

Reptile Survey Report



Project: Traston Road, Newport

Instructed by: Bron Afon

Reported by: Ecological Services Ltd
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1. Introduction

Planning consent is being sought for the creation of a residential development within the site boundary. Development proposals seek to create 26 residential units with an access 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. A Preliminary Ecological Assessment (PEA) of the site was undertaken by Ecological Services Ltd on the 9th September 2024. The data search undertaken to inform the PEA report found records of slow worm from 2020 within the site boundary. The mosaic of habitats within the site boundary are suitable for reptile use and as such a reptile refugia survey of the site was recommended.

A Reptile Refugia Survey was undertaken by Ecological Services during September 2025 which found no evidence of reptiles within the site boundary.

1.1 Site Description

The site is located within Traston, a residential suburb of Newport. The site is generally flat and currently accessed 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 line 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 an area of scrub, open fields and tree lines which extend further south into the wider landscape.

1.2 Survey Constraints

Access was gained across all areas of the proposed development site. The reptile survey was carried out in September which is within the optimum time frame for such surveys. The weather during September 2025 initially started off mild and wet with temperatures dipping to the end of the month due to clear skies.

Each survey visit was completed during suitable weather temperatures of 9°C and above and in favourable weather conditions when it was expected that reptiles would be present.

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.

All survey work is undertaken following guidelines in the Froglife Advice Sheet 10.

2. Reptile Survey

2.1 Legislation

Reptiles such as Slow Worm (*Anguis fragilis*), Common Lizard (*Zootoca vivipara*), Adder (*Vipera berus*) and Grass Snake (*Natrix helvetica*) are protected under the Wildlife and Countryside Act 1981 (as amended) from killing injury and sale. All four common reptiles are also listed as 'Section 7' species in Wales. In Wales Sand Lizard (*Lacerta agilis*), Smooth Snake (*Coronella austriaca*), Adder, Grass Snake, Slow Worm and Common Lizard are listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

2.2 Survey Methodology

A standard approach to presence/absence reptile surveys is to complete a minimum of seven site visits in suitable weather conditions and check artificial reptile refugia spread out across the survey site. Survey refugia for reptiles can be made from a variety of materials but the most common material used is roofing felt cut into squares mats measuring at least 0.5m by 0.5m.

Suitable weather conditions for reptile surveys are dry and cloudy or just after a period of rain. The weather conditions during these times must be between 9°C and 19°C which is optimal for reptiles to use the tins as reptiles bask to gather heat from the sun and surrounding habitat or direct sun. Once animals are sufficiently warm they become very active and more difficult to observe during reptile surveys. Reptile surveys should ideally be completed in the early morning or late afternoon in Spring or Autumn.

40 reptile refugia were laid out across the proposed development site on the 7th September 2025. The refugia were placed across the site in areas thought suitable for use by reptiles such as the edge of different habitat types. The approximate location of the reptile mats can be found in Appendix 2.

The refugia were allowed to bed in for a minimum of 7 days. Seven survey visits were completed at site during suitable times of day when it is expected that reptiles would be present and also in favourable weather conditions. The survey started on the 15th September 2025 and finished on the 1st October 2025.

2.3 Survey Results

Full details of each survey visit and results are provided within Appendix 1. A map of approximate refugia locations is provided in Appendix 2. No reptiles were found during any survey visit to site.

3. Recommendations and Mitigation Measures

No evidence of reptile presence was found during reptile survey work. However the habitats on site are suitable for reptile use and there are records of Slow worm present from previous survey work completed at site. The vegetation on site is fairly overgrown and the presence of marshy grassland within the site indicates the ground is generally wet most of year. The wet ground conditions may reduce a population density as its generally cooler and more difficult for reptiles to warm up. A low density population can be difficult to detect during refugia surveys.

Given the suitability of the habitats present within the site boundary, habitat connectivity to the north west, south west and south east of site and historic records of Slow Worm within the site it is considered likely a small population of reptiles maybe present within the site boundary, even though none were recorded as part of the reptile survey. No further survey work for reptiles is recommended. However, **it is recommended that the presence of a low reptile population within the development area and suitable mitigation measures are incorporated into the site plans.**

Given the proposed site layout and engineering requirements the vast majority of the development site will be affected as part of the development proposals. A proposed site layout plan is provided within Appendix 3 which indicates the creation of a SUDS feature to the north west of the site. It has been agreed with the design team that works to create the SUDS feature will be undertaken first. Once the SUDS feature and associated landscaping are installed and established, the area will be fenced off and retained during the wider construction works. The established and securely fenced off SUDS feature will be used as a receptor site for any reptiles during wider construction works.

The below precautionary approach to site clearance will be adopted as part of any site clearance works:

SUDS Feature Creation

- Work to create the SUDS feature to the north west of the site will be undertaken first.
- A two stage vegetation cut will be undertaken between the months of April - September. The clearance work will be direction and encourage reptiles into the unaffected habitats to the south. Once the vegetation clearance work is completed secure fencing such as heras fencing will be erected around the edge of the work area to provide a clear boundary between the work area and wider land.

- Engineering work to create the SUDS Feature will be undertaken. Once completed, all landscape work required in the area will be installed. Ideally this work would be completed in April 2026.
- Once the vegetation clearance, engineering and landscape work has been completed and ecologist will inspect the area to ensure the required work and fencing has been correctly installed. Construction work on the wider development site will not commence until the grass seed mix has established and is at least 10cm in height.
- Once the vegetation has established within the SUDS feature area, the secure heras fencing will be amended to fence the area off during construction in the wider development area.
- Construction work on the wider development site can only commence when written confirmation from the supervising ecologist is provided to the site owner and contractors that the SUDS feature is suitable for reptile use and securely fenced off.

Wider Development Site

- Once the SUDS feature is completed and written confirmation from the supervising ecologist provided, work in the wider development. The SUDS feature will be known as the reptile receptor site.
- A two stage vegetation cut will be undertaken between the months of April - September. The clearance work will be direction and encourage reptiles into the reptile receptor site to the north of site. However consideration for nesting birds will need to be given to the timing of works.
- Ideally vegetation clearance would be undertaken in September to avoid the reptile hibernation and bird nesting season. If this is not possible. The first stage cut can be undertaken September to February inclusive. Once the first stage cut is finished and agreed, the second stage cut can commence April to September inclusive.
- The machinery to be used for cutting vegetation depends on the ground conditions and contractors. Owing to the small scale of the site ideally hand held trimmers and or brush cutters may be suitable and the tailings hand raked and removed from site.

Vegetation Removal Methodology

- The same cutting methodology detailed below will be used in all areas of the site.
- **First Stage Cut** - All vegetation including grasses and flowers are to be cut no shorter than 150mm. The cut material will be raked and removed to an undisturbed area of

the site. Once the cuttings have been collected and removed from site, the site must then be left for 24hrs.

- Any reptiles present should naturally move away of their own accord due to the disturbance from cutting. However if any reptiles or other fauna are encountered during this operation they will either be carefully collected and moved away onto the undisturbed areas of the site or allowed to do so of its own accord.
- **Second Stage Cut** - After 24 hours the grass should be cut to ground level to a maximum height of 50mm. Cutting will look to push any resident reptiles into adjacent habitats beyond the site boundary to the south and the arisings raked and removed to an undisturbed area of the site. Any reptiles or other fauna found will be treated as above.
- Any suitable refugia such as large fallen branches or building materials will be carefully lifted, inspected and removed under ecological supervision, for the presence of reptiles on or around this feature. Any which are found should be allowed to exit and disperse away from the site voluntarily, or should be carefully gathered up using gloved hands and taken for release in suitable habitat off the site.
- Once all vegetation has been cleared from within the site boundary, the construction site footprint must remain in a vegetation free state. This will help to reduce the likelihood of reptiles using the site while construction works are underway.

Habitat Enhancements

- 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 13 cm or 13 cm by 13 cm gaps cut every 3 m along fencing.
- A reptile hibernacula will be created within the grounds of the development site using rubble and brash from on site clearance works. The hibernacula must at least measure 0.5 m in depth, 2 m wide and 2 m long. It will be made by creating layers of wood, brash, rubble and soil. The hibernacula will create a mound approximately 0.3 m above ground level which will be covered over with soil and seeded using a native seed mix.
- At least 1 reptile refugia will be created along the north western boundary of the site in the reptile receptor area.

Reference List

- *'Preliminary Ecological Assessment - Traston Road, Newport'* dated October 2025 by Ecological Services Ltd
- Froglife Advice Sheet 10 *'REPTILE SURVEY - An introduction to planning, conducting and interpreting surveys for snake and lizard conservation'* dated November 1999

Appendix 1 - Reptile Survey Results

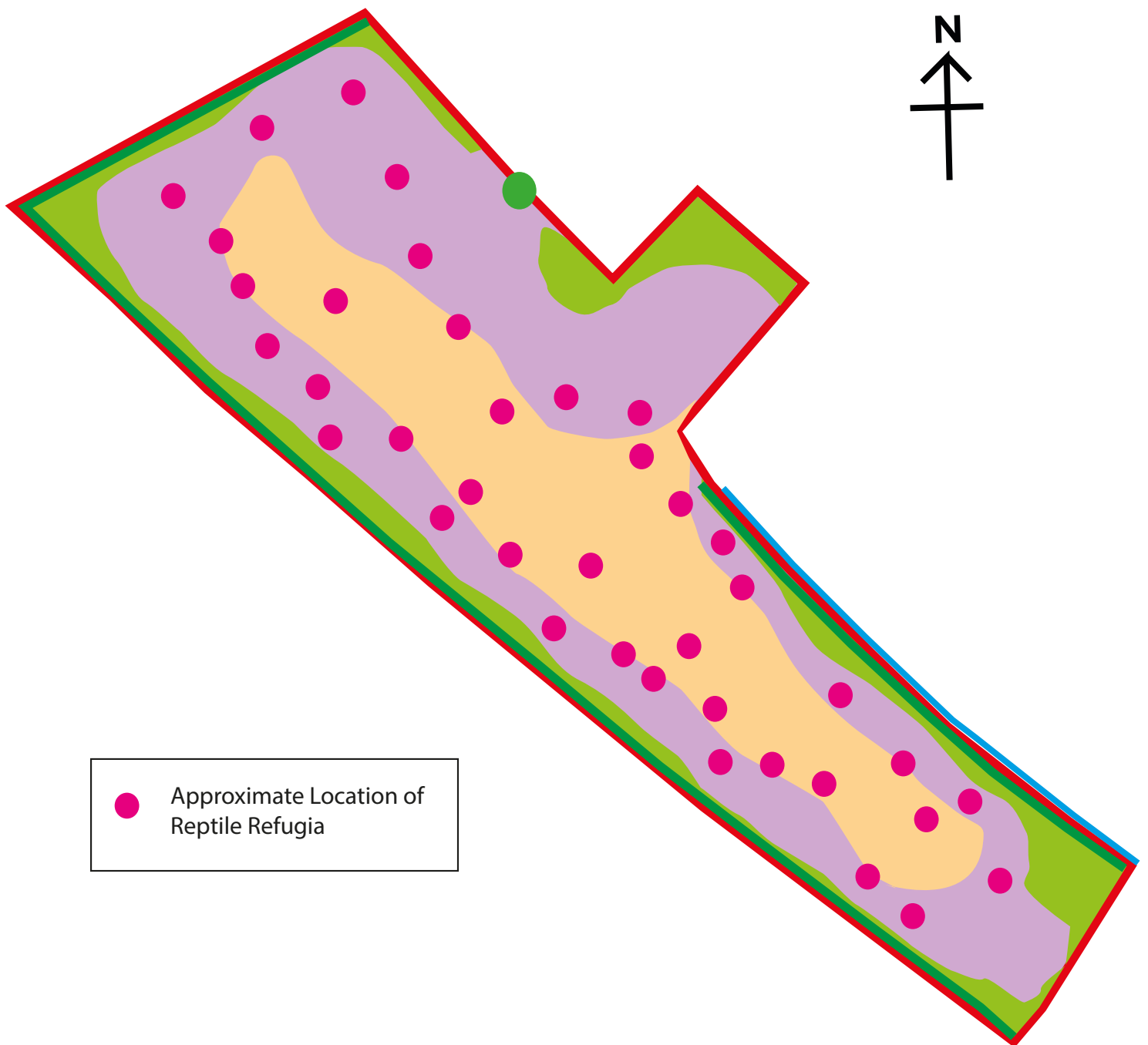
Date	Time	Conditions	Results	Comments
7/09/2025				40 Reptile refugia mats set out across the site
15/09/2025	11:30 - 12:00	17°C, dry and breezy after heavy rain	0	-
18/09/2025	10:30-11:00	14°C, dry but overcast	0	-
21/09/2025	10:30-11:00	14°C, dry but overcast, after a period of rain	0	-
23/09/2025	09:50 - 10:20	16°C, breezy, clear sky, dry	0	-
25/09/2025	12:30-13:00	18°C, breezy, clear sky, dry	0	-
29/09/2025	09:50 - 10:20	14°C, clear & sunny	0	-
01/10/2025	10:30-11:00	10°C, sunny and dry, slight breeze	0	-

Appendix 2 - Approximate Refugia Locations

TRASTON ROAD, NEWPORT

Reptile Refugia Survey

2025



Approximate Location of
Reptile Refugia

Appendix 3 - Proposed Site Layout

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EXISTING GRASSED AREA UPGRADED TO OFFER ADDITIONAL BI-DIVERSITY AND TO ASSISTANCE WITH SUDDS DESIGN.
POS ENHANCED WITH CIRCULAR SEAT AROUND SPECIMEN TREE AND UPLIGHTERS

KEY SCHEDULE

- DENOTES SITE APPLICATION BOUNDARY
- TYPE A: GARDEN FENCE DENOTES 1900MM HIGH TREATED CLOSE BOARDED FENCE
- TYPE C: RAILINGS DENOTES 900MM HIGH GALVANISED FLAT TOP RAILINGS
- TYPE D: REAR GARDEN WALLS DENOTES 1.8M HIGH FACING BRICKWORK BOUNDARY WALLS TO KEY POSITIONS
- TYPE E: RETAINING WALLS WITH FENCE DENOTES FACING BRICKWORK RETAINING WALLS (HEIGHT VARIES) WITH 1800MM TREATED CLOSE BOARDED FENCE ON TOP
- TYPE F: RETAINING WALLS DENOTES FACING BRICKWORK RETAINING WALLS - HEIGHT VARIES
- DENOTES AREA IN 'TOBERMORRE' PERMEABLE PAVING SYSTEM AS DENOTED - COLOUR: MULTI RED / BRND
- DENOTES 2.4M X 4.8M 'TOBERMORRE' PERMEABLE PAVING SYSTEM PARKING BAYS WITH 500MM X 100MM P.C. CONCRETE PATH EDGING TO DELINEATE BAYS
- DENOTES AREA OF NEW 2M WIDE TARMACADAM FOOTWAYS TO PERIMETER OF SITE
- DENOTES AREA OF NEW TARMACADAM ACCESS ROAD INTO SITE
- DENOTES AREAS OF 450 X 450MM P.C. CONC. PAVING SLABS TO FORM PATIO AREAS AND 900MM MIN FOOTPATHS TO TO CURTLAGE OF HOUSES AND 1200MM WIDE TO TO CURTLAGE OF FLATS
- DENOTES AREAS OF NORMAL PLANTING / LANDSCAPING AREAS - AS PER TREE / SPECIES MIX IN LANDSCAPING SCHEDULE
- DENOTES AREAS OF RAIN GARDENS TO ASSIST SUDDS DRAINAGE DESIGN & BI-DIVERSITY AS PER TREE / SPECIES MIX IN LANDSCAPING SCHEDULE
- DENOTES 1.8M HIGH - 900MM WIDE TIMBER GATE WITH A SECURITY LOCK. IN COMPLIANCE WITH BS5800 HOPE GATE TO BE SIMILAR HEIGHT TO ADJACENT WALLGATE IF APPLICABLE
- DENOTES NEW TREE PLANTING (REFER TO LANDSCAPE DRAWING FOR TYPES AND SCHEDULES)
- DENOTES 2.9M DIAMETER ROTARY DRYER SET IN CONCRETE - PROVIDING 4M MIN. OF LINE FOR 2 BED DWELLINGS, 6M MIN. FOR 3 BED DWELLINGS
- DENOTES PAVED CONCRETE HARDSTANDING FOR COMMUNAL BIN STORE HOSTING REFUSE BINS TO SUIT LA REQUIREMENTS
- DENOTES ROBUST TREATED TIMBER FRAMED SHED WITH 110/210 SHEPHERD OR SIMILAR TYPE STEEL FRAMED BEE SACKS, BOTH BOLTED TO 150MM THICK CONCRETE BASE - PROVIDING SPACE FOR 110/210 BICYCLES AND 1M² GARDEN STORE SPACE. PERMANENT LOCK TO BE PROVIDED TO SHED DOOR. CONFORMING TO BS 3621:2004.
- DENOTES POSITION OF B5 STOCK OR SIMILAR SWIFT BOX IN SMOOTH RED - TO BE INSTALLED AT MIN. 3M FROM EXTERNAL GROUND LEVEL
- DENOTES POSITION OF B5 STOCK BAT BRICK (TYPE A) OR SIMILAR - REFER TO INDIVIDUAL ELEVATIONS FOR EXACT LOCATION
- GREEN CORRIDORS TO REMAIN AND ENHANCED - PROVIDING GREEN INFRASTRUCTURE LINKS
- GREEN INFRASTRUCTURE LINKS BETWEEN PROPOSED SITE AND PERIMETER GREEN SPACES

ECOLOGY ENHANCEMENTS:

- 3M BUFFER AROUND EXISTING HEDGES.
- 25% OF DWELLINGS TO HAVE BIRD AND BAT BOXES.
- HEDGEHOG TUNNELS IN FENCES.
- AT LEAST 1 POND TO BE PROVIDED.
- BIO ENHANCEMENT HEMP BOUNDARY WALLS WITH ECOLOGICAL ENHANCEMENT GROWING PLANTS

PLOT SCHEDULE

2P 2B FLAT TYPE	10
4P 2B HOUSE TYPE	14
5P 3B HOUSE TYPE	2
TOTAL NUMBER OF UNITS	26

PARKING SCHEDULE

UNIT TYPE	No.	TOTAL SPACES
4 PERSON 2 BEDROOM HOUSE TYPE - (MIN 2 SPACES EACH)	14	28
2 PERSON 3 BEDROOM HOUSE TYPE - (MIN 3 SPACES EACH)	2	6
2 PERSON 1 BEDROOM FLAT TYPE - (MIN 1 SPACE EACH)	10	10
Sub Total		44
VISITORS (MIN 5%)		5
TOTAL		49

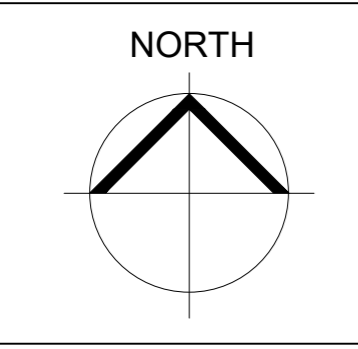
REFER TO CONSULTING TRANSPORT ASSESSMENT AND MATRIX FOR PARKING REDUCTION REGIME.

REFER TO CONSULTING ENGINEERING DRAWINGS FOR PLOT FINISHED FLOOR LEVELS AND DRAINAGE DETAILS.

REFER TO LANDSCAPE ARCHITECT'S DRAWINGS FOR DETAILS OF LANDSCAPING PROPOSALS.

--- DENOTES 2.4M X 4.8M PARKING BAY.
LTH DENOTES LIFE TIME HOME COMPLIANT PARKING SPACE.

GREEN INFRASTRUCTURE LINKS BETWEEN PROPOSED SITE AND PERIMETER GREEN SPACES



GREEN CORRIDORS TO REMAIN AND ENHANCED PROVIDING GREEN INFRASTRUCTURE LINKS

GREEN CORRIDORS TO REMAIN AND ENHANCED PROVIDING GREEN INFRASTRUCTURE LINKS

GREEN INFRASTRUCTURE LINKS BETWEEN PROPOSED SITE AND PERIMETER GREEN SPACES

BIN COLLECTION POINT FOR PLOTS 23-26

GREEN CORRIDORS TO REMAIN AND ENHANCED - PROVIDING GREEN INFRASTRUCTURE LINKS

NEW PUMPING STATION LOCATION TO ENGINEERS DESIGN.

NEW JUNCTION FORMED OFF TRASTON ROAD AND EXISTING PATHWAY ADJUSTED TO SUIT

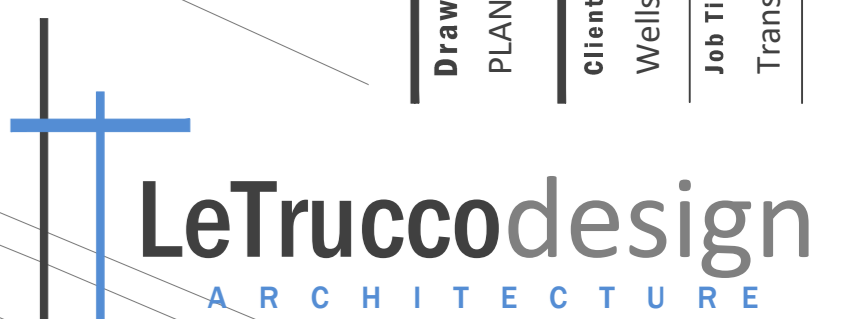
PROPOSED SITE LAYOUT
Scale 1:250
0 2.5 5 7.5 10 12.5 m
SCALE 1:250

Revisions

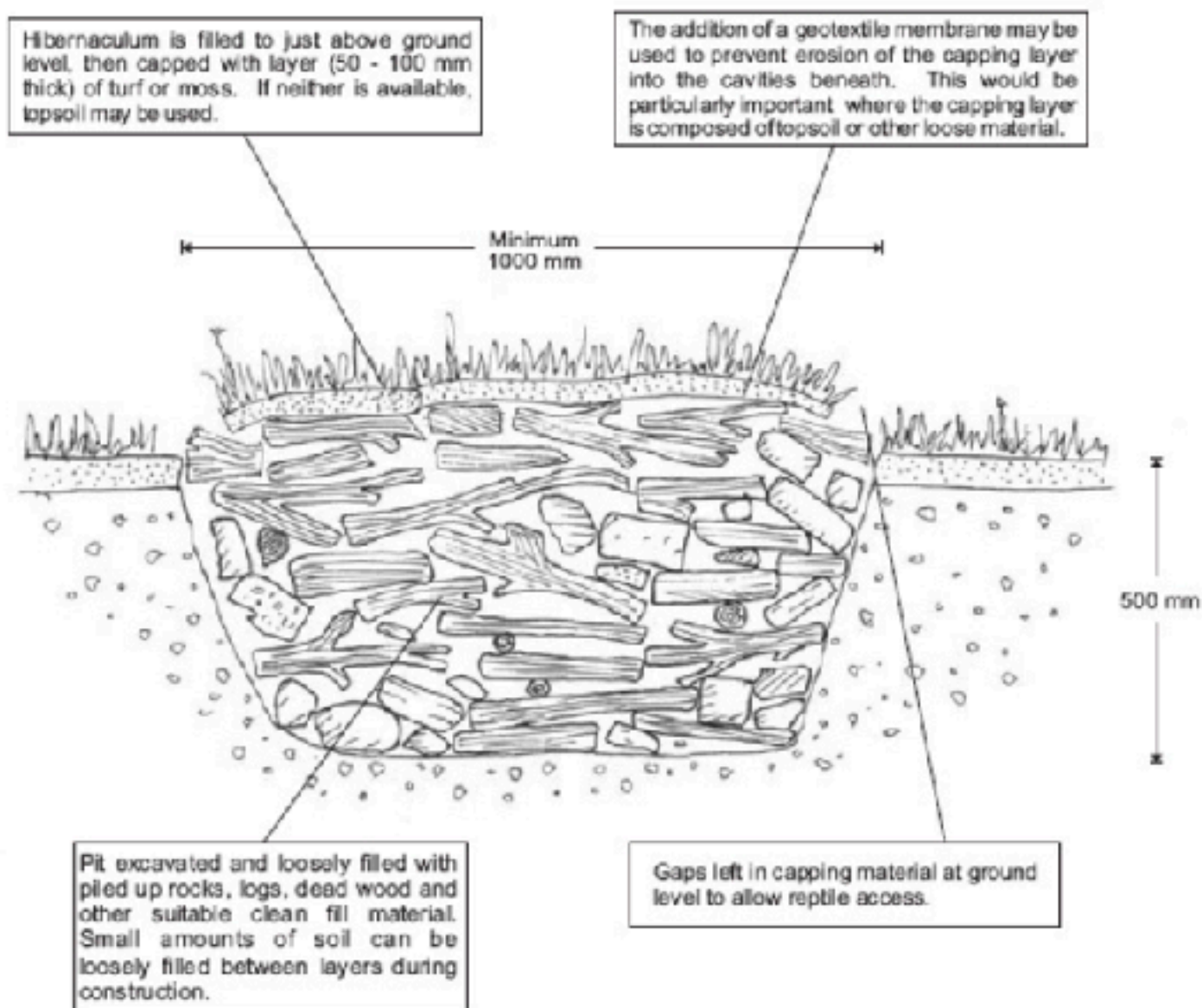
Rev	Description	Scale	Revision	Date	Checked
1	REVISED ADDRESS FOR WAG SUBSTATION, BINS AND CYCLE STORES ADDED TO PLAN	1:250 @ A0	B	Nov 23	KMIL

Client Wellspring / Bion Afon H.A.
Drawing No LT2435.01.01
Job Title Traston Lane, Newport
Proposed Site Layouts

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Appendix 4 - Reptile Hibernacula



Source: Highways Agency (2005) *Design Manual for Roads and Bridges: Volume 10 Section 4 Part 7 – Nature Conservation Advice in Relation to Roads and Reptiles*