLRA, trees with moderate or high suitability for bats (see Table 1.2) and safe to climb were subject to an aerial tree inspection. Where trees were not considered safe to climb, those with moderate or high suitability instead progressed directly to emergence survey.

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- 1.6.3.10 Any trees identified with low or negligible suitability for bats following GLRA were not subject to further surveys. However, trees with low suitability for bats likely to be affected by the Mona Onshore Wind Project will be covered by precautionary working methods, where required.
- 1.6.3.11 All aerial tree inspections were conducted either by a trained tree climber who was also a Natural Resources Wales (NRW) licensed bat worker or Accredited Agent, or by a tree climber under the direct supervision of a licensed bat worker. To minimise the risk of disturbing bats during inspections all tree climbers who are not licensed bat workers were briefed by a licenced bat worker.
- 1.6.3.12 Aerial tree inspections can be undertaken at any time of year to provide information on the exact nature of PRFs identified during the GLRA. Surveyors access PRFs using a harness and ropes to carry out a detailed internal inspection using torches, mirrors, and endoscopes to determine presence or likely absence of bats, and to obtain information on the suitability of the PRF for bats.
- 1.6.3.13 Where PRFs were low in height on the tree and accessible from the ground or ladder, an aerial tree inspection was not undertaken. Instead, surveyors used a torch and an endoscope to fully inspect the PRF from the ground (or a ladder).

Preliminary Roost Assessment (buildings or structures)

- 1.6.3.14 Buildings or structures, including natural structures (e.g. caves, adits) identified as requiring a PRA were assessed for their potential to support bat roosts. Where possible (and safe), the PRA accessed all areas of buildings or structures, including cellars/underground structures and loft spaces. High-powered torches with red filters, binoculars, and endoscopes were used to investigate all accessible areas.
- 1.6.3.15 Where there were constraints to the PRAs regarding access, these were clearly identified in the corresponding survey notes and due consideration was given to the effect of these constraints on the results. Each building or structure subject to a PRA during the bat active season (April-October) was classified according to the criteria set out in Table 1.2 above regarding its suitability for roosting bats.
- 1.6.3.16 Where possible, surveyors also recorded the type of roost the feature is considered most likely to support based on current evidence (Collins, 2016). Roost types include summer maternity roosts, transitory roosts, feeding perches, swarming sites or hibernation roosts. The number of bats the PRA may support on a three-point scale of small, medium or large was also recorded. It is acknowledged that for many features, classification under these criteria was possible based on the initial inspection alone.
- 1.6.3.17 Each building or structure subject to a PRA was also assessed for its potential to support hibernating bats (or act as a swarming site). For the purposes of the PRA, each building or structure was classified as either: having potential for hibernation/swarming or lacking potential for hibernation/swarming.

Dusk emergence/dawn re-entry surveys (trees or structures)

- 1.6.3.18 No further surveys were undertaken for structures or trees assessed to have low or negligible suitability as informed by the GLRA, aerial tree inspections or the PRA.
- 1.6.3.19 Structures or trees with confirmed bat roosts, that were considered to have moderate or high suitability for bat roosts, or where a full inspection could not be completed due to access restrictions (e.g. unsafe structure or a tree unsafe to climb), a subsequent dusk emergence and dawn re-entry surveys were undertaken.

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- 1.6.3.20 For structures or trees with moderate suitability, surveys comprised two dusk emergence and dawn re-entry surveys. For structures or trees with high suitability or confirmed roosts, surveys comprised three dusk emergence and dawn re-entry surveys. Where bats were recorded roosting within a structure or tree with moderate suitability then the number of surveys was increased to three to accurately characterise the roost.
- 1.6.3.21 Dusk emergence and dawn re-entry surveys were undertaken between May and September 2023, with at least three weeks between each survey visit. Dusk emergence surveys commenced 15 minutes prior to sunset and continued for two hours. Dawn re-entry surveys commenced two hours prior to sunrise and continued until 15 minutes after sunrise. Surveys were undertaken under appropriate weather conditions, as defined in the Bat Surveys for Professional Ecologists Good Practice Guidelines (Collins, 2016).
- 1.6.3.22 All surveyors were equipped with night vision aids (e.g. infrared or thermal imaging cameras) during dusk emergence surveys, as per recommendations set out in the Bat Conservation Trust's Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys (Bat Conservation Trust, 2022). Cameras were used to replace one or more surveyors.
- 1.6.3.23 Surveyors were present in sufficient numbers that all PRFs could be seen by at least one surveyor. All surveyors were briefed prior to the start of survey as to the findings of the PRA and shown the presence of any potential access or egress points. Surveyors remained at their survey station throughout the dusk emergence/dawn re-entry survey period.
- 1.6.3.24 Surveyors used full spectrum echolocation detectors. Following survey work, all recordings were analysed by an experienced ecologist using call analysis software to confirm species (where possible) and the number of passes made. All recordings were retained for future reference.

1.6.4 Limitations

- 1.6.4.1 Some of the trees identified within the bat survey area could not be fully inspected. Either access was not granted, or the tree could not be safely reached or climbed. The precautionary approach will be adopted and a detailed assessment of all un-surveyed trees within the Mona Onshore Development Area will be completed immediately prior to works commencing and if this is not possible the trees will be soft felled. The requirements for pre-commencement surveys are set out in the Outline Code of Construction Practice (CoCP) (Document reference: J.26).
- 1.6.4.2 Soft felling involves the cutting of the tree in sections to avoid cutting through any cavities. Each section will be lowered to the ground with any PRFs facing upwards and left in-situ for at least 24 hours. In the unlikely event that any bats are found during these works, all works must cease and a licence (or licence amendment if one is already in place) sought from NRW.
- 1.6.4.3 Where possible, GLRAs of trees were undertaken before trees came into full leaf. However, where this was not possible and leaf cover significantly obscured the initial inspection, trees were given a precautionary 'high' suitability grading, triggering the requirement for future tree inspection.

1.6.5 Results

Designated sites

- 1.6.5.1 One internationally designated site where bats are a designated feature, was identified 18.82 km from the Mona Onshore Development Area, Mmyngloddiau Fforest Gwydir/Gwydyr Forest Mines Special Area of Conservation (SAC). Mmyngloddiau Fforest Gwydir/Gwydyr Forest Mines SAC supports a lesser horseshoe bat *Rhinolophus hipposideros* colony, which is a qualifying feature of the SAC but not a primary reason for designation.
- 1.6.5.2 One nationally designated site where bats are a designated feature, was located 0.82 km from the Mona Onshore Development Area, Coed y Gopa Site of Special Scientific Interest (SSSI). Coed y Gopa SSSI hosts natural caves and underground mine workings, which provide opportunities for roosting bats and includes a large hibernation roost for lesser horseshoe bats, with smaller numbers of Natterer's bat *Myotis nattereri* and Daubenton's bat *Myotis daubentonii*.

Bat species and roosts

- 1.6.5.3 The desktop study confirmed that bat species are distributed across Wales. Common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus* and brown long-eared bat *Plecotus auritus* are widespread throughout north and mid-Wales, with whiskered bat *Myotis mystacinus*, Brandt's bat *Myotis brandtii*, Daubenton's bat *Myotis daubentonii*, Natterer's bat *Myotis nattereri* and noctule *Nyctalus noctula* are widespread in many areas but not as abundant (Reason and Wray, 2023). Lesser horseshoe bats *Rhinolophus hipposideros* are rarer or have a restricted distribution and greater horseshoe *Rhinolophus ferrumequinum*, barbastelle *Barbastella barbastellus*, serotine *Eptesicus serotinus*, Leisler's bat *Nyctalus leisleri* and Nathusius' pipistrelle *Pipistrellus nathusii* are very rare in north and mid-Wales (Reason and Wray, 2023).
- 1.6.5.4 There were 124 historical records of bats dated between 2010 and 2022 identified within the bat roost study area. The results included eight different species and 25 records of bats that could not be identified to species level. A summary of the desk study results is provided in Table 1.3.

Table 1.3: Bat data records within 2 km of the Mona Onshore Development Area over the last ten years.

Taxon name	Common name	Date and number of records	Within the Mona Onshore Development Area
<i>Chiroptera sp.</i>	Bat	5 records from 2012 to 2018	Outside – with the closest confirmed roost located 1.58 km from the Mona Onshore Development Area
<i>Eptesicus serotinus</i>	Serotine	6 records from 2010 to 2012	Outside – with the closest confirmed roost (a known day and night roost) located 0.67 km from the Mona Onshore Development Area
<i>Myotis sp.</i>	Myotis species	11 records from 2010 to 2020	Outside – with the closest confirmed roost (a hibernation roost) located

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Taxon name	Common name	Date and number of records	Within the Mona Onshore Development Area
			0.07 km from the Mona Onshore Development Area
<i>Myotis mystacinus/brandtii</i>	Whiskered/Brandt's bat	3 records from 2012 to 2019	Outside – with the closest confirmed roost located 0.31 km from the Mona Onshore Development Area
<i>Myotis nattereri</i>	Natterer's bat	4 records from 2011 to 2015	Outside – with the closest confirmed roost (a hibernation roost) located 0.07 km from the Mona Onshore Development Area
<i>Nyctalus noctula</i>	Noctule	15 records from 2010 to 2020	Outside – with the closest confirmed roost located 0.90 km from the Mona Onshore Development Area
<i>Pipistrellus sp.</i>	Pipistrelle species	4 records from 2011 to 2020	Outside – with the closest confirmed roost located 0.26 km from the Mona Onshore Development Area
<i>Pipistrellus pipistrellus</i>	Common pipistrelle	25 records from 2010 to 2021	Outside – with the closest confirmed roost located 0.18 km from the Mona Onshore Development Area
<i>Pipistrellus pygmaeus</i>	Soprano pipistrelle	18 records from 2010 to 2020	Outside – with the closest confirmed roost located 0.20 km from the Mona Onshore Development Area
<i>Plecotus sp.</i>	Long-eared bat species	1 record from 2011 to 2011	Outside – with no roosts included within the desktop study for this species group
<i>Plecotus auritus</i>	Brown long-eared bat	11 records from 2010 to 2020	Outside – with the closest confirmed roost (a hibernation roost) located 0.07 km from the Mona Onshore Development Area
<i>Rhinolophus ferrumequinum</i>	Greater horseshoe bat	4 records from 2010 to 2013	Outside – with the closest confirmed roost (a hibernation roost) located 0.07 km from the Mona Onshore Development Area
<i>Rhinolophus hipposideros</i>	Lesser horseshoe bat	17 records from 2010 to 2021	Outside – with the closest confirmed roost located 0.26 km from the Mona Onshore Development Area

1.6.6 Site-specific surveys

Ground Level Roost Assessment

1.6.6.1 A total of 4890 trees located within the bat survey area were subject to a GLRA. Of these, 1061 trees were located within the Mona Onshore Development Area. Table 1.4 and Figure 1.2 to Figure 1.16 below provide a summary of the results of the GLRAs, including the number and location of trees with negligible, low, moderate, or high suitability for roosting bats, and confirmed bat roosts. The full results of the GLRAs, including tree species, height and information on hibernation potential are provided in Appendix A of this technical report, along with coordinates provided to enable cross referencing with locations.

1.6.6.2 Two confirmed bat roosts were identified during the GLRAs. One was an unconfirmed pipistrelle species day roost in a bat box on a tree, and one was an unconfirmed pipistrelle species roost within a sycamore tree, both located outside the Mona Onshore Development Area.

Table 1.4: Summary of the GLRA results.

Suitability	Number of trees – within bat survey area	Number of trees – within the Mona Onshore Development Area
Negligible	1106	273
Low	1483	304
Moderate	1698	352
High	601	132
Confirmed	2	0
Total	4890	1061

Aerial tree inspections

1.6.6.3 Of the trees subject to the GLRA, a total of 2296 trees required aerial tree inspections. A total of 893 aerial tree inspections were undertaken. The suitability of the trees, following detailed inspection are shown in Table 1.5. The location and suitability of trees within the bat roost study area and survey area are presented in Figure 1.17 to Figure 1.31.

1.6.6.4 Thirteen roosts (including the two identified during the GLRA) in trees were identified during the aerial tree inspections, two of which were located within the Mona Onshore Development Area, with the remainder of roosts located within the wider bat survey area. The roosts identified during aerial tree inspections included:

- Three pipistrelle species day roosts – all outside the Mona Onshore Development Area

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- Two noctule day roosts – one within the Mona Onshore Development Area and specifically within the Onshore Substation Footprint
- Two Natterer's bat day roosts – both outside the Mona Onshore Development Area
- Three soprano pipistrelle day roosts – one within the Mona Onshore Development Area
- One unknown bat day roost (where only droppings were present) – outside the Mona Onshore Development Area
- Two pipistrelle species roosts identified during the GLRA, as detailed above.

1.6.6.5 Deoxyribonucleic Acid (DNA) analysis of the droppings at the unknown bat roost was undertaken. The analysis was inconclusive.

Table 1.5: Suitability of trees following aerial tree inspections.

Suitability of trees	Number of trees subject to aerial tree inspections within the bat survey area	Number of trees subject to aerial tree inspections within the Mona Onshore Development Area
Negligible	66	28
Low	287	124
Moderate	331	128
High	196	61
Confirmed	13	2
Total	893	343

Preliminary Roost Assessment (buildings/structures)

- 1.6.6.6 A total of 24 buildings or structures were subject to a PRA. The results of the PRAs undertaken are provided in Appendix B of this technical report. No structures were identified with negligible suitability for roosting bats, nine as low, seven as moderate and eight as high. No bat roosts were confirmed in buildings or structures during the PRAs.
- 1.6.6.7 None of the structures with negligible, low or moderate suitability for roosting bats were located within the Mona Onshore Development Area. Two of the structures with high suitability were located within the Mona Onshore Development Area.
- 1.6.6.8 The location suitability of structures subject to PRA within the bat survey area are shown in Figure 1.32 to Figure 1.44.

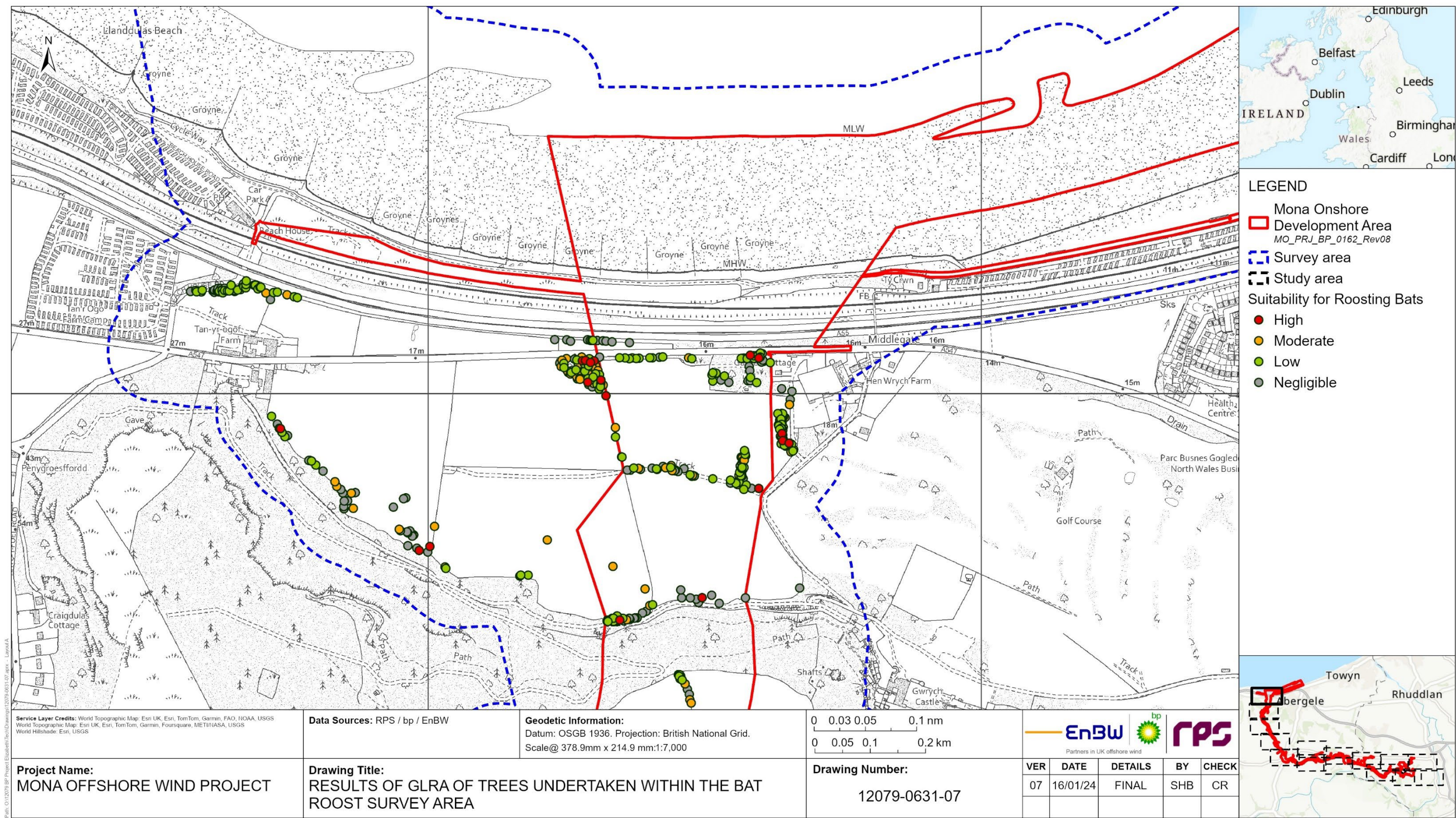


Figure 1.2: Results of GRLA of trees undertaken within the bat roost survey area.

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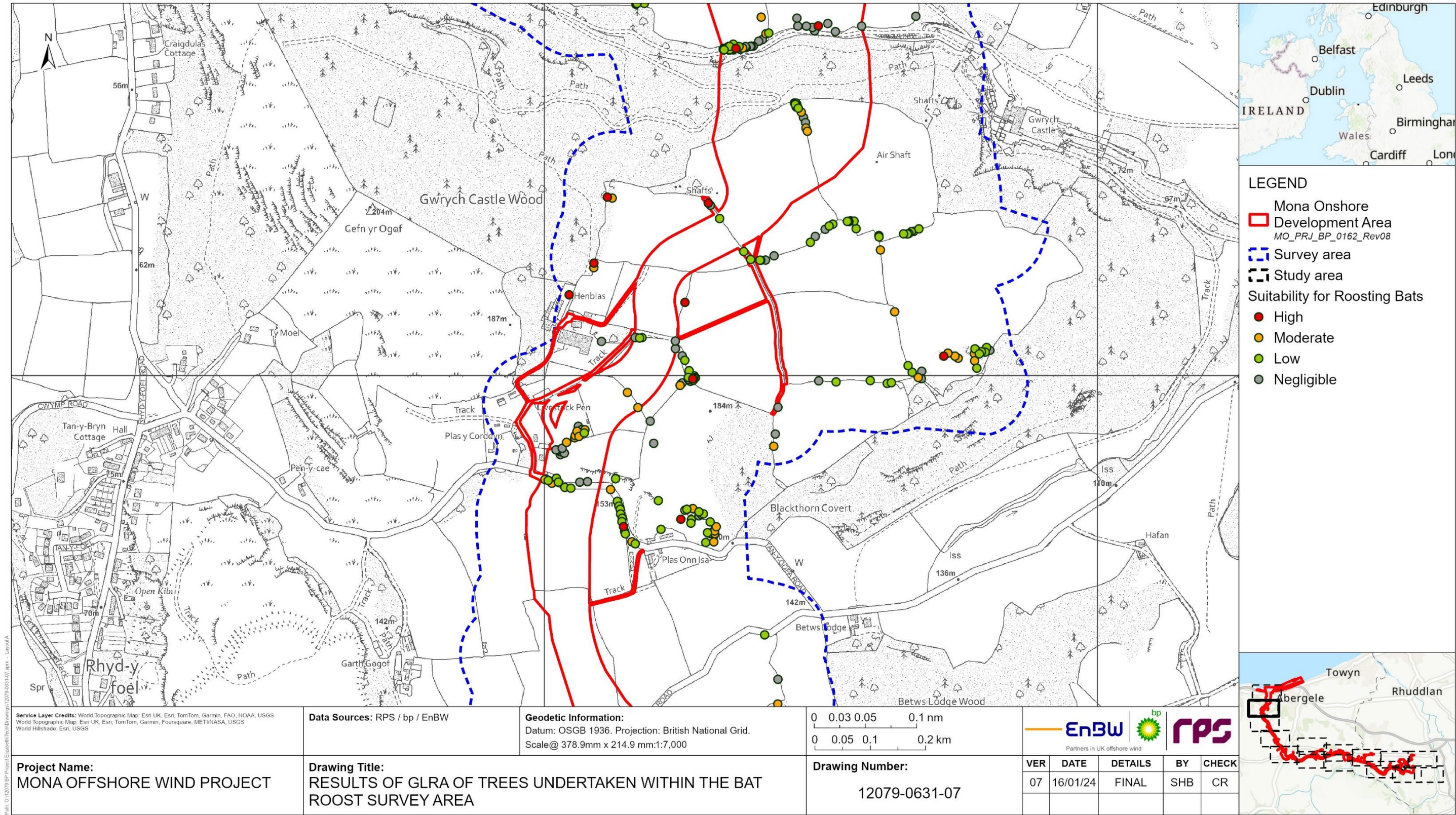


Figure 1.3: Results of GRLA of trees undertaken within the bat roost survey area.

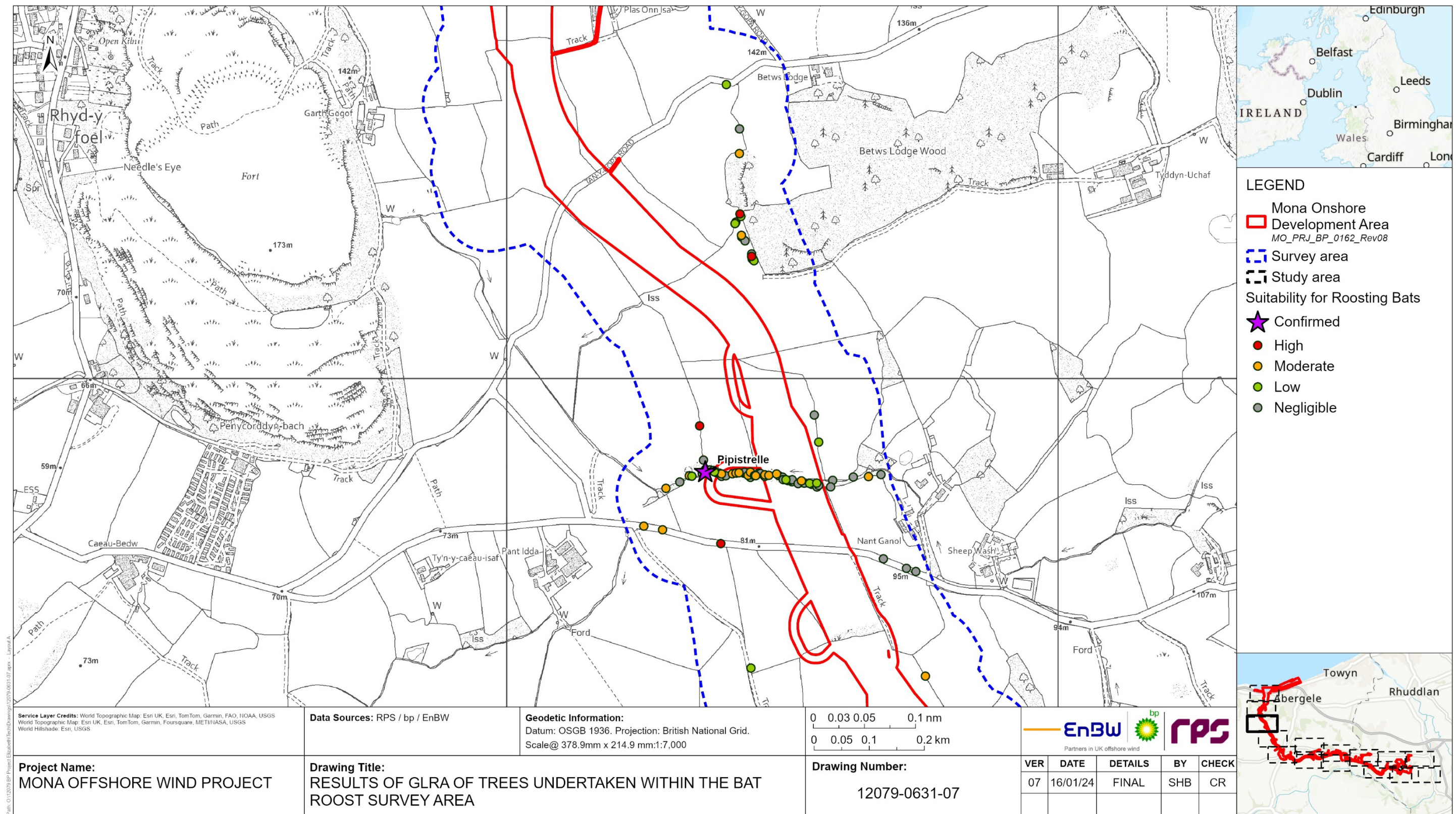


Figure 1.4: Results of GRLA of trees undertaken within the bat roost survey area.

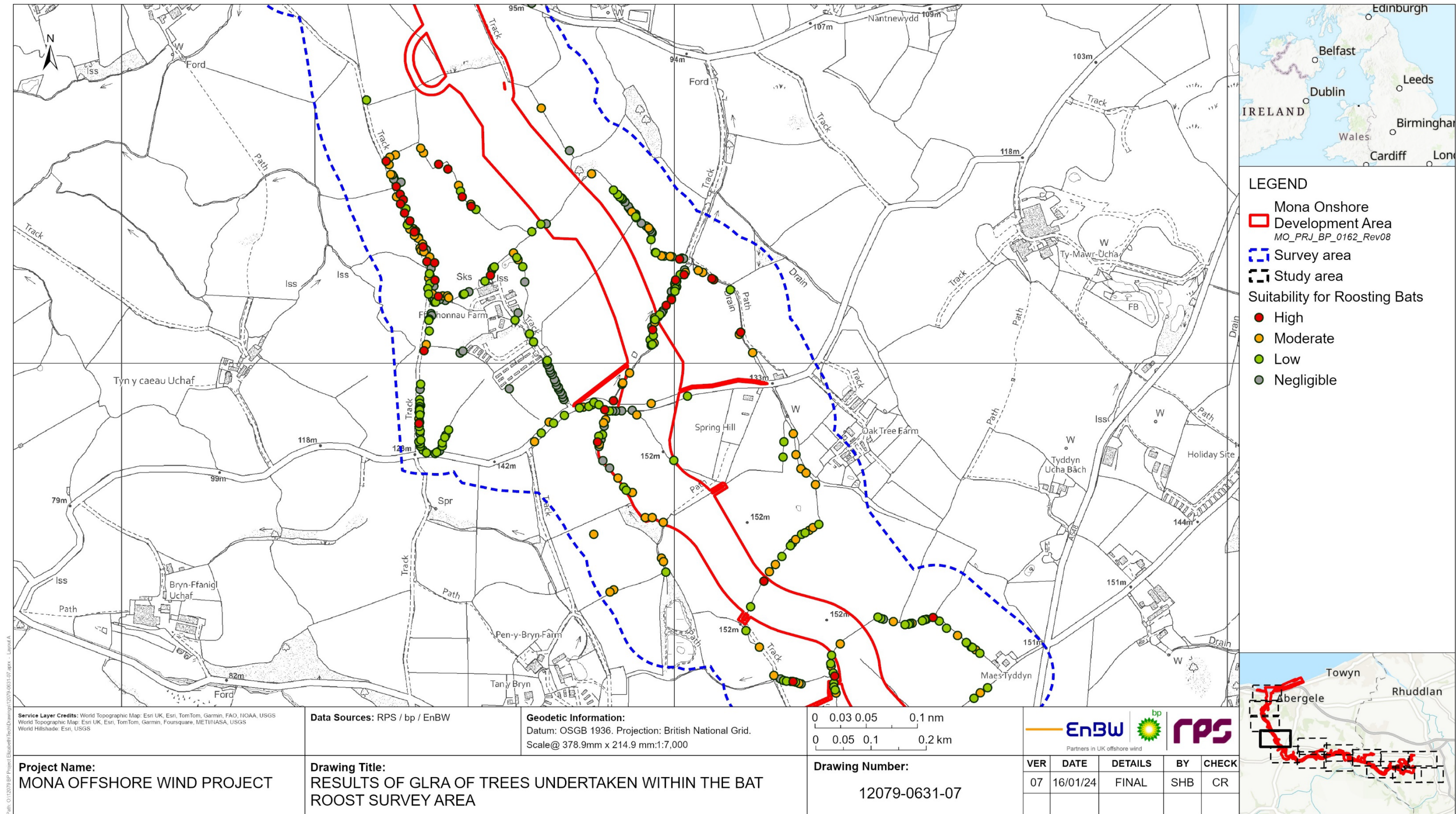


Figure 1.5: Results of GRLA of trees undertaken within the bat roost survey area.

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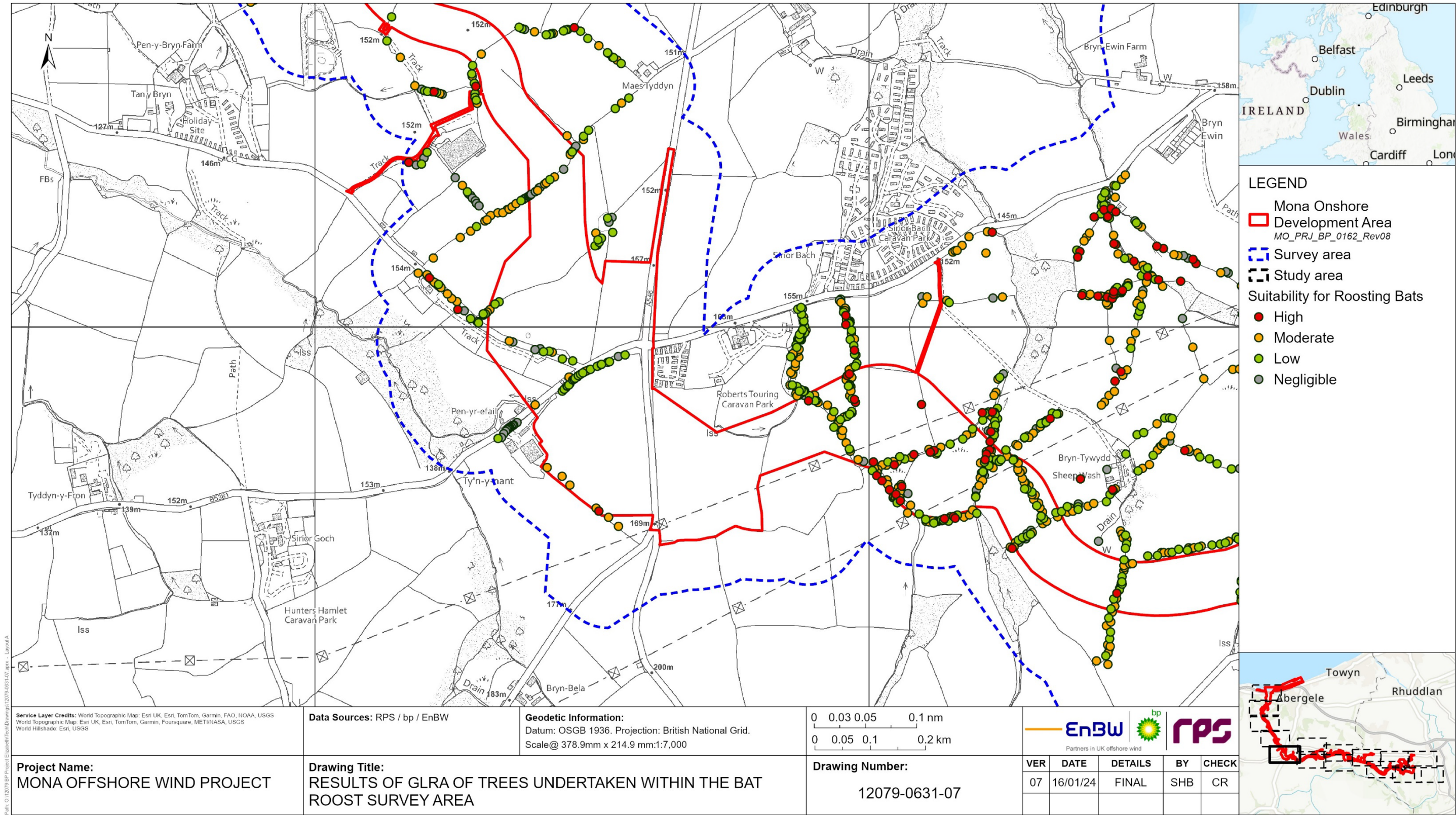


Figure 1.6: Results of GRLA of trees undertaken within the bat roost survey area.

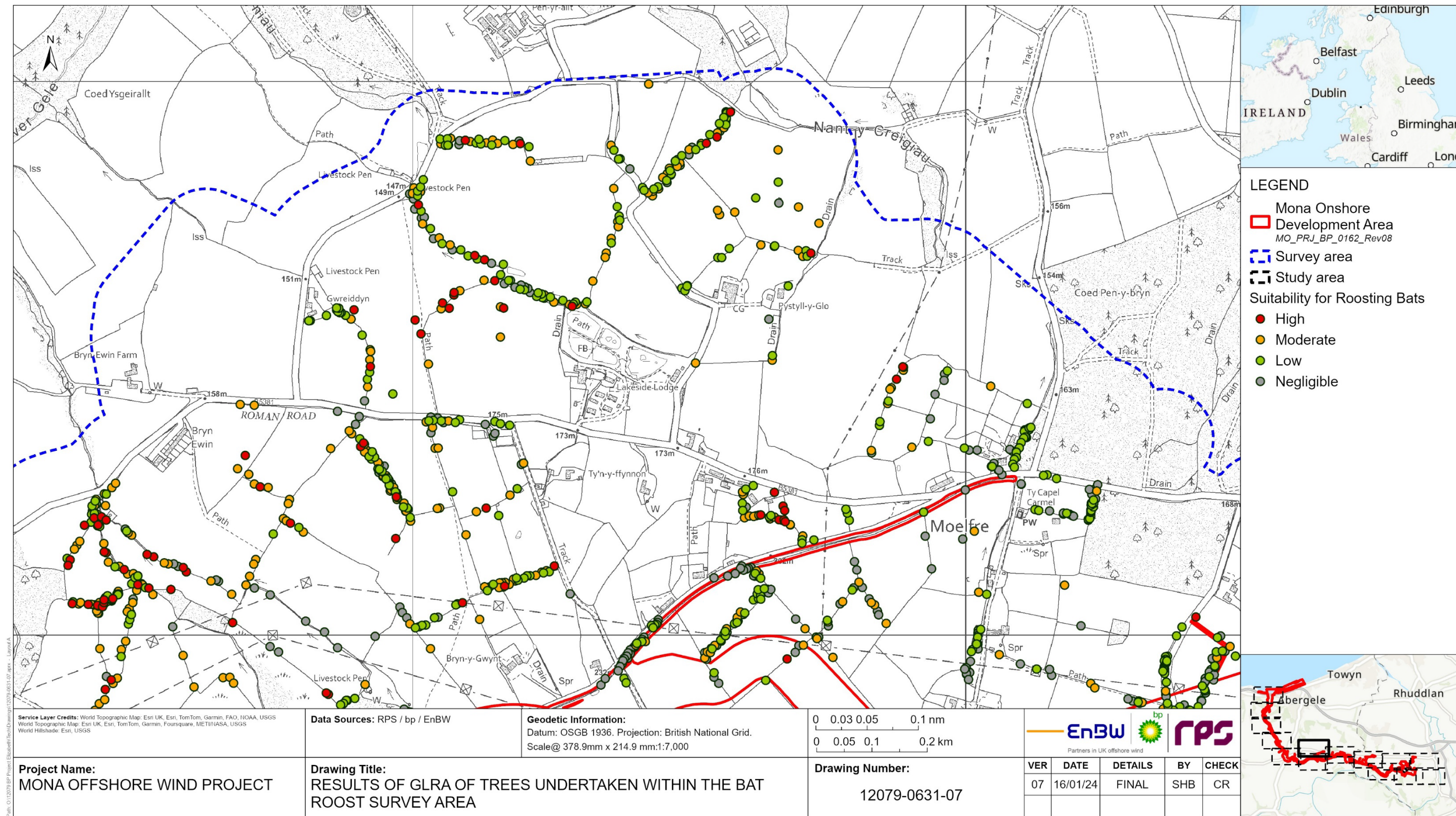


Figure 1.7: Results of GRLA of trees undertaken within the bat roost survey area.

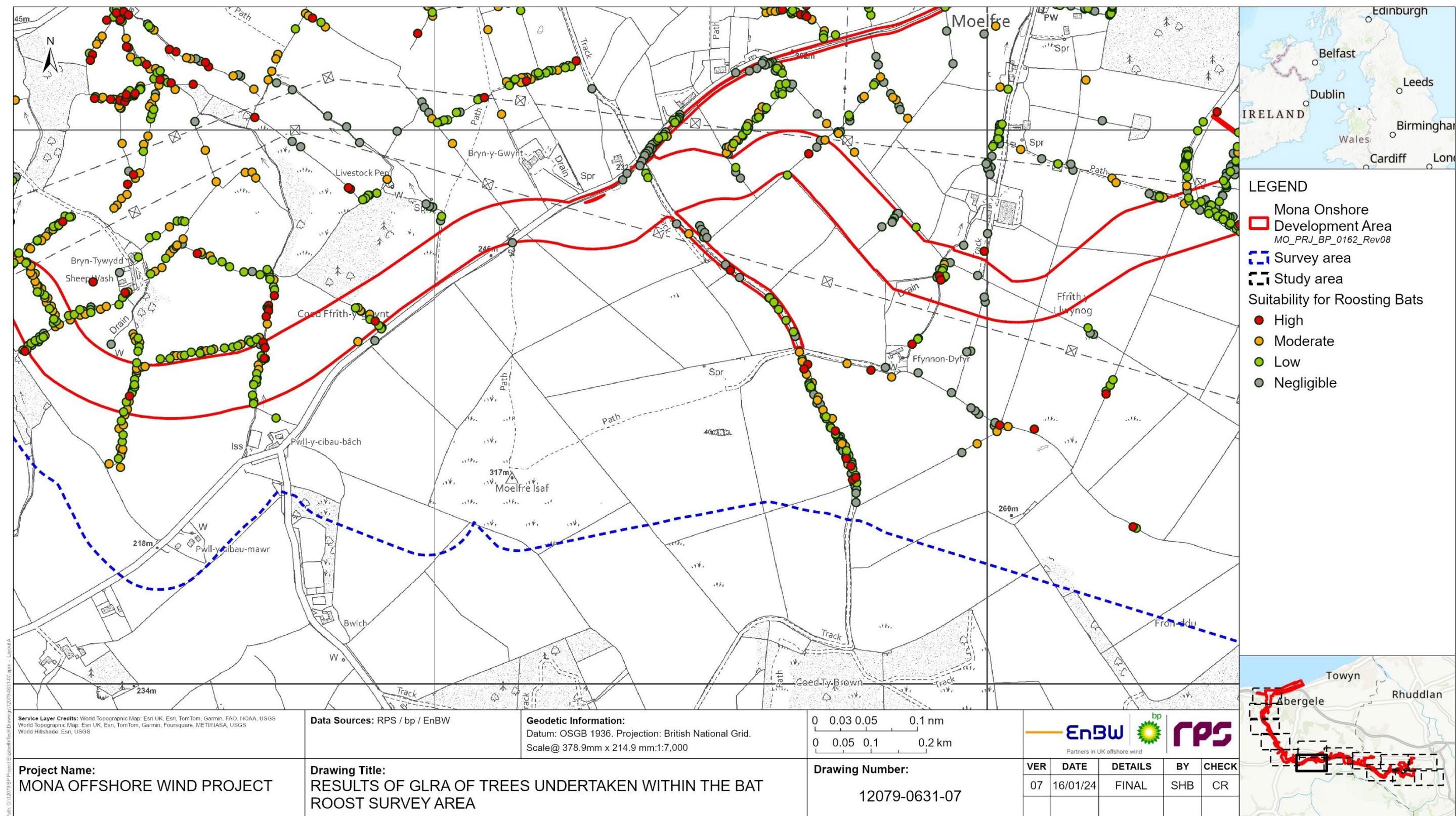


Figure 1.8: Results of GRLA of trees undertaken within the bat roost survey area.

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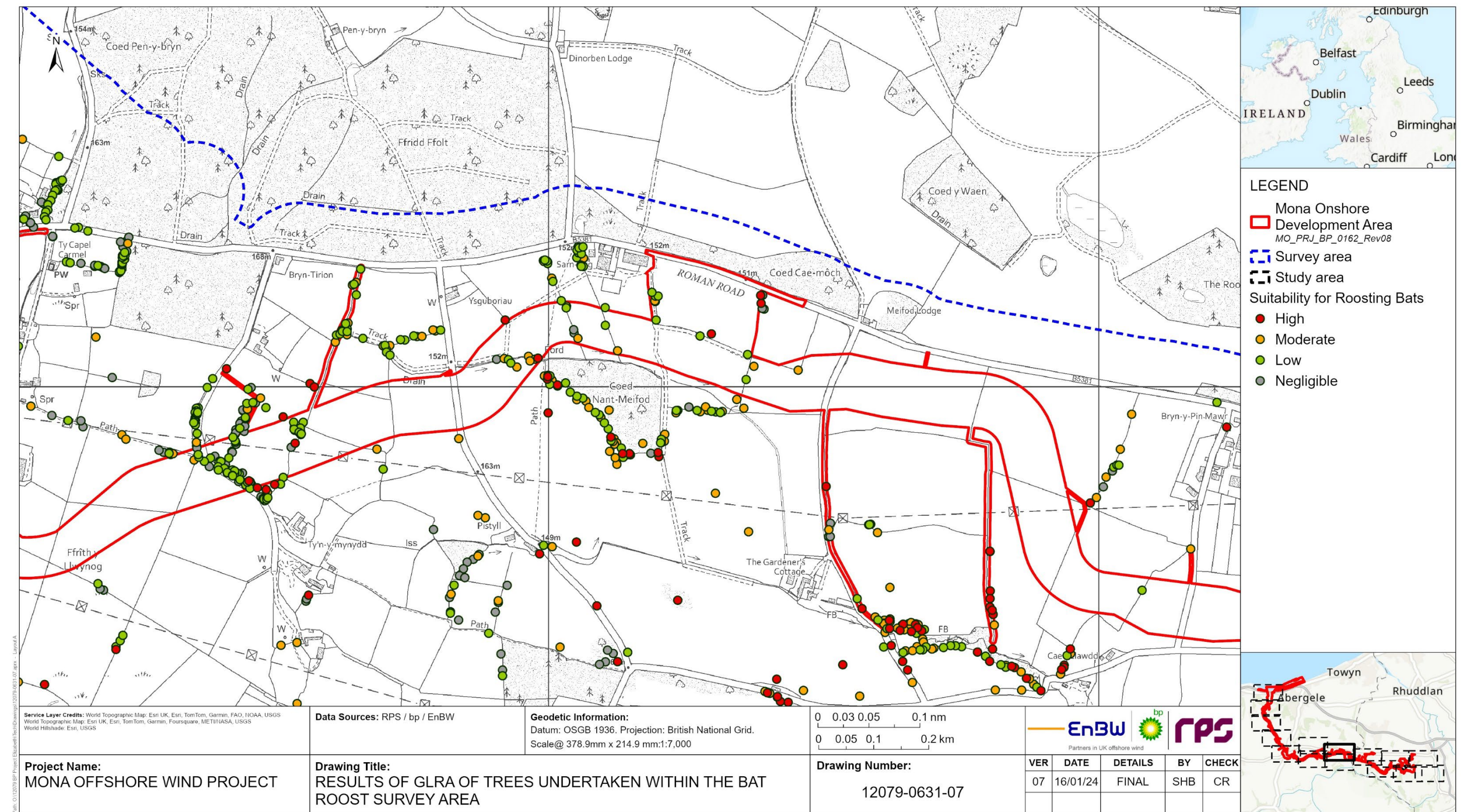


Figure 1.9: Results of GRLA of trees undertaken within the bat roost survey area.

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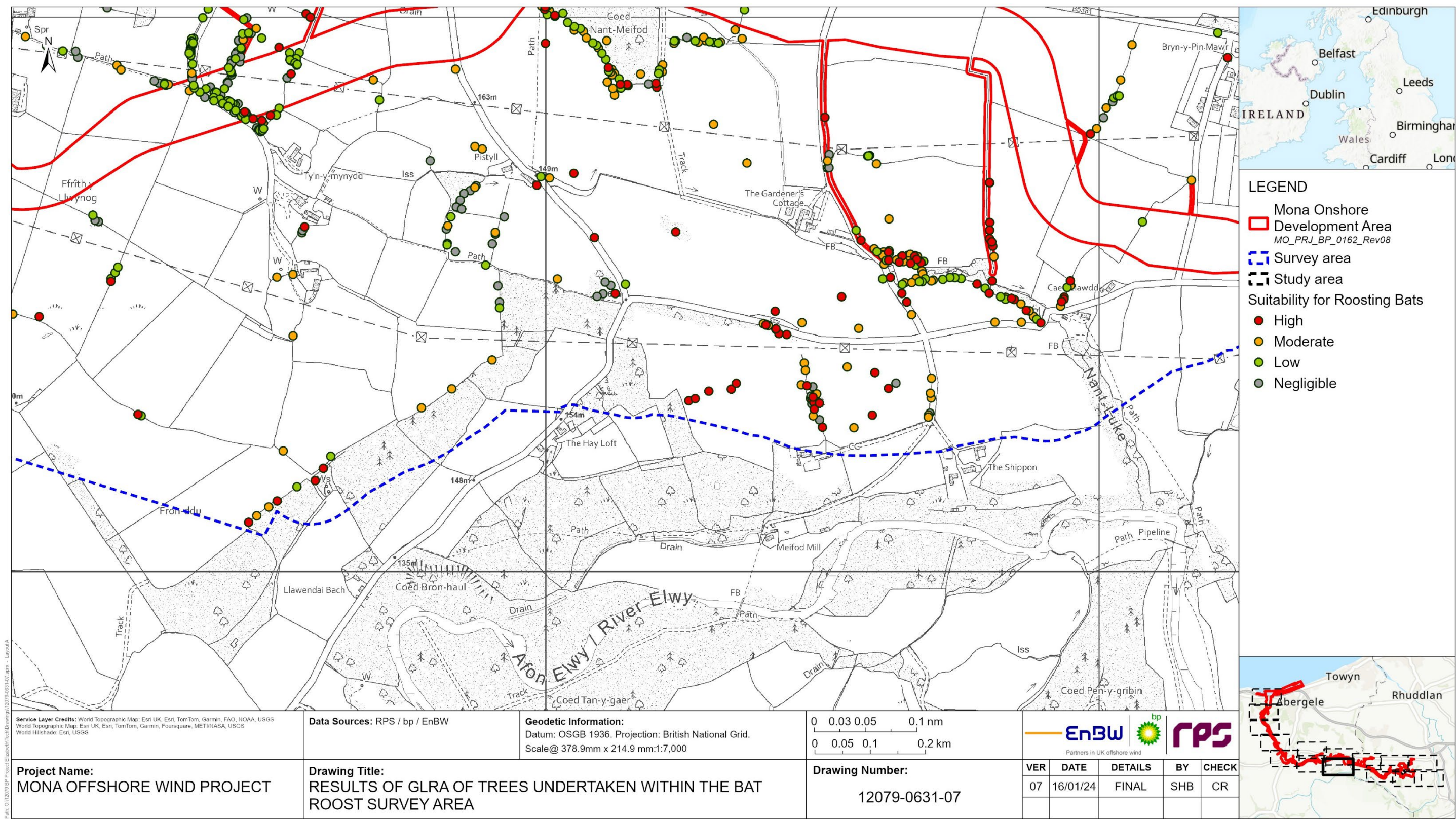


Figure 1.10: Results of GRLA of trees undertaken within the bat roost survey area.

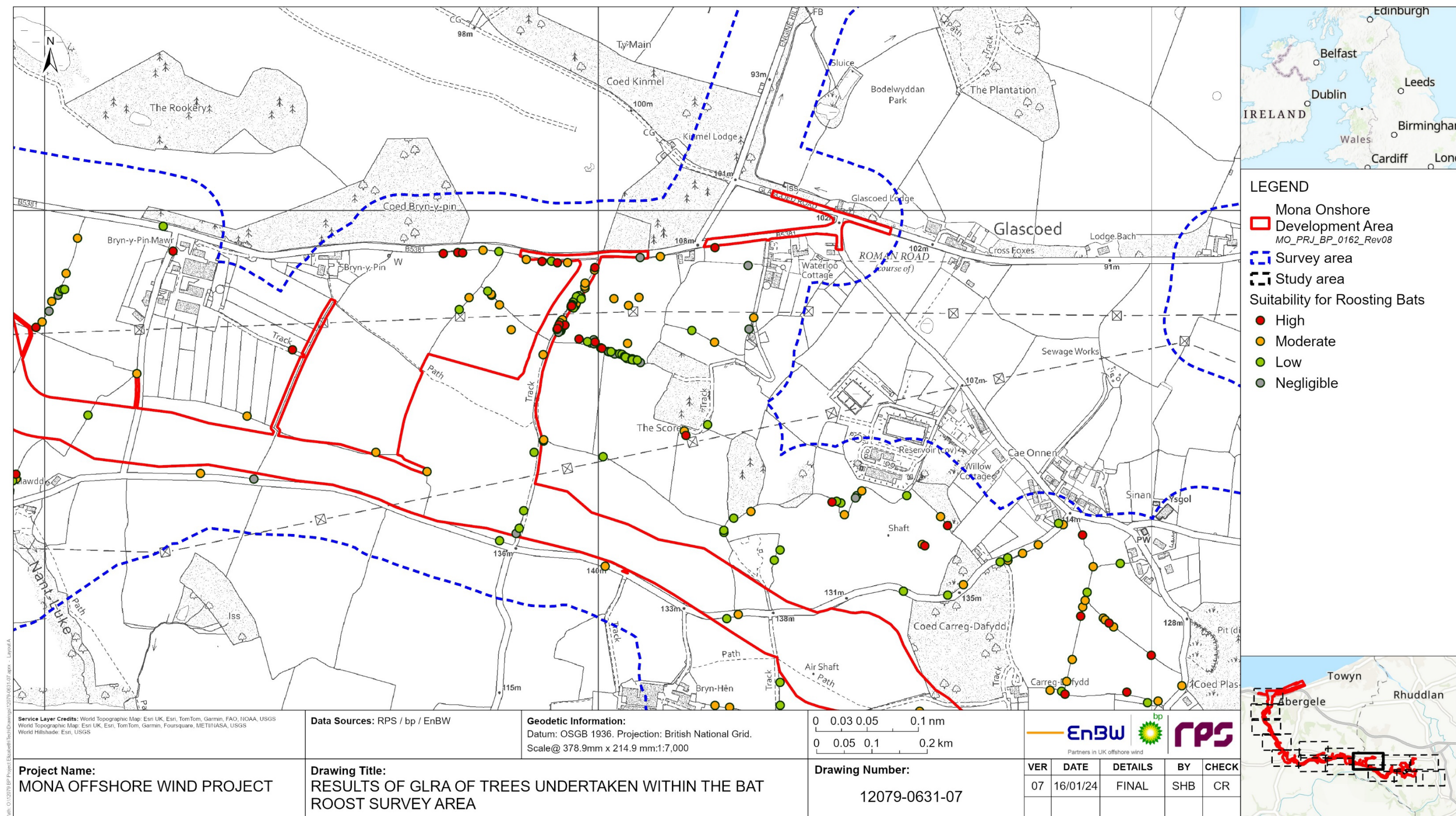


Figure 1.11: Results of GRLA of trees undertaken within the bat roost survey area.

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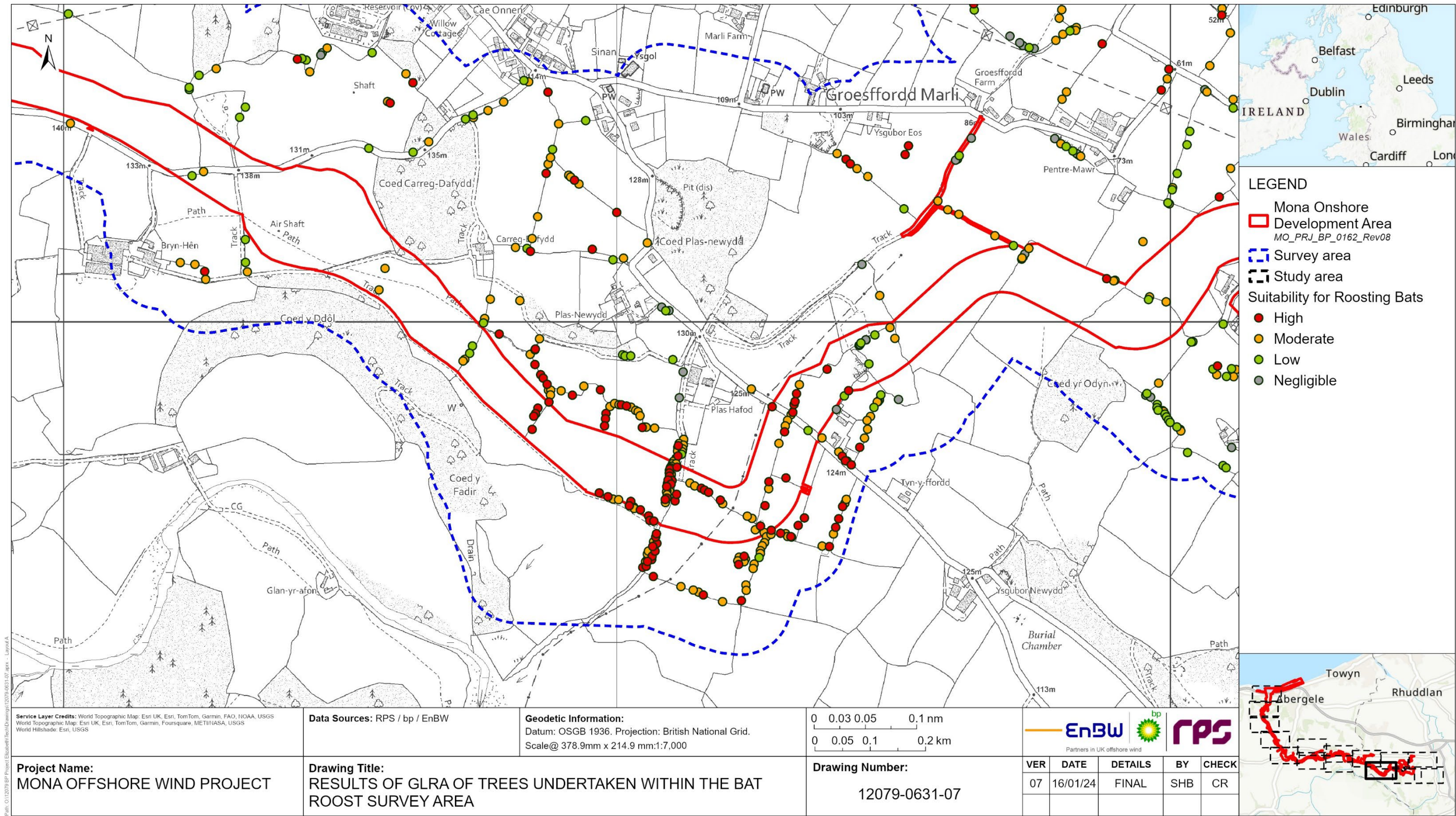


Figure 1.12: Results of GRLA of trees undertaken within the bat roost survey area.

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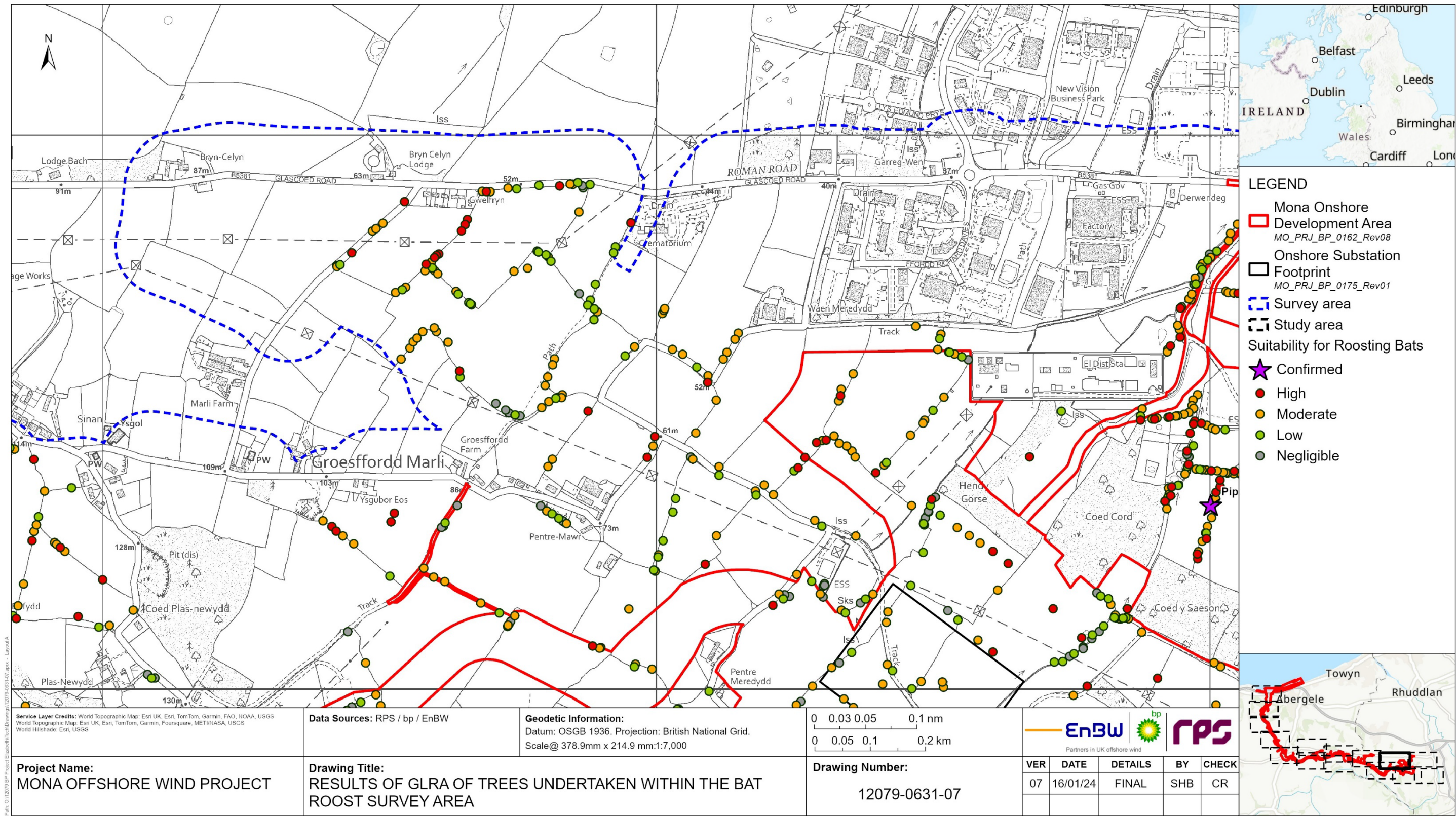


Figure 1.13: Results of GRLA of trees undertaken within the bat roost survey area.

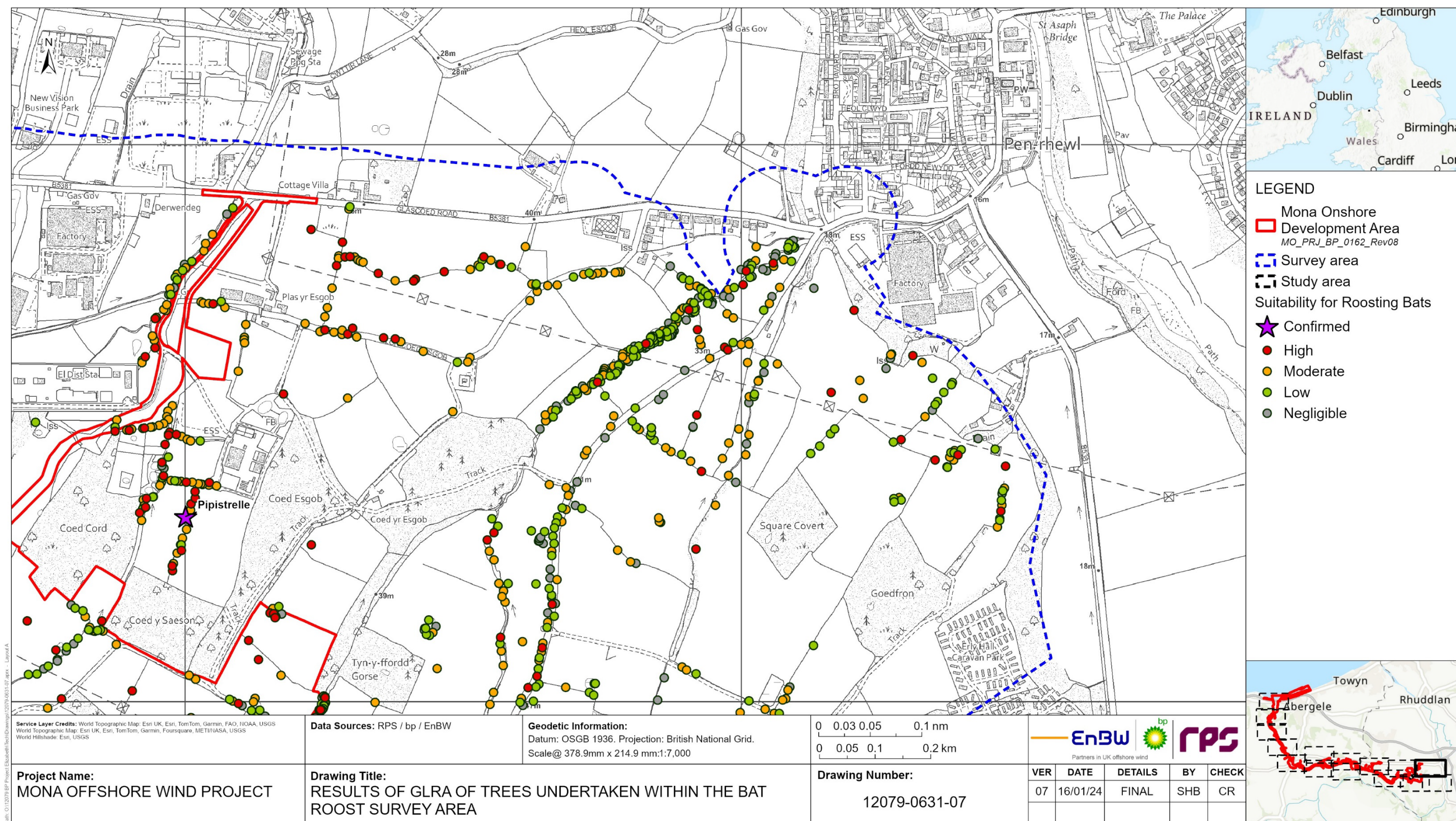


Figure 1.14: Results of GRLA of trees undertaken within the bat roost survey area.

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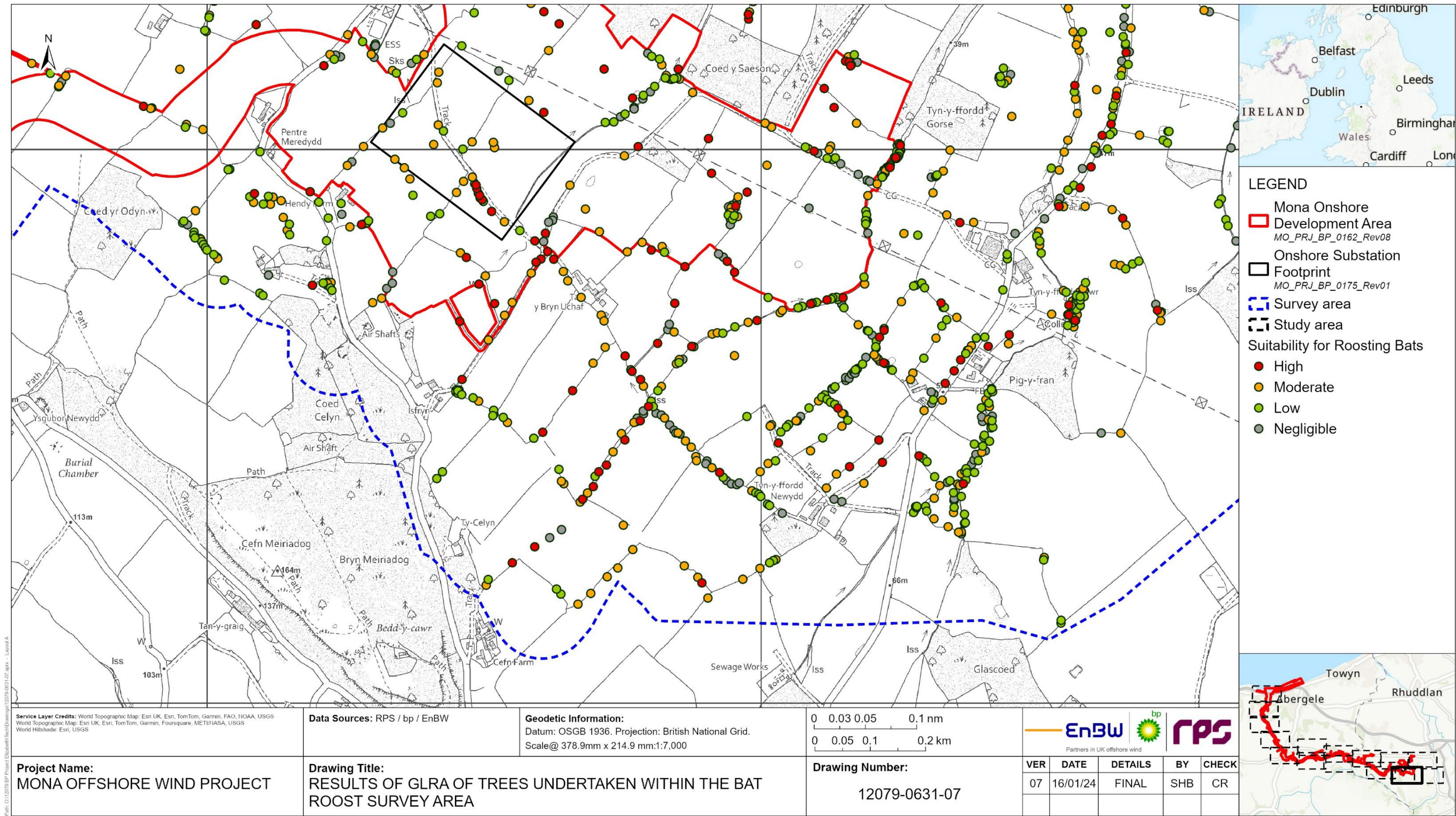


Figure 1.15: Results of GRLA of trees undertaken within the bat roost survey area.

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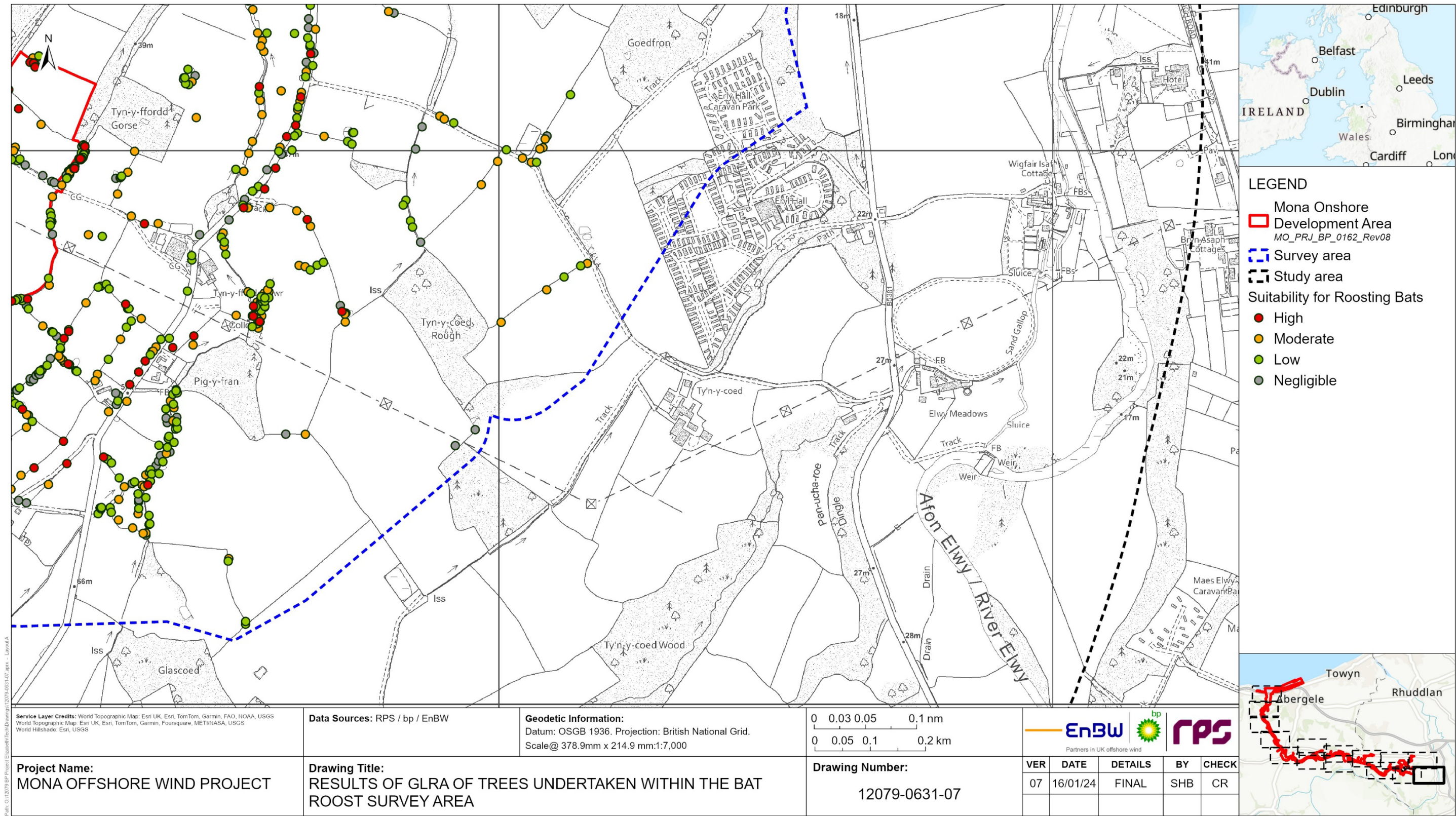


Figure 1.16: Results of GRLA of trees undertaken within the bat roost survey area.