Preliminary Ecological Assessment

Project: Traston Road, Newport

Instructed by: Bron Afon Community Housing

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1. Introduction

Planning consent is being sought for the creation of a residential development within the site boundary. Development proposal seek to create 26 residential units with an access road road leading into the site via Traston Road to the south east. The development site is centred at ST3371686342 and sits to the south west of the residential area of Traston, Newport.

The development site contains marshy grassland, tall ruderal vegetation, scrub and a tree line around the majority of the site periphery. This report will assess the potential of the land within the site boundary to support habitats and species and the implications that any future development proposals could have on them.

1.1 Site Description

The site is located within Traston, a residential suburb of Newport. The site is generally flat and currently access via Traston Lane along the eastern boundary of the site. Residential properties are present to the north and east of the site. Spytty Park Leisure Centre and recreational grounds are present to the south and west. Newport Stadium is present to the north west of site.

The A48 runs east to west approximately 270m to the north. Residential housing is present north of the A48. Lliswerry High School is present approximately 225m to the east of site. An industrial estate is present approximately 450m away to the south east of site. Light industrial units are present to the west of site forming an industrial estate. A railway lines runs north to south approximately 1km away to the west around the industrial estate. The River Usk wraps around the industrial estate, flowing north to south through the landscape.

To the south of site there appears to be and area of scrub, open fields and tree lines which extend further south into the wider landscape.

1.2 Survey Constraints

The site visit was completed during September which is an optimal time of year to undertake habitat assessments. It was possible to draw broad conclusions on habitat types within the site boundary.

The absence of desk study records cannot be relied upon to determine absence of particular species/habitat. Often, the absence of records is a result of under-recording within the given search area.

The optimal time period to carry out ground-based visual assessments of trees for bat roosting potential is between December to March inclusive, when broadleaved trees are

devoid of leaves and features are more readily visible. It should be noted that ground based assessments are inherently constrained and potential roosting features present upon the skyward facing surfaces of limbs and branches will most likely be missed.

1.3 Surveyor Experience

Aislinn Harris is a full member of Chartered Institute of Ecology and Environmental Management (CIEEM). Aislinn is an ecologist with 14 years experience undertaking a wide range of flora and fauna surveys. All survey work is undertaken following JNCC Phase 1 Survey Guidelines and CIEEM Guidelines for Preliminary Ecological Appraisal (2nd Ed 2017). Aislinn is a licensed bat, great crested newt and dormouse ecologist with a wide variety of experience undertaking ecological surveys.

2. Desktop Study

A data search was undertaken via Aderyn for the proposed development site and surrounding area (ref: 0245-480). A 2km buffer zone was searched and records returned within 500 m of site are noted below:

- Slow Worm (*Anguis fragilis*) - closest record appears to be within the development site boundary,
- Hedgehog (*Erinaceus europaeus*) - closest record approximately 185m to the east,
- Common Pipistrelle (*Pipistrellus pipistrellus*) - closest record approximately 410m away to the north east,
- Otter (*Lutra lutra*) - closest record approximately 410m away to the south east,
- Bird species listed under Section 7 of the Environment (Wales) Act 2016 (EWA 2016) recorded within 500 m of the site include – Herring Gull (*Larus argentatus*), Linnet (*Linaria cannabina*), House Sparrow *(Passer domesticus), S*tarling (*Sturnus vulgaris*), Black Headed Gull (*Chroicocephalus ridibundus*), Kestrel (*Falco tinnunculus*), Dunnock (*Prunella modularis*),
- Bird species listed under Schedule 1 of the Wildlife & Countryside Act 1981 (WCA1.1) recorded within 500 m of the site include – Cetti's Warbler (*Cettia cetti*), Kingfisher (*Alcedo atthis*),
- Invertebrate species including Cinnabar (*Tyria jacobaeae*).

Records of note returned for the rest of the 2 km buffer zone are detailed below:

- Noctule (*Nyctalus noctula*),
- Common Lizard (*Zootoca vivipara*),
- Palmate Newt (*Lissotriton helveticus*),
- Common Frog (*Rana temporaria*),
- Red Kite (*Milvus milvus*),
- Unidentified Myotid bat species (*Myotis sp*),
- Great Crested Newt (*Triturus cristatus*),
- Grass Snake (*Natrix helvetica*),
- Badger (*Meles meles*),

- Invertebrate records including Shrill Carder Bee (*Bombus sylvarum*), Cinnabar (*Tyria jacobaeae*), Brown- Banded Carder Bee (*Bombus humilis*).

2.1 Protected Sites

The search also considered statutory and non-statutory protected sites within 2km of the site boundary.

Statutory Protected Sites

There are no Statutory Protected Sites within or directly adjacent to the development site. The River Usk Special Area of Conservation (SAC) is located approximately 1km to the west of site. The River Usk is also designated as a Site of Special Scientific Interest (SSSI) and located approximately 1km to the west of site at its closest point. The Gwent Levels - Nash & Goldcliff SSSI is located approximately 1.3km to the south east of site at its closest point.

Non- Statutory Protected Sites

There are eight Sites of Interest for Nature Conservation (SINCs) within 2km of the site. The closest such site is Solutia Site SINC approximately 10m away to the south. The Solutia Site SINC is separated from the development site by a single lane tarmac road. The remaining SINC sites along with an approximate distance from site are listed below:

- Alpha Steel Site (1.3km),
- Ladyhill Wood (1.9km),
- Ringland Way Marsh (1.5km),
- Monkey Island (1km),
- Marshall's (1km),
- Liswerry Playing Fields and Angling Ponds. (1.3km),
- Former Steel Works Site off Queensway Meadow (1.1km).

There is a single Wildlife Trust Reserve (WTR) within 2km of the development site. The Great Traston Meadows WTR is located approximately 1.3km to the south of site at its closest point.

There are four areas of Ancient Semi Natural Woodland (ASNW) within 2km of the site boundary. The closest areas is approximately 1.35km south of the site. These are broadleaf woodlands comprising mainly native tree and shrub species which are believed to have been in existence for over 400 years. The ground vegetation will reflect the naturalness of these woodlands and will frequently feature species which provide clear indication of long and

continued woodland cover. They will have been woodland for centuries and contribute substantially to our natural and cultural heritage.

The very northern boundary of the development site falls within a B-Lines designation. B-Lines are non-statutory protected sites which aim to restore and create wildflower habitats forming stepping stones that link existing wildlife areas together creating a network of habitats across the landscape benefiting not only pollinators but a host of other wildlife.

2.2 Potential Impacts to Protected Sites

Given the localised nature of the development proposals there is unlikely to be any adverse effects to any protected site within the local area.

3. Phase 1 Survey

3.1 Habitats

A walkover survey of the site was completed on the **9th September 2024.** A species list can be found in Appendix 1, photographs of the site can be found in Appendix 2 and a map of the habitats found within the site is provided in Appendix 3.

A small section of the site interior has been cleared to allow surveyor access across the development site. A high level cut appears to have been undertaken and when looking at the remaining habitats on site, it is likely the site was very overgrown previously. The majority of the interior of the site, including the cleared areas of vegetation are considered to be **marshy grassland**. The **marshy grassland** is dominated mainly by compact rush but other species recorded include fleabane, Timothy grass, meadow buttercup, purple loosestrife, bird's-foot trefoil, a species of mint, hard rush, pendulous sedge, creeping buttercup, common knapweed, a species of vetch, smooth tare, fox sedge, cock's-foot and common bent.

The grassland areas grade into **tall ruderal vegetation** without a clear boundary present. Species noted within the **tall ruderal vegetation** include rosebay willowherb, broad-leaved willowherb, hogweed, hemp agrimony, nettle, creeping thistle, hedge bindweed, bramble, teasel, cock's-foot, fleabane, hedge woundwort, a species of phragmites and a species of hypha thought to be bulrush.

The **tall ruderal vegetation** in turn grades into a narrow band of **scrub** habitat which bounds the site. The scrub habitat consists of bramble, dogwood, blackthorn and butterfly bush. The scrub habitat made it difficult to reach the **tree lines** present around the periphery of the site. Species noted within the **tree line** include a species of elm, English oak, ash, blackthorn, dogwood, hawthorn, a species of willow, dog rose, hedge bindweed and bramble.

A shallow **ditch** runs along the eastern edge of the site where it abuts Traston Lane. The ditch held water during the survey visit at approximately 20cm in depth. The ditch is culverted in small sections along the boundary and appears to enter a culvert to the east of the site running underneath Traston Road. An open section of ditch appears to run through the north eastern portion of the development site. The ditch was heavily vegetated being choked with phragmites and tall ruderal vegetation making it difficult to see but it was not thought to hold water. OS maps indicate ditches being present along the northern and western boundary of the site but these were not visible or accessible during the site visit.

3.2 Great Crested Newts (GCN)

Great crested newts (*Triturus cristatus)* are a European protected species and are protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Deliberate taking or destroying of eggs,
- Damage or destruction of a breeding site or resting place.

Great crested newts (GCN) are listed on schedule 5 of The Wildlife & Countryside Act 1981 which protects them from intentional or reckless disturbance or obstruction when using a structure or place for shelter and / or protection. It is also an offence to sell, offer or expose for sale a GCN. GCN and Common toad are listed in section 7 of the Environment (Wales) Act 2016 which makes them key species to sustain and improve biodiversity.

The closest record for GCN available via the data search is approximately 860m to the south of site. The record is from 2017 for a field record which is assumed to be a live sighting of a GCN. There are numerous other records around Solutia to the south of site. Two GCN records were returned to the east of the development site, outside of the 2km buffer zone.

There were no ponds visible within the development site. A ditch is present along the eastern boundary of the site. The closest pond visible on OS maps is approximately 150m away to the west of the development site. Another pond appears to be present 280m to the north east of site. The potential presence of other waterbodies within the local area, such as garden ponds, cannot be ruled out.

The majority of the development site appears suitable for use by GCN during their terrestrial life stages. The scrub, tall ruderal vegetation, marshy grassland and tree lines could all be used by GCN for commuting and foraging purposes. The dense scrub and roots of the tree line could possibly be used for hibernation purposes also.

Direct habitat connectivity between the proposed development site and suitable aquatic features for GCN is limited. The pond to the west is separated by open playing fields which are regular mown. The pond to the north is separated by housing and the Velodrome building, car parks and access paths.

The potential presence of GCN within the development site footprint is considered unlikely. Consideration to further survey work has been given and is not considered pragmatic given the likely absence of the species in the area. Instead, a precautionary approach to site

clearance will be adopted. **A herptile mitigation strategy will be required which includes two-stage vegetation cutting, ecological supervision and measures to be implemented should GCN be found during vegetation clearance work.**

3.3 Dormouse

The dormouse (*Muscardinus avellanarius)* is a European protected species and is protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Dormouse is listed on schedule 5 of The Wildlife & Countryside Act 1981 which protects them from intentional or reckless disturbance or obstruction when using a structure or place for shelter and / or protection. It is also an offence to sell, offer or expose for sale a native dormouse. Dormouse is listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

There were no records of Dormouse within 2km of the site returned within the data search.

The majority of the habitats within the development site are considered sub-optimal for use by Dormouse. The marshy grassland and tall ruderal vegetation cover the majority of the site and do not provide suitable commuting and foraging habitats for Dormouse who prefer more arboreal habitats. The tree line and scrub around the periphery of the site are more suitable for Dormouse use and there is some habitat connectivity to scrub, tree lines and hedgerows to the south of site. Habitat connectivity to the north, east and west is limited due to residential and industrial estate development.

The suitable habitat within the development site is fairly small in overall size and limited to the periphery. The Dormouse Conservation Handbook estimates that 2.2ha of suitable habitat are required to support a pair of Dormouse. While the habitat within the site boundary is considered suitable for use by Dormouse, given its overall small size, the presence of Dormouse within the site boundary is considered unlikely. **No further survey recommendations are made for this species.**

3.4 Bats

All British bats are a European protected species and are protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,

- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Schedule 5 of The Wildlife and Countryside Act (1981) also protects all species of British bat and their roosting locations. British bats are protected from intentional or reckless disturbance and or obstruction of their roosting places. Barbastelle, Bechstein, Noctule, Brown long-eared, Common pipistrelle, Soprano pipistrelle, Greater horseshoe and Lesser horseshoe are also listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

There are numerous bat roost records within the 2km data search area. The closest bat record to site is for live Common Pipistrelle approximately 410m away to the north east. An unidentified bat record is available approximately 570m away to the east. The record is for a bat found during works in a warehouse building. A Natterer's and Common Pipistrelle bat were found in a property approximately 1.25km to the south of site. There are commuting and foraging records for Natterers, Whiskered, Brandts, Common Pipistrelle and Soprano Pipistrelle bats in the wider landscape.

Tree Assessment

Trees within the site were subject to a cursory ground level assessment for the potential presence for roosting bats. The optimum time for such surveys is during the winter months when trees have lost their foliage. Should any tree be considered likely to have above low potential for roosting bat use, further detailed survey work will be recommended following the ground based visual assessment methodology provided in the BCT Survey Guidelines 2023 (4th Ed).

Many of the trees were not accessible due to the dense scrub understorey around the tree lines and across the site. Also, the trees were all in leaf making it difficult to see the upper canopy, trunk and limbs and potential roosting features that bats could use. A number of mature trees are present around the periphery of the development site. Many of the trees are of an age and structure where potential roosting features for bats could be present. Ash die back was evident in many of the trees and a small number of large oak trees had occasional damaged branches visible.

A tree survey of the development site has been undertaken by Treescene Arboriculutral Consultants. A number of trees are proposed for removal due to their poor health and structure. The majority of tree removal is proposed along the south western boundary of the site and are mostly young multi stemmed crack willow trees

In the first instance all tree removal should be avoided where possible and a precautionary approach to any new lighting and increased noise disturbance should be adopted. **A Ground**

Based Visual Roost Assessment (GBVRA) of all trees proposed for removal is recommended. Any tree categorised as having PRF-i bat roosting potential may require further bat survey work.

Habitat Assessment

The habitat within the site is considered to have **moderate** suitability for use by commuting and foraging bats. The site is not overly large but trees lines and ditches do border the site along the north east and western boundaries. The site sits adjacent to open playing fields to the south and west. Solutia Site SINC is located approximately 10m to the south of the site and extends much further south providing good habitat connectivity southwards to the wider landscape.

Whilst the habitats within the site boundary i.e grassland, scrub and short perennial vegetation, are like to provide foraging habitat to a small number of bats, the site provides a dark vegetated parcel of land which bats may use to commute through from roost sites. The current site layout does appear to retain the tree lines to the north and west of site but a number of trees to the east of site will be lost. **Bat activity transect surveys are recommended for the site to gain an understanding of the sites usage by bat species.** However, consultation with the LPA ecologist is recommended in the first instance to ascertain what level of survey work if any they would request to support a planning application for site**.**

A wildlife friendly lighting strategy will be required as part of the development proposals. It will be important to design the scheme to prevent light spill onto retained vegetation around the periphery of the site. Recent Bat Conservation Trust (BCT) guidance would advise desired illuminance levels for a feature to be considered dark to be at or below 0.2 lux on a horizontal plane and 0.4 lux on a vertical plane.

3.5 Otters

The Otter (*Lutra lutra)* is a European protected species and is protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Otter are listed on schedule 5 of The Wildlife & Countryside Act 1981 which protects them from intentional or reckless disturbance or obstruction when using a structure or place for shelter and / or protection. It is also an offence to sell, offer or expose for sale an otter. Otter

is listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

The closest otter record to the proposed development site is for a road traffic fatality approximately 420m away to the south east along Nash Road. Another record for a dead otter is present approximately 470m to the west of site. A number of otter records associated with the A48 to the north west and A4810 to the north east are also available. Only three records associated with the River Usk to the west were available via the data search.

Otters tend to prefer secluded locations for their holts to help prevent them being disturbed by other animals. It is accepted that otters can travel long distances from river corridors to find acceptable holt sites.

While there doesn't appear to be any direct linkages between the development site and main river or streams, ditches are present around the periphery of the site. There is habitat connectivity to Great Traston Meadows Nature Reserve approximately 1.3km to the south of site which appears to hold a network of reens and ditches. The dense vegetation within the site boundary could provide suitable cover for otter to use. The site is fenced and therefore doesn't appear to be regularly disturbed.

The land within the site boundary is overgrown but not particularly dense, whilst it provides visual cover it doesn't appear to provide physical protection. The site is considered sub optimal for otter holt or resting sites. However, the potential presence of otter within the site boundary cannot be ruled out. Further survey work for otter is not recommended, however **a visual inspection of scrub, trees and tall ruderal vegetation immediately prior to any vegetation clearance is recommended.**

3.6 Badger

Badgers (*Meles meles)* are protected under the Protection of Badgers Act 1992. In summary they are protected from:

- Taking, killing or injuring;
- Cruelty;
- Interfering with a badger sett;
- The selling and possession of badgers;
- Marking or ringing.

Badgers are also listed on schedule 6 of the Wildlife and Countryside Act 1981 as amended.

Badgers tend to have a variety of setts with different uses and functions within the territory for the family unit. In general there is usually a main sett which the family will use the most. There are then annex, subsidiary and or outlier setts which depending on family structures and environmental pressures may be used at different times of the year. As female badgers tend to have their cubs over winter the disturbance and damage of badger setts is prohibited between December and June inclusive. NRW are the licensing body for any actions which may contravene the above legislation.

Badgers favour a dry sloping site for digging their setts preferably within woodland or even under a large hedgerow bank. Badgers are creatures of habit and tend to follow regular pathways between their setts and foraging grounds.

There are limited record for badger available within 2km of the development site. The closest badger record is approximately 970m to the south east along Nash Road. The record is for a road traffic fatality. Two other records for badger are available and they are both associated Nash Road further southwards.

No evidence of the presence of badger was found during the site survey. No evidence of mammal runs, latrines, snuffle holes or badger hair were found within the site. The presence of a badger sett within or adjacent to the site is considered to be highly unlikely. However, they could use the site at least on occasion for foraging and commuting purposes. As a precaution, **a visual inspection of scrub immediately prior to any vegetation clearance is recommended.**

3.7 Birds

All breeding birds are protected under schedule 1 of the Wildlife and Countryside Act (1981) as amended. Under this Act it is an offence to:

- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built.
- Intentionally take or destroy the egg of any wild bird.

Enhanced protection is afforded to species listed on Schedule 1 of the Act, this additional protection makes it an offence to:

- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

The tree lines and scrub around the periphery of the site are considered to be suitable for nesting use by birds. The remaining habitats within the site boundary are suitable foraging habitat for local bird species. **A precautionary approach to the removal of habitat with bird**

nesting potential will be required. Compensation measures for the loss of bird foraging and nesting habitat will be required.

3.8 Reptiles and Amphibians

Reptiles such as the Slow-worm, Common lizard, Adder and Grass snake are protected under the Wildlife and Countryside Act 1981 (as amended). They are protected from killing, injuring and sale. They are protected from killing, injuring and sale. They are also listed in section 6 of The Environment (Wales) Act 2016.

The four widespread species of amphibian i.e. the Smooth and Palmate newts, Common frog and Common toad, are protected under the Wildlife and Countryside Act 1981 (as amended) by Section 9(5) of the Wildlife and Countryside Act 1981. This section prohibits sale of these species. Common toad is listed in section 6 of The Environment (Wales) Act 2016.

There are no records within 500m of the proposed development site which is considered likely to indicate under recording rather than an absence of such species. The closest common amphibian records available via the data search are for Palmate Newt approximately 560m to the north east of site. The records are separated from site by the A48 road. Common Frog and Common Toad records are available approximately 1km to the south of site. GCN records are discussed within Section 3.2 of this report.

The closest reptile records available via the data search are for Slow Worm which appear to be within the site boundary. The notes associated with the record state adult Slow from were found during a reptile survey in 2020 at Traston Lane, Newport. The record is given to a six figure grid reference.

Reptiles prefer a mosaic of habitats with diverse vegetation structure creating open areas and nearby cover to provide protection from predators and the elements. Common amphibian species require still pools of water for breeding purposes and damp conditions with foraging habitat during their terrestrial life stages.

There are no waterbodies within the site itself but ponds are present within the area with ponds present to the west and north of the site. Ponds within residential gardens are also potentially present and cannot be ruled out. A ditch is present along the eastern boundary of the site and OS maps indicate the presence of ditches along the north and western boundaries. The site is unsuitable for breeding amphibians due to there being no permanent waterbodies within the site itself. However, it is likely used by common amphibian species during terrestrial life stages.

The transitional structure of the vegetation within the development site is suitable for reptile use. The variety of taller and shorter vegetation is suitable for commuting, foraging

and basking use by reptiles. The dense scrub and tree roots are suitable for reptile hibernation use.

Consideration to the need for reptile surveys has been given. It may be possible to assume the presence of reptiles within the site boundary based on habitat suitability and the previous Slow Worm records from 2020. In order to assume the presence of reptiles within the site boundary a suitable site layout will be required that retains a portion of the development site unaffected by construction works. The development proposals must provide habitat connectivity across the development site and sufficient space retained within the site boundary for reptiles to colonise post development.

Given the likely expected difficulties in achieving a suitable development layout and ensuring enough space is retained unaffected by development proposals, it is suggested that reptile surveys are undertaken. **Reptile surveys are recommended to support any future planning application for the proposed development site boundary if retention of a portion of the site cannot be achieved.**

3.9 Other Mammals

Other notable mammal species listed under Section 7 of the Environment (Wales) Act 2016 which had records returned during the data search include hedgehog.

Hedgehog - a number of hedgehog records were returned in the data search within the local area. A cluster of records are available for Nash Road to the east, with the closest record being approximately 185m away. This species is considered likely to be present within the site, at least on an occasional basis, for foraging and overwintering. The dense scrub, tall ruderal vegetation and tree lines provide a variety of suitable areas for hedgehogs to reside and forage. Hedgehog is considered to be a species of principal importance, for the purpose of maintaining and enhancing biodiversity in relation to Wales. As such, consideration must be given to this species in any plans proposed for the site.

3.10 Invertebrates

Notable invertebrate species records, those species that are listed under Section 7 of the Environment (Wales) Act 2016, returned from the data search within a 2km buffer of the site include: Cinnabar, Shrill Carder Bee (Bombus sylvarum), Brown-Banded Carder bee (*Bombus humilis*), Black-tailed Skimmer (*Orthetrum cancellatum*), Holly Blue (*Celastrina argiolus britanna*), Slender Ground-hopper (*Tetrix subulata*), Mottled Rustic (*Caradrina morpheus*), Shaded Broad-bar (*Scotopteryx chenopodiata*), Dot Moth (*Melanchra persicariae*), Dark-barred Twin-spot Carpet (*Xanthorhoe ferrugata*) and Rustic (*Hoplodrina blanda*).

The site comprises of a small amount of marshy grassland along with tall ruderal vegetation, scrub and tree lines. Mosaic habitats are important for invertebrates as many require access

to two or more habitats to complete their lifecycle. The variety of habitats present therefore allows the site to support a wide range of invertebrate groups. Invertebrates noted during the site survey include Field Grasshopper (*Chorthippus brunneus*), Speckled Wood (*Pararge aegeria*) and Common Carder Bee (*Bombus pascuorum*).

The habitats of the site and immediately adjacent habitats were assessed for their potential to support invertebrates using the Invertebrate Habitat Potential Assessment (IHPA) as found in CIEEM in practice Issue 112, June 2021. See Table 1 for results. The IHPA protocol has been produced to allow ecologists without specialised entomological expertise to identify key habitats and features likely to support important invertebrate assemblages. Full details of habitat types can be found in Appendix 5.

Table 1. Invertebrate Habitat Potential Assessment

Habitat Element	**Grade**
Decaying Wood – H1	E - Negligible/Absent
Rotational Management – H2	E - Negligible/Absent
Nectar Resources – H3	D - Minor
Wet Substrates – H4	D - Minor
Other Water Habitats – H5	D - Minor
Structural Patchwork – H6	C- Moderate
Still Air (S) – H7	D - Minor
Still Air (H) – H8	D - Minor
Connectivity – H9	D - Minor
Ecoclines – H10	D - Minor
Bare Earth – H11	E - Negligible/Absent

Based on the Invertebrate Habitat Potential Assessment (IHPA) the site, in its current state, is considered to have potential to support common and widespread species of invertebrate only. **No further survey work is recommended for invertebrates** but steps should be incorporated into the new site design to create and enhance habitats that encourage invertebrate populations.

4. Recommendations and Mitigation

Planning consent is sought for the creation of 26 residential units and an access road from Traston Road to serve the development site. To facilitate this development it is likely that the majority of habitats within the site boundary will require removal. It is understood a previous outline planning consent has been granted for the development site. However, due to the passage of time and constraints of the site, a new planning consent is being sought.

The habitats within the development site boundary are transitional at present. The site appears to have been left unmanaged for some time.

Broad recommendations are made below to help inform the design process. **Once the development proposals are progressed and finalised and the considerations to development within the site are addressed, further ecological input may be required**. Our recommendations are:

- **A root protection zone (RPZ) must be implemented** around any retained trees which lie adjacent to or within the boundary of the proposed development site. British Standard BS 5837, Trees *in relation to design, demolition and construction - Recommendations* will be followed. Measures will include clear marking of the RPZ to guarantee no machinery is used or digging carried out in that area. This will ensure that there is no detrimental impact to the trees and the flora or fauna it supports.

- **A pre-inspection check of all vegetation within the site is recommended** immediately prior to vegetation clearance works for the presence or field signs for badger and otter. Whilst the presence of badger and otter within the site boundary is considered unlikely, it cannot be completely ruled out. A pre inspection check of vegetation immediately prior to clearance work will check for any mammals or evidence of mammal setts or resting places.

- **Bat activity transect survey** work of the development site is recommended. Bat transect surveys must follow the guidance given within the BCT Good Practice Guidelines 2023 (4th Edition). Transect surveys of moderate suitability habitat will be required once per month April to October inclusive to identify the extent of potential site usage by bat species.

- A **reptile refugia survey** of the site will be required to establish the presence or likely absence of reptiles and other amphibian species within the site boundary. Artificial refugia must be set out within suitable habitat in the site boundary following advice given in Froglife Advice Sheet 10.

- **Pollution measures must be put in place to avoid any impacts to adjacent watercourses and ditches.** All machinery used during any on-site works must be stored in an agreed

location away from the west and north of the site. Spill kits must be kept on site at all times to deal with any fuel, oil or material spills. All machinery will be kept in a bunded, water-tight storage compound to prevent spills. The storage compound must be at least 10 m away from any surrounding watercourse and away from bankings that slope towards the watercourses to the west and north of the site.

- A **detailed ground based visual assessment of all trees** proposed for removal to establish their likely use by roosting bats will be required for any tree to be removed. Should any tree be found to have moderate or above potential for use by roosting bats, further detailed surveys such as aerial inspection surveys, to fully inspect any suitable feature will be required. The optimal survey window for bat tree assessment work is the winter when the trees are devoid of leaves.

- The scrub and trees within the site have the potential for use by **nesting birds**. Any vegetation removal must be completed outside of the bird nesting season of March to August inclusive. If this is not achievable an ecologist must inspect any vegetation with the potential for birds to be present for active birds' nests prior to removal works beginning. If an active nest is identified a buffer zone of at least 5m around the nest must be observed until the chicks have fledged. Only then can the vegetation be removed. Greater buffer zones around nests may be required depending on the species and habitat the nest is within.

- Ideally all excavations within the site will be securely covered over if left unattended. Any excavations that have a depth in excess of 0.5m and that are left open overnight will have a means of escape left for any mammals (e.g. hedgehog) that may fall into them. A wooden board or equivalent will be left from the bottom to the top of the hole at an angle no steeper than 45^{o}. This will allow any mammal to escape and avoid increased stress from being trapped.

- **Careful consideration must be given to the use of lighting within the development site,** as this can adversely affect the activity of a variety of fauna, particularly foraging bats, nesting birds, badger, otter and dormice. Light spillage into adjacent semi-natural habitats must be avoided and brightness kept to the lowest permissible level in the areas adjacent to such habitats. All lighting must meet recommendations in the BCT Guidance Note 08/23 Bats and Artificial Lighting at Night. https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/.

5. Biodiversity Enhancements & Green Infrastructure

The Environment Act (Wales) 2016 places a duty on competent authorities and councils to conserve and enhance biodiversity. Chapter 6 of Planning Policy Wales (version 12), paragraph 6.2.5 requires Green Infrastructure considerations to be included with all planning applications. Development proposals must detail how green infrastructure considerations which are proportionate to the scale and nature of the plans are being provided.

Green infrastructure currently within the development site takes the form of marshy grassland, tall ruderal vegetation, scrub and tree lines. A small ditch was noted along the eastern boundary of the site. OS maps indicate the presence of ditches along the northern and western boundary of the site. These features provide important connectivity to the wider landscape.

Direct habitat connectivity is moderate. The site sits adjacent to playing fields to the west. Some small pockets of soft landscaping are present northwards around the Velodrome. Traston Road runs along the south eastern boundary of the site but open grassland, scrub, tree lines and hedgerows extend further southwards into the wider landscape

General considerations to green infrastructure and biodiversity enhancements to be considered as part for the development include:

- Paragraph 6.4.42 of Planning Policy Wales (version 12) requires that at least three trees of a similar type and compensatory size are planted for every tree lost. The site layout should avoid tree loss where possible. If loss is unavoidable, space within the site boundary and development plans to allow a suitable amount of compensatory planting is required.

- Creating habitat connectivity around the development site would be a positive step for biodiversity. Pulling construction boundaries away from the edge of the development site boundary and providing green areas around the periphery of the site that are managed to benefit wildlife can help wildlife continue to commute across the site.

- The use of soft landscaping to strengthen boundary features would be a welcome enhancement to the site. Tree and hedgerow planting along with long term management would help to create screening around individual units for privacy and also integrate the development into the landscape. To be considered enhancement features, tree and hedgerow planting must be above that required as habitat compensation for direct habitat loss.

- The use of native species within the soft landscaping works on the site should be sought. Suitable long term management of soft landscaping also helps ensure spaces are useful to wildlife. Management measures will need long term funding and must reflect the different habits to be retained and created within the development site.

The below bullet points are some simple measures that could be achieved to enhance the biodiversity of the site:

- The use of integrated bat and bird box within any new buildings created on site is recommended. Integrated boxes must be built into the block work of the building and placed as high as possible on a suitable elevation, no lower than eaves level. It is recommended that at least 50% of new buildings should contain one bat and or bird box.

- All fencing across the site must be hedgehog friendly in design. A friendly design is considered to allow passage of small animals across the site. Close board or mesh fencing should provide either a continuous gap between the bottom of the fence and ground of approximately 13cm or 13cm by 13cm gaps cut every 3m along fencing.

- A reptile hibernacula can be created within the grounds of the development site using rubble from on site clearance works. The hibernacula must at least measure 0.5m in depth, 2m wide and 2m long each. It will be made by creating layers of wood, brash, rubble and soil. The hibernacula will create a mound approximately 0.3m above ground level which will be covered over with soil and seeded using a native seed mix.

- A bug hotel could be created within the development, making use of wooden pallets or reclaimed materials. Twig piles, bamboo canes, pine cones and leaves could be placed within sections of the pallet along with old roofing slates, terracotta pot pieces and logs with holes drilled into them. All providing some dryer areas and other damp sections to attract a wide range of invertebrate species. Pollinator friendly planting will also encourage a range of invertebrate species within the site. Perennial meadow planting containing a wide range of native species will allow flowering year on year.

- The creation of at least one butterfly bank within the grounds of the site would be welcomed. A butterfly bank creates a range of micro climates and habitats for use by invertebrates. In simplified terms, a butterfly bank requires a mound of poor quality soil to be created ideally 30m long and ‘C’ shaped. At the base of the bank a gravel substrate should be spread a few metres in width. The mound can then be seeded with a native seed mix and subject to low intensity cut and collect mowing.

Bibliography

- Treescene Arboricultural Consultants (6th August 2024) ' *Tree Survey at Traston Lane, Newport*'

Appendix 1 – Plant Species Recorded

Common Name	*Scientific Name*
Trees & Shrubs	
elm sp.	*Ulmus sp*
ash	*Fraxinus excelsior*
butterfly bush	*Buddleja davidii*
sycamore	*Acer pseudoplatanus*
willow sp.	*Salix sp.*
dogwood	*Cornus sp*
hawthorn	*Crataegus monogyna*
blackthorn	*Prunus spinosa*
bramble	*Rubus fruticosus*
English oak	*Quercus robur*
dog rose	*Rosa canina*
Herbaceous Plants	
common nettle	*Urtica dioica*
bird's foot trefoil	*Lotus corniculatus*
common ragwort	*Senecio jacobaea*
creeping buttercup	*Ranunculus repens*
creeping thistle	*Cirsium arvense*
bulrush	*Tyhpa angustifolia*
phragmites sp	*Phragmites sp*
ribwort plantain	*Plantago lanceolata*
bristly ox-tongue	*Helminthotheca echioide*
fox sedge	*Cyperaceae vulpina*
vetch sp	*Vicia sp*

Common Name	*Scientific Name*
common knapweed	*Centaurea nigra*
teasel	*Dipsacus fullonum*
hemp agrimony	*Eupatorium cannabinum*
smooth sow thistle	*Sonchus oleraceus*
purple loosestrife	*Lythrum salicaria*
hedge bindweed	*Calystegia sepium*
hedge woundwort	*Stachys sylvatica*
herb-robert	*Geranium robertianum*
hogweed	*Heracleum sphondylium*
compact rush	*Juncus conglomeratus*
fleabane	*Pulicaria dysenterica*
meadow buttercup	*Ranunculus acris*
mint sp	*Mentha sp*
pendulous sedge	*Carex pendula*
smooth tare	*Vicia tetrasperma*
rosebay willowherb	*Chamaenerion angustifolium*
great willowherb	*Epilobium hirsutum*
bittersweet	*Solanum dulcamara*
curled dock	*Rumex crispus*
Grasses, Sedges & Rushes	
cock's-foot	*Dactylis glomerata*
Yorkshire fog	*Holcus lanatus*
Timothy	*Phelum pratense*
common bent	*Agrostis capillaris*

Appendix 2 – Site Photographs

Site looking south east

Site looking north west

Scrub to south east of site

Tree line along western boundary looking northwards

Tree line along eastern boundary looking northwards

Tree line along northern boundary of site

Tall ruderal vegetation to north east of site

Tall ruderal vegetation to north east of site

Site looking south east

Example view of tall ruderal and grassland interface

Ditch along eastern boundary of site

Appendix 3– Site Habitat Map

TRASTON ROAD, NEWPORT

Habitat Map

September 2024

Appendix 4- Aerial View of Site Location

Appendix 5 – Invertebrate Habitat Potential Assessment

Table 1. Summary of the 11 habitat elements assessed by IHP survey.

Habitat element	No.	Comments
Decaying Wood	HE1	In all its forms; from decaying wood on/in large trees to woodland floor debris
Rotational Management	HE2	Planned or serendipitous; and whether for nature conservation or other purposes
Nectar Resources	HE3	As a proxy for nectar- and pollen resources, as assessment of pollen resources is impracticable on a walk-through survey
Wet Substrates	HE4	Including marginal, marshy, muddy and seasonally inundated habitats, as well as flushes
Open Water Habitats	HE5	The open water element of rivers, lakes, ponds, streams, ditches, etc
Structural Patchwork	HE6	Habitat mosaics, including, but by no means restricted to open mosaic habitats on previously developed land
Still Air (S)	HE7	Suntraps and still-air microclimates in open situations; the term 'still air' is used in preference to 'wind breaks' as many rigid wind breaks are likely to produce turbulent air in their lee
Still Air (H)	HE8	Humid still-air microclimates in sheltered and shaded situations
Connectivity	HE9	Landscape-scale connectivity between the site and external habitats
Ecoclines	HE10	A graded transition between two or more broad habitats
Bare Earth	HE11	Unshaded bare or sparsely vegetated well-drained substrate, regardless of soil type

Appendix 6 - Legislation

The Habitats Directive (Directive 92/43/EEC) aims to '*contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States*'. The Directive requires the establishment and conservation of a network of sites within each member state which protect the rarest flora and fauna found across Europe. A number of species and habitats are listed in Annex 2 of the directive for which areas can be designated as a SAC. The aims of the Habitats Directive are transposed into British Law through the Conservation of Habitats and Species Regulations 2017.

The Wildlife and Countryside Act (1981) as amended provide the legislation framework and protection for SSSI. A SSSI is designated by a statutory nature conservation body such as Natural Resources Wales (NRW) for its make up of flora, fauna, geological and / or physiographical features. Each SSSI should have a citation which describes the site and its special features.

The Environment (Wales) Act 2016 is a wide reaching piece of legislation which seeks help improve the management of Wales' natural resources into the future. The Act sets out a Wales wide approach to planning and managing its natural resources at a national and local level in a sustainable manner. One main requirement for all public bodies, such as local councils, is to maintain and enhance biodiversity where possible within their duties.

The Well-Being of Future Generations (Wales) Act 2015 places a duty upon public bodies to produce well-being objectives that contribute to achieving a set of overarching well-being goals. The Resilient Wales goal is the key goal that biodiversity and geodiversity conservation, as part of the planning process, will contribute towards delivering.