

Site Assessment Survey

PROJECT TITLE: Ivy Cottage

SITE ADDRESS: Mitchell Troy Common Monmouthshire NP25 4JG

DATE: 21st December 2022

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It is proposed to install a Shepherd's Hut within the garden of Ivy Cottage, Mitchell Troy Common, Monmouthshire NP25 4JG (SO 49603 09235). The Shepherd's Hut measures 20ft x 7ft 7", will be located in the east of the garden and sit on a bed of gravel. It is proposed to install decking around the Shepherd's Hut to provide a flat area for outdoor seating. The Shepherd's Hut will be serviced with electricity via a cable and water piped from Ivy Cottage with foul water/sewage to be piped from the Shepherd's Hut to the septic tank also belonging to Ivy Cottage. The services will run in a westerly direction down the site towards Ivy Cottage and will cross over the stream where it is culverted underground in a large diameter pipe.

The site sits in a rural location to the south of the village of Mitchell Troy, Monmouthshire. The site accessed via Common Road which lies to the south west of the site. Immediately to the south of the site there is a residential dwelling, to the north, east and west there are fields. The wider landscape comprises open countryside comprising open fields, hedgerows and areas of woodland.

The site slopes downwards from east to west, with Ivy Cottage in the west of the site. A small stream dissects the garden, flowing from south to north and is culverted for part of its course through the garden. The site is bounded by a hedgerow to the east and south, there is a stone wall along the north boundary and a wooden fence at the western boundary.

Desktop Study

A data search with a 1km buffer around the proposed development was requested from SEWBRc. The data search (LERC Reference: 0223-684) took a 1km buffer around a central point of the proposed development site. Protected sites returned as part of the data search include:

- There are no statutory designated sites within 1km of the site.

- There are ten local non-statutory sites within 1km of the site, all are Sites of Importance for Nature Conservation (SINC). The nearest such site is Mitchell Troy Common Field SINC which lies approximately 69m away to the west of the site, the other side of Common Road.

Protected species records of note returned as part of the data search include:

- No species records are present within the proposed development site. The closest record is for bluebell, approximately 55m away to the west of the site.
- The next nearest record is for hedgehog approximately 169m to the east of the site.
- There are 8 records of dormouse within 500m of the site, the nearest being approximately 278m away to the north west of the site.

Given the localised and small scale nature of the development proposals it is highly unlikely any protected sites or species will be impacted as part of the proposed works.

Site Visit

Vicky Hannaford and Lee Gregory from Ecological Services attended the site on 6th December 2022 to assess the potential ecological impacts of the proposed works. December is outside the optimum time for Phase 1 habitat surveys; however, broad habitats were identifiable. Photographs of the site can be found in Appendix 1. A boundary of the survey area can be found in Appendix 2 of this report. The bright red line boundary indicates the proposed location of the Shepherd's Hut, the wider red boundary indicates the land within the client's ownership. The report concentrates on the land in close proximity to the proposed location of the Shepherd's Hut and the route of the required services.

The proposed development area comprises semi improved grassland, species include cock's foot, species of bent and Yorkshire fog, other floral species include frequent creeping buttercup, common sorrel and hogweed with occasional dock, spear thistle, a species of bedstraw and wood avens. Other species scattered across the grassland include foxglove, forget me not, pendulous sedge, ox eye daisy and primrose. Within the grassland area there is a small clump of shield fern and bracken with two saplings, one ash, one a species of willow. The species diversity likely indicates the area is not intensively managed.

The eastern boundary comprises a hedgerow which has been trimmed with some layering. Woody species include hazel, holly, hawthorn, field maple and possible spindle, with occasional honeysuckle. Ground flora species such as stinking iris, red campion, ivy ground ivy, herb Robert and greater celandine. The hedgerow/tree line continues along the south boundary, additional woody species include sycamore, ash and yew with wild

rose growing through. In the junction of the east and south boundary there is a small patch of bramble. The boundary along the north a post and wire fence in the north east with a five-bar gate into the adjacent field. A stone wall continues the boundary from the gate in a north westerly direction.

Below the proposed area allocated for the Shepherd's Hut the grassland is less diverse. There is a patch of bracken near the south boundary and a number of apple trees have also been planted.

A small stream flows across the garden from south to north, the stream is approximately 0.4m wide, the water flows within a shallow channel approximately 30cm deep. At the time of the survey the water was approximately 7.5cm deep. There is also a well in the garden which at the time of the survey was dry.

Birds recorded within the site during the visit include dunnock, blue tit, coal tit and blackbird. A chaffinch was observed flying over the site and a buzzard was heard calling.

Potential Development Impacts

- The proposed development will result in the loss of a small area of semi improved grassland.
- The diversity in structure of the habitats across the site have potential to support low numbers of reptiles. The clearance of vegetation to facilitate the proposed development has the potential to impact on reptiles.
- During construction works, the proposed works to enable piping the services to and from the Shepherds Hut have the potential to negatively impact on the small stream running from south to north across the stream.
- A suitable buffer between the Shepards Hut and any adjacent hedgerow will be required.
- Any additional external lighting, may impact on nocturnal species, such as bats and dormouse using the hedgerows and tree line for commuting.

The hedgerows and tree line around the development site do appear to have potential to support use by dormouse. However the development proposals do not include the loss of any hedgerows or trees within the site boundary. Therefore impacts to Dormouse are considered to be highly unlikely. If proposals change to include hedgerow impacts, further consideration to Dormouse will be required.

The proposed Shepards Hut does not require excavation for footings and will be placed on a gravel bed. Therefore providing the hut is located a suitable distance away from

hedgerows to allow maintenance access for hedgerow upkeep, there is unlikely to be any impact to hedgerows.

Conclusions and Recommendations

Given the potential impacts of the proposed development the below mitigation measures are proposed:

- **A reptile mitigation strategy**, which is agreed with the LPA ecologist, will be required to support the proposed development. Measures suitable for reptiles will be included within the design to allow movement across the site post development. A reptile mitigation strategy should include, but not be limited to:
 - Habitat clearance measures such as sensitive timings of works and a two stage vegetation cut and destructive searching of roots if required.
 - Habitat clearance will aim to push any reptiles which may be present into the north, east and west of the site into the adjacent fields/garden.
 - Timings of works to avoid reptile hibernation period, November to March inclusive.
- Due to the proximity of the proposed pipework to the stream measures must be put in place following the Guidance for Pollution Prevention (GPP5 version 1.2 February 2018), to prevent pollution of the stream during construction. Measures should include but be limited to:
 - Storage of building materials and fuel away from the stream bank to avoid spills,
 - Storage of machinery away from the stream bank to avoid fuel spills or parts being lost,
 - Measures to prevent the run off of building materials and soils etc into the stream during periods of rain or wind.
- The Shepards Hut will be located at least 2m away from any hedgerow or tree line. This will allow access for maintenance purposes and help prevent disturbance to a range of species that may use the habitat.
- No night time working will be permitted to prevent incidental light spillage onto retained vegetation and habitats where nocturnal species may use at night. No work between the hours of 7pm and 7am which requires the use of artificial lighting will be allowed.
- 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°. This will allow any mammal to escape and avoid increased stress from being trapped.

- Any external lighting required as part of the development proposals will be focused / directional lighting which is hooded or cowled to prevent light spill. The external lighting will be placed on a timer and motion activated. Sensitive lighting will reduce any negative impacts to nocturnal wildlife which use the area. This is particularly important for foraging bats that are likely to use the site.

Measures that could be achieved to enhance the biodiversity of the site are detailed below:

- The provision of 2 bird boxes of different designs, such as a Blackbird FSC Nest Box (or similar design) and a Vivara Pro Seville 28mm WoodStone Nest Box (similar design)

Bird boxes are best located on the north or east aspect of trees, at a height of between 2-4m. Examples of bird boxes can be found in Appendix 3.

Best Wishes

Ash Harris
Director
Ecological Services Ltd

Signed: Ash Harris Date: December 2022

Appendix 1 - Site Photographs



Proposed location of Shepherd's Hut



Hedgerow along eastern boundary

Tree line along south boundary



Wire fence and stone wall, north boundary



Lower (western) end of garden where services to be routed



Approximate location of stream and well



Stream

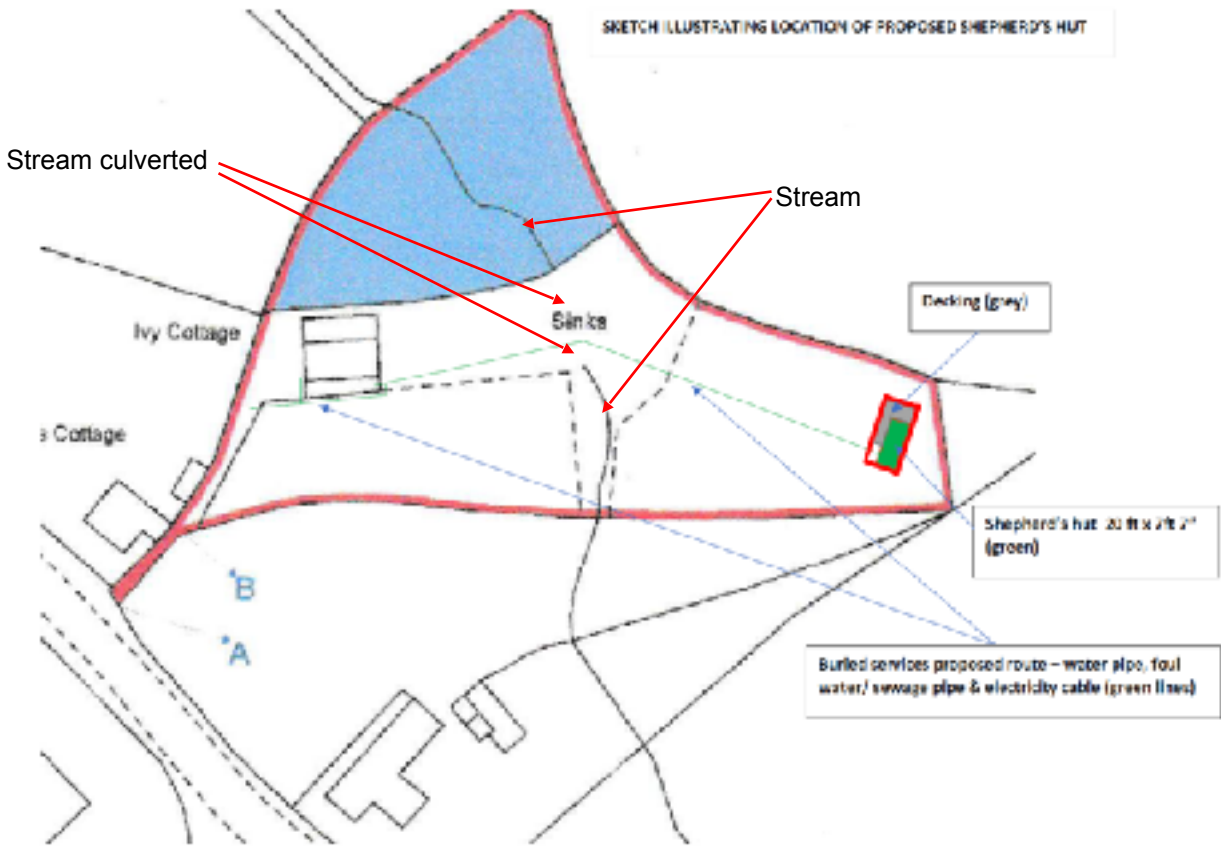


Stream culverted here



Well, dry for the majority of the time

Appendix 2 – Survey Site Boundary



Appendix 3 – Examples of Bird Boxes



Blackbird FSC Nest Box

Vivara Pro Seville 28mm WoodStone Nest Box
Suitable for blue tits, coal tits, great tits

