My name is Mike Le Lacheur and I lived for many years in Robertsbridge and prior to that in Sedlescombe. I now live in Westfield with my family where I run a business with my wife, working in the main on fundraising and marketing projects for various charities.

1. For around 30 years, I helped out on a voluntary basis at Forge Farm whilst it was in the ownership of Mr Derek Wilton. I had access to the whole of the farm and was a key holder there. I saw the land change from one fairly devoid of natural habitat due to the years of intensive spraying on what were once hop fields, to a prime example of what might now be trendily called "rewilding" where you could see deer, hares, badgers, a huge variety of birds and insects and at certain times of the year, sea trout swimming up the river to spawn.

It has been widely stated by RVR that should they succeed in getting approval for the track to cut through this piece of land to Robertsbridge then it will benefit wildlife and the local community. Clearly this is not the case and I should like to point out why.

As a father, I would often bring my children down to the farm. At the same time I should also point out, that my son was an avid watcher of Thomas the Tank Engine and I also took him to KESR at Tenterden for a chance to see Thomas.

One particular evening, myself and my son went down to watch the barn owls flit along the now cleared stretch of woodland between Junction Road and the river crossing at Austen's Bridge. They came so close that my son swore blind he could feel their wings on his head as they swooped past as they hunted for mice and voles. As we passed the bridge and headed towards the old lookout post, we spotted movement in the grass and I told him to sit down quietly and remain still. It was then a group of six badger cubs came up to us inquisitively, so close he asked if he could stroke them. They stayed with us for around 10 minutes while their mother watched over them from about 20 yards away. It was one of the most magical moments of his childhood and will be with us both forever.

My point is this. At any time we could go and see a steam train at Tenterden, Sheffield Park, New Romney or at Tunbridge Wells. It never mattered where it went to my children and it never needed to join the mainline at Robertsbridge. They were all easy to get to and hopefully will be there for future generations. But, by clearing the stretch of disused line at Udiam, RVR have taken away any opportunity local children and their parents had of experiencing what we did that evening.

They may preach to everyone that they are forming a new wildlife corridor (it already is one) and opportunities to watch badgers exist locally at the RSPCA's Mallydams Wood sanctuary but there it is a captive show where the badgers are summoned by banging a bucket of food on an artificial sett. What we had was real, it was free, it was accessible for anyone who took the time to walk along the public footpath of an evening and it was a memory etched in the mind of a youngster for life. Thomas has long been forgotten and his decline in popularity is maybe why he has now been relegated from peak time children's TV and can now be viewed at slots between midnight and 6.50am while programmes such as Countryfile, Springwatch and the thought-provoking Life on Earth with David Attenborough are all prime time, essential family viewing – surely that tells us something about what parents and children want nowadays? People are finding out more about where they live and what they have nearby and this has maybe been a positive from a country not able to travel due to COVID-19.

It is also why George Eustice MP, Secretary of State for Environment, Food and Rural Affairs, stated only recently on the 24th June this year (while recognising the Defra commissioned report from Julian Glover and an independent panel to consider how we might improve the management of our National Parks and Areas of Outstanding Natural Beauty) the following :

"The government agrees that more funding should be directed towards making space for nature and supporting nature's recovery in our protected landscapes. Since the review was published, we have been supporting important

projects in our protected landscapes through our Nature for Climate Fund and Green Recovery Challenge Fund. Our future Local Nature Recovery scheme, part of the future agriculture policy, will also support the objective of nature's recovery in our protected landscapes and beyond. I have also asked Natural England to prepare proposals for the possible designation of additional National Nature Reserves, where there is landowner support, and to consider how nature's recovery within such designations might be supported financially through our new Landscape Recovery scheme (also part of our future agriculture policy).

https://questions-statements.parliament.uk/written-statements/detail/2021-06-24/hcws119

2. My second point is in regard to the timings of the clearing in May 2019 of the land discussed above and the ecological credibility of RVR, their advisers and the project. It was questioned at the time as to why the "island" that RVR could not in any way get a train onto without approval of a level crossing over Junction Road had to be cleared during the nesting season in May 2019. It has now been said by Mr Coe that this was due to the dormice breeding and hibernation seasons and this was unavoidable.

From the RVR's CEMP document - (v3 19/02/2019)

Breeding Birds
2.35 The removal of habitats with potential to support breeding birds (those within BPZ 5) is to be undertaken during May 2019 (subject to a dormouse mitigation licence being granted by Natural England). As site clearance during the breeding season is unavoidable then potential nesting habitat will be inspected up to 48 hours prior to clearance work commencing to identify active birds' nests. If any nests are found, they are to be protected until such time as the ecologist confirms that the young have fledged (left the nest). This would involve setting up an exclusion zone/cordon of an appropriate size for the species concerned. Works may then proceed up to, but not within, this exclusion zone. If any nesting birds are found at any time during clearance works when the ecologist is not present, work must stop immediately and an ecologist consulted immediately for advice on how to proceed.

2.36 Otherwise, habitats with potential to support breeding birds will be removed during September to February inclusive, to avoid any potential offences relating to breeding birds during their main bird breeding season.

Why I have to ask were none of the RVR's ecological advisers aware of these "unavoidable" timings prior to February 2019 as they had stated in their previous version of the CEMP document (v1 25/5/18)

Breeding Birds
2.27 The removal of habitats with potential to support breeding birds (those within BPZ 5) is to be undertaken during September to February inclusive (outside of the main breeding season).

Surely if you know that badgers, dormice and breeding birds are likely to be along that stretch of woodland and you are qualified to understand how they are all linked in terms of the optimum time to clear that habitat, why did it take another organisation to tell them when clearing should be done? In fact, why clear it at all back in 2019 when you had no permission to cross Junction Road?

3. I had asked during Mr Higbee's evidence the following question:

"Given that essential engineering work on the Southeastern network is regularly carried out over weekends and bank holidays including, as an example, two weekends in August 2021 at what may be one of the KESR's busiest times, has an allowance been made for days where bus replacement services would affect train travel and if so, are there any figures please regarding how many days bus replacement services have operated in recent years and accordingly, any changes in journey times from London and/or the coast? I assume that the bus replacements will be key in any visitor's decision as to how they might travel?"

Mr Higbee responded that replacement bus services had not been taken into consideration because the

same may apply to roads if there were roadworks on the route. Having thought about this and after seeking advice from someone who was employed as a contractor which undertook the work, major road repairs such as resurfacing are almost always done at night when the A21 would be closed and diversions put in place. Any other small work on the roads would be under restricted time (usually 9.30am - 3.30pm) and would only be a traffic under signal and not a closure.

So to sum this up, major roadworks would not happen during railway operating hours, people could still drive to visit 1066 country although they may on rare occasions find traffic lights on the way after 9.30 but they would be gone on their return after 3.30. Trains however are often found to be replaced by buses and this is usually planned by Network Rail to happen for the whole day at weekends and bank holidays - presumably RVR's busiest predicted times. It seems to me that this is something that must be taken into consideration when stating that rail will be the preferred way for RVR to receive visitors. I for one would choose the car as opposed to a bus visiting all railway stations en route and I strongly believe many others would do exactly the same given the choice.

4. My final point is this. If the Inspector at the start of the Inquiry felt that submissions from RVR were out-of-date and inaccurate and requested that they be redone, recalculated and resubmitted, does that then hold true that the submissions made by RVR and their experts for planning applications were the same? Has planning permission been granted by Rother using inaccurate and out-of-date evidence? If so, then it must seriously question the validity of the planning proposal, the quality of the evidence and the process applied at the time it was granted. At what point does someone say that planning – like the Inquiry – needs a second look and new evidence needs to be submitted? I was under the impression that RVR had employed the best-in-field professional experts but it now seems to me that the original evidence given for both the planning application and Inquiry was not up-to-standard, nor up-to-date.

To summarise my feelings about this project I am against it for every single reason presented to the Inquiry, from flood risk to economic benefit and from traffic issues to environmental impact. There are more than enough opportunities right across the south east to ride on a steam train or see Thomas but once the badger setts, nests and habitat along this stretch of woodland is destroyed it is gone forever - or at least will take another 60 years to rewild and become the vibrant and varied habitat it was and in the main, still is. In view of all the evidence submitted to the Inquiry, I strongly believe the Inspector and the Secretary of State should not grant a TWAO for this project.

Mike Le Lacheur
22 July 2021

The Ecology Consultancy

Rother Valley Railway / CEMP: Biodiversity / **Report for Rother Valley Railway Ltd**

Rother Valley Railway (Track Reinstatement between Austen's Bridge and Junction Road)

Construction Environment Management Plan (CEMP): Biodiversity

Report for Rother Valley Railway Ltd

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Contents

1 Introduction

BACKGROUND

1.1 The Ecology Consultancy was commissioned by Rother Valley Railway Ltd in May 2018 to produce a Construction Environment Management Plan (CEMP) for biodiversity for the Rother Valley Railway (Track Reinstatement between Austen's Bridge and Junction Road), Robertsbridge, East Sussex.

1.2 The CEMP is required to discharge planning condition number 6 (Application Number RR/2014/1608/P) issued by Rother District Council as below:

No development shall take place until a construction environmental management plan (CEMP) that is in accordance with the approach outlined in the submitted Environmental Statement, has been submitted to and approved in writing by the Local Planning Authority. Such plan shall be carried out by suitably qualified and experienced persons/bodies and shall deal with the treatment of any environmentally sensitive areas, their aftercare and maintenance as well as detailing how the environment will be protected during the works. The CEMP shall include details of the following:

- *the timing of the works including timings to avoid harm to environmentally sensitive areas or features and the times when specialist ecologists need to be present on site to oversee works;*
- *the measures to be used during the development in order to minimise environmental impact of the works;*
- *the ecological enhancements as mitigation for the loss of any habitat resulting from the development;*
- *a map or plan showing habitat areas including the river buffer zone to be protected during the works with proposed means of protection.*
- *any necessary mitigation for protected species;*
- *a detailed method statement for removing or the long-term management I control of invasive non-native species;*
- *construction methods and a risk assessment of potentially damaging construction activities; and*
- *all necessary pollution prevention methods.*

The method statement/construction environmental management plan shall be implemented as approved. Elements of this condition are required due to the presence of Japanese knotweed (Fallopia japonica) at Bridge 6.

SUMMARY OF PREVIOUS ECOLOGICAL SURVEYS

1.3 Previous ecological surveys undertaken at the site include:

- badger survey (CLM, 2018a);
- bat survey (CLM, 2018b);
- dormouse survey (CLM, 2018c); and
- great crested newt survey (CLM, 2018d).

1.4 The main findings of the surveys which are relevant to the production of the CEMP are as follows:

- badger *Meles meles* (a protected species - see relevant legislation and planning policy below and full details in Appendix 1) was confirmed as being present. Several active badger setts, including at least one main sett, are present across the site;
- three species of bat (protected species) including common pipistrelle *Pipistrellus pipistrellus,* soprano pipistrelle *Pipistrellus pygmaeus* and Daubenton's *Myotis daubentonii* were recorded foraging and commuting around the site;
- a maternity roost for soprano pipistrelle and Daubenton's was located at the eastern end of the site within a large ash *Fraxinus excelsior* tree;
- hazel dormouse *Muscardinus avellanarius* was confirmed as being present; and
- the eDNA survey for great crested newts *Triturus cristatus* (a protected species) returned a negative result suggesting they are absent on site.

SCOPE OF THE REPORT

1.5 The purpose of the CEMP is to ensure that adverse environmental effects of development activities (specifically relating to biodiversity) are mitigated.

1.6 The CEMP has been prepared with reference to the British Standard 42020:2013 Biodiversity - Code of Practice for Biodiversity and Development (BSI, 2013).

1.7 As works within this section of the site stop short of the River Rother, the river buffer zone has not been included within this CEMP.

1.8 Japanese knotweed *Fallopia japonica* or other invasive species are not known to be present within this section of the site, therefore they are not mentioned again within the CEMP.

SITE CONTEXT AND STATUS

1.9 The site is situated between Austen's Bridge and Junction Road B2244, east of Robertsbridge, East Sussex. The site covers approximately 1.659 hectares (ha) in total and is centred on Ordnance Survey National Grid Reference TQ 7688 2414.

1.10 The site comprises a wooded embankment (former railway line) with smaller areas of dense scrub, tall ruderal vegetation, bare ground and poor semi-improved grassland. To the north and east of the site are grassland fields. To the west is the River Rother (running under Austen's bridge) and to the east is Junction Road B2244.

DEVELOPMENT PROPOSALS

1.11 Current proposals for the site involve the reinstatement of the railway line between Austen's Bridge and Junction Road B2244. This will result in the loss of approximately 0.427ha of semi-natural habitats including 0.410ha of woodland and scrub.

1.12 The heritage railway only runs for 6 months of the year, during the summer. During this period, there would only be 10 trains a day (five in each direction), except for seven days of the year when there would be 14 trains (seven in each direction). All trains would be outside the hours of peak traffic flow (rush hours) and run from approximately 10:40 – 18:00. The trains are restricted to a maximum of 25 mph (40 kph).

RELEVANT LEGISLATION AND PLANNING POLICY

1.13 The following key pieces of nature conservation legislation are relevant to this CEMP. A more detailed description of legislation is provided in Appendix 1:

- The Conservation of Habitats and Species Regulations 2017 (as amended) (commonly referred to as the Habitats Regulations);
- Wildlife and Countryside Act 1981 (as amended);
- Natural Environment and Rural Communities Act 2006;
- Protection of Badgers Act 1992; and
- Wild Mammals (Protection) Act 1996.

1.14 The National Planning Policy Framework (Department of Communities and Local Government, 2012) requires local authorities to avoid and minimise impacts on biodiversity and, where possible, to provide net gains in biodiversity when taking planning decisions.

2 CEMP: Biodiversity

RISK ASSESSMENT OF POTENTIALLY DAMAGING DEVELOPMENT ACTIVITIES

2.1 Presented in Table 1 below is a risk assessment of all the proposed construction-related activities likely to impact upon important biodiversity on the site. This risk assessment should be cross-referenced with the Ecological Constraints and Opportunities Plan (ECOP) provided in Appendix 2. The ECOP presents the results of the surveys carried out to-date and gives spatial context to the ecological constraints associated with the development and the risks outlined below.

Table 1: Site activities and the potential risk to habitats and species

Activity	Habitats	Badger	Bats	Breeding Birds	Hazel Dormouse
Site clearance					
Removal and cutting of trees, shrubs, and ground vegetation	Direct loss of ecologically valuable habitats including lowland mixed deciduous woodland.	Killing, injury or disturbance to badgers. Damage or destruction of a badger sett.	Killing, injury or disturbance to bats. Damage or destruction of a breeding site or resting place.	Killing, injury or disturbance to breeding birds. Damage or destruction of an active bird's nest.	Killing, injury or disturbance to hazel dormice. Damage or destruction of a breeding site or resting place.
Removal of soil, rubble and other materials		Killing, injury or disturbance to badgers. Damage or destruction of a badger sett.			

Table 1: Site activities and the potential risk to habitats and species

Activity	Habitats	Badger	Bats	Breeding Birds	Hazel Dormouse
Site set-up					
Temporary storage areas and stockpiles for soils, materials, spoils and waste	Damage to ecologically valuable habitats including lowland mixed deciduous woodland.	Killing, injury or disturbance to badgers. Damage or destruction of a badger sett.		Killing, injury or disturbance to breeding birds. Damage or destruction of an active bird's nest.	Killing, injury or disturbance to hazel dormice. Damage or destruction of a breeding site or resting place.
Areas for storage of oils, fuels and chemicals	Damage to ecologically valuable habitats including lowland mixed deciduous woodland and the River Rother.	Killing or injury to badgers.			
Site lighting		Disturbance to badgers.	Disturbance to bats.	Disturbance to breeding birds.	Disturbance to hazel dormouse.
Site fencing	Damage to ecologically valuable habitats including lowland mixed deciduous woodland.	Disturbance to badgers.		Killing, injury or disturbance to breeding birds. Damage or destruction of an active bird's nest.	Killing, injury or disturbance to hazel dormice. Damage or destruction of a breeding site or resting place.

Table 1: Site activities and the potential risk to habitats and species

Activity	Habitats	Badger	Bats	Breeding Birds	Hazel Dormouse
Ground investigations, foundations, excavations and piling, temporary earthworks and tunnelling	Direct loss of and/or damage to ecologically valuable habitats including lowland mixed deciduous woodland.	Killing, injury or disturbance to badgers. Damage or destruction of a badger sett.		Killing, injury or disturbance to breeding birds. Damage or destruction of an active bird's nest.	Killing, injury or disturbance to hazel dormice. Damage or destruction of a breeding site or resting place.
Installation of underground services (e.g. pipes, electricity, gas, foul and surface water drains)	Direct loss of and/or damage to ecologically valuable habitats including lowland mixed deciduous woodland and species-rich grassland.	Killing, injury or disturbance to badgers. Damage or destruction of a badger sett.		Killing, injury or disturbance to breeding birds. Damage or destruction of an active bird's nest.	Killing, injury or disturbance to hazel dormice. Damage or destruction of a breeding site or resting place.
Construction					
Dust, noise and vibration	Damage to ecologically valuable habitats including lowland mixed deciduous woodland.	Disturbance to badgers.	Disturbance to bats.	Disturbance to breeding birds.	Disturbance to hazel dormice.

Table 1: Site activities and the potential risk to habitats and species

Activity	Habitats	Badger	Bats	Breeding Birds	Hazel Dormouse
Increase in traffic movements (deliveries, materials, etc.)		Killing or injury to badgers.			
Environmental incidents					
Pollution (air, water and ground)	Damage to ecologically valuable habitats including lowland mixed deciduous woodland and the River Rother.				

IDENTIFICATION AND PROTECTION OF BIODIVERSITY PROTECTION ZONES

2.2 The Biodiversity Protection Zones (BPZs) outlined below and in Figure 1 have been used to identify the following:

- important habitats and species that are to be retained and protected during construction;
- areas that are to be restricted for some or all construction-related activities;
- areas where protective measures are to be installed; and
- areas for construction-related activities necessary to implement the proposed development.

BPZ 1 – Woodland and Scrub Retention

2.3 Activities to be undertaken in BPZ 1 (described in detail below under 'practical measures to avoid or reduce impacts during construction') include the following:

- retention and protection of woodland;
- enhancement of woodland through understorey planting; and
- installation of dormouse boxes.

BPZ 2 – Badger Sett Closure

2.4 Activities to be undertaken in BPZ 2 (described in detail below under 'practical measures to avoid or reduce impacts during construction') include the following:

- closure of badger setts.

BPZ 3 – Badger Sett Creation

2.5 Activities to be undertaken in BPZ 3 (described in detail below under 'practical measures to avoid or reduce impacts during construction') include the following:

- creation of a badger sett (in one location only).

BPZ 4 – Bat Roost Retention

2.6 Activities to be undertaken in BPZ 4 (described in detail below under 'practical measures to avoid or reduce impacts during construction') include the following:

- retention and protection of bat roost.

BPZ 5 – Woodland and Scrub Removal

2.7 Activities to be undertaken in BPZ 5 (described in detail below under 'practical measures to avoid or reduce impacts during construction') include the following:

- removal of woodland and scrub with potential to support hazel dormouse and breeding birds.

BDZ 6 – Woodland and Scrub Creation

2.8 Activities to be undertaken in BPZ 6 (described in detail below under 'practical measures to avoid or reduce impacts during construction') include the following:

- creation of woodland/scrub.

Figure 1: Biodiversity Protection Zones

PRACTICAL MEASURES TO AVOID OR REDUCE IMPACTS DURING CONSTRUCTION

Toolbox Talk

2.9 All contractors working on-site will be given access to the CEMP and given a toolbox talk by the Ecological Clerk of Works (ECoW) as part of their induction. Information will be provided that explains the importance of sensitive features at the site and the associated protection measures to be employed.

2.10 It will be made clear to all contractors that should any unexpected discoveries of protected species be made during construction, works will cease in this area and the ECoW contacted immediately.

Habitats

2.11 All contractors will be made aware that the following applies to areas of retained habitat in BPZ 1 at all times (to safeguard habitats and all protected species):

- no tracking of vehicles;
- no storing of vehicles, soils, materials, spoils or waste;
- no storing of oils, fuels or chemicals;
- no excavations, piling or tunnelling; and
- no ground investigations or installation of underground services unless works agreed with and overseen by the ECoW.

2.12 Compensatory measures for the loss of ecologically valuable habitats include the planting of woodland/scrub approximately 450m north-east of the site in BPZ 6 (see details under dormouse below).

Badger

Creation of artificial sett

2.13 In order to compensate for the loss of six setts and to provide accommodation for badgers during the exclusion process, a new (artificial) badger sett will be created in BPZ 3 (one of two locations) in 2018.

2.14 The artificial sett will be located within 250 m of the main sett, and at least 5m away from any future development works. It will comprise a 'natural type' design. To encourage long-term adoption of the artificial sett, it will include blind ending tunnels (to

allow for expansion by the badgers), nesting chambers that were offset from the tunnels (to mimic natural chambers) and a range of chamber locations.

2.15 The existing setts will not be closed until use of the new artificial sett has been confirmed.

Sett closure

2.16 Timing: All licensable activities will be carried out between 1 July and 15 November 2018 (subject to a licence being granted by Natural England). The exclusion and closure process is anticipated to take 4-5 weeks to complete.

2.17 Personnel: All works associated with sett exclusion and destruction will be carried out by the licensee or his accredited agents. The monitoring responsibilities will be split between the licensee (David Gillett) and the named ecologist or agent with the ecologist setting up the monitoring system for the licensee to follow.

2.18 Exclusion: The entrances into the setts will be gated using steel badger gates with a specification in accordance with guidance given in Natural England TIN025 (Natural England 2007). They will be fitted tightly within the entrance, using an infill of soil or stones around the edge and/or a Postcrete™ mix where appropriate. The gate will be positioned in such a way as to ensure that the flap readily closes under its own weight and is not obstructed by loose debris.

2.19 The area around the sett will then be covered over with a steel mesh chain-link fence fixed into the ground using timber surveying posts or similar. The aim of fitting this feature is to prevent badgers from digging back into the sett or the area immediately around it.

2.20 The gates will be set to a one-way position to allow animals to leave the sett but not to re-enter. This exclusion will continue for a period of at least 21 days beyond the last evidence of badger movement in or out of the sett.

2.21 Monitoring: During the exclusion process the sett will be monitored using standard techniques. A length of cotton will be attached to the frame of the badger gate with blue tack or strong adhesive tape to detect if the gate is opened, a latticework of small sticks will be placed just inside the gate to further monitor the movement of animals out of the sett. In addition, two motion activated infra-red trail cameras will be placed outside the entrances to detect any activity. The sett will then be checked every three days for signs

of movement through the gates and/or any attempt to dig back into the setts or surrounding area.

2.22 Sett closure: All works associated with sett closure will be carried out by the named ecologist or his accredited agent. The tunnels leading away from the sett entrances will be excavated back using a mini-digger. The excavator will be fitted with a narrow trenching bucket that will be used to open up the tunnels, with the ecologist employing sand bags/fertiliser sacks to progressively block the tunnels to prevent collapse. This process will continue until all of the tunnels and chambers have been fully exposed.

2.23 Once all tunnels associated with the setts have been fully exposed the exposed tunnels/chambers will be backfilled with a Type 1 aggregate (or similar) and compacted using the excavator.

Other practical measures

2.24 Other practical measures to be implemented at the site to safeguard badgers include the following:

- oils, fuels and chemicals should be stored in sealed containers and will preferably not be left out overnight;
- overnight working should be avoided to minimise noise and disturbance to badgers (and other protected species including bats, breeding birds and dormice);
- any trenches should be covered overnight, or include a means of escape for any animals falling in (such as a ramp);
- any open or exposed pipe work should be capped to prevent animals from gaining access; and
- vehicles are to drive at a maximum speed of 5mph around the site to minimise the risk of collision with badgers.

Bats

2.25 The ash tree located at the eastern end of the site (BPZ 4) with a maternity roost of soprano pipistrelle and Daubenton's bats will be retained and protected during the works with appropriate signage indicating its location.

2.26 No permanent lighting is currently proposed for the site which would potentially affect protected species including badgers, bats, breeding birds and hazel dormice.

Breeding Birds

2.27 The removal of habitats with potential to support breeding birds (those within BPZ 5) is to be undertaken during September to February inclusive (outside of the main breeding season).

2.28 To compensate for the loss of breeding bird habitat, 40 dormouse boxes will be installed on retained trees in BPZ 1. Birds (mainly blue tits *Cyanistes caeruleus*) are commonly known to use dormouse boxes for breeding. These will be installed prior to the habitat loss in September 2018.

Hazel Dormouse

Habitat removal

2.29 Timing: All suitable dormouse habitat within the site (those within BPZ 5) will be cleared during the active season of late September – October 2018 (subject to the European Protected Species Mitigation (EPSM) licence being granted by Natural England). The works are timed to avoid the hibernation and the breeding season. In accordance with the current guidance (Bright et al, 2006), 0.410ha will be removed by taking out small amounts (up to 0.11ha) each day to allow animals time to move of their own accord into adjacent suitable habitat. This would be undertaken over a period of approximately four days, allowing one day per animal likely to be displaced.

2.30 Methodology: Prior to the clearance commencing, a hand search for nests as part of an Ecological Watching Brief will be carried out by an experienced and licensed dormouse handler (the ECoW). This will involve a thorough search in and around all trees and scrub to be removed, including around the base of the vegetation. Where necessary, gloves will be worn to allow areas of bramble to be searched with greater ease.

2.31 The vegetation removal will involve an initial cut of scrub, trees and secondary woodland at a height of between 200mm-500mm, to be undertaken using hand tools only i.e. strimmers and chainsaws. Clearance will start at the eastern end of the site, persuading displaced dormice to move north, south, or west into retained habitat. A soft-felling technique will be employed to reduce the height of the trees to be removed which will involve cutting the timber into sections and carefully lowering each section to the ground. An ecologist will be present on site to oversee this work. Arisings will be carried, not dragged, from the working area ensuring that disturbance to the leaf litter is kept at a minimum. Arisings will be chipped 'off site' and removed to prevent disturbance to

dormice. Following this the stumps and other remaining cut vegetation will be grubbed out using a small 360o excavator and removed from site.

2.32 In the unlikely event that breeding dormice are found, they shall be left undisturbed until such time that the young dormice have become independent of their mother. Vegetation supporting and immediately adjacent to the nests (within 5m) will be retained during this time, and clearance of other vegetation on the site will proceed where possible with caution to prevent unnecessary disturbance. Vegetation will not be removed that is likely to result in the isolation of any occupied nests, and a corridor of habitat shall be temporarily retained where necessary to allow animals to move into permanently retained habitat.

Trapping/translocation of animals

2.33 No trapping or translocation of dormice is proposed. In the highly unlikely event of a dormouse being discovered that has not moved of its own accord into the adjacent habitat during clearance of vegetation, the individual will be captured by hand by a licenced ecologist. After being checked for injuries, any captured animals will be transported immediately in cotton drawstring holding bags to the closest artificial nest box, not further than 40m from where the animal is discovered. If a dormouse is discovered in a nest then the nest will also be placed in a cotton drawstring bag and transported with the animal.

2.34 If an injured or sick animal is found during works, it will be transported safely in a lined shoebox to the RSPCA's Mallydams Wood wildlife rehabilitation centre which is located approximately 12 miles from the site.

2.35 Given the small area of habitat to be removed and the methodology which will be adopted during clearance the risk of encountering dormice is considered to be low.

Habitat compensation

2.36 To compensate for habitat loss on site, an area of no less than 0.298ha of mixed native scrub and trees will be planted along the railway corridor approximately 450m north-east of the site (BPZ 6). Planting will comprise a mix of species with recognised value to dormice (Bright et al, 2006) including oak (10%), birch/rowan/hornbeam (15%), hazel (10%), hawthorn (30%), blackthorn (30%) and honeysuckle (5%). All plants will be of local provenance where possible. The new planted areas will comprise a higher diversity of species than is currently present on the site within the scrub and secondary woodland

and will also increase the proportion of species providing food for dormice such as hazel and honeysuckle.

2.37 Retained woodland measuring 1.118ha located along the northern and southern boundaries of the site will be enhanced for dormice with new scrub planting in the gaps (10% of the area) equating to new habitat creation of 0.112ha. The following mitigation measures are proposed as part of the habitat creation and enhancements and include:

- A new woodland understorey to be created by planting a mosaic of scrub species.
- New scrub planting to total habitat creation of 0.112ha September 2018. Species composition will comprise 17% bramble, 17% blackthorn, 17% Guelder Rose, 17% hazel, 17% honeysuckle and 17% hawthorn.
- Scrub understorey to provide a rich food resource for dormice year round.
- New planting and woodland to be managed for five years.

2.38 All of the scrub and tree planting will be carried out during November 2018 after receipt of the licence.

2.39 To mitigate for the temporary loss of nesting sites and enable long term monitoring of the site 40 dormouse boxes will be installed at 15-20m intervals within woodland along the northern and southern site boundaries. Boxes will be installed in September 2018 so that they are in place before habitat clearance takes place.

2.40 The boxes are to be monitored as part of the national Dormouse Monitoring Program (NDMP) for five years. All results will be submitted to People Trust for Endangered Species (PTES) to provide data on dormouse distribution for the local area. The boxes will be monitored and maintained.

The Timing of Sensitive Works and Presence of ECoW

2.41 Presented in Table 2 below is a timetable of works, which outlines (where applicable) the months in which the practical measures described above should be implemented. It also indicates for which activities the presence of an ECoW is required.

Responsible Persons and Lines of Communication

2.42 Presented in Table 3 below are details of personnel and lines of communication necessary for full implementation of the CEMP. This is provided to ensure that the

project team know who to liaise with and which personal are undertaking the required tasks.

THE TIMING OF SENSITIVE WORKS AND PRESENCE OF ECOW

Table 2: Timetable of works

✓ = timing of activity * = EcoW presence required

Tasks	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Site preparation and protection												
Removal of woodland and scrub (2018)									✓*	✓*		
Closure of badger setts (2018)								✓	✓	✓		
Habitat creation and enhancement												
Creation of artificial badger sett (2018)							✓*					
Planting of woodland/scrub (2018)											✓	
Installation of dormouse boxes (2018)									✓*			
Ongoing maintenance and monitoring												
Monitoring of artificial badger sett (2018)							✓	✓				
Inspection of new woodland/scrub planting to assess establishment success (2018 – 2023)										✓	✓	✓
Re-plant any stock that has failed to establish (2019-2023)	✓	✓	✓									
Topping of scrub to encourage dense growth (2020)	✓	✓								✓	✓	✓

Table 2: Timetable of works

✓ = timing of activity * = EcoW presence required

Tasks	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Creation of scalloped edges 1-2m deep by coppicing to ground level (2023)	✓	✓								✓	✓	✓
2 x monitoring visits of dormouse boxes, results to be submitted to NDMP (2019-2023)					✓				✓			
Dormouse boxes to be repaired/replaced (if required) and cleaned out (2019-2023)	✓	✓										✓

RESPONSIBLE PERSONS AND LINES OF COMMUNICATION

Table 3: Responsible persons and lines of communication

Information required	Responsible person	Line of communication
a) Advice and monitoring in relation to regulations, legal consents, planning conditions, environmental procedures and contractual arrangements.	ECoW, The Ecology Consultancy	Request for advice or monitoring received from the Project Manager, David Gillett (Rother Valley Railway Ltd)
b) Training and toolbox talks for staff.	ECoW, The Ecology Consultancy	Request for training and toolbox talks received from the Lead Contractor (TBC) or the Project Manager, David Gillett (Rother Valley Railway Ltd)
c) Contingency measures in the event of an accident or occurrence of other potentially damaging incidents.	Lead Contractor (TBC)	Advice on contingency measures in the event of an accident received from the ECoW, The Ecology Consultancy and the Project Manager, David Gillett (Rother Valley Railway Ltd)
d) Periodic reporting on the success of a) to d) as required, for example, by planning conditions.	Lead Contractor (TBC), ECoW, The Ecology Consultancy and Project Manager, David Gillett (Rother Valley Railway Ltd)	All reporting fed back to the Project Manager, David Gillett (Rother Valley Railway Ltd)

THE ROLE OF THE ECOLOGICAL CLERK OF WORKS (ECOW)

2.43 The responsibilities of the ECoW are as follows:

- review and update the ECOP and risk assessment (where necessary);
- review and update the biodiversity protection zones (where necessary);
- review and update the practical measures to avoid and reduce impacts on biodiversity, achieve ecological mitigation, compensation and enhancement (where necessary);
- review and update the timing of sensitive works during construction and implementation (where necessary);
- monitor on-site works and practical undertaking of ecological works;
- provide training and information to site workers through toolbox talks;
- monitor and report on compliance with legal and planning requirements;
- investigate and report unplanned incidents (e.g. pollution, damage to habitats, unexpected occurrence of protected species, implications of delays due to bad weather); and
- provide further advice to the client / site manager on any of the above as necessary.

2.44 The ECoW role will be fulfilled by the involvement of a number of competent persons with differing skill sets. Where less experienced ecologists are placed in this role they will be adequately supported by more senior staff, who will be accessible to give advice and guidance at all times.

PROTECTIVE FENCING, WILDLIFE EXCLUSION BARRIERS AND WARNING SIGNS

2.45 Protective fencing will not be required, however warning signs will be installed if seen to be appropriate (for example to indicate the location of the bat roost).

References

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CLM (2018b) *Badger Survey: Rother Valley Railway (Track Reinstatement between Austins Bridge and Junction Road).* Unpublished report.

CLM (2018c) *Dormouse Survey: Rother Valley Railway (Track Reinstatement between Austins Bridge and Junction Road).* Unpublished report.

CLM (2018d) *Primary Great Crested Newt Survey: Rother Valley Railway (Track Reinstatement between Austins Bridge and Junction Road).* Unpublished report.

Department of Communities and Local Government (2012). National Planning Policy Framework. DCLG, London.

Natural England. (2007). *Badgers & Development*, Natural England, Peterborough.

Appendix 1: Legislation and Policy

Important Notice: This section contains details of legislation and planning policy applicable in Britain only (i.e. not including the Isle of Man, Northern Ireland, the Republic of Ireland or the Channel Islands) and is provided for general guidance only. While every effort has been made to ensure accuracy, this section should not be relied upon as a definitive statement of the law.

A NATIONAL LEGISLATION AFFORDED TO SPECIES

The objective of the EC Habitats Directive[1] is to conserve the various species of plant and animal which are considered rare across Europe. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2017 (formerly The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)) and The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended).

The Wildlife and Countryside Act 1981 (as amended) is a key piece of national legislation which implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and implements the species protection obligations of Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Since the passing of the Wildlife & Countryside Act 1981, various amendments have been made, details of which can be found on www.opsi.gov.uk. Key amendments have been made through the Countryside and Rights of Way (CRoW) Act (2000) and Nature Conservation (Scotland) Act 2004.

Other legislative Acts affording protection to wildlife and their habitats include:

- Deer Act 1991
- Countryside and Rights of Way (CRoW) Act 2000
- Natural Environment & Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

Species and species groups that are protected or otherwise regulated under the aforementioned domestic and European legislation, and that are most likely to be affected by

[1] Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora

development activities, include herpetofauna (amphibians and reptiles), badger, bats, birds, dormouse, invasive plant species, otter, plants, red squirrel, water vole and white clawed crayfish.

Explanatory notes relating to species protected under The Conservation of Habitats and Species Regulations 2017 (which includes smooth snake, sand lizard, great crested newt and natterjack toad), all bat species, otter, dormouse and some plant species) are given below. **These should be read in conjunction with the relevant species sections that follow.**

- In the Directive, the term 'deliberate' is interpreted as being somewhat wider than intentional and may be thought of as including an element of recklessness.
- The Conservation of Habitats and Species Regulations 2017 does not define the act of 'migration' and therefore, as a precaution, it is recommended that short distance movement of animals for e.g. foraging, breeding or dispersal purposes are also considered.
- In order to obtain a European Protected Species Mitigation (EPSM) licence, the application must demonstrate that it meets all of the following three 'tests': i) the action(s) are necessary for the purpose of preserving public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment; ii) that there is no satisfactory alternative and iii) that the action authorised will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.

Herpetofauna (Amphibians and Reptiles)

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita* and great crested newt *Triturus cristatus* receive full protection under The Conservation of Habitats and Species Regulations 2017 through their inclusion on Schedule 2. The pool frog *Pelophylax lessonae* is also afforded full protection under the same legislation. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of species listed on Schedule 2
- Deliberate disturbance of any Schedule 2 species as:
    - a) to impair their ability:
        - (i) to survive, breed, or reproduce, or to rear or nurture young;
        - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate
    - b) to affect significantly the local distribution or abundance of the species

- Deliberate taking or destroying of the eggs of a Schedule 2 species
- Damage or destruction of a breeding site or resting place
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

With the exception of the pool frog, these species are also currently listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of herpetofauna are protected solely under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). Species such as the adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis* are listed in respect to Section 9(1) & (5). For these species, it is prohibited to:

- Intentionally (or recklessly in Scotland) kill or injure these species
- Sell, offer or expose for sale, possess or transport for purpose of sale these species, or any part thereof.

Common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Lissotriton vulgaris* and palmate newt *L. helveticus* are listed in respect to Section 9(5) only which affords them protection against sale, offering or exposing for sale, possession or transport for the purpose of sale.

How is the legislation pertaining to herpetofauna liable to affect development works?

A European Protected Species (EPS) Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect the breeding sites or resting places of those amphibian and reptile species protected under The Conservation Habitats and Species Regulations 2017. A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the Wildlife and Countryside Act 1981 (as amended).

Badger

Badgers *Meles meles* receive protection under The Protection of Badgers Act 1992 which consolidates the previous Badger Acts of 1973 and 1991. The Act makes it an offence to:

- Wilfully kill, injure, take, or attempt to kill, injure or take a badger
- Cruelly ill-treat a badger, including use of tongs and digging
- Possess or control a dead badger or any part thereof
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett[2] or any part thereof
- Intentionally or recklessly disturb[3] a badger when it is occupying a badger sett
- Intentionally or recklessly cause a dog to enter a badger sett
- Sell or offers for sale, possesses or has under his control, a live badger

How is the legislation pertaining to badgers liable to affect development works?

A Development Licence[4] will be required from the relevant countryside agency (e.g. Natural England) for any development works liable to affect an active badger sett, or to disturb badgers whilst in the sett. Depending on the nature of the works and the specifics of the sett and its environs, badgers could be disturbed by work near the sett even if there is no direct interference or damage to the sett itself. The countryside agencies have issued guidelines on what constitutes a licensable activity. N.B. there is no provision in law for the capture of badgers for development purposes and therefore it is not possible to obtain a licence to translocate badgers from one area to another.

Bats

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2017 through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats)
- Deliberate disturbance of bat species as:

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2 A badger sett is defined in the legislation as *"any structure or place which displays signs indicating current use by a badger"*. This includes seasonally used setts. Natural England and DEFRA have issued guidance on what is likely to constitute current use of a badger sett: https://www.gov.uk/guidance/badgers-surveys-and-mitigation-for-development-projects

3 For guidance on what constitutes disturbance and other licensing queries, see Natural England and DEFRA guidance https://www.gov.uk/guidance/badgers-protection-surveys-and-licences.

4 Natural England will only consider issuing a licence where detailed planning permission (if applicable to operation) has already been granted

    - a) to impair their ability:
        - (i) to survive, breed, or reproduce, or to rear or nurture young;
        - (ii) to hibernate or migrate[3]
    - b) to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

Bats are also currently protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

How is the legislation pertaining to bats liable to affect development works?

A European Protected Species (EPS) Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Though there is no case law to date, the legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost[5].

Birds

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the Wildlife and Countryside Act 1981 (as amended). Among other things, this makes it an offence to:

[5] Garland & Markham (2008) Is important bat foraging and commuting habitat legally protected? Mammal News, No. **150**. The Mammal Society, Southampton.

- Intentionally (or recklessly in Scotland) kill, injure or take any wild bird
- Intentionally (or recklessly in Scotland) take, damage or destroy (or, in Scotland, otherwise interfere with) the nest of any wild bird while it is in use or being built
- Intentionally take or destroy an egg of any wild bird
- Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.
- In Scotland only, intentionally or recklessly obstruct or prevent any wild bird from using its nest

Certain species of bird, for example the barn owl, black redstart, hobby, bittern and kingfisher receive additional special protection under Schedule 1 of the Act and Annex 1 of the European Community Directive on the Conservation of Wild Birds (2009/147/EC). This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young
- Intentional or reckless disturbance of dependent young of such a bird
- In Scotland only, intentional or reckless disturbance whilst lekking
- In Scotland only, intentional or reckless harassment

How is the legislation pertaining to birds liable to affect development works?

To avoid contravention of the Wildlife and Countryside Act 1981 (as amended), works should be planned to avoid the possibility of killing or injuring any wild bird, or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird nesting season which typically runs from March to August[6]. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Those species of bird listed on Schedule 1 are additionally protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance

[66] It should be noted that this is the main breeding period. Breeding activity may occur outwith this period (depending on the particular species and geographical location of the site) and thus due care and attention should be given when undertaking potentially disturbing works at any time of year.

is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

Dormouse

Dormice *Muscardinus avellanarius* are fully protected under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. dormice)
- Deliberate disturbance of dormice as:

  a) to impair their ability:

  (i) to survive, breed, or reproduce, or to rear or nurture young;

  (ii) to hibernate or migrate

  b) to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

Dormice are also currently protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

How is the legislation pertaining to dormice liable to affect development works?

A European Protected Species (EPS) Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect dormouse breeding or resting places (N.B. this is usually taken to mean dormouse 'habitat') or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Wild Mammals (Protection) Act 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to:

- Mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

Invasive Plant Species

Certain species of plant, including Japanese knotweed *Fallopia japonica*, giant hogweed *Heracleum mantegazzianum* and Himalayan balsam *Impatiens glandulifera* are listed on Part II of Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) in respect to Section 14(2). Such species are generally non-natives whose establishment or spread in the wild may be detrimental to native wildlife. Inclusion on Part II of Schedule 9 therefore makes it an offence to plant or otherwise cause these species to grow in the wild.

How is the legislation pertaining to invasive plants liable to affect development works?

Although it is not an offence to have these plants on your land per se, it is an offence to cause these species to grow in the wild. Therefore, if they are present on site and development activities (for example movement of spoil, disposal of cut waste or vehicular movements) have the potential to cause the further spread of these species to new areas, it will be necessary to ensure appropriate measures are in place to prevent this happening prior to the commencement of works.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

Appendix 2: ECOP

The Ecology Consultancy

Job title: Rother Valley Railway
TEC Job no. ET6860

Client: Rother Valley Railway Ltd

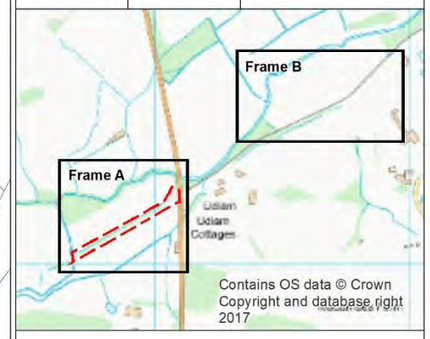
Map title: Ecological Constraints and Opportunities Plan

Section:	Scale (at A3)
N/A	1:1,500

Date of survey: N/A

Surveyor: Rosanna Marston

Drawn	Approved	Date
RM	GC	18/05/2018



Legend

- Site boundary
- Bare ground
- Tall ruderal
- Poor semi-improved grassland
- Main badger sett (to be closed)
- Annex badger sett (to be closed)
- Dormouse nest
- Dormouse in nest
- Dense scrub
- Broad-leaved semi-natural wooodland
- Standing water
- Earth bank
- Outlier badger sett (to be closed)
- Artificial badger sett creation (options)
- Maternity bat roost (to be retained)
- New woodland/ scrub planting

This plan is provided solely for the purpose of supporting the description of the ecological features of the site as contained in the accompanying report

The Ecology Consultancy

The Ecology Consultancy is part of the Temple Group.

Making places better for people and wildlife

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The Ecology Consultancy

Rother Valley Railway / CEMP: Biodiversity / **Report for Rother Valley Railway Ltd**

Rother Valley Railway (Track Reinstatement between Austen's Bridge and Junction Road)

Construction Environment Management Plan (CEMP): Biodiversity

Report for Rother Valley Railway Ltd

Version	Author	Checked by	Approved by	Date	Type
1.0	Rosanna Marston BSc MSc ACIEEM	Sasha Dodsworth BSc MSc MCIEEM	Wendy McFarlane MA MSc MCIEEM	25.05.2018	Final
2.0	Rosanna Marston BSc MSc ACIEEM	Charlie Dwight BSc CEcol, MCIEEM	Giles Coe	20.12.2018	Final
3.0	Rosanna Marston BSc MSc ACIEEM		Rosanna Marston BSc MSc ACIEEM	19.02.2019	Final

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Contents

1 Introduction

BACKGROUND

1.1 The Ecology Consultancy was commissioned by Rother Valley Railway Ltd in May 2018 to produce a Construction Environment Management Plan (CEMP) for biodiversity for the Rother Valley Railway (Track Reinstatement between Austen's Bridge and Junction Road), Robertsbridge, East Sussex.

1.2 It should be noted that planning permission and conditions apply to the whole scheme -

reinstatement of the Rother Valley Railway from Northbridge Street, Robertsbridge, to Junction Road, Bodiam. The environmental statement for this scheme that supported the planning application was drafted in respect of the entire route and in the absence of survey data, was based on assumptions of presence and the likelihood of different habitats and species being present.

1.3 This document covers **only** the section of the site from Austen's Bridge to Junction Road only and will be updated for the other sections as the scheme progresses. This and other supporting documents have been created after site specific surveys for this section of the track only.

1.4 The CEMP is required to discharge planning condition number 6 (Application Number RR/2014/1608/P) issued by Rother District Council as below:

No development shall take place until a construction environmental management plan (CEMP) that is in accordance with the approach outlined in the submitted Environmental Statement, has been submitted to and approved in writing by the Local Planning Authority. Such plan shall be carried out by suitably qualified and experienced persons/bodies and shall deal with the treatment of any environmentally sensitive areas, their aftercare and maintenance as well as detailing how the environment will be protected during the works. The CEMP shall include details of the following:

- *the timing of the works including timings to avoid harm to environmentally sensitive areas or features and the times when specialist ecologists need to be present on site to oversee works;*
- *the measures to be used during the development in order to minimise environmental impact of the works;*

- *the ecological enhancements as mitigation for the loss of any habitat resulting from the development;*
- *a map or plan showing habitat areas including the river buffer zone to be protected during the works with proposed means of protection.*
- *any necessary mitigation for protected species;*
- *a detailed method statement for removing or the long-term management I control of invasive non-native species;*
- *construction methods and a risk assessment of potentially damaging construction activities; and*
- *all necessary pollution prevention methods.*

The method statement/construction environmental management plan shall be implemented as approved. Elements of this condition are required due to the presence of Japanese knotweed (Fallopia japonica) at Bridge 6.

SUMMARY OF PREVIOUS ECOLOGICAL SURVEYS

1.5 Previous ecological surveys undertaken at the site include:

- reptile survey (CLM, 2017);
- badger survey (CLM, 2018a);
- bat survey (CLM, 2018b);
- dormouse survey (CLM, 2018c);
- great crested newt survey (CLM, 2018d).

1.6 The main findings of the surveys which are relevant to the production of the CEMP are as follows:

- Low populations of common lizard *Zootoca vivipara* and grass snake *Natrix helvetica* (protected species) were confirmed as being present;
- badger *Meles meles* (a protected species - see relevant legislation and planning policy below and full details in Appendix 1) was confirmed as being present. Several active badger setts, including at least one main sett, are present across the site;
- three species of bat (protected species) including common pipistrelle *Pipistrellus pipistrellus,* soprano pipistrelle *Pipistrellus pygmaeus* and Daubenton's *Myotis daubentonii* were recorded foraging and commuting around the site;

- a maternity roost for soprano pipistrelle and Daubenton's was located at the eastern end of the site within a large ash *Fraxinus excelsior* tree;
- hazel dormouse *Muscardinus avellanarius* (a protected species) was confirmed as being present; and
- the eDNA survey for great crested newts *Triturus cristatus* (a protected species) returned a negative result suggesting they are absent on site.

SCOPE OF THE REPORT

1.7 The purpose of the CEMP is to ensure that adverse environmental effects of development activities (specifically relating to biodiversity) are mitigated. It also addresses comments made by Dr Kate Cole (County Ecologist for East Sussex County Council) in her letter dated 22 August 2018 (ref: RR/2018/2095/DC).

1.8 The CEMP has been prepared with reference to the British Standard 42020:2013 Biodiversity - Code of Practice for Biodiversity and Development (BSI, 2013).

1.9 Japanese knotweed *Fallopia japonica* or other invasive species are not known to be present within this section of the site, therefore they are not mentioned again within the CEMP.

SITE CONTEXT AND STATUS

1.10 The site is the stretch of track between Austen's Bridge and Junction Road B2244, east of Robertsbridge, East Sussex. The site covers approximately 1.659 hectares (ha) in total and is centred on Ordnance Survey National Grid Reference TQ 7688 2414.

1.11 The site comprises a wooded embankment (former railway line) with smaller areas of dense scrub, tall ruderal vegetation, bare ground and poor semi-improved grassland. To the north and east of the site are grassland fields. To the west is the River Rother (running under Austen's bridge) and to the east is Junction Road B2244.

DEVELOPMENT PROPOSALS

1.12 Current proposals for the site involve the reinstatement of the railway line between Austen's Bridge and Junction Road B2244. This will result in the loss of approximately 0.427ha of semi-natural habitats including 0.410ha of woodland and scrub.

1.13 The heritage railway only runs for 6 months of the year, during the summer. During this period, there would only be 10 trains a day (five in each direction), except for seven days of the year when there would be 14 trains (seven in each direction). All trains would be outside the hours of peak traffic flow (rush hours) and run from approximately 10:40 – 18:00. The trains are restricted to a maximum of 25 mph (40 kph).

RELEVANT LEGISLATION AND PLANNING POLICY

1.14 The following key pieces of nature conservation legislation are relevant to this CEMP. A more detailed description of legislation is provided in Appendix 1:

- The Conservation of Habitats and Species Regulations 2017 (as amended) (commonly referred to as the Habitats Regulations);
- Wildlife and Countryside Act 1981 (as amended);
- Natural Environment and Rural Communities Act 2006;
- Protection of Badgers Act 1992; and
- Wild Mammals (Protection) Act 1996.

1.15 The National Planning Policy Framework (Department of Communities and Local Government, 2018) requires local authorities to avoid and minimise impacts on biodiversity and, where possible, to provide net gains in biodiversity when taking planning decisions.

2 CEMP: Biodiversity

RISK ASSESSMENT OF POTENTIALLY DAMAGING DEVELOPMENT ACTIVITIES

2.1 Presented in Table 2.1 below is a risk assessment of all the proposed construction-related activities likely to impact upon important biodiversity on the site. This risk assessment should be cross-referenced with the Ecological Constraints and Opportunities Plan (ECOP) provided in Appendix 2. The ECOP presents the results of the surveys carried out to-date and gives spatial context to the ecological constraints associated with the development and the risks outlined below.

Table 2.1: Site activities and the potential risk to habitats and species

Activity	Habitats	Badger	Bats	Breeding Birds	Hazel Dormouse	Reptiles
Site clearance						
Removal and cutting of trees, shrubs, and ground vegetation	Direct loss of ecologically valuable habitats including lowland mixed deciduous woodland.	Killing, injury or disturbance to badgers. Damage or destruction of a badger sett.	Killing, injury or disturbance to bats. Damage or destruction of a breeding site or resting place.	Killing, injury or disturbance to breeding birds. Damage or destruction of an active bird's nest.	Killing, injury or disturbance to hazel dormice. Damage or destruction of a breeding site or resting place.	Killing or injury to reptiles.
Removal of soil, rubble and other materials		Killing, injury or disturbance to badgers. Damage or destruction of a badger sett.				Killing or injury to reptiles.

Table 2.1: Site activities and the potential risk to habitats and species

Activity	Habitats	Badger	Bats	Breeding Birds	Hazel Dormouse	Reptiles
Site set-up						
Temporary storage areas and stockpiles for soils, materials, spoils and waste	Damage to ecologically valuable habitats including lowland mixed deciduous woodland.	Killing, injury or disturbance to badgers. Damage or destruction of a badger sett.		Killing, injury or disturbance to breeding birds. Damage or destruction of an active bird's nest.	Killing, injury or disturbance to hazel dormice. Damage or destruction of a breeding site or resting place.	Killing or injury to reptiles.
Areas for storage of oils, fuels and chemicals	Damage to ecologically valuable habitats including lowland mixed deciduous woodland and the River Rother.	Killing or injury to badgers.				
Site lighting		Disturbance to badgers.	Disturbance to bats.	Disturbance to breeding birds.	Disturbance to hazel dormouse.	
Site fencing	Damage to ecologically valuable habitats including lowland mixed deciduous woodland.	Disturbance to badgers.		Killing, injury or disturbance to breeding birds. Damage or destruction of an active bird's nest.	Killing, injury or disturbance to hazel dormice. Damage or destruction of a breeding site or resting place.	Killing or injury to reptiles.

Table 2.1: Site activities and the potential risk to habitats and species

Activity	Habitats	Badger	Bats	Breeding Birds	Hazel Dormouse	Reptiles
Ground investigations, foundations, excavations and piling, temporary earthworks and tunnelling	Direct loss of and/or damage to ecologically valuable habitats including lowland mixed deciduous woodland.	Killing, injury or disturbance to badgers. Damage or destruction of a badger sett.		Killing, injury or disturbance to breeding birds. Damage or destruction of an active bird's nest.	Killing, injury or disturbance to hazel dormice. Damage or destruction of a breeding site or resting place.	Killing or injury to reptiles.
Installation of underground services (e.g. pipes, electricity, gas, foul and surface water drains)	Direct loss of and/or damage to ecologically valuable habitats including lowland mixed deciduous woodland and species-rich grassland.	Killing, injury or disturbance to badgers. Damage or destruction of a badger sett.		Killing, injury or disturbance to breeding birds. Damage or destruction of an active bird's nest.	Killing, injury or disturbance to hazel dormice. Damage or destruction of a breeding site or resting place.	Killing or injury to reptiles.
Construction						
Dust, noise and vibration	Damage to ecologically valuable habitats including lowland mixed deciduous woodland.	Disturbance to badgers.	Disturbance to bats.	Disturbance to breeding birds.	Disturbance to hazel dormice.	

Table 2.1: Site activities and the potential risk to habitats and species

Activity	Habitats	Badger	Bats	Breeding Birds	Hazel Dormouse	Reptiles
Increase in traffic movements (deliveries, materials, etc.)		Killing or injury to badgers.				
Environmental incidents						
Pollution (air, water and ground)	Damage to ecologically valuable habitats including lowland mixed deciduous woodland and the River Rother.					

IDENTIFICATION AND PROTECTION OF BIODIVERSITY PROTECTION ZONES

2.2 The Biodiversity Protection Zones (BPZs) outlined below and in Figure 1 have been used to identify the following:

- important habitats and species that are to be retained and protected during construction;
- areas that are to be restricted for some or all construction-related activities;
- areas where protective measures are to be installed; and
- areas for construction-related activities necessary to implement the proposed development.

2.3 This includes the protective fencing to be installed around the new badger sett, the protective fencing to be installed around the ash tree which contains a bat roost and the protective buffer around the River Rother.

BPZ 1 – Woodland and Scrub Retention

2.4 Activities to be undertaken in BPZ 1 (described in detail below under 'practical measures to avoid or reduce impacts during construction') include the following:

- retention and protection of woodland;
- enhancement of woodland through understorey planting;
- installation of dormouse boxes; and
- installation of log piles.

BPZ 2 – Badger Sett Closure

2.5 Activities to be undertaken in BPZ 2 (described in detail below under 'practical measures to avoid or reduce impacts during construction') include the following:

- closure of badger setts.

BPZ 3 – Badger Sett Creation

2.6 Activities to be undertaken in BPZ 3 (described in detail below under 'practical measures to avoid or reduce impacts during construction') include the following:

- creation of a badger sett (in one location only).

BPZ 4 – Bat Roost Retention

2.7 Activities to be undertaken in BPZ 4 (described in detail below under 'practical measures to avoid or reduce impacts during construction') include the following:

- retention and protection of bat roost.

BPZ 5 – Woodland and Scrub Removal

2.8 Activities to be undertaken in BPZ 5 (described in detail below under 'practical measures to avoid or reduce impacts during construction') include the following:

- removal of woodland and scrub with potential to support hazel dormouse, breeding birds and reptiles.

BPZ 6 – Woodland and Scrub Creation

2.9 Activities to be undertaken in BPZ 6 (described in detail below under 'practical measures to avoid or reduce impacts during construction') include the following:

- creation of woodland/scrub.

BPZ 7 – River Rother

2.10 Activities to be undertaken in BPZ 7 (described in detail below under 'practical measures to avoid or reduce impacts during construction') include the following:

- protection of the River Rother.

Figure 1: Biodiversity Protection Zones

PRACTICAL MEASURES TO AVOID OR REDUCE IMPACTS DURING CONSTRUCTION

Toolbox Talk

2.11 All contractors working on-site will be given access to the CEMP and given a toolbox talk by the Ecological Clerk of Works (ECoW) as part of their induction. Information will be provided that explains the importance of sensitive features at the site and the associated protection measures to be employed.

2.12 It will be made clear to all contractors that should any unexpected discoveries of protected species be made during construction, works will cease in this area and the ECoW contacted immediately.

Habitats

2.13 All contractors will be made aware that the following applies to areas of retained habitat in BPZ 1 at all times (to safeguard habitats and all protected species):

- no tracking of vehicles;
- no storing of vehicles, soils, materials, spoils or waste;
- no storing of oils, fuels or chemicals;
- no excavations, piling or tunnelling; and
- no ground investigations or installation of underground services unless works agreed with and overseen by the ECoW.

2.14 All contractors will be made aware that the following applies to the 10m buffer zone around BPZ 7 at all times (as pollution prevention to safeguard the River Rother):

- no storing of vehicles, soils, materials, spoils or waste; and
- no storing of oils, fuels or chemicals.

2.15 Compensatory measures for the loss of ecologically valuable habitats include the planting of woodland/scrub approximately 450m north-east of the site in BPZ 6 (see details under dormouse below).

Badger

Creation of artificial sett

2.16 In order to compensate for the loss of six setts and to provide accommodation for badgers during the exclusion process, a new (artificial) badger sett will be created in BPZ 3 (one of two locations) in 2019.

2.17 The artificial sett will be located within 250 m of the main sett, and at least 5m away from any future development works. It will comprise a 'natural type' design. To encourage long-term adoption of the artificial sett, it will include blind ending tunnels (to allow for expansion by the badgers), nesting chambers that were offset from the tunnels (to mimic natural chambers) and a range of chamber locations.

2.18 The existing setts will not be closed until use of the new artificial sett has been confirmed.

2.19 Protective fencing, signage and toolbox talks will be used to prevent incursion into the area of the new artificial sett, and this will be located approximately where the buffer zone lies around BPZ 3.

Sett closure

2.20 Timing: All licensable activities will be carried out between 1 July and 15 November 2019 (subject to a licence being granted by Natural England). The exclusion and closure process is anticipated to take 4-5 weeks to complete.

2.21 Personnel: All works associated with sett exclusion and destruction will be carried out by the licensee or his accredited agents. The monitoring responsibilities will be split between the licensee (David Gillett) and the named ecologist or agent with the ecologist setting up the monitoring system for the licensee to follow.

2.22 Exclusion: The entrances into the setts will be gated using steel badger gates with a specification in accordance with guidance given in Natural England TIN025 (Natural England 2007). They will be fitted tightly within the entrance, using an infill of soil or stones around the edge and/or a Postcrete™ mix where appropriate. The gate will be positioned in such a way as to ensure that the flap readily closes under its own weight and is not obstructed by loose debris.

2.23 The area around the sett will then be covered over with a steel mesh chain-link fence fixed into the ground using timber surveying posts or similar. The aim of fitting this feature is to prevent badgers from digging back into the sett or the area immediately around it.

2.24 The gates will be set to a one-way position to allow animals to leave the sett but not to re-enter. This exclusion will continue for a period of at least 21 days beyond the last evidence of badger movement in or out of the sett.

2.25 Monitoring: During the exclusion process the sett will be monitored using standard techniques. A length of cotton will be attached to the frame of the badger gate with blue tack or strong adhesive tape to detect if the gate is opened, a latticework of small sticks will be placed just inside the gate to further monitor the movement of animals out of the sett. In addition, two motion activated infra-red trail cameras will be placed outside the entrances to detect any activity. The sett will then be checked every three days for signs of movement through the gates and/or any attempt to dig back into the setts or surrounding area.

2.26 Sett closure: All works associated with sett closure will be carried out by the named ecologist or his accredited agent. The tunnels leading away from the sett entrances will be excavated back using a mini-digger. The excavator will be fitted with a narrow trenching bucket that will be used to open up the tunnels, with the ecologist employing sand bags/fertiliser sacks to progressively block the tunnels to prevent collapse. This process will continue until all of the tunnels and chambers have been fully exposed.

2.27 Once all tunnels associated with the setts have been fully exposed the exposed tunnels/chambers will be backfilled with a Type 1 aggregate (or similar) and compacted using the excavator.

Other practical measures

2.28 Other practical measures to be implemented at the site to safeguard badgers include the following:

- oils, fuels and chemicals should be stored in sealed containers and will preferably not be left out overnight;
- overnight working should be avoided to minimise noise and disturbance to badgers (and other protected species including bats, breeding birds and dormice);

- any trenches should be covered overnight, or include a means of escape for any animals falling in (such as a ramp);
- any open or exposed pipe work should be capped to prevent animals from gaining access; and
- vehicles are to drive at a maximum speed of 5mph around the site to minimise the risk of collision with badgers.

Bats

2.29 The ash tree located at the eastern end of the site (BPZ 4) with a maternity roost of soprano pipistrelle and Daubenton's bats will be retained and protected during the works with appropriate fencing and signage indicating its location.

2.30 The fencing will be installed around the buffer zone and dense scrub, approximately 20m from the tree. It will be protected in accordance with BS 5837:2012 - Trees in Relation to Design, Demolition and Construction.

2.31 The only other tree with high bat potential identified on or near to the embankment was a mature double stem crack willow, as mentioned below as having low barn owl roost potential. In addition to a large cavity this tree had woodpecker holes and dense ivy cover. Nine trees on or near to the embankment were identified as having moderate potential to support a bat roost and 12 trees were assessed as having low potential to support a bat roost.

2.32 The good practice guidelines (Collins, 2016) state that although three surveys are recommended for high potential trees and two surveys for moderate potential trees, they are unlikely to give confidence in a negative result (due to the inherent difficulties of surveying bats in trees). An accepted alternative approach is to climb trees and use torches/endoscopes to inspect features and establish bat presence/likely absence. This will be carried out for climbable trees with moderate to high bat roost potential immediately prior to them being felled, and any trees found to contain a bat roost will be protected until such time that a licence is in place to facilitate their removal.

2.33 For those trees with low value to roosting bats, they will be section felled avoiding any visible cavities. Sections with cavities will be lowered by rope and left for a minimum 24hrs on the ground before chipping or removing from site. Sections of trunk or limbs, with no cavities, and brash can be removed on the day of the trees works.

2.34 No permanent lighting is currently proposed for the site which would potentially affect protected species including badgers, bats, breeding birds and hazel dormice. If any new lighting is proposed along the route, it will include backscatter guards to reduce light spill.

Breeding Birds

2.35 The removal of habitats with potential to support breeding birds (those within BPZ 5) is to be undertaken during May 2019 (subject to a dormouse mitigation licence being granted by Natural England). As site clearance during the breeding season is unavoidable then potential nesting habitat will be inspected up to 48 hours prior to clearance work commencing to identify active birds' nests. If any nests are found, they are to be protected until such time as the ecologist confirms that the young have fledged (left the nest). This would involve setting up an exclusion zone/cordon of an appropriate size for the species concerned. Works may then proceed up to, but not within, this exclusion zone. If any nesting birds are found at any time during clearance works when the ecologist is not present, work must stop immediately and an ecologist consulted immediately for advice on how to proceed.

2.36 Otherwise, habitats with potential to support breeding birds will be removed during September to February inclusive, to avoid any potential offences relating to breeding birds during their main bird breeding season.

2.37 A mature double stem crack willow with low potential to support a barn owl roost was located off the main embankment and therefore the main trunk will remain unaffected by the proposed works. There remains the possibility that the branches of this tree will require remedial works, and if this is the case this tree will be climbed prior to any remedial works to inspect it for the presence of barn owls.

2.38 Planting in BPZ 6 will also provide mitigation for barn owls by forcing them to fly up and over the train line, instead of foraging adjacent to it and risking train strikes.

2.39 To compensate for the loss of breeding bird habitat and enhance the site for breeding birds, 5 new bird boxes will be installed on retained trees in BPZ 1, understorey planting will be undertaken in BPZ 1 and new mixed native scrub and trees will be planted in BPZ 6 (see details under hazel dormouse below and the habitat creation/enhancement map in Appendix 2). The planting will be undertaken and the boxes will be installed prior to the breeding season in winter 2018/2019 to spring 2019.

Hazel Dormouse

Habitat removal

2.40 Timing: All suitable dormouse habitat within the site (those within BPZ 5) will be cleared during the active season of May 2019 (subject to the European Protected Species Mitigation (EPSM) licence being granted by Natural England). The works are timed to avoid the hibernation and the breeding season. In accordance with the current guidance (Bright et al, 2006), 0.410ha will be removed by taking out small amounts (up to 0.11ha) each day to allow animals time to move of their own accord into adjacent suitable habitat. This would be undertaken over a period of approximately four days, allowing one day per animal likely to be displaced. This area represents much less than the average dormouse home range (1-1.5ha).

2.41 Methodology: Prior to the clearance commencing, a hand search for nests as part of an Ecological Watching Brief will be carried out by an experienced and licensed dormouse handler. This will involve a thorough search in and around all trees and scrub to be removed, including around the base of the vegetation. Where necessary, gloves will be worn to allow areas of bramble to be searched with greater ease.

2.42 The vegetation removal will involve an initial cut of scrub, trees and secondary woodland at a height of between 200mm-500mm, to be undertaken using hand tools only i.e. strimmers and chainsaws. Clearance will start at the eastern end of the site, persuading displaced dormice to move north, south, or west into retained habitat. A soft-felling technique will be employed to reduce the height of the trees to be removed which will involve cutting the timber into sections and carefully lowering each section to the ground. An ecologist will be present on site to oversee this work. Arisings will be carried, not dragged, from the working area ensuring that disturbance to the leaf litter is kept at a minimum. Arisings will be chipped 'off site' and removed to prevent disturbance to dormice. Following this the stumps and other remaining cut vegetation will be grubbed out using a small 360° excavator and removed from site.

2.43 In the unlikely event that breeding dormice are found, they shall be left undisturbed until such time that the young dormice have become independent of their mother. Vegetation supporting and immediately adjacent to the nests (within 5m) will be retained during this time, and clearance of other vegetation on the site will proceed where possible with caution to prevent unnecessary disturbance. Vegetation will not be removed that is likely to result in the isolation of any occupied nests, and a corridor of habitat shall be

temporarily retained where necessary to allow animals to move into permanently retained habitat.

Trapping/translocation of animals

2.44 No trapping or translocation of dormice is proposed. In the highly unlikely event of a dormouse being discovered that has not moved of its own accord into the adjacent habitat during clearance of vegetation, the individual will be captured by hand by a licenced ecologist. After being checked for injuries, any captured animals will be transported immediately in cotton drawstring holding bags to the closest artificial nest box, not further than 40m from where the animal is discovered. If a dormouse is discovered in a nest then the nest will also be placed in a cotton drawstring bag and transported with the animal.

2.45 If an injured or sick animal is found during works, it will be transported safely in a lined shoebox to the RSPCA's Mallydams Wood wildlife rehabilitation centre which is located approximately 12 miles from the site.

2.46 Given the small area of habitat to be removed and the methodology which will be adopted during clearance the risk of encountering dormice is considered to be low.

Habitat compensation

2.47 To compensate for habitat loss on site, an area of 0.41ha of mixed native scrub and trees will be planted along the railway corridor approximately 450m north-east of the site (BPZ 6) (see the habitat creation/enhancement map in Appendix 2). Planting will comprise a mix of species with recognised value to dormice (Bright et al, 2006) including oak (10%), birch/rowan/hornbeam (15%), hazel (10%), hawthorn (30%), blackthorn (30%) and honeysuckle (5%). The new planted areas will comprise a higher diversity of species than is currently present on the site within the scrub and secondary woodland and will also increase the proportion of species providing food for dormice such as hazel and honeysuckle.

2.48 Retained woodland measuring 1.118ha located along the northern and southern boundaries of the site will be enhanced for dormice with new scrub planting in the gaps (10% of the area) equating to new habitat creation of 0.112ha. The following mitigation measures are proposed as part of the habitat creation and enhancements and include:

- A new woodland understorey to be created by planting a mosaic of scrub species.

- New scrub planting to total habitat creation of 0.112ha. Species composition will comprise 17% bramble, 17% blackthorn, 17% Guelder Rose, 17% hazel, 17% honeysuckle and 17% hawthorn.
- Scrub understorey to provide a rich food resource for dormice year round.
- New planting and woodland to be managed for five years.

2.49 All of the scrub and tree planting will be carried out in winter/spring 2019.

2.50 To mitigate for the temporary loss of nesting sites and enable long term monitoring of the site 40 dormouse boxes will be installed at 15-20m intervals within woodland along the northern and southern site boundaries. Boxes will be installed in winter 2018/2019 so that they are in place before habitat clearance takes place.

2.51 The boxes are to be monitored as part of the national Dormouse Monitoring Program (NDMP) for five years. All results will be submitted to People Trust for Endangered Species (PTES) to provide data on dormouse distribution for the local area. The boxes will be monitored and maintained.

Reptiles

2.52 The removal of woodland and scrub habitats with potential to support sheltering reptiles (those within BPZ 5) is to be undertaken as part of an Ecological Watching Brief during 2019 as described above (under hazel dormouse). This will ensure no reptiles sheltering in the woodland and scrub will be injured or killed during site clearance, and can move into retained habitat of their own accord.

2.53 In the event that reptiles are found during clearance works that do not move of their own accord, they shall be moved no more than 50m away into retained habitat at the site edges using on-site log piles as receptor locations. An area with similar aspect and slope will be chosen to place the animal, if necessary hazard tape will be used to mark the area and it shall be left undisturbed by the works.

2.54 To mitigate for the loss of reptile hibernation habitat and enhance the site for biodiversity, approximately five new log piles will be created in BPZ 1 using the cut material from the woodland on the embankment (see the habitat creation/enhancement map in Appendix 2).

The Timing of Sensitive Works and Presence of ECoW

2.55 Presented in Table 2.2 below is a timetable of works, which outlines (where applicable) the months in which the practical measures described above should be implemented. It also indicates for which activities the presence of an ECoW is required.

Responsible Persons and Lines of Communication

2.56 Presented in Table 2.3 below are details of personnel and lines of communication necessary for full implementation of the CEMP. This is provided to ensure that the project team know who to liaise with and which personal are undertaking the required tasks.

THE TIMING OF SENSITIVE WORKS AND PRESENCE OF ECOW

Table 2.2: Timetable of works

✓ = timing of activity * = EcoW presence required

Tasks	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Site preparation and protection												
Woodland and scrub removal (2019)					✓*							
Closure of badger setts (2019)							✓*	✓*	✓*	✓*	✓*	
Habitat creation and enhancement												
Creation of artificial badger sett (2019)					✓*	✓*						
Planting of woodland/scrub (2019)		✓	✓									
Installation of dormouse boxes (2019)		✓*	✓*									
Installation of bird boxes (2019)		✓*	✓*									
Installation of log piles (2019)					✓							
Ongoing maintenance and monitoring												
Monitoring of artificial badger sett (2019)					✓*	✓*						
Inspection of new woodland/scrub planting to assess establishment success (2019 – 2023)										✓	✓	✓

Table 2.2: Timetable of works

✓ = timing of activity * = EcoW presence required

Tasks	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Re-plant any stock that has failed to establish (2019-2023)	✓	✓	✓									
Topping of scrub to encourage dense growth (2020)	✓	✓								✓	✓	✓
Creation of scalloped edges 1-2m deep by coppicing to ground level (2023)	✓	✓								✓	✓	✓
2 x monitoring visits of dormouse boxes, results to be submitted to NDMP (2019-2023)					✓*				✓*			
Dormouse boxes to be repaired/replaced (if required) and cleaned out (2019-2023)	✓*	✓*										✓*

RESPONSIBLE PERSONS AND LINES OF COMMUNICATION

Table 2.3: Responsible persons and lines of communication

Information required	Responsible person	Line of communication
a) Advice and monitoring in relation to regulations, legal consents, planning conditions, environmental procedures and contractual arrangements.	ECoW, The Ecology Consultancy	Request for advice or monitoring received from the Project Manager, David Gillett (Rother Valley Railway Ltd)
b) Training and toolbox talks for staff.	ECoW, The Ecology Consultancy	Request for training and toolbox talks received from the Lead Contractor (TBC) or the Project Manager, David Gillett (Rother Valley Railway Ltd)
c) Contingency measures in the event of an accident or occurrence of other potentially damaging incidents.	Lead Contractor (TBC)	Advice on contingency measures in the event of an accident received from the ECoW, The Ecology Consultancy and the Project Manager, David Gillett (Rother Valley Railway Ltd)
d) Periodic reporting on the success of a) to d) as required, for example, by planning conditions.	Lead Contractor (TBC), ECoW, The Ecology Consultancy and Project Manager, David Gillett (Rother Valley Railway Ltd)	All reporting fed back to the Project Manager, David Gillett (Rother Valley Railway Ltd)

THE ROLE OF THE ECOLOGICAL CLERK OF WORKS (ECOW)

2.57 The responsibilities of the ECoW are as follows:

- review and update the ECOP and risk assessment (where necessary);
- review and update the biodiversity protection zones (where necessary);
- review and update the practical measures to avoid and reduce impacts on biodiversity, achieve ecological mitigation, compensation and enhancement (where necessary);
- review and update the timing of sensitive works during construction and implementation (where necessary);
- monitor on-site works and practical undertaking of ecological works;
- provide training and information to site workers through toolbox talks;
- monitor and report on compliance with legal and planning requirements;
- investigate and report unplanned incidents (e.g. pollution, damage to habitats, unexpected occurrence of protected species, implications of delays due to bad weather); and
- provide further advice to the client / site manager on any of the above as necessary.

2.58 The ECoW role will be fulfilled by the involvement of a number of competent persons with differing skill sets. Where less experienced ecologists are placed in this role they will be adequately supported by more senior staff, who will be accessible to give advice and guidance at all times.

PROTECTIVE FENCING, WILDLIFE EXCLUSION BARRIERS AND WARNING SIGNS

2.59 Protective fencing will be required as outlined above for the new badger sett and bat roost. This will be located approximately where the buffer zones lie as shown on the BPZ map (Figure 1).

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Appendix 1: Legislation and Policy

Important Notice: This section contains details of legislation and planning policy applicable in Britain only (i.e. not including the Isle of Man, Northern Ireland, the Republic of Ireland or the Channel Islands) and is provided for general guidance only. While every effort has been made to ensure accuracy, this section should not be relied upon as a definitive statement of the law.

A NATIONAL LEGISLATION AFFORDED TO SPECIES

The objective of the EC Habitats Directive[1] is to conserve the various species of plant and animal which are considered rare across Europe. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2017 (formerly The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)) and The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended).

The Wildlife and Countryside Act 1981 (as amended) is a key piece of national legislation which implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and implements the species protection obligations of Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Since the passing of the Wildlife & Countryside Act 1981, various amendments have been made, details of which can be found on www.opsi.gov.uk. Key amendments have been made through the Countryside and Rights of Way (CRoW) Act (2000) and Nature Conservation (Scotland) Act 2004.

Other legislative Acts affording protection to wildlife and their habitats include:

- Deer Act 1991
- Countryside and Rights of Way (CRoW) Act 2000
- Natural Environment & Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

Species and species groups that are protected or otherwise regulated under the aforementioned domestic and European legislation, and that are most likely to be affected by

[1] Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora

development activities, include herpetofauna (amphibians and reptiles), badger, bats, birds, dormouse, invasive plant species, otter, plants, red squirrel, water vole and white clawed crayfish.

Explanatory notes relating to species protected under The Conservation of Habitats and Species Regulations 2017 (which includes smooth snake, sand lizard, great crested newt and natterjack toad), all bat species, otter, dormouse and some plant species) are given below. **These should be read in conjunction with the relevant species sections that follow.**

- In the Directive, the term 'deliberate' is interpreted as being somewhat wider than intentional and may be thought of as including an element of recklessness.
- The Conservation of Habitats and Species Regulations 2017 does not define the act of 'migration' and therefore, as a precaution, it is recommended that short distance movement of animals for e.g. foraging, breeding or dispersal purposes are also considered.
- In order to obtain a European Protected Species Mitigation (EPSM) licence, the application must demonstrate that it meets all of the following three 'tests': i) the action(s) are necessary for the purpose of preserving public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment; ii) that there is no satisfactory alternative and iii) that the action authorised will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.

Herpetofauna (Amphibians and Reptiles)

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita* and great crested newt *Triturus cristatus* receive full protection under The Conservation of Habitats and Species Regulations 2017 through their inclusion on Schedule 2. The pool frog *Pelophylax lessonae* is also afforded full protection under the same legislation. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of species listed on Schedule 2
- Deliberate disturbance of any Schedule 2 species as:
    - a) to impair their ability:
        - (i) to survive, breed, or reproduce, or to rear or nurture young;
        - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate
    - b) to affect significantly the local distribution or abundance of the species

- Deliberate taking or destroying of the eggs of a Schedule 2 species
- Damage or destruction of a breeding site or resting place
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

With the exception of the pool frog, these species are also currently listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of herpetofauna are protected solely under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). Species such as the adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis* are listed in respect to Section 9(1) & (5). For these species, it is prohibited to:

- Intentionally (or recklessly in Scotland) kill or injure these species
- Sell, offer or expose for sale, possess or transport for purpose of sale these species, or any part thereof.

Common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Lissotriton vulgaris* and palmate newt *L. helveticus* are listed in respect to Section 9(5) only which affords them protection against sale, offering or exposing for sale, possession or transport for the purpose of sale.

How is the legislation pertaining to herpetofauna liable to affect development works?

A European Protected Species (EPS) Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect the breeding sites or resting places of those amphibian and reptile species protected under The Conservation Habitats and Species Regulations 2017. A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the Wildlife and Countryside Act 1981 (as amended).

Badger

Badgers *Meles meles* receive protection under The Protection of Badgers Act 1992 which consolidates the previous Badger Acts of 1973 and 1991. The Act makes it an offence to:

- Wilfully kill, injure, take, or attempt to kill, injure or take a badger
- Cruelly ill-treat a badger, including use of tongs and digging
- Possess or control a dead badger or any part thereof
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett[2] or any part thereof
- Intentionally or recklessly disturb[3] a badger when it is occupying a badger sett
- Intentionally or recklessly cause a dog to enter a badger sett
- Sell or offers for sale, possesses or has under his control, a live badger

How is the legislation pertaining to badgers liable to affect development works?

A Development Licence[4] will be required from the relevant countryside agency (e.g. Natural England) for any development works liable to affect an active badger sett, or to disturb badgers whilst in the sett. Depending on the nature of the works and the specifics of the sett and its environs, badgers could be disturbed by work near the sett even if there is no direct interference or damage to the sett itself. The countryside agencies have issued guidelines on what constitutes a licensable activity. N.B. there is no provision in law for the capture of badgers for development purposes and therefore it is not possible to obtain a licence to translocate badgers from one area to another.

Bats

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2017 through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats)
- Deliberate disturbance of bat species as:

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2 A badger sett is defined in the legislation as *"any structure or place which displays signs indicating current use by a badger"*. This includes seasonally used setts. Natural England and DEFRA have issued guidance on what is likely to constitute current use of a badger sett: https://www.gov.uk/guidance/badgers-surveys-and-mitigation-for-development-projects

3 For guidance on what constitutes disturbance and other licensing queries, see Natural England and DEFRA guidance https://www.gov.uk/guidance/badgers-protection-surveys-and-licences.

4 Natural England will only consider issuing a licence where detailed planning permission (if applicable to operation) has already been granted

    - a) to impair their ability:
        - (i) to survive, breed, or reproduce, or to rear or nurture young;
        - (ii) to hibernate or migrate[3]
    - b) to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

Bats are also currently protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

How is the legislation pertaining to bats liable to affect development works?

A European Protected Species (EPS) Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Though there is no case law to date, the legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost[5].

Birds

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the Wildlife and Countryside Act 1981 (as amended). Among other things, this makes it an offence to:

[5] Garland & Markham (2008) Is important bat foraging and commuting habitat legally protected? Mammal News, No. **150**. The Mammal Society, Southampton.

- Intentionally (or recklessly in Scotland) kill, injure or take any wild bird
- Intentionally (or recklessly in Scotland) take, damage or destroy (or, in Scotland, otherwise interfere with) the nest of any wild bird while it is in use or being built
- Intentionally take or destroy an egg of any wild bird
- Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.
- In Scotland only, intentionally or recklessly obstruct or prevent any wild bird from using its nest

Certain species of bird, for example the barn owl, black redstart, hobby, bittern and kingfisher receive additional special protection under Schedule 1 of the Act and Annex 1 of the European Community Directive on the Conservation of Wild Birds (2009/147/EC). This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young
- Intentional or reckless disturbance of dependent young of such a bird
- In Scotland only, intentional or reckless disturbance whilst lekking
- In Scotland only, intentional or reckless harassment

How is the legislation pertaining to birds liable to affect development works?

To avoid contravention of the Wildlife and Countryside Act 1981 (as amended), works should be planned to avoid the possibility of killing or injuring any wild bird, or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird nesting season which typically runs from March to August[6]. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Those species of bird listed on Schedule 1 are additionally protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance

[66] It should be noted that this is the main breeding period. Breeding activity may occur outwith this period (depending on the particular species and geographical location of the site) and thus due care and attention should be given when undertaking potentially disturbing works at any time of year.

is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

Dormouse

Dormice *Muscardinus avellanarius* are fully protected under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. dormice)
- Deliberate disturbance of dormice as:

  a) to impair their ability:

  (i) to survive, breed, or reproduce, or to rear or nurture young;

  (ii) to hibernate or migrate

  b) to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

Dormice are also currently protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

How is the legislation pertaining to dormice liable to affect development works?

A European Protected Species (EPS) Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect dormouse breeding or resting places (N.B. this is usually taken to mean dormouse 'habitat') or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Wild Mammals (Protection) Act 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to:

- Mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

Invasive Plant Species

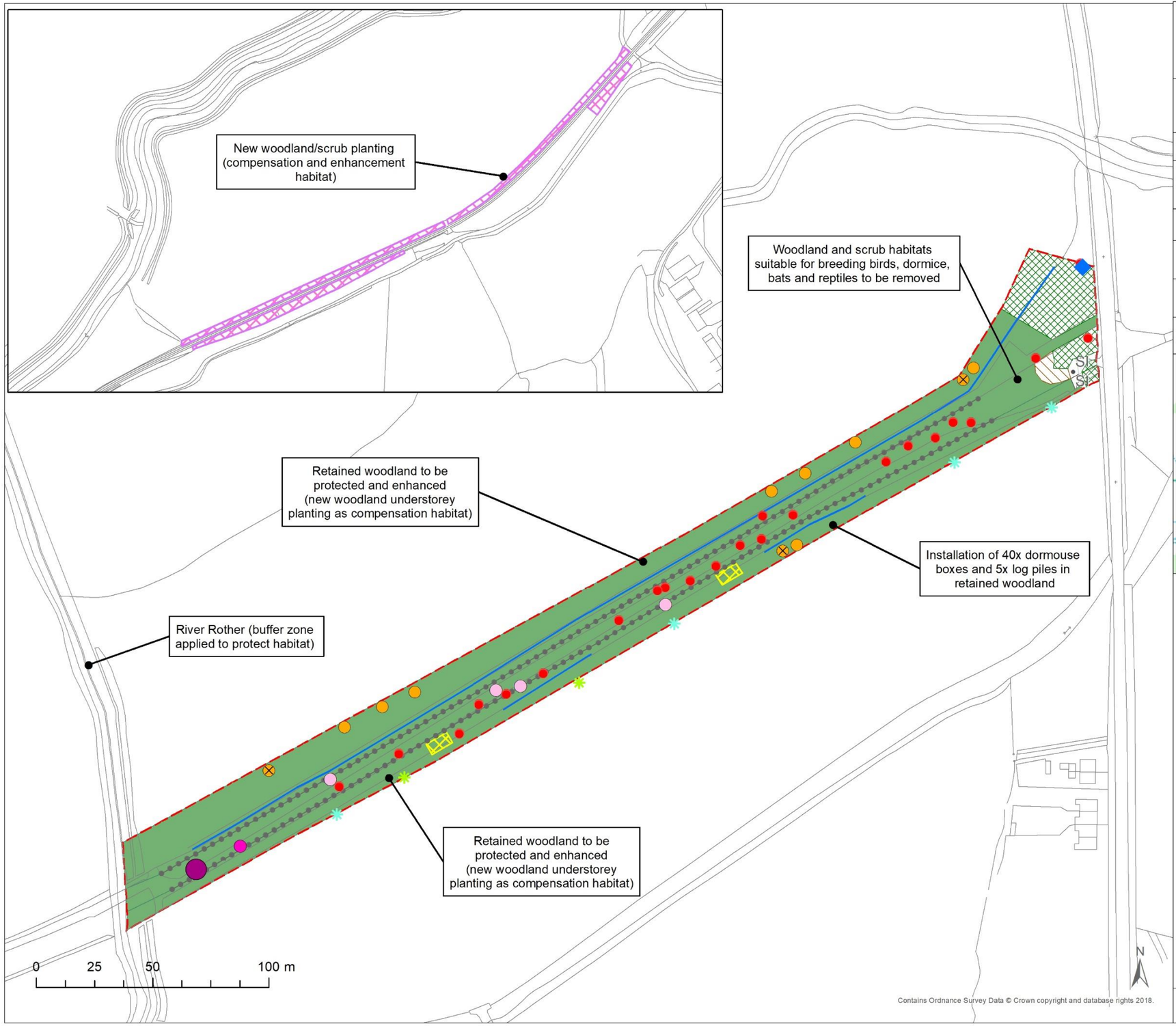
Certain species of plant, including Japanese knotweed *Fallopia japonica*, giant hogweed *Heracleum mantegazzianum* and Himalayan balsam *Impatiens glandulifera* are listed on Part II of Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) in respect to Section 14(2). Such species are generally non-natives whose establishment or spread in the wild may be detrimental to native wildlife. Inclusion on Part II of Schedule 9 therefore makes it an offence to plant or otherwise cause these species to grow in the wild.

How is the legislation pertaining to invasive plants liable to affect development works?

Although it is not an offence to have these plants on your land per se, it is an offence to cause these species to grow in the wild. Therefore, if they are present on site and development activities (for example movement of spoil, disposal of cut waste or vehicular movements) have the potential to cause the further spread of these species to new areas, it will be necessary to ensure appropriate measures are in place to prevent this happening prior to the commencement of works.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

Appendix 2: ECOP and Habitat Creation/Enhancement Map



The Ecology Consultancy

Job title
Rother Valley Railway
TEC Job no. ET6860

Client
Rother Valley Railway Ltd

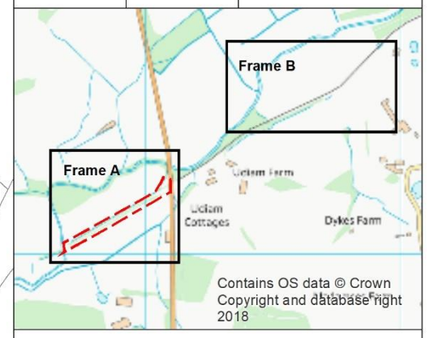
Map title
Ecological Constraints and Opportunities Plan

Section:	Scale (at A3)
N/A	1:1,500

Date of survey
N/A

Surveyor
Rosanna Marston

Drawn	Approved	Date
RM	GC	05/12/2018



Legend

- Site boundary
- Bare ground
- Tall ruderal
- Poor semi-improved grassland
- Main badger sett (to be closed)
- Annex badger sett (to be closed)
- Dormouse nest
- Dormouse in nest
- Common lizard
- Trees with bat roost potential
- Dense scrub
- Broad-leaved semi-natural woodland
- Standing water
- Earth bank
- Outlier badger sett (to be closed)
- Artificial badger sett creation (options)
- Maternity bat roost (to be retained)
- New woodland/ scrub planting
- Grass snake

This plan is provided solely for the purpose of supporting the description of the ecological features of the site as contained in the accompanying report

The Ecology Consultancy

Job title
Rother Valley Railway
TEC Job no. ET6860

Client
Rother Valley Railway Ltd

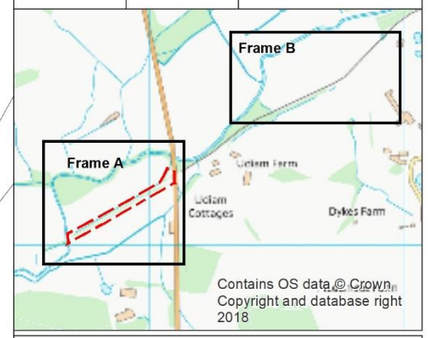
Map title
Habitat Creation/ Enhancement Map

Section:	Scale (at A3)
N/A	1:1,643

Date of survey
N/A

Surveyor
N/A

Drawn	Approved	Date
RM	GC	19/12/2018



Legend

- Site boundary
- New woodland/scrub planting Total area = 0.41ha
  Extent of planting subject to detailed survey. Planting may be extended to the south of the track. Planting to be kept 3m from outer edge of rail.
- Woodland to be enhanced with 0.112ha of new scrub (understorey planting)
- 40 x new dormouse boxes
- 5 x new log piles
- 5 x new bird boxes

This plan is provided solely for the purpose of supporting the description of the ecological features of the site as contained in the accompanying report

The Ecology Consultancy is part of the Temple Group.

Making places better for people and wildlife

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