



Britology Ltd

Land West of Highfield, Sled Gates, Fylingthorpe
Hedgerow Translocation Method Statement

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FPCR Environment and Design Ltd

Registered Office: Lockington Hall, Lockington, Derby DE74 2RH

Company No. 07128076.

[W] www.fpcr.co.uk

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Photograph 1: Trial hole on site, approximately 2m from the base of the hedge

1.0 INTRODUCTION

- 1.1 This Hedgerow Translocation Method Statement has been produced by FPCR Environment and Design Ltd. (FPCR) on behalf of Britology Ltd who act on behalf of the applicant. The hedgerow in question is located along the site frontage on land West of Highfield, Sledgates, Fylingthorpe.
- 1.2 The purpose of this document is to assess the state of the hedge, the presence of physical factors which may affect the feasibility and methods for translocation, a description of the particular methods to be used for the translocation of the hedgerow, the key elements that should be considered to ensure successful relocation and to demonstrate the expertise of FPCR to complete this work.
- 1.3 In the context of new developments, the translocation of hedgerows is only considered where all other options to retain the hedgerow have been explored and it has been judged appropriate on the individual merits of that particular case. A full account of all ecological, landscape and arboricultural constraints and the relevant statutory guidance, planning policy and regulations also need to be considered.
- 1.4 The site has been identified for residential development, the need for which is provided in accompanying planning documents submitted with the application. For this site, it is not possible to retain the hedge in its current location due to highways issues affecting visibility splays and corresponding affects to site access.

Permitted Works under Hedgerow Regulations 1997 & North York Moors National Park Authority Supplementary Planning Documents

- 1.5 Part Three of the 'Design Guide Supplementary Planning Document'¹ (SPD) of the North York Moors National Park Authority Local Development Framework recognises the provisions in the Hedgerow Regulations.
- 1.6 Under the Hedgerow Regulations 1997 ("the Regulations") it is against the law to remove most countryside hedgerows without first obtaining permission from the local planning authority.
- 1.7 Provision 5(1) of the Regulations² states that:

"Subject to the exceptions specified in regulation 6, the removal of a hedgerow to which these Regulations apply is prohibited unless (a) the local planning authority in whose area the hedgerow is situated ..have received.. a proposal to remove the hedgerow ("hedgerow removal notice") together with the plan and evidence mentioned in the form set out in Schedule 4."

- 1.8 There are a number of "permitted works" set out in the Regulations. Under Provision 6 (1), the LPA's permission is not required before the hedgerow is removed if:

"the removal of any hedgerow to which these Regulations apply is permitted if it is required...(e) for carrying out development for which planning permission has been granted or is deemed to have been granted..."

¹ <https://www.northyorkmoors.org.uk/planning/framework/spds/dgpt3.pdf> accessed 16.12.21

² <https://www.legislation.gov.uk/uksi/1997/1160/regulation/5/made>, accessed 16.12.21

- 1.9 The main benefits of translocating hedgerows include, that it:
- allows mature & complex ecological resources to be retained on or near the site;
 - generates ecological resources for new habitat creation schemes rapidly;
 - provides ecological function, structure & habitat diversity more quickly than habitat creation using seeds or nursery materials;
 - provides quick visual screening, wind breaks and landscape benefits;
 - maintains native species of local provenance; and
 - may have a smaller carbon footprint than habitat creation using nursery materials.
- 1.10 Other factors which will need to be considered but are outside the scope of this report are the location of services (a streetlamp was observed abutting the hedgerow), that operations are likely to require a traffic management system, and permission from the highway authority given the proximity of the hedge to Sled Gates.

2.0 BACKGROUND CONSIDERATIONS & COMPANY EXPERTISE

- 2.1 FPCR are a multi-disciplinary practice who offer a complete ecological service covering a range of disciplines, which have been utilised by numerous nationally known client bodies. We have over 50 years of experience of providing ecological and arboricultural advice. During this time, we have worked on many habitat translocation and large-scale habitat re-creation schemes. Habitat translocation has involved wetland, grassland, individual trees, scrub, and hedges. We have also completed specialist translocations involving habitats on more complex sites such as those developed on pulverised fuel ash containing orchid assemblages.
- 2.2 Examples of work we have conducted or have been directly involved in where hedgerow translocation was required included numerous larger scale developments from minerals to infrastructure projects. For example, for UK Coal Ltd. these include sites located across the East Midlands and Northeast. We have also worked with UK Coal's predecessors going back 30 years, and have been involved in outlining methods and approaches to habitat recreation and translocation over this period. A total of 550m of hedgerows was successfully translocated in collaboration with UK Coal Estates management teams.
- 2.3 More recently FPCR, working alongside a specialist contractor, successfully translocated hedgerows as part of the Northampton Gateway Rail Freight Interchange for Segro Ltd.; a total of 2776m of conservation grade hedges were translocated. Images from these sites have been included within Appendix A to provide a visual aid of the work required.
- 2.4 The majority of these sites have required the preparation of management plans and subsequent monitoring for which we routinely provide input and support.
- 2.5 FPCR can therefore demonstrate expertise attained over many decades of being involved in successful habitat recreation and translocation work for many schemes.

Hedgerow Evaluation

- 2.6 The hedgerow is located along the frontage of the site and runs alongside Sled Gates. It is described and defined in the Hedgerow Assessment produced by Middleton Bell Ecology (MBE) in 2021, as being a native species rich hedgerow, with no gaps present, atop a small hedge bank

- and wall. Former laying/coppicing was evident, and the hedgerow had a good structure with no/little vertical gaps from the base. The hedge was noted to appear to have been recently managed.
- 2.7 Whilst the survey carried out by MBE did not confirm the hedgerow to be 'important' under the Hedgerow Regulations 1997, third party submissions provided further data to suggest the hedge met criteria as 'important'.
- 2.8 Representations were also made with regard to the lack of ecological supporting information, reliance on out-of-date survey information, and the validity of surveys provided in support of the application.
- 2.9 Dr Tim Reed of St Ives Cambridgeshire (a retired Consultant Ecologist) in in his representation (made C/O The Pond House Sledgates, Fylingthorpe) maintained that the hedgerow qualified as important under the Regulations on the basis of "**5 confirmed woody species and 3 associated qualifying features.**" However, under Provision 7 (d)³, the lowest of the categories for qualification as an important hedge, the Regulations state: "*at least 5 woody species, and has associated with it at least 4 of the features specified in sub-paragraph (4)*". The hedgerow only meets three: a bank or wall supporting a hedgerow, less than 10% gaps, and at least three woodland species within 1m. The remaining categories – presence of a ditch, trees, connections scoring more than 4 points and a parallel hedge adjacent – are absent.
- 2.10 In reviewing the hedge on site and the information available, it is therefore doubtful that the hedgerow in question would be able to meet any additional criteria under the minimum category to be considered as an important hedgerow under the Regulations. Nevertheless, under the habitat descriptions for Hedgerow Habitat of Principal Importance (HPI) as listed within Section 41 of the NERC Act, the hedge consists of 80% or more native species and therefore qualifies as HPI.
- 2.11 The local planning authority is required to consider any priority habitats that could be potentially affected during development. Where a priority habitat is present, the mitigation hierarchy should be applied. This means that impacts on these habitats should be avoided where feasible and, in cases where this is not possible, measures which reduce any such negative impact should be explored. Losses of such habitats should be compensated for as part of development proposals.
- 2.12 In considering the mitigation hierarchy, it is confirmed that the hedgerow cannot be retained in its current alignment due to highways requirements. Mitigation measures can however be applied to minimise the potential loss of hedgerow habitat and regardless of the hedgerow's conservation status, it is preferable to seek to translocate the hedgerow rather than lose it or replant a new hedgerow in compensation.
- 2.13 The hedge is considered suitable for translocation, and it is considered that the hedge could be readily relocated further into the site to retain what is a valuable nature conservation resource. By relocating further into the site, the required visibility splays and access works can be completed without constraint, and the hedge line can be reconnected not far from its original alignment, reinforced, and managed to enable it to continue to serve as a functional ecological unit.
- 2.14 A sketch of the cross section of the hedge can be seen in Appendix B. A small trial hole was dug into the soil on 4th December 2021, approximately 2m from the base of the hedge, as shown on Photograph 1 below. The soil profile confirms little evidence of lateral roots extending far from the

³https://www.legislation.gov.uk/ukxi/1997/1160/schedule/1/paragraph/7/made/data.xht?view=snippet&wra_p=true, accessed 16.12.21

hedge base (likely to be within 1m of hedge base). The soil profile confirms a uniform clay-clay/loam which should allow for good extraction of both the component shrubby species and associated ground flora, but care will be needed to avoid excessively wet conditions.



Photo 1: Trial hole on site, approximately 2m from the base of the hedge

Additional proposals in Mitigation

- 2.15 The development proposals also include the planting of a new native species hedge to define the southern site boundary and to provide net gain. Where feasible, species should include those of local providence and be appropriate to the location (see Section 3.4 below for native tree and shrub species). Again, planting will include tree species such as oak and ash which will be allowed to develop into standards to create structure as well as increasing diversity.

3.0 METHOD STATEMENT

- 3.1 The translocation of the hedgerow has been identified as key to facilitating development of the Site.

Locations

- 3.2 The hedgerow is located along the frontage of the site and runs alongside Sled Gates. A section of the hedgerow c.8m will need to be lost to create an access road and service paths. The remaining length is subject to the translocation. It is also proposed that the original retaining wall is rebuilt in front of the hedgerow and the hedge set back onto a small bank to recreate the original profile (Appendix B).
- 3.3 The final location of the translocation will be along the frontage of the new development, very close to its original alignment. This minimises any issues in relation to extraction, effects of transportation, drying out and any potential damage. Once established, the hedge line will look similar to the original; the hedge will be retained albeit aligned further into the development. Original connections

will be preserved, and the hedge connected to a proposed new hedge in the southern site boundary.

- 3.4 It is recommended that the sycamore specimens are removed (as they are introduced non-native species) and the hedgerow reinforced by new planting of native locally-appropriate species, the aim being to build in greater diversity, habitat value and resilience. Species may include oak, ash, rowan, hazel, wild cherry, and hawthorn. Along with reinforcing any gaps, trees will be planted at intervals along the relocated hedge to become future standards.

Timing & Preparatory Works

- 3.5 A summary of the translocation timings and preparation methodology is presented in Table 1, below.
- 3.6 Preparatory works should comprise coppicing to remove all growth to approx. 1m and trenched root pruning to the southern side of the hedgerow. This should include backfilling opened trenches to allow the development of better root balls to ensure better survival of transplants. The aim is to achieve a manageable aerial component to the hedge.
- 3.7 These works should include clearance of any other vegetation (prior to a nesting bird check) to allow trenching, removal of obstacles, and trial holes. This would also allow an assessment of the root structure to be undertaken at the time.
- 3.8 The hedge, having been prepared as described above, would be ready for the next phase of translocation which would take place in the Autumn/Winter period.
- 3.9 Due to the presence of a retaining wall and adjacent footpath it is recommended that that roots on the northern side of the hedgerow are cut on the day of translocation.
- 3.10 The physical translocation of the hedgerows will be completed during the dormant period between October and March inclusive, which will allow the hedgerow to establish in its new location before the summer. During this period, translocations will not take place during extreme or inclement weather resulting in ground frost, snow, or heavy rain.

Equipment

Preparatory works

- 3.11 Preparatory works should be undertaken using a trenching machine and air spades. A root saw can be used for larger roots.

Translocation

- 3.12 A suitable 360-degree excavator, likely in excess of 30 tonnes, should be used to move the sections of the existing hedgerow with minimal disturbance in sections as large as possible. A low ground pressure tracked machine with a suitable reach should be used.
- 3.13 The recommended bucket width is a minimum of 1.5m, but this is dependent on ground conditions and a narrower bucket may be necessary. Nevertheless, the bucket should be sufficient to remove roots from a depth of approximately 1m, though most roots will be within the first 0.5m.

- 3.14 Due to the distances involved, it is not considered necessary to place excavated plant material and associated soils onto a flatbed trailer or similar kit to transfer to the receptor site. Instead to minimise disturbance once excavated, sections of hedge will be transferred directly in the bucket.

Summary Methodology

- 3.15 A summary of the translocation timings and methodology is presented in Table 1, below. Images from example sites have been included within Appendix A to provide a visual aid of the work required.

Table 1: Methods to achieve objectives – see images in Appendix A for illustrations

ACTION	MANAGEMENT TO ACHIEVE OBJECTIVE – PRE-TRANSLOCATION	MANAGEMENT TO ACHIEVE OBJECTIVE – POST-TRANSLOCATION
1. Protected Species Survey Update	Prior to work commencing, an ecologist will conduct a walkover survey of the hedge to be prepared for translocation looking for signs of any protected species. The findings of this survey will be used to refine the extent of the works and any timing restrictions required will be adhered to.	No further management required
2. Nesting Bird Checks	Nesting bird season runs between March and September (inclusive). Nesting bird checks would not be required for hedgerow translocation between October to end of February. Should works not be completed by March, an ecologist will thoroughly check lengths of hedgerow for nesting birds prior to any preparatory works scheduled to occur throughout this period. Any nest discovered will have a suitable buffer put in place and be clearly marked until an ecologist confirms that chicks have fledged.	Annual management: • any management of the hedgerow should be carried out during the period October-February (inclusive) to avoid disturbance to breeding birds. • if management must occur during the breeding season, an ecologist should be contacted.
3. Root pruning	Root pruning will occur at least 6 months prior to translocation. Root pruning will be completed within 1m from the hedgerow base to stimulate growth of a fibrous network of roots from the cut sections thereby better preparing the roots for uptake of water and nutrients when it is replanted in the receptor site.	No further management required
4. Coppicing	Hedges will be reduced in height to c.100cm, and side growth reduced to stimulate new shoot and root growth once moved.	No further management required
5. Receptor site excavation	<ul style="list-style-type: none"> • The new location of the hedgerow (receptor site) should be at least 750mm from the proposed site boundary (this will need to be marked out with care to ensure correct location). • The receptor site will be prepared in advance of receiving the translocated material by excavating a trench 1.0m deep and 2.0m wide. The excavated soil 	No further management required

	<p>should be piled along the length of the trench so that it is easily accessible for backfilling.</p> <ul style="list-style-type: none"> The base of the trench will be broken with excavator teeth and slow release fertilizer 20:4:10 N:P:K applied at a rate of 50g per metre. Broadleaf P4 water retention granules will also be spread along the base of the trench at a rate of 30g per metre length. 	
<p>6. Translocation</p>	<p>Under supervision of an experienced ecologist/horticulturalist:</p> <ul style="list-style-type: none"> Sections of the hedgerow will be dug and transferred to the receptor site in sequence. A chainsaw operative will be available to cut roots or stems rather than breaking them with the excavator. The hedgerow will then be excavated to a depth of c.1.0m and a width as wide as the bucket is able to accommodate to allow it to be lifted complete along with as much of the intact soil profile and ground flora as possible to maximise the volume of rooting material being translocated. Excavated section will either be transported in the bucket of the excavator used to remove length (or if required upon a trailer suitable to securely transport multiple sections). Roots must be exposed for as short a time as possible – no longer than one hour – and must never dry out completely. If a trailer is used to transport sections, the roots should be wrapped in water-soaked coir matting to prevent drying (unless completed during a period of lighter wet weather- in which case this might not be necessary). New hedgerow planting of whips will be incorporated within the translocated hedgerow using species suitable to the site. Topsoil from the original hedge will be used around the translocated sections. Subsoils either won from the donor site or receptor site to be used to recreate small hedgebanks. 	<p>Annual management:</p> <ul style="list-style-type: none"> the translocated hedgerow will need to be watered periodically during the first summer – particularly during prolonged periods of dry weather – to promote root development and maximise the chances of successful establishment.
<p>7. Making good</p>	<ul style="list-style-type: none"> An experienced ecologist/horticulturalist must check the translocated hedge to ensure it is sitting at the correct depth and there is sufficient topsoil around the roots. This must be undertaken during the translocation. Exposed roots will be buried and firmed by operatives. A small excavator must be available to facilitate this. On completion the hedge will be heavily watered to ensure topsoil is washed in to fill any voids. Ground flora will be left to regenerate naturally from the translocated hedgerow. 	<p>No further management required.</p>

Conclusions

- 3.16 In conclusion, the hedge does not qualify as an important hedge under the Hedgerow Regulations 1997 but it is considered a Habitat of Principal importance (Section 41, NERC 2006) as it contains more than 80% native species.
- 3.17 In order to facilitate residential development through the accommodation of highways requirements, the hedge cannot feasibly be retained in its original alignment. Given that it has nature conservation value, it is preferable to seek to translocate the hedgerow rather than either losing it or replant a new hedgerow in compensation. By translocating this hedgerow:
- mature ecological resources can be retained on the site;
 - ecological resources for new habitat creation schemes will be more rapidly generated;
 - provision is more rapidly made for ecological function, structure & habitat diversity than habitat creation alone using seeds or nursery materials;
 - the retained hedge line will be able to contribute visually in a similar way to the original; and
 - native species of local provenance would be maintained and not lost, thereby relying less on the importation of additional nursery stock to create a new hedge.
- 3.18 The proposed methodology outlined in the report has been used routinely by FPCR and its clients over the last 30 years to successfully translocate valuable hedges that cannot feasibly be retained in their original alignments (e.g. Appendix A); it is a tried and tested approach used to successfully mitigate development impacts.
- 3.19 In light of the findings of the report and the methodology to be implemented, it is our professional opinion that the hedge can reasonably be translocated and therefore impacts to this hedgerow does not warrant a reason to refuse the planning application.

**APPENDIX A - HEDGE TRANSLOCATION IMAGES TO ILLUSTRATE
METHODOLOGY**

Appendix A
 Hedgerow Translocation
 Images to Illustrate Methodology

1. Preparation of hedge base season before translocation. Trenching works. Site near Northampton

2 & 3. Coppicing lengths of hedge line. Site near Road, Northampton

4. Using a root saw to cut lengths of hedge prior to excavation. The same equipment can be used to sever any laterally extending roots in the first season for the purposes of preparing the hedge and help stimulate fine root growth.



1



2



3



4

Appendix A
 Hedgerow Translocation
 Images to Illustrate Methodology

5. Using a flatbed trailer or similar (depending on distances and conditions) to move larger volumes of excavated plant material and soil. Otherwise, material can be transferred directly in the bucket of the excavator.



5

6. Close up of hedge portion prepared for excavator.



6

7. Specially constructed bucket attachment to facilitate hedge excavation (helpful for longer lengths of hedges and time critical works but not absolutely essential).



7

8. Preparing a hedge for translocation in Derbyshire



8

9. Bedding in post translocation site in Derbyshire

10. Bedding in post translocation Site near Northampton. Example of double hedge recreation.

11. Placement of translocated root balls into prepared receptor trenches. Example of double hedge recreation



9



11



10

Appendix A
 Hedgerow Translocation
 Images to Illustrate Methodology

12. Completed translocation one of a number of hedges completed for site near Northampton. Example of double hedge recreation

13. Completed Hedge translocation. Site in Leicestershire location along a footpath on edge of development site.

14. Same hedge showing regrowth after approximately 3 seasons.



12



13



14

15. Hedegline after approximately 1 season of regrowth post translocation site in Derbyshire



15

16. First season of regrowth translocated hedge in Derbyshire



16

17. Post Translocation Hedge in Derbyshire after 3 seasons.



17

**APPENDIX B - SKETCHES OF THE CROSS-SECTION OF HEDGE AT ITS
WESTERN AND EASTERN ENDS**



