



Preliminary Ecological Appraisal
Unit 6 Pacific Park, Wrexham
7th August 2020

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Summary

- S.1. This report has been prepared by Tyler Grange Group Ltd on behalf of Unimaq Limited. It sets out the findings of a Preliminary Ecological Appraisal (PEA) of a parcel of land at Pacific Park, Wrexham (OS Grid Reference SJ 38521 49881), hereinafter referred to as the 'site' to accompany a planning application for additional industrial units adjacent to the site.
- S.2. The site is located off Bridge Road North in Wrexham industrial estate to the east of Wrexham, just north of Pentre Maelor. The site measures approximately 1 hectare and comprises amenity grassland, buildings, dense scrub, hardstanding, mixed woodland, poor semi-improved grassland, scattered scrub, short perennial grassland.
- S.3. The findings of the desk study, phase I habitat survey and preliminary roost assessment for recorded the following outcomes:
- Potential effects to statutory and non-statutory conservation designations:
 - a) The nature conservation sites within the Zone of Influence around the site are considered to be sufficiently distant to likely avoid any adverse impacts as a result of the proposed works if the outlined mitigation strategies recommended are implemented in full.
 - Habitats within the site are mostly of negligible importance with small areas of plantation woodland (present along the site boundary and scrub being evaluated as of site of local ecological importance. Recommendations for the inclusion of new native tree and shrub planting have been made to mitigate losses of these habitats.
 - Potential effects on protected and priority species:
 - a) Amphibians: Negligible potential for amphibians (including Great Crested Newt – GCN) aquatically or terrestrially – precautionary methods of working have been recommended to manage any risks during construction;
 - b) Bats: Negligible potential for roosting bats in the buildings and trees on site and the site is deemed to be of negligible importance as a habitat resource for bats – no further action is required;
 - c) Birds: Potential for birds to nest within areas of vegetation and buildings within the site – recommendations have been made to avoid impacts to nesting birds should site clearance occur during the nesting season. The inclusion of new native planting within landscape proposals would maintain habitat resources for bird
 - d) Hedgehog: Potential for hedgehog presence recommendation for precautionary working methods during construction and for inclusion of 'hedgehog highways' along site boundaries to maintain habitat links to adjacent land; and
 - e) Badger, reptiles water vole/otter: Negligible potential for these species to utilise the site – no further action is required.
- S.4. Through the implementation of a sensitive landscape scheme and adoption of a construction environmental management plan, the potential impacts on habitats and species within the site can be mitigated. Recommendations for the improvement of habitats that are being kept and the introduction of bat/bird boxes seek to enhance the overall ecological value within the site.
- S.5. In conclusion, it is considered that development within the site of the scale proposed would be in conformity with both Local and National legislation relating to biodiversity. Opportunities also exist to enhance the

biodiversity value of the site within any detailed landscaping scheme. All potential effects on protected/notable protected species would also be avoided or adequately mitigated.

Section 1: Introduction

Introduction

- 1.1. This report has been prepared by Tyler Grange Group Ltd on behalf of Unimaq Limited. It sets out the findings of a Preliminary Ecological Appraisal (PEA) of a parcel of land at Pacific Park, Wrexham (OS Grid Reference SJ 38521 49881), hereinafter referred to as the 'site', to accompany a planning application for additional industrial units adjacent to the site.
- 1.2. The site is located off Bridge Road North in Wrexham industrial estate to the east of Wrexham, just north of Pentre Maelor. The site measures approximately 1 hectare and comprises amenity grassland, buildings, dense scrub, hardstanding, mixed woodland, poor semi-improved grassland, scattered shrub, short perennial grassland.
- 1.3. This report:
- Uses available background data, results of field surveys and consultation, to describe and evaluate the ecological features present within the likely 'zone of influence' (ZoI)¹ of the proposed development;
 - Describes the actual or potential ecological issues and opportunities that might arise as a result of the site's development;
 - Where appropriate, makes recommendations for mitigation of adverse effects and ecological enhancement, to ensure conformity with policy and legislation listed in **Appendix 1**; and
 - Identifies whether any further work is required to inform a future planning application.
- 1.4. This assessment and the terminology used are consistent with the 'Guidelines for Ecological Impact Assessment in the UK and Ireland' (CIEEM, 2018) and 'Guidelines for Preliminary Ecological Appraisals' (CIEEM, 2018).

¹ Defined as the area over which ecological features may be subject to significant effects as a result of activities associated with a project and associated activities (CIEEM 2018).

Section 2: Methodology

Scope of Assessment

- 2.1 This report follows the guidance set out in the Chartered Institute of Ecologists and Environmental Management (CIEEM) Guidance on Ecological Impact Assessment (EclA)².
- 2.2 The extent of potential ecological effects which could arise from the proposed development were determined by undertaking a desk-based assessment of available records and published sources, together with an initial site survey, followed by dedicated species surveys. With this information, the 'Zone of Influence' (Zol) of the proposed development was established, together with potential ecological effects, opportunities and any further work, such as detailed surveys, that might be necessary to inform detailed development designs and requirements for mitigation.

Data Search

- 2.3 A desk-based study was undertaken to identify statutory and non-statutory nature conservation designations and protected species records within 2km of the site and relevant planning policies. The following sources were used:
- The data search was undertaken in April 2019 for a 10km radius around the site for European statutory sites, a 2km radius for national statutory and non-statutory sites and a 1km radius for protected and priority³ species records. The data search was conducted by inspecting the Multi Agency Geographic Information for the Countryside website (www.magic.defra.gov.uk);
 - Records of protected species and other species of nature conservation importance within 2km of the site were obtained from Cofnod Environmental Records Centre in April 2019; and
 - Local Planning policies from the Local Plan were checked to identify local planning policies which need to be considered as part of the development of the site (see **Appendix 1**)

Extended Phase 1 Habitat Survey

- 2.4 An 'extended' Phase 1 habitat survey of the site was initially undertaken on 6th July 2020 by Kyle Mellish (Ecological Consultant, Tyler Grange), an experienced field ecologist and full member of CIEEM. Weather conditions on the day of the survey were partially overcast, dry and 16°C with a moderate breeze.
- 2.5 The survey broadly followed the methodology set out in guidance from the Joint Nature Conservation Committee (JNCC) for extended Phase 1 habitat survey⁴. This method of survey provides information on habitats and assesses the potential for legally protected or otherwise notable species to occur in and adjacent to the site and allows the ecological value of resources to be determined.

² Chartered Institute for Ecology and Environmental Management. Guidelines for Ecological Impact Assessment in the UK and Ireland. September 2018.

³ UK priority species and habitats are those subject to conservation action and referred to as Species of Principal Importance (SoPIs) or Habitats of Principal Importance (HoPIs). They are listed at Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act states that local planning authorities must have regard for the conservation of both SoPIs and HoPIs

⁴ Joint Nature Conservation Committee, (2010), Handbook for Phase 1 habitat survey - a technique for environmental audit.

- 2.6 The vegetation composition of the different habitats within the site was defined using the DAFOR scale, whereby D = Dominant, A = Abundant, F = Frequent, O = Occasional and R = Rare.
- 2.7 During the Phase 1 survey, the surveyor also looked for evidence of badgers within the site. This entails looking for evidence which may include badger hair, active setts or latrines.

Preliminary Roost Assessment (PRA)

- 2.8 A PRA for bats was undertaken on all buildings and trees within the site boundary during the extended Phase one habitat survey by Kyle Mellish to determine whether any further detailed bat survey work would be required to inform a future planning application. The PRA followed guidance set out in the Bat Survey Guidelines⁵ All surveys were daytime inspections and the conditions for all surveys was considered optimal. The location of the buildings and trees at the site are shown on Plan **13257_P01**. All buildings and trees were inspected for evidence of usage by bats from the ground using binoculars, high powered torch and digital camera. In relation to buildings, such signs may include bat droppings, urine splashes, staining and features suitable for allowing bats access to roost (e.g. gaps behind soffits/hanging tiles/ridge tiles, lifted slates/flashing). Due to the ongoing COVID-19 pandemic no internal inspections of buildings were undertaken. In relation to trees, such features may include woodpecker holes, frost cracks, deadwood, knot holes and limb wounds. Due to the ongoing COVID-19 pandemic no internal inspections were undertaken.
- 2.9 The potential of the buildings and trees to support roosting bats was assessed using the criteria shown in **Table 2.1** below.

Suitability	Description of Roosting Habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain Potential Roost Features (PRFs) but with none seen from the ground or features seen with only very limited potential.
Moderate	A structure or 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).
High	A structure or 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.

Table 2.1: Building/Structure Assessment Criteria - adapted from Collins, 2016.

⁵ Collins, J., 2016. *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*. London: The Bat Conservation Trust.

Evaluation

- 2.10 The habitats and species in this ecological appraisal were evaluated using published guidance produced by CIEEM⁶. The level of value of specific ecological receptors is assigned using a geographic frame of reference, i.e. international value being most important, then national, regional, county, local and lastly, within the context of the site itself.
- 2.11 Value judgements are based on various characteristics that can be used to identify ecological resources or features likely to be important in terms of biodiversity. These include site designations (such as Sites of Special Scientific Interest (SSSIs)), or for undesignated features, the size, conservation status (locally, nationally, or internationally) and the quality of the ecological resource. In terms of the latter, 'quality' can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats), or species populations or assemblages.

Quality Assurance

- 2.12 All ecologists at Tyler Grange are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) and abide by the Institute's code of conduct.

Limitations

- 2.13 The findings of this report are valid at the time of writing. Owing to the dynamic nature of ecological resources, if more than 12 months have elapsed since the report was written, advice should be sought to determine whether update work is required. The findings of the report should not be relied upon without this advice.

⁶ CIEEM (2016) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester

Section 3: Results

Context

- 3.1. The site extends to approximately 1ha and comprises a commercial building with a large hardstanding area and strips of grassland, shrub, and woodland. Habitats within the site comprise amenity grassland, buildings, dense scrub, hardstanding, mixed woodland, poor semi-improved grassland, scattered shrub, short perennial grassland. The site is located off Bridge Road North in Wrexham industrial estate to the east of Wrexham, just north of Pentre Maelor and is surrounded primarily by commercial buildings within the industrial estate with scattered patches of grassland and ancient woodland. In the wider landscape (beyond the industrial estate) the site is surrounded by farmland, with Wrexham a bit further to the west.

Protected Sites

Statutory Sites

- 3.2. A desk study identified three European sites within 10km of the site: Midland Meres & Mosses Phase 2 (Ramsar – 4.45km NW), River Dee and Bala Lake (SAC – 3.38km E), and Johnstown Newt Sites (SAC – 7.66KM SW).
- 3.3. There are no other nationally designated sites such as Sites of Special Scientific Interest (SSSI) or Local Nature Reserves (LNR) within 2km of the site.

Non-Statutory Sites

- 3.4. There is one non-statutory local wildlife site within 2km of the site – Wrexham Industrial Estate LWS. This includes a series of scattered areas within the industrial estate containing unmanaged species-rich grassland and ancient woodland, the closest part of this being located 0.29km east of the site.

Habitats and Flora

- 3.5. The following section describes the habitats present within the site at the time of survey. The location and extent of each habitat is shown on drawing **13257/IP01** and described alphabetically below.

Amenity Grassland

- 3.6. There is one area of amenity grassland in the northwest corner of the site and a larger area running around the offsite boundary to the north, east and south. This habitat was dominated by perennial ryegrass *Lolium perenne*, Yorkshire fog grass *Holcus lanatus* and dandelion *Taraxacum officinale* with frequent white clover *Trifolium repens* and lawn daisy *Bellis perennis* – see **Photograph 1** below. This habitat is considered to be of **negligible ecological importance**.



Photograph 1: Amenity grassland within site, with scattered trees.

Buildings

- 3.7. Two buildings were recorded within the site; the existing metal clad industrial building (labelled Building B1) and a small portacabin outbuilding (labelled Building B2). Buildings have **negligible ecological importance** intrinsically but do offer value for roosting bats and nesting birds – this is discussed further in the relevant fauna sections.



Photograph 2: Portacabin outbuilding, B2



Photograph 3: Main building on site, B1

Continuous Scrub

- 3.8. There is a section of dense, continuous scrub on the eastern border of the site consisting largely of snowberry *Symphoricarpos* with some ruderal species such as garlic mustard *Alliaria petiolata* and creeping thistle *Cirsium arvense*. There is occasional bramble *Rubus*, dogwood *Cornus* and dog rose *Rosa canina* alongside juvenile ash *Fraxinus excelsior* – see photograph 4 below. Scrub habitat like this provide shelter, food and nesting habitat for a variety of birds and other species and therefore is considered to be of **site ecological importance**.



Photograph 4: Continuous scrub on the eastern border of the site

Ephemeral/Short Perennial

- 3.9. Areas of short perennial and ephemeral plants occupied previously bare ground around the northern and southern borders of the site boundary. These areas are dominated mostly by ox eye daisy *Leucanthemum vulgare*, dandelion, pignut *Conopodium majus*, black medic *Medicago lupulina* and creeping cinquefoil *Potentilla reptans* with occasional appearances of other common waste ground plants. Due to the lack of

ecologically important adjoining habitats and overall lack of diversity, this habitat is considered to be of **negligible ecological importance**.



Photograph 5: Ephemeral/Short Perennial on the southern border



Photograph 6: Ephemeral/ Short Perennial surrounding the hardstanding in the northwest of the site

Hardstanding

- 3.10. Concrete and stone hardstanding were recorded across the site, being the predominant habitat present – this habitat is considered to be of **negligible ecological importance**.



Photograph 7: Large area of hardstanding

Scattered Trees

- 3.11. There are several trees scattered across the site, amongst the amenity grassland (Norway maple *Acer platanoides*, ash and larch *Larix*) and ephemeral/short perennial habitats (ash). The trees are mostly juvenile and, aside from the row of ash trees, spaced-out providing no habitat for commuting birds or bats. Therefore, the scattered trees on the northern border of the site are considered to be of **negligible ecological importance**.
- 3.12. The row of juvenile - semi-mature ash, close to the stretch of woodland on the south border, has a higher potential to provide nesting habitat and refuge for birds due to its proximity to other suitable habitats and can be considered to have **site ecological importance**.



Photograph 8: Row of juvenile ash trees



Photograph 9: Norway maple and ash

Species Poor Semi-Improved Grassland

- 3.13. Occupying the mounded area in the north/north-eastern borders of the site and dominated by smooth meadow grass *Poa pratensis*, fake oat grass *Arrhenatherum elatius* and greater willowherb *Epilobium hirsutum*. Other abundant species include ox-eye daisy and couch grass *Elymus repens* – see photograph 10 below. This habitat is considered to be of **negligible ecological importance** due to the lack of plant diversity.



Photograph 10: Poor semi-improved grassland habitat

Woodland - Mixed

- 3.14. The mixed woodland plantation along the southern border of the site is comprised of ash, oak *Quercus robur* and *Ilex* ranging in size from juvenile to mature. The understory is predominantly ground elder *Aegopodium podagraria* and hedge woundwort *Stachys sylvatica* with occasional bramble, nettle *Urtica dioica* and rose.

- 3.15. Providing a food, shelter, nesting and commuting opportunities for bats, birds, small mammals and a host of invertebrates, this habitat is considered to have **site ecological importance**.



Photograph 11: Mixed Woodland Plantation

Habitats Adjacent to Site

- 3.16. Along the southern boundary of the site, adjacent to the woodland that lies within the site boundary, there lies an additional strip of juvenile woodland. To the north lies further amenity grassland, which runs parallel to the road, following a similar composite to that on site. To the east an offsite, metal clad building is directly attached to building B1 and to the west lies further scrub and amenity grassland. None of these habitats represent areas that require specific protection, due to the lack of adjoining habitat in the wider ecosystem and poor ecological value they provide. Therefore, they do not need to be considered any further in this report.

Protected and Notable Species

- 3.17. Faunal species or groups that have been considered in this assessment are summarised alphabetically below:

Badger

- 3.18. COFNOD returned 7 records of badger *Meles meles* within 1km of the site, with the closest being 0.22km east and the most recent record being from 2019.
- 3.19. The compact nature of the woodland and grassland areas on site coupled with the lack of evidence of badgers found during the Phase 1 survey (setts, hair, latrines) suggests that the suitability of the site as a habitat for badgers is negligible. The areas surrounding the site also have a lack of suitable habitat for badgers and so they are unlikely to colonise the site pre-development. They therefore do not require further consideration in this report.

Bats

- 3.20. COFNOD returned records of pipistrelle bat species *Pipistrellus*, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared bat *Plecotus auritus*, myotis bat species *Myotis*, Brandt's bat, *Myotis brandtii*, Daubenton's bat *Myotis daubentonii* and noctule bat *Nyctalus noctula*.
- 3.21. The two buildings present on site (B1 & B2) have been assessed to have negligible potential for roosting bats during the completion of the PRA – See **Table 1** below. Apart from the tree line associated with the small belt of mixed plantation (previously described) these are no other suitable habitat resources for bats on site. Due to its small size this resource is likely to be of **negligible ecological importance** in providing a habitat resource for bats locally.
- 3.22. Table 1 Results of Building PRA

Building Number	Photo	Description
B1		Metal clad industrial unit with brick footings, linked to an offsite building. Metal sloping roof and open fronted to the west. Bird faeces seen on building but considered to have negligible roosting potential for bats.
B2		A temporary portacabin building considered to have negligible bat roosting potential .

Birds

- 3.23. COFNOD returned 5 relevant records of birds which are priority species listed in section 7 of the Environment Wales Act 2016 within 1km of the site, as follows: Bullfinch *Pyrrhula pyrrhula*, Dunnock *Prunella modularis*, Goldcrest *Regulus regulus*, Whitethroat *Sylvia communis* and Song thrush *Turdus philomelos*. The site contains a narrow range of habitats that could contain suitable foraging and nesting opportunities for these species.

Great Crested Newts and other Amphibians

- 3.24. COFNOD returned 57 records of GCN *Triturus cristatus* within 1km of the site, with the closest being only 0.07km north, and the most recent record being from 2020.
- 3.25. COFNOD also returned records of other amphibians present within 1km of the site boundary. 31 records of smooth newt *Lissotriton vulgaris* were returned, the closest being 0.07km north and most recent in 2020. 1 record of palmate newt *Lissotriton helveticus* was returned, 0.49km west and from 2020. 11 records of Common toad *Bufo bufo* were returned, the closest being 0.34km north-east and most recent in 2018. 17 records of common frog *Rana temporaria* were returned, the closest being 0.07km north and the most recent in 2017.
- 3.26. There are two ponds within 250m of the site boundary, with the nearest being c.205m distant and separated by several dispersal barriers to GCN (i.e. road complexes, industrial development). The site contains no ponds (or other permanent or temporary water bodies) that could provide potential breeding habitat for GCN and is mostly dominated by habitat, which is unsuitable for GCN terrestrially, being predominantly hardstanding and industrial units. Small areas of potentially suitable terrestrial habitat for GCN exist around the boundaries of the site across the areas of grassland and scrub but due to the lack of potential breeding sites in proximity to these and lack of connectivity to ponds on adjacent land, the presence of GCN within the site is unlikely.

Hedgehog

- 3.27. COFNOD returned 1 record of Hedgehog *Erinaceus europaeus* within 1km of the site. This was located 0.70km south-west and was recorded in 2017.
- 3.28. There is a patch of mixed woodland on site that could potentially provide some suitable habitat for hedgehogs but given the small size of this area and presence of more suitable areas of woodland in the wider area this would be considered unlikely.

Otter and Water Vole

- 3.29. COFNOD returned 2 records of otter *Lutra lutra* within 1km of the site, the closest being 0.38km south-west and most recent being from 2019.
- 3.30. COFNOD returned no records of water vole *Arvicola amphibius* within 1km of the site.
- 3.31. There is a small pond 0.38km south-west where the otter was recorded, connecting to a small waterway/ditch which runs parallel to Ash Road South for just under 1km. The proposed development will have no impact on this habitat.
- 3.32. Given the above neither water vole nor otter require further consideration in this report.

Reptiles

- 3.33. COFNOD returned three records of reptiles within 1km of the site. 1 record of adder *Vipera berus* was returned, this being 0.88km south-west and from 2009. 1 record of grass snake *Natrix Helvetica* was returned, this being 0.39km south-west and from 2018. 1 record of slow worm *Anguis fragilis* was returned, this being 0.88km south-west and from 2009.
- 3.34. There are small areas of grassland on site, although these have little potential as a habitat for reptiles as they mostly consist of short perennial and amenity grassland. Small areas of longer grassland are present but these are isolated from other suitable reptile habitat and will not be long established habitats of a type which are likely to support reptile populations. They are therefore unlikely to occur on site and they therefore do not require further consideration in this appraisal.

Section 4: Potential Ecological Impacts and Requirement for Mitigation

General

- 4.1 The proposals for the site, as presented in Plan 2 of the appendix (13257_P02), indicate that there will be two further industrial units built, one centrally located and one along the eastern boundary. An additional access point would be placed to the north between these two new units and the hardstanding extended to accommodate the large HGV's turning areas to the south.
- 4.2 The proposals would necessitate the loss of the row of juvenile ash trees along the south eastern border and also the loss of several trees, scrub and a patch of short perennial grassland in the north and north eastern boundaries of the site, to accommodate the new industrial unit. The second, centrally placed, industrial unit is being built on what is currently hardstanding and the trees next to the existing building (B01) are being retained. The loss of the scrub and selected trees is of minimal impact when considering the wider ecosystem and can be compensated through the replanting of trees and areas of scrub around the boundary of the site.

Protected Sites

Statutory Sites

- 4.3 Midland Meres & Mosses Phase 2 (Ramsar) is not functionally or hydrologically linked to the site and there would be no direct impacts on this site due to the construction phase of the proposed works. The proposed works are not residential so it would not result in any adverse impacts on this RAMSAR site through increased recreational pressure. It is, therefore, considered that there would be no adverse impacts on Midland Meres & Mosses Phase 2 from the proposed development and there is no recommendation for further mitigation.
- 4.4 River Dee and Bala Lake (SAC) are not directly functionally or hydrologically linked to the site, although the site does lie 0.3km east of Rodwither Brook, which runs into the Afon Clywedog, a tributary of the River Dee. However, at this distance and taking account of the scale and nature of the proposed development there would be no direct impacts on this site due to the construction phase of the proposed works. It is, therefore, considered that there would be no adverse impacts on River Dee and Bala Lake because of the proposed development and there is no recommendation for further mitigation. For similar reasons stated above no impacts during the operational phase of the proposed development are anticipated.
- 4.5 Johnstown Newt Sites are not functionally or hydrologically linked to the site and there would be no direct impacts on this site due to the construction phase of the proposed works. It is, therefore, considered that there would be no adverse impacts on Johnstown Newt Sites because of the proposed development and there is no recommendation for further mitigation.

Non-Statutory (Local) Sites

- 4.6 Wrexham Industrial Estate LWS, including scattered areas of species-rich grassland and ancient woodland, is not at any point directly functionally linked to the site, being 0.29km east of the site boundary. Due to the development being of commercial use, there would be no adverse impacts on this site through increased recreational pressure. Through the adoption of a Construction Environmental Management plan (CEMP), dust and noise throughout the construction phase can be maintained within the site and therefore not impact the LWS.

Habitats and Flora

Habitats within the Site

- 4.7 All habitats on site that are of site **ecological importance** should be retained where possible within the new plans. Where this is not possible, mitigation strategies should be put in place to reduce the overall impact the loss as described below.
- 4.8 The proposals would see the loss of numerous individual trees along the northern and eastern boundaries of the site, including the row of juvenile ash trees, as well as sections of the mixed woodland area along the southern boundary – as seen in plan **13257_P01**. Existing woodland should be retained possible and replaced elsewhere within the development layout in order to maintain habitat provision for birds, bats, small mammals and invertebrates.
- 4.9 Native tree species such as oak, beech and other large UK tree species should be used, as specified in the local planning policy (**appendix 1**), should be planted around the native woodland patch and site boundaries to minimise the loss of trees on site and maintain this habitat as much as possible.
- 4.10 The introduction of thorny and berry-producing scrub/shrub species (i.e. *Berberis sp.*) around the site boundary, after the erection of the new industrial units, will recreate the shrub habitat that is currently there and so provide habitat for small mammals, birds and invertebrates.
- 4.11 The patch of continuous scrub along the north-eastern boundary of the site would need to be cleared to make room for one of the new industrial units. Since this habitat also is of importance for wildlife replacement planting in the native shrub cover plants along the new boundary of the site should be considered.
- 4.12 In addition to the above, site margins could also include small grassland areas created through the sowing of species rich grassland wildflower mixes.
- 4.13 All other habitats affected by the new development plans are of **negligible ecological importance** and do require any mitigation for their loss and are considered further in this report.

Fauna

Protected and Notable Species

Bats

- 4.14 Following the phase 1 survey and preliminary roost assessment, all buildings on site and trees were judged to have negligible potential for roosting bat species. Similarly, other habitat resources such as tree lines are also assessed as being of negligible importance in maintaining foraging and commuting resources for bat populations locally.
- 4.15 Habitat and green infrastructure provisions recommended above which form part of the overall landscaping design will adequately compensate for minor habitat losses for bats which have been incurred.
- 4.16 There is potential for impacts to foraging and commuting bats resulting from use of inappropriate lighting, both during construction and operation of the site. To avoid longer term impacts, it is recommended that the layout of the site should include a sensitively designed lighting scheme, detailed at the Reserved Matters planning stage, to mitigate potential impacts to foraging and commuting bats once the site is operational. The lighting scheme should avoid light spill of greater than 1 Lux at tree canopy height onto any retained, adjacent, or newly created habitat features (including hedgerows, trees and ponds).

Birds

- 4.17 Development proposals would require the loss of habitat within the site which is suitable for a range of common and widespread 'Green List' species, along with several species of Conservation Concern i.e. Amber List/Red List. These species are also included in the list of Welsh priority species such as bullfinch, dunnoek, goldcrest, song thrush and whitethroat, all of which are known from local records (see **section 3**) to be present in the area. Whilst there will be some habitat loss due to the small size of the site and nature of habitats present they are unlikely to be of significance in maintaining bird populations in the wider locality and no specific mitigation for habitat loss for birds is required. Recommendations for the provision of new tree and shrub planting made above should ensure that there is no overall loss of habitat resources of birds on site.
- 4.18 During the construction phase All vegetation and building clearance should also be timetabled for outside the 'core' nesting bird season (i.e. conducted between September and February) to avoid active nests and the legislation which is afforded to them. Where this is not possible, any site clearance activity must be preceded by a check for active nests if conducted between March and August inclusive (i.e. the 'core' nesting season for birds). The check must be conducted by a suitably qualified ecologist (SQE) and if an active nest is encountered, a sufficient buffer zone will be implemented around the nest commensurate with the species, tolerance of human activity and stage of nesting. Works can then only proceed in that buffer zone once the SQE has determined the nest is no longer active.
- 4.19 It should be noted that some species of bird (i.e. doves, pigeons) can nest year-round so even if site clearance activities are conducted outside of the 'core' nesting season, site contractors must show due diligence and cease works and seek advice from a SQE if they suspect the presence of an active nest.

Great Crested Newts and other Amphibians

- 4.20 The likelihood of GCN presence within the site is considered to be low due to the general absence of suitable terrestrial habitat and lack of connectivity to surrounding areas of GCN habitat, where this species is known to be present. The site does not offer any suitable places for continued/regular refuge or shelter, but the possibility cannot be ruled out that GCN may occasionally disperse through the site to access breeding habitat in the surrounding landscape. It is considered, however, that the adoption of Reasonable Avoidance Measures (RAMs) could adequately mitigate for any potential impacts to GCN – see **Appendix 2**.

Hedgehogs

- 4.21 Hedgehogs are a priority species and therefore afforded consideration in the planning policy, they are in population decline and efforts should be made to conserve this species and enhance sites for hedgehog wherever possible. To this end, the construction phase of the proposed works should be conducted following sensitive working methodologies. For example, undertaking pre-construction checks, ensuring site material is stored off the ground or blocking the materials up when this is not possible.
- 4.22 Hedgehogs should also be allowed continued access through the site post-development. It is recommended that 'hedgehog highways' are built into the boundaries of the site to allow this.

Section 5: Conclusion

- 5.1 The plans outlined in **13257_P02** will require the removal of some areas of habitat that currently provide ecological value within the site and have the potential to support species such as breeding birds, bats, GCN (and other amphibians) and hedgehogs – all of which require protection and consideration. Several recommendations have been made throughout **section 4** that would mitigate the potential impacts and, in some cases, improve the ecological value of the site.
- 5.2 Subject to implementation of a sensitive landscape scheme and adoption of a construction environmental management plan, it is considered that the proposals sought would be in conformity with both local and national planning policy in regards to protected/notable species, habitats and sites and could also provide enhancements for biodiversity through a sensitive landscape scheme and introduction of bat roost and bird nesting features.

References

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Harris, S., Cresswell, P. & Jeffries, D., 1989. *Surveying Badgers – Mammal Society Publication No.9*. London: Mammal Society.

Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey - a technique for environmental audit. JNCC, Peterborough. <http://data.jncc.gov.uk/data/9578d07b-e018-4c66-9c1b-47110f14df2a/Handbook-Phase1-HabitatSurvey-Revised-2016.pdf>

Appendix 1: Relevant Legislation and Planning Policy

Appendix 1: Relevant Legislation and Planning Policy

The Conservation of Habitats and Species Regulations 2012 (as amended).

- A1.1 The Habitat Regulations transpose EEC Council Directive 92/43 (The Habitats Directive) into UK law. The regulations place duty upon the relevant authority of the UK government to identify sites which are of importance to the habitats and species listed in Annexes I and II of the Habitats Directive. Those sites which meet the criteria are, in conjunction with the European Commission, designated as Sites of Community Importance, which are subsequently identified as Special Areas of Conservation (SAC) by the European Union member states. The regulations also place a duty upon the UK government to maintain a register of European protected sites designated as a result of EC Directive 79/409/EEC on the Conservation of Wild Birds (The Birds Directive). These sites are termed Special Protection Areas (SPA) and, in conjunction with SACs, form a network of sites known as Natura 2000.
- A1.2 The regulations also provide for the protection of individual species of fauna and flora of European conservation concern listed in Schedules 2 and 4, respectively. Schedule 2 includes species such as otter and great crested newt for which the UK population represents a significant proportion of the total European population. It is an offence to deliberately kill, injure, disturb or trade these species in the UK. Schedule 4 plant species are protected from unlawful destruction, uprooting or trade under the regulations.

The Wildlife and Countryside Act (WCA) 1981

- A1.3 The WCA, as amended, consolidates and amends pre-existing national wildlife legislation in order to implement the Bern Convention and the Birds Directive. It complements the Conservation (Natural Habitats. &c.) Regulations 1994 (as amended), offering protection to a wider range of species. The Act also provides for the designation and protection of national conservation sites of value for their floral, faunal or geological features, termed Sites of Special Scientific Interest (SSSIs).
- A1.4 Schedules of the act provide lists of protected species, both flora and fauna, and detail the possible offences that apply to these species.

The Countryside and Rights of Way (CROW) Act 2000

- A1.5 The CROW Act, introduced in England and Wales in 2000, amends and strengthens existing wildlife legislation detailed in the WCA. It places a duty on government departments and the National Assembly for Wales to have regard for biodiversity and provides increased powers for the protection and maintenance of SSSIs.
- A1.6 The Act also contains lists of habitats and species (Section 74) for which conservation measures should be promoted, in accordance with the recommendations of the Convention on Biological Diversity (Rio Earth Summit) 1992.

The Environment Act Wales 2016

Section 6 - Biodiversity and resilience of ecosystems duty

- A1.7 Section 6 of the Act places a duty on public authorities to 'seek to maintain and enhance biodiversity' so far as it is consistent with the proper exercise of those functions. In so doing, public authorities must also seek to 'promote the resilience of ecosystems'. The duty replaces the section 40 duty in the Natural Environment and Rural Communities Act 2006 (NERC Act 2006), in relation to Wales, and applies to those authorities that fell within the previous duty.

- A1.8 Public authorities will be required to report on the actions they are taking to improve biodiversity and promote ecosystem resilience.

Section 7 - Biodiversity lists and duty to take steps to maintain and enhance biodiversity

- A1.9 This section replaces the duty in section 42 of the NERC Act 2006. The Welsh Ministers will publish, review and revise lists of living organisms and types of habitat in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales.
- A1.10 The Welsh Ministers must also take all reasonable steps to maintain and enhance the living organisms and types of habitat included in any list published under this section and encourage others to take such steps.
- A1.11 Part 1 of the Act, including Sections 6 and 7, came into force on May 21, 2016.

The Hedgerow Regulations 1997

- A1.12 The Hedgerow Regulations make provision for the identification of important hedgerows which may not be removed without permission from the Local Planning Authority.

National Planning Policy

National Planning Policy - Planning Policy Wales - Wildlife and Biodiversity

- A1.13 The Welsh Government sets out in para 5.1.2 of Planning Policy Wales the following objectives for the conservation and improvement of the natural heritage:
- Promote the conservation of landscape and biodiversity, in particular the conservation of native wildlife and habitats;
 - Ensure that action in Wales contributes to meeting international responsibilities and obligations for the natural environment;
 - Ensure that statutorily designated sites are properly protected and managed;
 - Safeguard protected species; and
 - To promote the functions and benefits of soils, and in particular their function as a carbon store.
- A1.14 Section 5.4 of Planning Policy Wales requires that UDPs set out the locational policy framework for the conservation and enhancement of the natural heritage and seek to conserve and enhance the natural heritage in ways which bring benefits to local communities and encourage social and economic progress.
- A1.15 UDPs should encourage the appropriate management of features of the landscape which are of major importance for flora and fauna in order to complement and improve the ecological coherence of the Natura 2000 network. This encompasses features which, because of their linear or continuous structure or their function as “stepping stones” or “wildlife corridors”, are essential for migration, dispersal and genetic exchange. Policies should attach appropriate weight to statutory and non-statutory designations and devise criteria against which development will be assessed. The conservation and, where appropriate, enhancement of biodiversity outside designated areas, should also be sought.

Wales Spatial Plan

- A1.16 The Wales Spatial Plan – People, Places, Futures – was originally adopted by the National Assembly for Wales in November 2004 and was updated in 2008 (Welsh Assembly Government, 20083). In Wales, spatial planning is the consideration of what can and should happen where. It investigates how policies and practice interact in specific areas as well as the role of places in a wider context. It goes well beyond traditional land-

use planning and sets out a strategic framework to guide future development and policy interventions. The importance of the natural environment is reflected through its vision:

“We will sustain our communities by tackling the challenges presented by population and economic change. We will grow in ways which will increase Wales’ competitiveness while assisting less well-off areas to catch up on general prosperity levels and reducing negative environmental impacts. We will enhance the natural and built environment and we will sustain our distinctive identity.”

- A1.17 It is a principle of the Wales Spatial Plan that development should be sustainable. Sustainable development is about improving wellbeing and quality of life by integrating social, economic and environmental objectives in the context of more efficient use of natural resources. The Wales Spatial Plan aims to deliver sustainable development through its Area Strategies in the context of the Welsh Assembly Government’s statutory Sustainable Development Scheme. The Application Site falls within the North-East Wales Border and Coast Area Strategy and the importance of the natural environment is reflected under the third spatial plan theme of ‘Valuing our Environment’ through the following key priorities for North-East Wales:

“Protecting and enhancing protected wildlife, landscape and built heritage sites.”

- A1.18 Of specific relevance to the application site is the identification in the Welsh Spatial Plan that *“of note [is] the River Dee and particularly its estuary which is internationally important for wildlife, the wonderful coastline with its sand dunes, sandy beaches and high quality bathing waters”*

Local Planning Policy

Biodiversity and Development

<https://www.wrexham.gov.uk/sites/default/files/2020-05/lpg-32e.pdf>

- A1.19 Policy PS2 Development must not materially detrimentally affect countryside, landscape/townscape character, open space, or the quality of the natural environment.
- A1.20 Policy PS11 Encouragement will be given to proposals which improve the biodiversity value of sites and to the establishment of local nature reserves where the nature conservation and landscape interest of the land will be protected and enhanced.
- A1.21 Policy EC4 Development proposals should provide for the conservation and management of hedgerows, trees, orchards, woodland, wildlife and other natural landscape and water features, and include new planting in order to enhance the character of the landscape and townscape. Development which results in the loss or significant damage to valuable trees, important hedgerows or ancient woodland sites will not be permitted.
- A1.22 Policy EC6 Development either within or close to sites of biodiversity interest will only be permitted where it can be clearly demonstrated that the need for the development outweighs the need to safeguard the intrinsic nature conservation value of the site. Where such development is permitted, damage should be kept to a minimum, and compensatory measures should be provided. Measures to improve the biodiversity value of sites and enhance their natural conservation interest and landscape quality including the establishment of local nature reserves, will be supported.
- A1.23 An ecological assessment will be required to accompany planning applications that affect:
- woodland, hedgerow and/or trees;
 - areas of open green space (including scrub land);
 - water courses and bodies (including ponds, ditches, rivers);

- any site or building with a known protected species, or with a likelihood of presence;
- any site of nature conservation importance such as County Wildlife Sites;
- industrial archaeology - lime kilns, chimneys etc. Involve:
- the conversion of barns and buildings;
- demolition of buildings / structures (including walls) and removal of roofs;
- felling of trees (including woodland) hedgerows and other vegetation including the clearance of scrub land;
- refurbishment of unoccupied dwellings;
- infrastructure construction - roads, drainage schemes, electricity and telecommunications installations; and
- habitat formation / enhancement.

Trees and Development

<https://www.wrexham.gov.uk/sites/default/files/2020-05/lpg-17e.pdf>

A1.24 Trees and hedgerows form an important part of our environment and in the delivery of sustainable development, the retention and the planting of new trees and hedges is crucial.

A) Development which would result in damage and/or inappropriate felling of significant trees (i.e. BS 5837 Category A & B trees) and hedgerows will not normally be permitted. Planning conditions and Tree Preservation Orders will be used to safeguard trees in appropriate cases.

B) Development proposed near to existing trees, woodlands or hedgerows must be in accordance with the design and protection principles set out in this Local Planning Guidance Note and British Standard 5837: 2012 "Trees in relation to design, demolition and construction" (or any subsequent revisions). The British Standard provides a flow chart that details the necessary steps to be taken at each stage of the development process.

Landscape and Industrial Development

<https://www.wrexham.gov.uk/sites/default/files/2020-05/lpg-26e.pdf>

A1.25 Wrexham's industrial estates, smaller industrial sites, and retail and business parks make a very noticeable contribution to the landscape of the County Borough, and this can be a positive one. New development in particular can provide excellent opportunities for exciting and sustainable landscape and building design, providing attention is paid to the impact which such proposals might have on the surroundings. Landscape considerations include the way the external environment is affected by the development, and the way the development is perceived by the public. Landscape needs to be considered from the very beginning of the development process.

DO plant oak trees, other large native tree species, and hedges, and always protect existing trees, shrubs and wildflower meadow (especially species-rich grassland on Wrexham Industrial Estate).

DO spread surplus soil to gentle contours or remove from site.

DO look after topsoil by keeping vehicles etc. away from it - it is a living material, and if damaged will not be good for planting.

DO retain and protect watercourses and ponds.

DON'T put security fencing next to pavements as it will dominate the view from the road. If needed on frontages leave at least 1m for hedging, shrubs or climbers.

DON'T replace valuable existing grassland, hedges, scrub, woodland or trees with 'amenity' planting of low wildlife value (and higher cost).

DON'T develop within 5m of water-courses.

Appendix 2: Reasonable Avoidance Measures for Great Crested Newts

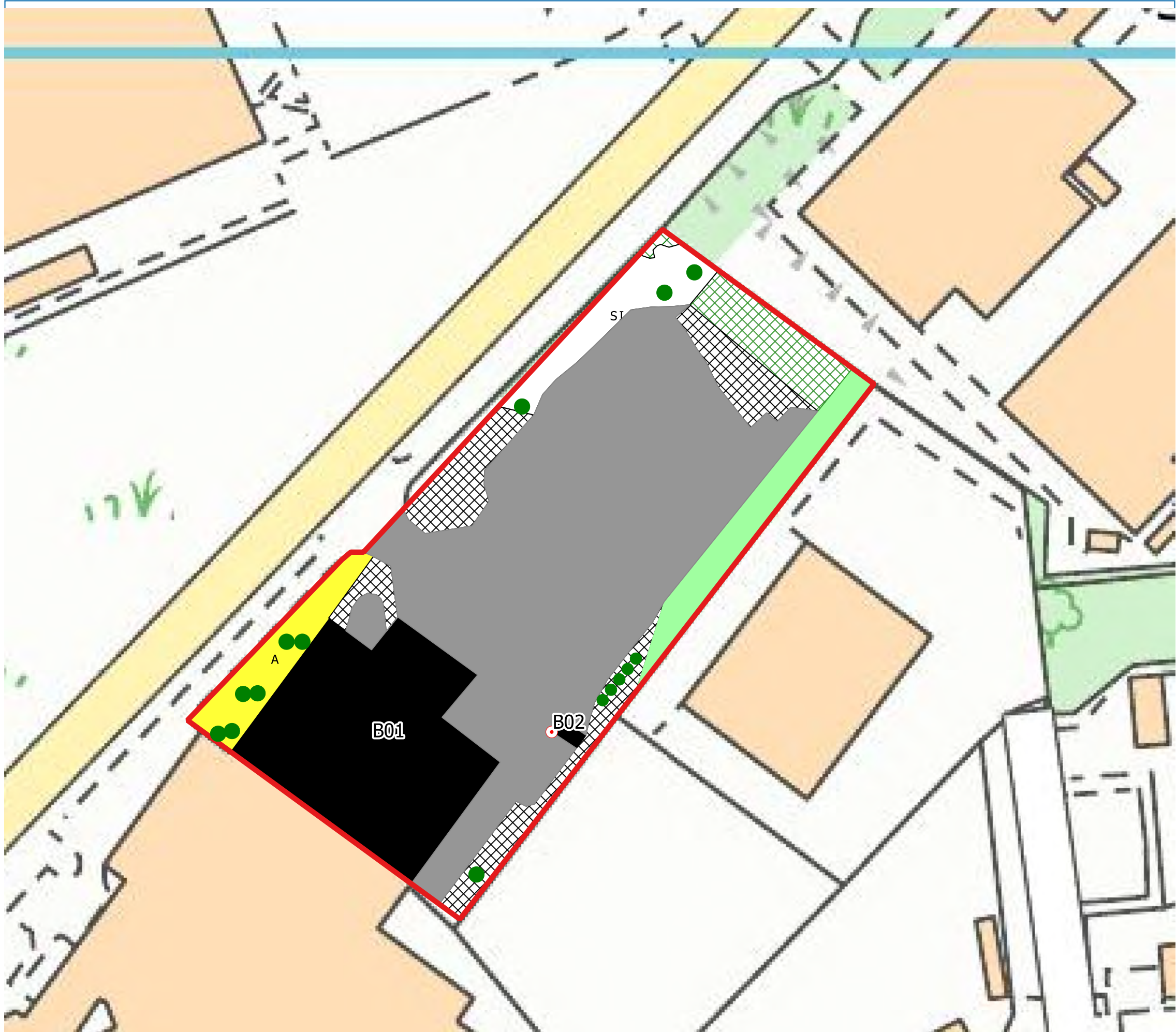
Appendix 2: Reasonable Avoidance Measures for Great Crested Newts

- A2.1 Given the low level of risk posed to GCN by the proposed development (as described in Section 4), adoption of the following RAMS is recommended. Prior to commencing development at the site, a suitably experienced ecologist should be appointed to ensure that the RAMS are successfully implemented.
- A2.2 The winter hibernation period for amphibians is between November and mid-February. Any work which is likely to result in the disturbance of features which could potentially provide amphibian shelter / hibernation on site should not be scheduled or undertaken between November and mid-February or during any periods of cold or frosty weather outside of this period. Such features include rubble and earth mounds, scrub bases and grassland. If amphibians are likely to be hibernating / dormant prior to any development related works commencing at the site, a tool box talk should be given to all developers and contractors working within the site to ensure they are able to recognise GCN, are aware of the small possibility that GCN could be present within the site, the implications involved if GCN are found within the site and the need to implement these RAMS. Details of the RAMS should be kept on-site for reference during development;
- A2.3 Prior to any site clearance and / or ground disturbance works commencing at the site, the extent of works should be agreed by the appointed ecologist and the developer / contractors;
- A2.4 The appointed ecologist and the developer / contractors should ensure that no adjacent areas of potential GCN habitat are inadvertently damaged as a consequence of the development works. This would be achieved by fencing off these areas with Heras or post and wire fences;
- A2.5 Following the site induction / tool box talk, a search of potential places of refuge within the development site should be carried out by the appointed ecologist or their accredited agent, to check for sheltering amphibians and any items of potential refuge should be removed from the development site immediately following the search to prevent amphibians from seeking shelter either beneath or within them;
- A2.6 The development site should (where practicable to do so) be kept clear of any debris, rubble or other arisings and stored materials kept off the ground on pallets or in skips to prevent GCN from potentially using them as refuges;
- A2.7 Any rubble or other debris resulting from ground clearance should be removed from the development site; it should be taken off-site at the earliest opportunity for appropriate disposal;
- A2.8 Any excavations should not be left open, where possible. Where they are to be left open for any reason, the excavation should be searched / checked for sheltering amphibians before works re-commence. Ideally open excavations should incorporate 'ramps' at either end to allow amphibians and small mammals falling into them to escape;
- A2.9 Wherever practicable, excavations should be in-filled and made good to ground level at the earliest opportunity, so as to remove any hazard to amphibians. If spoil / materials are left on the ground overnight, they may require searching for sheltering amphibians before they are moved; and
- A2.10 These RAMS do not allow for the capture or movement of a GCN. Should a GCN be found at any time during the works, all works should stop, and a suitably licenced ecologist should be contacted for advice.

Plans

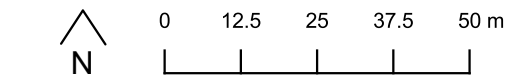
Plan 1: 13257_P01 Habitat Features Plan

Plan 2: 13257_Provisional Layout



Legend

- Portakabin
- Line of Ash Trees
- Scattered Broad-Leaf Trees
- Habitats
 - A Amenity Grassland
 - Building
 - Dense Scrub
 - Hardstanding
 - Mixed Woodland
 - SI Poor Semi-Improved Grassland
 - Red Line Boundary
 - Scattered Scrub
 - Short Perennial Grassland



Project	Unit 6, Pacific Park, Wrexham
Drawing Title	Habitat Features Plan
Scale	As Shown (Approximate)
Drawing No.	13257/P01
Date	July 2020
Checked	JD

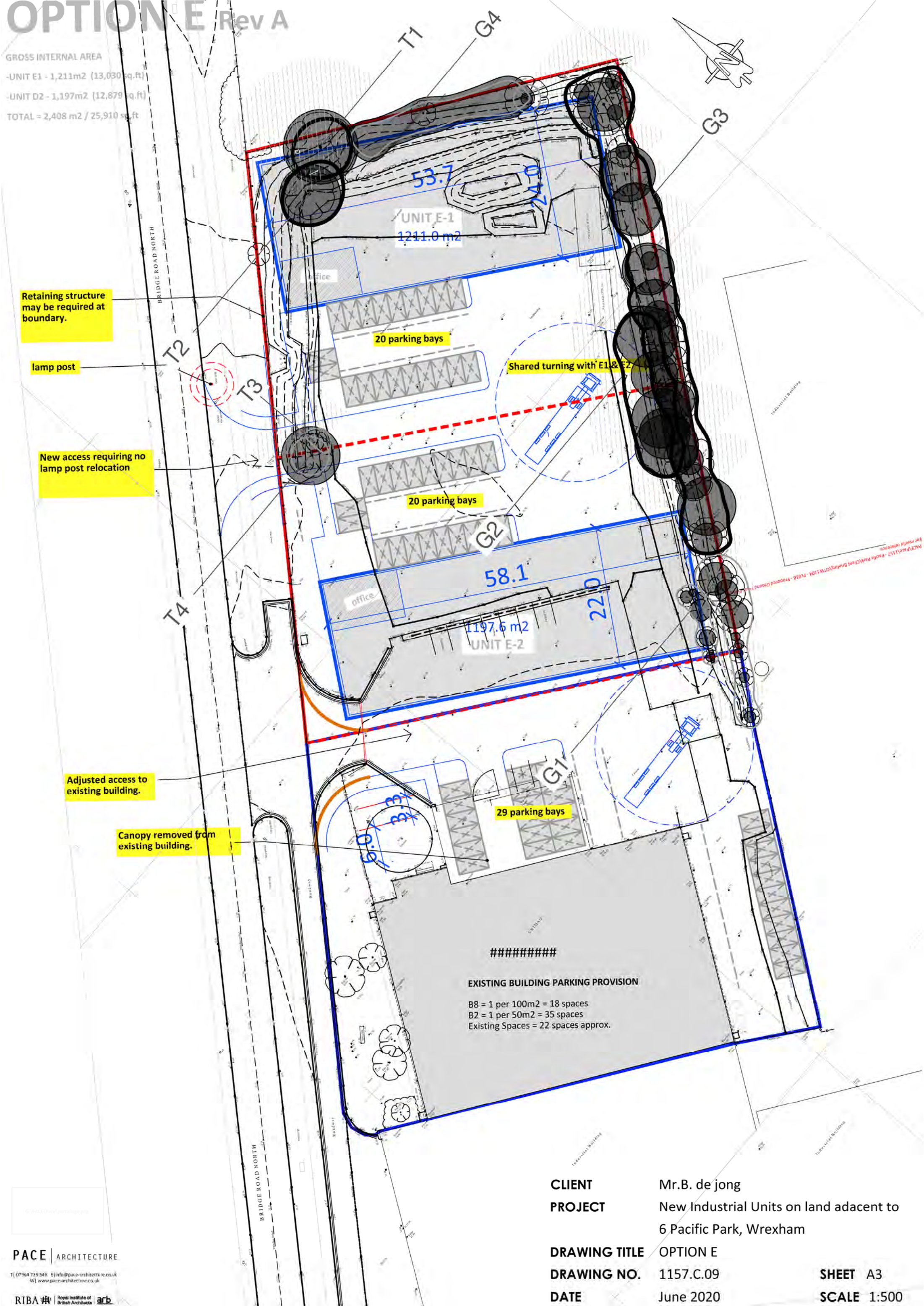
OPTION E Rev A

GROSS INTERNAL AREA

-UNIT E1 - 1,211m² (13,030 sq.ft)

-UNIT D2 - 1,197m² (12,879 sq.ft)

TOTAL = 2,408 m² / 25,910 sq.ft



CLIENT
PROJECT

Mr.B. de jong
New Industrial Units on land adacent to
6 Pacific Park, Wrexham

DRAWING TITLE

OPTION E

DRAWING NO.

1157.C.09

DATE

June 2020

SHEET A3

SCALE 1:500

PACE | ARCHITECTURE

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