HOLBURY
CONSULTANCY SERVICE

Technical Note

Project:	Southern primary school substation	**Date**:	22nd March 2024
Subject:	Updated ecology assessment	**Reference**:	BWD_SSS_220324JP

1.0 Introduction

1.1. Holbury Consultancy Services has been appointed by Grainger to undertake an ecological appraisal of land identified for a new substation and temporary construction comound to serve the southern primary school at Berewood, Waterlooville.

1.2. The purpose of the survey is to provide an up-to-date report describing current conditions on the site to support a reserved matters application (RMA) for the substation and temporary construction compund to service the southern primary school. The application area sits between the southern primary school site which was surveyed in 2018 by LCES to support a planning application for the primary school and land to the north, known as Daubenton's Glen (Phase 11B), that was surveyed in 2023 by LCES to provide information to support a reserved matters application for housing. The proposed substation location is immediately adjacent to the western link road.

1.3. In addition to the surveys detailed above a further presence/absence survey for hazel dormice was undertaken in the southern primary school site in 2023 to provide up-to-date information for an EPS licence submission. An updated population survey was also undertaken of ponds used by great crested newts in Spring 2023 for the same purpose.

1.4. The conclusion and recommendations contained in the LCES ecological reports included in Appendix 1 have been reviewed in light of the findings of the detailed design proposals for the substation. Where previous recommendations are relevant to this application, these have been highlighted and should be implemented as previously reported. Where needed, further mitigation measures have been included within this report.

2.0 Background

2.1 The land covered by the southern primary school substation RMA has not been specifically surveys but land to the south and north of the application area has been surveyed. The field work undertaken by LCES included habitat surveys, badger activity surveys, great crested newt population surveys, common reptile and hazel dormouse presence/absence surveys and bat activity surveys. The results of these surveys can be found in LCES report included in **Appendix 1**.

2.2 The location of a proposed substation is on a small area of disturbed ground located immediately west of the western link road. On the northern boundary of

the substation location lies as small area of native lowland deciduous woodland that will be retained (see photo 1). The application area was formerly an arable field and has been subject to disturbance over the last 18 months during the construction of the western link road (see photo 2) The application site is bordered by the western link road to the east and open ground to the south and west. It sits within a retained green link running between Plant Row and Newlands Community Nature Reserve. A safe route to school will be provided within this green link on the northern side of the woodland.

2.3 The area identified for the construction compound is located to the south on the eastern side of the western link road. This area is already being used as a temporary compound to store materials associated with the western link road works (see photo 3).

Photo 1: Site photo looking north. Retained woodland on northern boundary. Western link road and unfinished footpath on right of picture

Photo 2: Early successional vegetation on sub-station site. Bramble on right of photo to be retained.

Photo 3: Location of proposed temporary construction compound.

3.0 Survey methodology

3.1. A site walkover was undertaken in March 2024 to ensure no significant changes had occurred on the application site or within 30 metres of the boundary. This work recorded the current vegetation communities with the application area and assessed the potential for protected species to be present in habitats on site. The vegetation survey included a survey for evidence of badger activity within, or close to the site boundary.

3.2. The survey work was undertaken by Jeff Picksley MCIEEM on 21st March 2024. Jeff Picksley MCIEEM is an ecological consultant who has worked with Grainger on the Berewood site since 2016 and is familiar with both the application site and the wider development area.

3.3. The weather was sunny and dry during the survey with early morning mist. Access to the site and the surrounding areas was unrestricted. The survey results comprise a summary and validation of the findings of the earlier LCES surveys, supplemented where necessary with additional information gathered during the March 2024 walk-over survey.

4.0 Survey results

4.1. The LCES vegetation survey (undertaken in May 2023) on former arable land to the north of the application site (Daubenton's Glen – Phase 11B) recorded large areas of modified grassland derived from former arable land. The field was recorded as being dominated by common grass species including annual meadow-grass, cock's-foot, Yorkshire-fog, common bent and false oat-grass. Other common and widespread species recorded included creeping buttercup, dandelion, hogweed, broad-leaved dock, bristly oxtongue and square-stalked willowherb.

4.2. The woodland comprises mature pedunculate oak, alder and goat willow. The understorey comprises blackthorn, hazel and holly. The ground flora is dominated by ivy with bramble, bracken (LF), bluebell, dog's mercury, lesser celedine and lords-and-ladies.

4.3. The March 2024 field survey found the area to been disturbed as a result of the consented western link road works (see Photos 1 and 2). The sub station site supports early successional plant communities typical of disturbed ground on this site. Currently around 40% of the sub station site is bare ground. The ground flora recorded in March 2024 included annual meadow grass, Yorkshire fog, toad rush, common mouse-ear, bristly oxtongue, creeping buttercup, broad-leaved dock, curled dock, dandelion, white clover, scentless mayweed, willowherb sp., spotted medick and Canadian fleabane.

4.4. The proposed location for the construction compound is largely bare earth or compacted aggregates with scattered Yorkshire fog, annual meadow grass, perennial rye-grass, willowherb sp., broad-leaved dock, common ragwort, white clover, soft rush, bristly ox-tongue, vetch sp and creeping buttercup.

4.5. Although there is some variation in the vegetation communities recorded to the north of the application site this is largely due to the field in Daubenton's Glen being less disturbed that those within the application site. Across all areas the vegetation comprises common and widespread species and is typical of those establishing on former arable or disturbed ground within the wider Berewood development.

4.6. No badger setts were recorded within 30 metres of the application area during the 2024 field surveys. This is in line with the known distribution of badger activity within the wider area, with active main setts known to be present to the east and west of the application site. Fresh badger latrines were noted along the base of a tree line c40m east of the application area and a well worn mammal track runs through the woodland immediately north of the application area. Given the location of the application site between two main setts it is highly likely that the application site is used, on occasions, by both foraging and commuting badgers.

4.7. No mature trees or hedgerows will be directly impacted by these works. The survey of bat activity between April and October 2023 included the placement of a static bat recorder along the line of trees to the west of the application site. The static recorded three species of bat: common pipistrelle, soprano pipistrelle and Nathusius' pipstelle. Calls from Myotis bats, pipistrelle species, long-eared

species and other bat calls were also recorded but could not be identified to species level. The majority of the passes from the bats detected using this hedgerow were for common pipistrelle.

4.8. Four species of bat were recorded: common pipistrelle, soprano pipistrelle, serotine and noctule. Calls of bats of the genus Myotis as well as calls of pipistrelle bats, long-eared bats and noctule/serotine were recorded on the static recorder, although calls could not be identified to species level. The hedgerows and trees in this part of the site were considered to be of moderate value to foraging and commuting bats.

4.9. Transect surveys undertaken on land to the north of the application site during 2023 recorded five species of bat: common pipistrelle, soprano pipistrelle, noctule, serotine and barbastelle. The barbastelle calls were recorded in September on the edge of Plant Row. Calls from long-eared bats and Myotis bats were recorded on the transect surveys but these could not be identified to species level.

4.10. The 2018 bat activity surveys of the southern primary school site recorded five species of bat: common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule and serotine as well as calls from long-eared bats and Myotis bats that could not be identified to species level. In both the 2023 and 2018 surveys the majority of recorded activity related to common pipistrelle.

4.11. The small area of native woodland to the north of the application site will be retained and provides a link between Plant Row to the east and the Newlands Community Nature Reserve to the west. The western link road is designed to reduce to a single lane at the eastern end of the woodland facilitate movement of bats and other animals across the site. The area around the sub-station forms part of a green link and will be landscaped to provide semi-natural habitats suitable for foraging and commuting bats. The small size of the application site means that it is very unlikely to provide a significant foraging resource for the local bat populations.

4.12. Hazel dormice were not recorded from the southern primary school site during 2023 but were recorded from a nest tube located in Plant Row to the east of the application site. No hedgerow, tree or woodland removal is required as part of this application.

4.13. Surveys undertaken in 2023 confirmed the continued presence of great crested newts in ponds located to the south of the application site. The sub-station site is located over 250 m from ponds known to support breeding great crested newts. The proposals will largely result in the loss of low growing plant communities recently established on disturbed ground. The loss of this land has been inputted into Natural England's rapid risk assessment which identifies a low risk of an offence being committed.

4.14. The habitat impacted by the sub-station is not considered to be suitable terrestrial habitat for great crested newt at the present time and the proposed temporary compound is already operational. No hedgerow or tree is required as part of this application and the adjacent woodland will be safeguarded during construction works through the use of Heras fencing. The application site

comprises recently disturbed ground and is considered highly unlikely to support great crested newts.

4.15. A reptile survey undertaken in 2023 recorded a small number of grass snakes along the western edge of Plant Row. The 2018 survey of the southern primary school site recorded a single grass snake on that site.. Although only a very small number of grass snake were recorded during recent reptile surveys, this species is known to have large home ranges and may occasionally use the site for foraging or resting.

4.16. The habitat impacted by the sub-station is not considered to be suitable terrestrial habitat for common reptiles at the present time and the proposed temporary compound is already operational. The application site comprises recently disturbed ground and is considered highly unlikely to support common reptiles.

4.17. The woodland to the north of application area is suitable for nesting birds. No tree, hedge or woodland removal is required as part of this application.

5.0 Conclusions and recommendations

5.1. The impacts of the construction of the substation on ecological receptors will be limited. However there is the potential for construction activities to impact foraging badgers, foraging or commuting bats and common reptiles. It is recommended retained habitat (mature woodland to the north of the application area) is protected through the erection of Heras fencing prior to works commencing.

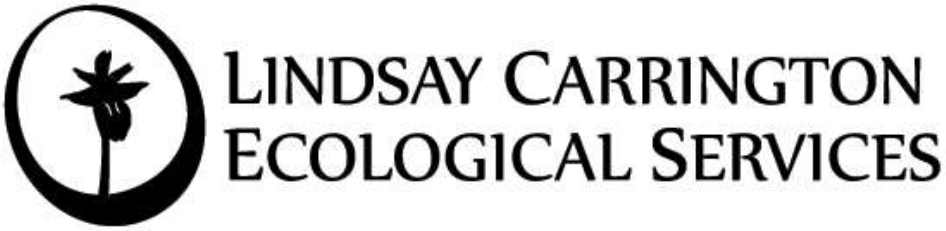
5.2. The mitigation set out in the 2023 LCES report requiring the preparation of a Construction and Environmental management plan (section 5.1.2) should be followed. The CEMP should include the measures identified to safeguard badgers during construction (section 5.3.2), bats (section 5.4.2) and breeding birds (section 5.5.2) as these are considered relevant to this application.

5.3. As an additional safeguard it is recommended the initial soil strip is supervised by an Ecological Clerk of Works (ECoW). In advance of works commencing the ECoW will undertake a finger-tip search of the substation site searching for common reptiles and amphibians. Provided no animals are found during the initial search the soil can be stripped from the site under supervision. This work would be undertaken between March and October.

5.4. If common reptiles or common amphibians are found they would be moved to the closest area of retained vegetation (the new SUDS features c70 metres west of the sub-station site). If a great crested newt is found, all work in that area will cease and Natural England will be contacted.

5.5. There is no lighting proposed as part of the substation design so there would be no post-development impacts on foraging or commuting bats.

Appendix 1: LCES reports (2018 and 2023)



ECOLOGICAL APPRAISAL AND PHASE 2 SURVEYS
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OCTOBER 2018
UPDATED NOVEMBER 2018

ON BEHALF OF GRAINGER PLC

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The contents of this report were correct at the time of the last survey visit. The report is provided for the sole use of the named client and is confidential.

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SUMMARY

1. Lindsay Carrington Ecological Services Limited were commissioned by Grainger Plc to conduct an ecological appraisal of the school land at Berewood, Waterlooville, PO7 7PS (Grid Ref: SU 6659 0892).

2. Berewood (Havant Borough Council planning ref: APP/10/00828/ Winchester City Council planning ref: 10/02862/OUT) is a large multi-phased development. This report is for the construction of a school on the site. The application boundary for these works is shown in appendix I.

3. An ecological appraisal is essentially a multi-disciplinary walk-over survey and was conducted with the objective of identifying any ecological constraints associated with the proposals such as the site's potential to support any legally protected species or habitats of high nature conservation value.

4. The site comprises a large arable field with tall ruderal. There are a number of species-rich native hedgerows with dry ditches which mark the field boundaries. There is also a pond to the south of the development area.

5. The species-rich native hedgerows within the application boundary may qualify as 'Important' under the Hedgerow Regulations 1997; one of the hedgerows may be lost as part of the development and further recommendations have been made in section 5.1.

6. There is limited foraging habitat for badgers on the site and no setts or activity were recorded during the survey. The pond may provide a drinking resource for badgers across the wider Berewood development. Further recommendations are provided in section 5.2.

7. Activity transects across the site recorded the site as being of local importance for bats with areas along the western and southern boundary being of particular importance. Further recommendations are provided in section 5.3.

8. The hedgerows on site provide potential nesting habitat for birds. Further recommendations are provided in section 5.4.

9. The hedgerows on site provide suitable habitat for dormice. The hedgerows are connected to the wider woodland network which are known to support populations of dormice. Further recommendations have been made in section 5.5.

10. Suitable terrestrial habitat for great crested newts is present on site and the main great crested newt breeding pond for the Berewood site lies 50 metres to the south of the proposed development area. Great crested newts are likely within the development boundary and further recommendations have been made in section 5.6.