

Appeal by Gladman Developments Ltd & Severn Valley Sand  
and Gravel Co. Ltd

Outline application for the erection of up to 145 dwellings,  
public open space, landscaping, and sustainable drainage  
systems (SuDS) and vehicular access point. All matters  
reserved except for access.

Land off Areley Common, Astley Cross Hill, Stourport-on-  
Severn

Appeal Ref. No. APP/J1860/W/22/3309338

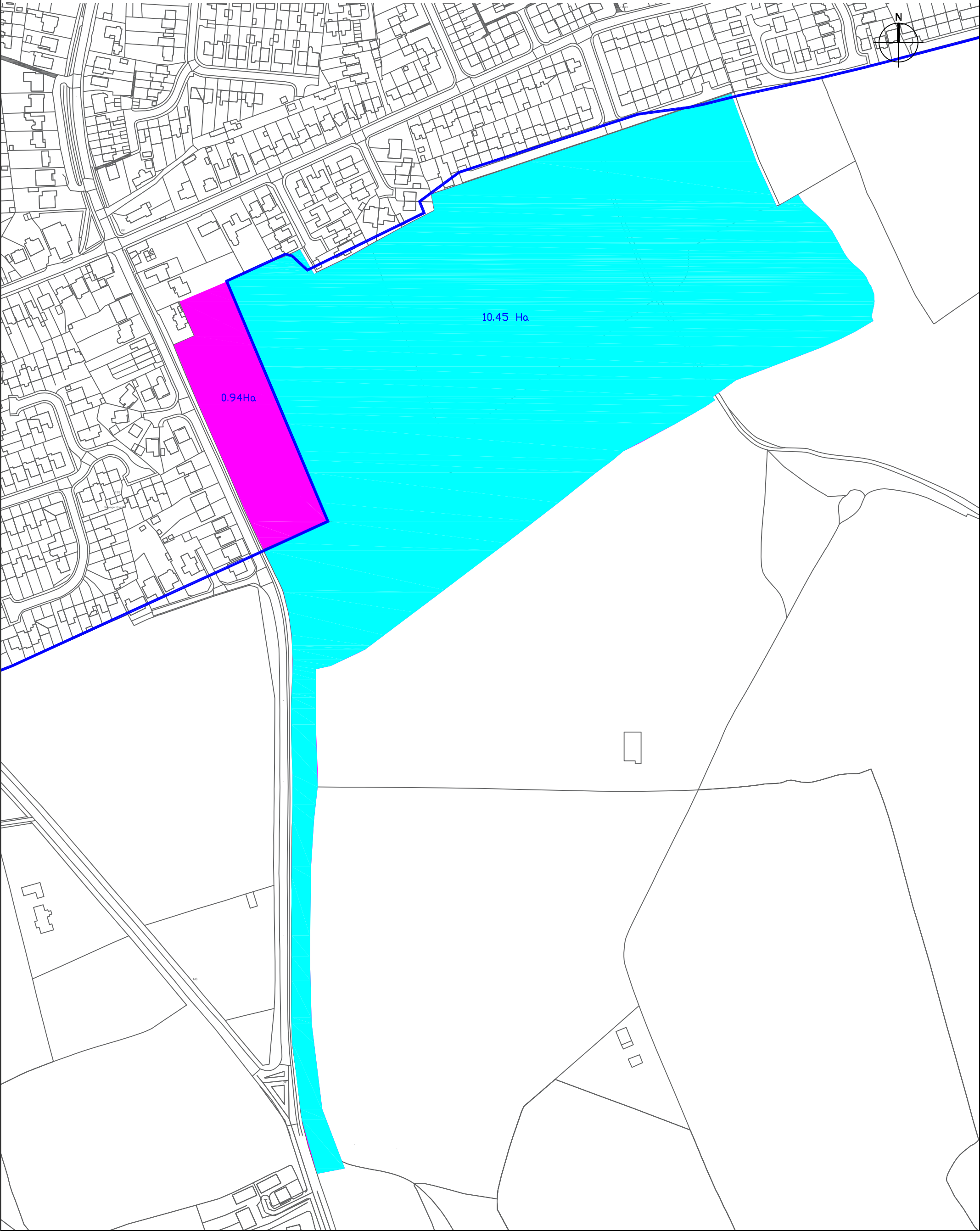
Appeal Ref. No. APP/R1845/W/22/3309343

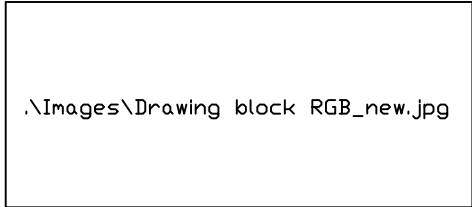
Appendices



**February 2022**

Appendix A1



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	<p>Rev Date By Revision notes</p>	<p>Title</p> <p><b>Boundaries</b></p>	<p>Title checked by</p> <p>CHECKED BY</p> <p>Title checked date</p> <p>CHECKED_DATE</p> <p>Highways checked by</p> <p>CHECKED BY</p> <p>Highways checked date</p> <p>CHECKED_DATE</p> <p>Topo checked by</p> <p>CHECKED BY</p> <p>Topo checked date</p> <p>CHECKED_DATE</p>
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## Appendix A2 - Third Party Responses

Summary of Consultation Comments	Gladman's Response
<b>Principle of Development</b>	
<ul style="list-style-type: none"> <li>• The proposed development is situated outside the area of the South Worcestershire Development Plan. Object to the site's location within Malvern Hills but adjacent to the town of Stourport-on-Severn.</li> <li>• Previous applications were refused because they failed to accord with local housing policies. There is no need for this development in order to meet housing needs. There are brownfield sites within Stourport-on-Severn which can contribute to meeting housing needs and requirements.</li> </ul>	<ul style="list-style-type: none"> <li>• The principle of development in relation to the appeal site has been discussed in my main Proof of Evidence. In doing so I have explained why I believe it represents a sustainable location to deliver further housing, helping to address Malvern Hill's five-year land supply deficit and also providing a boost to housing supply in Wyre Forest.</li> <li>• The appeal proposals will help to boost the supply of market and affordable homes in both district areas. It is considered that there are material considerations that justify a departure from the Development Plan and outweigh the limited degree of harm arising from a conflict with it in this instance.</li> <li>• Each planning application must be determined on its own merits taking account of the relevant material considerations prevailing at the time. The appeal parties will present their respective cases on the planning balance and the application of planning policies to the Inspector</li> </ul>
<b>Access (Highways, Public Transport, Cycling and Walking)</b>	
<ul style="list-style-type: none"> <li>• The multiple developments in the area will exacerbate existing congestion issues along Areley Common (B4196), which is the main route to and over the Bridge to access the Doctor's surgery, Schools and Stourport and Kidderminster towns.</li> <li>• Noise and air pollution will be experienced from built-up, gridlocked traffic.</li> <li>• Public transport under threat with the announcement by a major provider (Diamond Buses) that the services in the area are not viable.</li> <li>• The proposed access, off Areley Common, is unsatisfactory</li> </ul>	<ul style="list-style-type: none"> <li>• Worcestershire County Council in their capacity as the local highway authority has no objections to the appeal proposals in relation to highway safety or capacity.</li> <li>• The Transport Assessment that accompanied the appellant's original planning application describes how the appeal proposals would not have a detrimental impact on the operational performance of the highway network.</li> <li>• The proposed access point off Areley Common has been accepted by Worcester County Council as the local highways authority and they have</li> </ul>

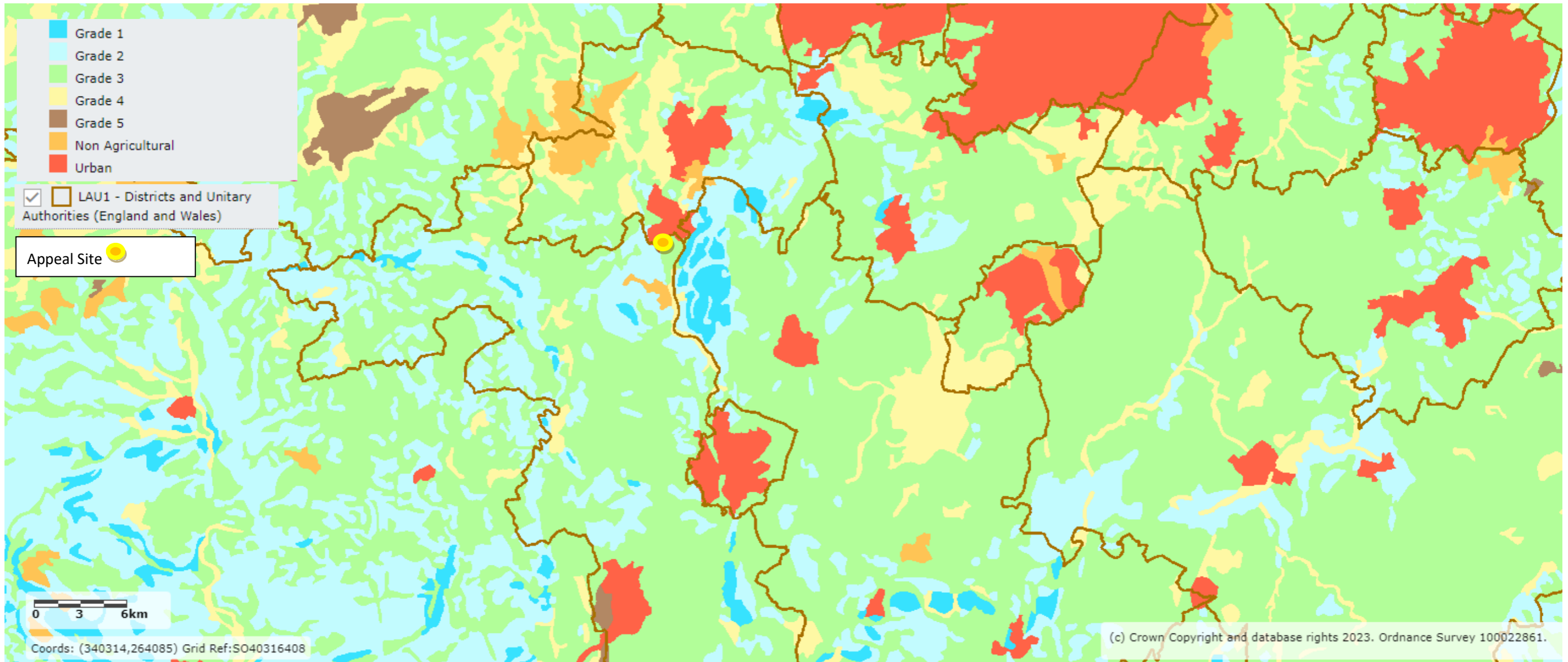
<ul style="list-style-type: none"> <li>• Access is off a busy road with speeding cars and parked cars, where visibility is already precarious due to the parked cars.</li> <li>• Questions over the traffic analysis as it was completed during COVID lockdown conditions and so may not reflect a true analysis of the area's traffic.</li> </ul>	<p>no objection to the proposals subject to conditions and financial obligations.</p> <ul style="list-style-type: none"> <li>• Speed surveys have been undertaken as part of the Transport Assessment and these have been taken into account through the assessment as required.</li> <li>• The appeal proposals benefit from access to frequent bus services and will also be accompanied by developer contributions towards the delivery of enhanced bus stop infrastructure.</li> </ul>
<b>Layout, Design and Appearance</b>	
<ul style="list-style-type: none"> <li>• The proposal would be on the highest corner of the Common and visually intrusive from adjacent housing in Stourport and Astley Cross, and from the nearby Geopark Way and Severn Way long-distance footpaths.</li> <li>• Development of the lower field instead would still intrude on the view from the road, alongside of which there is a well-used pedestrian footpath.</li> <li>• Previous applications were refused because the development would result in an adverse change to the character and appearance of the area.</li> <li>• Open space has become more important to the community following the COVID-19 pandemic.</li> <li>• New modern-style housing development won't fit in with the existing character of the settlement.</li> <li>• Support for the proposed development as the area could do with a makeover.</li> <li>• Support for the application as it is an inspiring project offering unique housing.</li> </ul>	<ul style="list-style-type: none"> <li>• The effects of the appeal proposals in landscape and visual terms have been carefully assessed in the accompanying Landscape and Visual Impact Assessment (LVIA) and the evidence of Ms Gruner. It has been demonstrated that the appeal proposals would be acceptable in this respect and can successfully integrate with the existing adjoining landscape and townscape character.</li> <li>• While this scheme is proposing development over a green field, all existing landscape features will be retained wherever possible, and will also be accompanied by new tree, thicket and hedgerow planting as part of the appeal proposals.</li> <li>• Based on the appellant's Development Framework Plan, 5.32ha of the appeal site would delivered as public open space. This will include a locally equipped area for play (LEAP) a multi-use games Area (MUGA), and a new parkland area, as well as other informal recreational opportunities. The areas of public open space would exceed the relevant requirements of adopted Development Plan policy.</li> </ul>
<b>Residential Amenity and Local Services</b>	

<ul style="list-style-type: none"> <li>• The development would have an unacceptable impact on the infrastructure in Areley Kings and the surrounding area</li> <li>• Particular impacts on new GP practice building in Stourport-on-Severn, as well as stress on local schools, public transport, shops and highways.</li> <li>• Doubts over the employment opportunities in Stourport-on-Severn</li> <li>• Lack of local jobs available for new residents</li> </ul>	<ul style="list-style-type: none"> <li>• The appeal proposals will be accompanied by proportionate developer contributions to help address any identified deficiencies in service or infrastructure provision that will arise in connection with the development of the appeal site.</li> <li>• Where there is a requirement to contribute towards existing facilities this will be identified and secured through the accompanying planning obligation. As described within my main Proof of Evidence, the parties are currently in the process of advancing a S106 agreement that will accommodate all necessary developer contributions and obligations, subject to meeting the relevant Community Infrastructure Levy (CIL) Regulation 122 tests, with the two Local Planning Authorities preparing a set of proposed S106 Heads of Terms to inform the S106 Agreement's preparation.</li> <li>• Consultation with Herefordshire and Worcestershire Clinical Commissioning Group (CCG) confirmed that developer contributions which would be secured through S106 would provide additional capacity to absorb the patient growth generated by this development.</li> <li>• Stourport-on-Severn has been identified as a Large Market Town and benefits from a range of services that will be available to new residents, and this is also likely to include employment opportunities. The appeal site also benefits from public transport links to Kidderminster, and other higher order centres. The appellant's Socio-Economic Statement also describes further economic benefits that would arise in connection with the appeal proposals.</li> </ul>
<b>Ecology, Heritage and Flooding</b>	
<ul style="list-style-type: none"> <li>• Development involves cutting down trees in an area that is used and valued by residents.</li> </ul>	<ul style="list-style-type: none"> <li>• The Arboricultural Appraisal submitted in support of the original planning application confirms that through good design the proposals would see</li> </ul>

<ul style="list-style-type: none"> <li>• Damage to wildlife habitats that cannot be replaced by green areas e.g. Skylarks that are protected under the Wildlife and Countryside Act 1981</li> <li>• Previous applications refused due to serious drainage concerns and the elements of flood risk to properties downstream at Longmore Hill, including Grade II listed buildings Longmore Hill Farm and Longmore Hill Barn.</li> <li>• Loss of agricultural land</li> </ul>	<p>much of the existing tree cover retained within areas of new public open space and landscape buffers.</p> <ul style="list-style-type: none"> <li>• Extensive new areas of planting have been proposed as part of the development, alongside the provision of a new parkland area. In this respect, the appeal proposals would also provide access to land that has not previously been publicly accessible.</li> <li>• The Ecology Appraisals and ecological information submitted in support of the appeal proposals concludes that it is considered likely that measures to avoid impacts on the protected species can be accommodated within on-site green space and the site is likely to provide relevant mitigation and compensation for these habitats. It is agreed that the appeal proposals have the ability to generate net biodiversity gains.</li> <li>• The Flood Risk Assessment (FRA) that accompanied the appellant's original application proposals demonstrated that the appeal proposals would operate with minimal risk from flooding and would not increase the risk of flooding elsewhere. The Lead Local Authority Area's (LLFA) only outstanding concern in respect of the appeal proposals is that the proposed surface water drainage outfall relies in part on the use of third-party land, which could be addressed via way of a Grampian condition.</li> <li>• Whilst the appeal proposals would result in the loss of some Best and Most Versatile (BMV) agricultural land, I have explained the weight that I believe should be attached to this loss in the planning balance.</li> </ul>
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# Appendix A3

## Defra Magic Map – Agricultural Land Classification Mapping



## **Appendix A4 - National Planning Policy Framework**

- 1.1.1 The latest version of the National Planning Policy Framework (The Framework) was published on the 20th July 2021 and, from the date of publication, its policies are a material consideration to be taken into account when dealing with applications<sup>1</sup>.
- 1.1.2 The Framework sets out the Government's planning policies for England and how these are expected to be applied; it also sets out the requirements for the planning system only to the extent that it is relevant, proportionate and necessary to do so.
- 1.1.3 Planning law requires that applications must be determined in accordance with the development plan unless material considerations indicate otherwise. This is confirmed by paragraphs 2, 12 and 47 of the Framework, which continue to place importance on the planned approach. The Framework is, however, a material consideration in decision taking from the date of its publication<sup>2</sup>.
- 1.1.4 The Government has made clear its expectation, through the Framework, that the planning system will positively embrace well-conceived development to deliver the economic growth necessary and the housing needed to create inclusive and mixed communities so that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development.
- 1.1.5 My evidence explains how the presumption in favour of sustainable development set out at paragraph 11 of the Framework is engaged in this case due to the appellant's contention that Malvern Hill District Council (MHDC) are unable to demonstrate a five-year housing land supply, and that the element of the appeal proposals that fall within MHDC's authority boundary fall to be determined in accordance with Framework paragraph 11(d)(ii). Paragraph 11(d)(i) asserts that the presumption can be disengaged where policies in the Framework provide a clear reason for refusing development. I have explained why this would not be the case in this instance.

### **Achieving sustainable development**

- 1.1.6 Paragraph 7 of the Framework summarises the objective of sustainable development as meeting the needs of the present without compromising the ability of future generations to meet their own needs. Paragraph 7 also makes reference to the UK's commitment to meeting the 17 Global Goals for Sustainable Development which address social progress, economic wellbeing and environmental protection.
- 1.1.7 Paragraph 8 notes that to achieve sustainable development, there are three overarching objectives that need to be pursued in mutually supportive ways: social, economic and

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<sup>1</sup> Paragraph 218.

<sup>2</sup> Paragraph 218.

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environmental. Under the 2021 Framework greater reference is made to ‘beautiful and safe’ places as a social objective.

- 1.1.8 The appeal proposals will deliver homes that will meet both market and affordable housing needs in an accessible location and allow for a choice of modes of transport to be used to access local facilities and services. Furthermore, the appellant has demonstrated how the appeal site would represent a suitable and sustainable location for the level of development proposed. The appeal proposals will be required by the Framework to be “beautiful and safe” at the reserved matters stage.

### **Delivering a sufficient supply of homes**

- 1.1.9 Paragraphs 60-80 set out how the Government’s objective of “significantly boosting” the supply of homes is to be achieved. The appeal proposals will help to boost the supply of market and affordable housing in both Council areas, and in doing so help to remedy MHDC’s five-year land supply deficit.
- 1.1.10 Paragraphs 60/61 of the Framework state that local authorities should seek to deliver a wide choice of quality homes and widen opportunities for home ownership, planning for a mix of housing based on current and future demographic trends. The proposal would be capable of providing for a range of market and affordable homes of various sizes and tenures meeting the expectations of the Framework.
- 1.1.11 Paragraph 61 of the Framework states that strategic policies should be informed by a local housing need assessment, conducted using the standard method in national planning guidance, unless exceptional circumstances justify an alternative approach which also reflects current and future demographic trends and market signals.
- 1.1.12 The definition of local housing need is set out at Annex 2 of the Framework, as follows:
- “The number of homes identified as being needed through the application of the standard method set out in national planning guidance, (or, in the context of preparing strategic policies only, this may be calculated using a justified alternative approach...)”**
- 1.1.13 Paragraph 63 of the Framework states that planning policies should also specify the type of affordable housing required and expect it to be met on site. In this instance, an appropriate affordable tenure mix will be secured via the accompanying legal agreement and the appellant anticipates that the appropriate affordable housing requirement will be met in full on site. The proposal will provide for a range of market and affordable homes of various sizes and tenures. These new dwellings will also help to free up existing dwellings that are under-occupied, enabling more efficient use of existing housing stock to be made.
- 1.1.14 Paragraph 74 of the NPPF notes that local planning authorities should identify and update annually a supply of specific deliverable sites sufficient to provide **a minimum** of five years’
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worth of housing against their housing requirement (my emphasis) or against their local housing need where the strategic policies are more than five years old. The supply of specific deliverable sites should in addition include a buffer (moved forward from later in the plan period) of either 5%, 10% or 20%. A 20% buffer should be applied where there has been significant under delivery of housing over the previous three years, to improve the prospect of achieving the planned supply.

1.1.15 In this case the appellant has not sought to challenge Wyre Forest District Council's (WFDC) ability to claim a five-year housing land supply. Whilst MHDC claim a supply of 5.06 years (25 dwellings above the minimum five-year requirement threshold), the appellant disputes this position and believes the Council are currently able to demonstrate a supply of 4.59 years.

1.1.16 The consequence of MHDC's inability to demonstrate a five-year housing land supply is that the tilted balance must be applied within their authority area: see footnote 8 of the NPPF, and paragraph 008 of the PPG on "Housing and economic land availability assessment":

**“What happens if an authority cannot demonstrate a 5 year land supply?”**

*‘In decision-taking, if an authority cannot demonstrate a 5 year housing land supply, including any appropriate buffer, the presumption in favour of sustainable development will apply, as set out in paragraph 11d of the National Planning Policy Framework.’*

**Building a strong, competitive economy**

1.1.17 Paragraph 80 of the Framework maintains that significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development.

1.1.18 The economic benefits associated with the appeal proposals are set out at Section 8.1 of my evidence and in more detail within the Socio-economic Sustainability Statement (CD1.19) submitted with the planning application. In my opinion, these are real benefits that are derived from the scheme and should be given significant weight in the planning balance.

**Promoting healthy and safe communities**

1.1.19 Paragraph 92 of the Framework promotes the aim of achieving healthy, inclusive and safe places by promoting social interaction, creation of places which are safe and accessible and also supporting healthy lifestyles through the provision of green infrastructure places. The accompanying Development Framework Plan (CD2.7) demonstrates how the provision of open space, landscaping, informal open space and new and retained footpath linkages could be integrated into a detailed design for the site at reserved matters stage.

1.1.20 The Development Framework Plan (CD2.7) shows how a total of 5.32 ha of new green infrastructure and formal and informal open space could be provided as part of the appeal

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proposals. This includes a new area of parkland within the south of the appeal site and other areas of new accessible greenspace, which will also incorporate wildflower planting, new native tree planting, a locally equipped area for play (LEAP) and a multi-use games area (MUGA), and new recreational routes. The green infrastructure framework will also allow for appropriate landscape and ecological mitigation measures to be secured and applied.

- 1.1.21 These components of the scheme will enable the new resident community, together with the existing, to use these networks in order to take exercise and thus the proposed scheme will actively promote general well-being for the new and existing resident community.

### **Promoting sustainable transport**

- 1.1.22 Paragraphs 104-113 of the Framework set out how transport factors should be taken into account when considering development. In accordance with paragraph 106 of the Framework, the application was supported by a detailed Transport Assessment (CD1.7) and Travel Plan (CD1.8). The submitted documents demonstrate that the development proposals are acceptable in highways and transportation terms, in accordance with paragraph 111 of the Framework.

- 1.1.23 Paragraph 111 of NPPF states:

**“Development should only be prevented or refused on highway grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road networks would be severe.”**

- 1.1.24 The Local Highway Authority has confirmed that they do not object to the appeal proposals, do not consider that there will be a severe impact upon the highway network, nor an unacceptable impact on highway safety. It has also been demonstrated that the appeal site is situated in a sustainable location in relation to the accessibility of services and amenities, and opportunities to access these by sustainable modes of travel.

### **Making effective use of land**

- 1.1.25 Paragraph 119 of the Framework states that:

**“Planning policies and decisions should promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions...”**

- 1.1.26 The application proposals provide a suitable location for housing development and would be an effective use of the land. The proposals also accord with paragraph 120 as they would offer opportunities to achieve net environmental gains by both enabling new habitat creation and improving public access to open space, not previously available. The overall average net
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density for the residential development will be 35 dwellings per hectare (dph), which will respect the character and form of the surrounding area.

### **Achieving Well Designed Places**

- 1.1.27 The Framework states that good design is a “key aspect of sustainable development”; the creation of high-quality buildings and places is fundamental to what the planning and development process should achieve. The latest iteration of the Framework places greater emphasis on design being “beautiful”, with paragraph 129 focusing on the need to produce design codes at an area-wide, neighbourhood or site-specific scale. Paragraph 131 states that planning decisions should ensure that new streets are tree-lined, for amenity and climate change resilience reasons.
- 1.1.28 The scheme is in outline, with all matters reserved except for details of the main site access. The Design and Access Statement (DAS) (CD1.5) and Development Framework Plan (CD2.7) illustrate how the site will deliver a high quality sustainable residential development. The proposals have evolved through an iterative process that was informed by environmental and technical work and an understanding of the development’s relationship with Astley Cross and the surrounding context. There will also be the ability for new streets within the development to be tree lined.

### **Meeting the challenge of climate change, flooding and coastal change**

- 1.1.29 This section of the Framework states that the planning system should support the transition to a low carbon future in a changing climate, helping to shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience (particularly in respect of flood risk) and support renewable and low carbon energy.
- 1.1.30 Paragraphs 153 to 158 set out the Government’s approach to tackling climate change through the planning system. It is stated that new development should avoid vulnerability from impacts arising from climate change, ensuring adaptation measures are brought forward such as encouraging green infrastructure, and helping to reduce emissions through the location, orientation and design of development.
- 1.1.31 The above matters have been taken into account in designing the proposal, which can provide net biodiversity gains and include a minimum of 5.32 ha of open space provision. Matters such as design and massing will be required to conform to the Framework and any local policies in place at the Reserved Matters stage. Development will also be required to meet the requirements of the Building Regulations in place at the time in respect of energy generation and building performance.
- 1.1.32 Paragraph 159 of the NPPF states that development should be directed away from areas at highest risk of flooding. In this respect, a Flood Risk Assessment (FRA) (CD1.12) was submitted with the appellant’s original planning application and considers the existing flood
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risk of the site and includes an assessment of the surface water drainage requirements of the site. The FRA is clear that the appeal proposals would be at minimal risk from flooding, would not increase flood risk elsewhere and are compliant with the requirements of the Framework. The appeal proposals will also allow for the control of surface water run-off from the appeal site.

- 1.1.33 In the respect of this latter point, Worcestershire County Council (WCC) as the relevant Lead Local Flood Authority (LLFA) were consulted as part of the application process and consider there are no policy grounds to object to the drainage strategy put forward by the appellant (CD5.21). Following further dialogue with Severn Trent Water (STW), it has also now been confirmed that the proposed surface water outfall can be delivered whilst providing sufficient clearance to STW's asset (the Strensham-Trimpley aqueduct), which has now removed the LLFA's objection on this matter.
- 1.1.34 Although the delivery of the proposed surface water drainage outfall is partly reliant on the use of third-party land, the appellant does not view the varying landownership as an issue. If the Inspector deemed that a Grampian condition would address this issue, the appellant would suggest that one is attached to the grant of planning permission.

## **Conserving and Enhancing the Natural Environment**

### ***Ecology***

- 1.1.35 Paragraph 174(d) of the Framework states that planning policies and decisions should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.
- 1.1.36 The Ecological Appraisal (CD1.9) submitted in support of the original planning application, the Revised Ecology Appraisal (CD2.10) and Ecological Addendum (CD2.12) confirm that no significant adverse effects would be expected as a result of the proposed development, subject to the delivery of proposed landscaping and ecological enhancement measures. It has also been demonstrated that the appeal proposals have the ability to give rise to net biodiversity gains.
- 1.1.37 As described within my main Proof of Evidence, following further dialogue between the appeal parties, it has now been confirmed that MHDC and WFDC no longer intend to pursue their previous ecological Reasons for Refusal (RfR).

### ***Landscape/Agricultural Land***

- 1.1.38 Paragraph 174 of the Framework states that the planning system should contribute to and enhance the natural and local environment by inter alia protecting and enhancing valued landscapes (in a manner commensurate with their statutory status or identified quality in the development plan) and recognising the intrinsic character and beauty of the countryside, and
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the wider benefits from natural capital and ecosystem services - including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland.

- 1.1.39 In this respect, the appeal site does not fall within any national or local landscape designation, and Ms Gruner is clear that in her opinion the site cannot be considered a 'valued landscape'.
- 1.1.40 Wider landscape matters, including the need to recognise the intrinsic character and beauty of the countryside, are addressed in Ms Gruner's proof and weighed in the planning balance as part of my evidence. Ms Gruner has demonstrated how the appeal proposals would not give rise to any unacceptable landscape impacts.
- 1.1.41 The Agricultural Quality report (CD1.23) that accompanied the appellant's application proposals describes how the appeal site includes areas of subgrade 3a, 3b and Grade 2 agricultural land. In this respect, I have explained how the loss of best and most versatile (BMV) agricultural land within the appeal site would represent a minor loss of such resources in the context the wider BMV agricultural land that is present within the MHDC and WFDC authority areas, and why I believe it should attract limited weight in the planning balance.

### ***Air Quality/Noise***

- 1.1.42 Paragraph 185 of the Framework states:

**“Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development...”**

- 1.1.43 Air Quality and Noise Assessments (CD1.14 and CD1.13) were submitted as part of the appellant's original application proposals. The findings of these reports have been reviewed by the Council's Environmental Health team, who have confirmed that any potential noise and air quality effects can be addressed by way of appropriate conditions.

### **Conserving and Enhancing the Historic Environment**

- 1.1.44 Section 16 of the Framework provides policy guidance on the conservation and investigation of heritage assets.
- 1.1.45 In the Framework, heritage significance is defined as:

**“The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.”**

- 1.1.46 In relation to proposals affecting heritage assets, paragraph 194 of the Framework states:
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**“...Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation”**

- 1.1.47 With regard to the above, Malvern Hills’ Heritage Consultation team (CD5.9) had requested that the appellant carry out a geophysical survey and trial trenching across the entirety of the appeal site prior to determination. Following the completion of a programme of archaeological trial trenching, MHDC have now confirmed that their previous Reason for Refusal relating to this matter can be removed, and that any remaining archaeological matters can be addressed by way of conditions.
- 1.1.48 Mrs Stoten has described the results of the programme of trial trenching that has been undertaken within the appeal site in her accompanying proof of evidence, including the significance of the archaeological remains uncovered. Having regard to paragraph 203 of the Framework and Mrs Stoten’s evidence on the scale of the harm or loss and its significance, I have explained how I afford limited weight to the loss of archaeological remains in the overall planning balance.
- 1.1.49 No other heritage harm has been identified as arising from, or is alleged to arise from, the development of the appeal site.

### **Facilitating the Sustainable Use of Minerals**

- 1.1.50 Paragraph 209 of the Framework describes how *“it is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs”*. It further states that *“since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation”*.
- 1.1.51 Criterion c) and d) of paragraph 210 of the Framework further outline how planning policies should:

**“Safeguard mineral resources by defining Mineral Safeguarding Areas and Mineral Consultation Areas; and adopt appropriate policies so that known locations of specific minerals resources of local and national importance are not sterilised by non-mineral development where this should be avoided (whilst not creating a presumption that the resources defined will be worked); and**

**Set out policies to encourage the prior extraction of minerals, where practical and environmentally feasible, if it is necessary for non-mineral development to take place.”**

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- 1.1.52 Finally, Framework paragraph 212 states that “*local planning authorities should not normally permit other development proposals in Mineral Safeguarding Areas if it might constrain potential future use for mineral working*”.
- 1.1.53 The issue of mineral safeguarding has been addressed by the appellant through the evidence of Mr Barry. In this respect and as described through my main Proof of Evidence, Mr Barry has identified how the appeal site contains resources of solid sand that are in abundance within north Worcestershire and are of relatively limited economic value, and that whilst there may be potential opportunities for incidental extraction of this mineral resource as part of the appeal site’s development, partial or full extraction would not be practicable or feasible. Mr Barry has also outlined why he believes it would be implausible to apply for planning permission for extraction in such a location, immediately adjacent to existing residential properties, given the resources of the same mineral that are available in the wider area.
- 1.1.54 Whilst the appeal proposals would result in the sterilisation of a mineral resource, this would involve a resource that is of relatively low economic value, and of which there are plentiful reserves elsewhere in north Worcestershire should the need for additional solid sand extraction arise. Extraction would also result in a landform that is incompatible with the appeal proposals, resulting in a hole next unexcavated adjoining land, and limit the contribution that the development of the appeal site could make to delivering market and affordable housing, including remedying MHDC’s housing shortfall. For these reasons it is my view that any weight attached to the potential for mineral sterilisation in this instance should be limited.

### **Planning Conditions and Obligations**

- 1.1.55 Paragraphs 55-58 of the Framework restate previous advice on conditions and obligations and Community Infrastructure Levy charges, emphasising their impact on viability. Paragraph 55 requires conditions precedent to be avoided, unless there is clear justification. Footnote 25 of the Framework refers to a legislative requirement for applicants to provide their written agreement to the imposition of any pre-commencement conditions.
- 1.1.56 A schedule of conditions will be discussed and agreed between the appellant and two Councils. A copy of the accompanying S106 Agreement will also be provided to the Inspector in advance of the inquiry.

### **Conclusion**

- 1.1.57 The appeal proposals have been assessed against the various relevant chapters of the Framework, which confirms that they comprise sustainable development as a result of:
- i. Providing a deliverable housing development that will make a valuable contribution towards national and local objectives for economic growth;
  - ii. Benefitting from access by public transport and other sustainable means, promoted through a Travel Plan;
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- iii. Making an important contribution towards the supply of housing in the Malvern Hills and Wyre Forest district areas, and the minimum requirement to demonstrate a five-year supply of housing land within the Malvern Hills authority area;
- iv. Contributing to housing choice and the mix of housing in the area, and making an important contribution to the supply of affordable housing to help meet identified needs;
- v. Being capable of delivering a beautiful high quality design;
- vi. Promoting healthy communities through integration with the existing settlement and the provision of open space;
- vii. Being located on land at low risk of flooding and ensuring that the development will not increase flood risk downstream;
- viii. Being resilient to the challenge of climate change;
- ix. Conserving and enhancing the natural and historic environments; and
- x. Resulting in limited harm in relation to mineral safeguarding, owing to the value of mineral resource in question, and the feasibility and practicalities of prior extraction taking place.

1.1.58 Accordingly, I consider the above demonstrates the proposals amount to sustainable development.

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## Gladman Site Delivery: 01.04.2016 - 31.03.2021.

Issued December 2021

	Local Planning Authority	Site Address	App Reference	Outline Permission Granted Date	Number of Dwellings	% Affordable	Purchaser	Reserved Matters Planning Application Reference	Reserved Matters Permission Granted Date	Conditioned Timescale of Reserved Matters	Commencement on Site	Timescale from Initial Planning Permission to Commencement
1	Amber Valley Borough Council	Roes Lane, Crich, Phase 2	AVA/2016/0464	12/04/2017	60	30%	Harron Homes	AVA-2018-0750	22/03/2019	3 years	October 2019	29 months
2	Aylesbury Vale District Council	Lower Road II, Stoke Mandeville	16/00448/AOP	08/03/2017	190	30%	Bloor Homes	17/01221/ADP	14/09/2017	2 years	January 2018	10 months
3	Aylesbury Vale District Council	Lower Road I, Stoke Mandeville	15/04341/AOP	09/03/2017	117	30%	Abbey Developments	18/01857/ADP	19/06/2019	2 years	July 2019	28 months
4	Aylesbury Vale District Council	North End Road, Steeple Claydon	15/01490/AOP	17/06/2016	60	30%	Bovis Homes	17/00543/ADP	12/09/2017	18 months	May 2018	23 months
5	Ashford Borough Council	The Street, Smarden	16/00045/AS	12/06/2017	50	35%	Countryside Properties	18/00576/AS	25/02/2019	3 years	August 2019	26 months
6	Braintree District Council	Oak Road, Halstead	14/01580/OUT	03/06/2016	292	30%	BDW Homes	17/01952/REM	25/01/2018	3 years	April 2018	22 months
7	Braintree District Council	Western Road, Silver End	15/00280/OUT	21/03/2017	350	40%	Redrow Homes	18/01693/FUL	03/12/2018	2 years	December 2018	21 months
8	Braintree District Council	Sudbury Road, Halstead	17/00575/OUT	09/11/2017	205	40%	Bellway Homes	18/01749/FUL	11/06/2019	2 years	December 2019	25 months
9	Braintree District Council	Station Road, Earls Colne	18/00121/OUT	08/01/2019	115	40%	Bellway Homes	19/00802/REM	27/09/2019	3 years	September 2020	20 months
10	Braintree District Council	Stone Path Drive, Hatfield Peverel	16/01813/OUT	08/07/2019	140	40%	Bellway Homes	20/01906/REM	14/05/2021	2 years	May 2021	22 months
11	Breckland District Council	Dereham Road, Mattishall	2015/0498/O	06/03/2018	50	40%	Hopkins & Moore Developments	3PL/2020/0462/F	30/07/2021	2 years	October 2021	43 months
12	Central Bedfordshire Council	Mill Road, Cranfield	CB/14/05007/OUT	13/06/2016	113	35%	Bloor Homes	CB/16/04924/RM	21/03/2017	3 years	April 2017	10 months
13	Central Bedfordshire Council	Chapel End Road, Houghton Conquest	CB/15/01362/OUT	02/06/2016	125	35%	Kier Homes	CB/17/01389/REM	26/06/2017	3 years	August 2017	14 months
14	Central Bedfordshire Council	Biggleswade Road, Potton	CB/16/03943/OUT	03/01/2018	85	35%	Mulberry Homes	CB/19/00085/RM	02/05/2019	3 years	June 2019	18 months
15	Central Bedfordshire Council	High Street, Silsoe	16/01855/OUT	12/04/2018	105	35%	Kingsey Homes	CB/18/04409/RM	26/02/2019	2 years	April 2019	12 months
16	Central Bedfordshire Council	Shefford Road, Meppershall	CB/17/03887/OUT	22/05/2018	150	35%	Davidsons	CB/19/03877/RM	18/12/2020	3 years	June 2021	37 months
17	Central Bedfordshire Council	Hitchin Lane, Clifton	CB/15/02733/OUT	17/02/2017	97	35%	Mears Group	CB/18/02637/RM	27/12/2018	2 years	September 2019	31 months
18	Central Bedfordshire Council	Taylors Road, Stotfold	16/03344/OUT	18/09/2018	78	35%	BDW Homes	CB/19/01302/RM	19/09/2019	3 years	February 2020	17 months
19	Chelmsford City Council	Main Road, Great Leighs	14/01791/OUT	26/09/2016	100	35%	Bellway Homes	17/01949/REM	15/03/2018	3 years	March 2018	18 months
20	Chelmsford City Council	Plantation Road, Boreham	14/01552/OUT	25/05/2016	145	35%	Bloor Homes	18/00682/REM	10/08/2018	3 years	September 2018	27 months
21	Cherwell District Council	Sibford Road, Hook Norton	14/00844/OUT	04/08/2016	54	35%	Lioncourt	17/00950/REM	21/12/2017	18 months	May 2018	21 months
22	Cherwell District Council	White Post Road, Banbury	15/01326/OUT	20/12/2017	280	30%	BDW Homes	19/00895/REM	31/07/2020	3 years	October 2020	33 months
23	Cheshire East Council	Abbey Road, Sandbach	14/1189C	30/10/2016	165	30%	Lane End Developments	18/2346C	17/01/2019	3 years	March 2019	30 months
24	Cheshire East Council	Church Lane, Wistaston	14/03024N	21/09/2016	300	30%	Bloor Homes	17/6042N	11/07/2018	3 years	July 2018	22 months
25	Cheshire East Council	East Avenue, Weston	15/1552N	18/08/2016	99	35%	Lovell	18/1073N	13/12/2018	3 years	March 2019	31 months
26	Cheshire East Council	London Road, Holmes Chapel	14/5921C	31/10/2016	190	30%	Bloor Homes	17/6123C	14/05/2018	3 years	October 2018	24 months
27	Cheshire East Council	Dickens Lane, Poynton	17/4256M	27/11/2018	150	30%	Bellway Homes	19/1972M	15/05/2020	3 years	October 2020	23 months
28	Colchester Borough Council	Barbrook Lane, Tiptree	182014	07/04/2020	200	30%	Bloor Homes	210398	01/06/2021	3 years	July 2021	15 months
29	Cotswold District Council	Berkeley Close, South Cerney	16/02598/OUT	15/08/2017	90	50%	Wain Homes	18/04656/REM	05/07/2019	3 years	August 2019	24 months
30	Derbyshire Dales District Council	Main Road, Brailsford	16/00567/OUT	11/07/2017	75	35%	Avant Homes	18/00397/REM	12/09/2018	3 years	May 2019	22 months
31	East Cambridgeshire Council	Mildenhall Road, Fordham	17/00481/OUM	30/05/2018	100	30%	Bellway Homes	19/01054/RMM	07/02/2020	3 years	May 2020	24 months
32	East Cambridgeshire Council	Manor Road, Witchford	18/00820/OUM	07/11/2018	116	30%	Bellway Homes	19/01502/RMM	18/06/2020	3 years	August 2020	21 months
33	Folkestone & Hythe District Council	Ashford Road, New Romney	Y18/1404/FH	30/08/2019	117	30%	Pentland Homes	21/0007/FH	27/08/2021	2 years	September 2021	25 months
34	Forest of Dean District Council	Ross Road, Newent	P0969/14/OUT	10/04/2017	85	40%	Bellway Homes	P0328/18/APP	08/08/2018	2 years	October 2018	17 months
35	Forest of Dean District Council	Berry Hill, Coleford	P1482/14/OUT	11/04/2018	180	40%	BDW Homes	P1547/19/APP	14/02/2020	2 years	June 2020	26 months
36	Harborough District Council	Leicester Road, Great Bowden	16/01942/OUT	18/10/2017	50	40%	Mulberry	18/00692/REM	11/10/2018	3 years	January 2019	15 months
37	Harrogate Borough Council	Ripon Road, Killinghall	16/00582/OUTMAJ	07/12/2016	75	40%	Harron Homes	17/04957/REMMAJ	17/10/2018	2 years	January 2019	25 months
38	Harrogate Borough Council	Knarborough II, Boroughbridge Road	17/01350/OUTMAJ	14/06/2019	120	40%	Gallford Fry	19/04911/REMMAJ	05/08/2020	3 years	June 2021	24 months
39	Herefordshire Council	B4349, Clehonger	P141964/O	17/11/2016	90	35%	Stonewater Developments	P193878/RM	04/02/2021	3 years	October 2020	47 months
40	Herefordshire Council	Leadon Way, Ledbury	143116	04/04/2016	321	35%	BDW Homes	P1604078/RM	21/12/2017	3 years	January 2018	20 months
41	Huntingdonshire District Council	Lucks Lane, Buckden	16/00576/OUT	18/07/2017	180	40%	Bloor Homes	18/02485/REM	16/07/2019	3 years	December 2019	30 months
42	Huntingdonshire District Council	Station Road 2, Warboys	16/02519/OUT	31/10/2017	80	40%	David Wilson Homes	18/00776/REM	30/11/2018	3 years	December 2018	14 months
43	Malden Borough Council	Mill Bank, Headcorn	15/507424/OUT	24/08/2016	62	40%	Bovis Homes	17/501093/REM	15/09/2017	2 years	March 2018	18 months
44	Maldon District Council	Soutminster Road, Burnham-on-Crouch	14/00845/OUT	21/04/2017	80	30%	Mathew Homes	18/01077/RES	01/03/2019	2 years	February 2021	46 months
45	Medway Council	Stoke Road, Hoo St Werburgh	MC/16/2837	13/02/2017	127	25%	Taylor Wimpey	MC/18/0702	13/07/2018	3 years	February 2019	24 months
46	Mid Suffolk District Council	Church Road, Stowupland	3112/15	25/05/2016	175	35%	Bloor Homes	DC/17/02755	07/11/2017	3 years	February 2018	21 months
47	Milton Keynes Council	Olney Road, Lavendon	17/00165/OUT	04/05/2018	95	35%	BDW Homes	19/00212/REM	02/12/2019	3 years	January 2020	19 months
48	Northumberland County Council	Milkwell Lane, Corbridge	15/00381/OUTES	21/09/2016	233	15%	Miller Homes	17/04547/REM	14/08/2018	3 years	December 2019	39 months
49	North Hertfordshire District Council	Holywell Road, Pirton	15/01618/1	27/05/2016	82	40%	Cala Homes	16/02256/1	30/05/2017	3 years	June 2017	13 months
50	Nuneaton & Bedworth Borough Council	The Longshoot, Nuneaton	033157	11/04/2016	330	25%	BDW Homes	034334	11/01/2017	3 years	September 2017	17 months
51	Oadby & Wigston Council	Welford Road, Wigston	17/00539/OUT	10/10/2018	43	40%	Redrow Homes	19/00160/REM	18/08/2019	3 years	September 2019	11 months
52	Peterborough City Council	Uffington Road, Barnack	15/01840/OUT	27/03/2017	80	30%	Linden Homes	18/00377/REM	06/07/2018	3 years	October 2018	19 months
53	Preston City Council	Preston Road, Grimsargh	06/2014/0902	09/05/2016	150	30%	Story Homes	06/2018/1243	09/04/2019	3 years	September 2019	40 months
54	Ribble Valley Borough Council	Henthorn Road, Clitheroe, Phase 2	3/2018/0688	19/06/2019	110	30%	Miller Homes	3/2020/0266	26/06/2020	18 months	September 2020	15 months
55	Rushcliffe Borough Council	Lantern Lane, East Leake	17/02292/OUT	18/07/2018	195	20%	Miller Homes	20/02632/REM	12/03/2021	3 years	April 2021	32 months
56	Ryedale District Council	Langton Road, Norton	15/00098/MOUT	22/07/2016	85	35%	Keppmoat	17/01517/MREM	08/06/2018	3 years	October 2018	25 months
57	South Cambridgeshire District Council	Highfields Road, Highfields Caldecote	S/2510/15/OL	05/07/2017	140	40%	Linden Homes	S/4619/18/RM	14/11/2019	2 years	February 2020	31 months
58	South Cambridgeshire District Council	Rampton Road, Cottenham	S/2413/17/OL	09/08/2017	200	40%	Redrow Homes	S/2679/19/RM	18/02/2020	2 years	June 2020	34 months
59	South Gloucestershire Council	Poplar Lane, Wickwar	PK16/4006/O	24/05/2017	80	35%	Bellway Homes	PK17/5966/RM	29/06/2018	3 years	October 2018	17 months
60	South Kesteven District Council	Sheepwash Lane, Grantham	S14/3571	27/07/2016	300	35%	Countryside	S19/1056	21/11/2019	3 years	January 2020	42 months
61	South Somerset District Council	Forton Road, Chard	15/04772/OUT	02/08/2017	200	35%	Kier Homes	18/01902/REM	21/02/2019	3 years	August 2019	24 months
62	Stratford-on-Avon District Council	Warwick Road, Kineton	15/03101/OUT	17/11/2016	78	35%	Morris Homes	17/03010/REM	09/10/2018	3 years	May 2021	54 months
63	Stratford-on-Avon District Council	Knightcote Road, Bishops Itchington	14/03419/OUT	20/06/2016	84	35%	Bovis Homes	17/01884/REM	22/03/2018	3 years	August 2018	26 months
64	Stroud District Council	Box Road, Cam	S.17/1366/OUT	19/12/2018	90	30%	Wainhomes	S.19/0810/REM	19/02/2020	3 years	March 2020	15 months
65	Telford and Wrekin Council	Haygate Road, Wellington	TWC/2013/1003	15/04/2016	290	25%	Bovis Homes & Anwyll	TWC/2017/0643	22/03/2018	3 years	June 2018	26 months
66	Tendering District Council	Parsons Heath, Bromley Road	17/00859/OUT	13/09/2018	145	30%	Bellway Homes	19/01392/DETAIL	05/05/2020	2 years	August 2020	23 months
67	Tewkesbury Borough Council	Twigworth, Tewkesbury Road	17/00852/OUT	19/12/2018	74	35%	Wainhomes	19/00953/APP	20/10/2020	3 years	February 2021	26 months
68	Tewkesbury Borough Council	Stoke Road, Bishops Cleeve	18/00249/OUT	11/11/2019	215	40%	Spitfire Bespoke Homes	21/00214/APP	10/09/2021	2 years	October 2021	23 months
69	Tonbridge & Malling Borough Council	Kings Hill, Teston Road	18/01013/OA	10/09/2019	120	40%	Crest Nicholson	20/00171/RM	15/07/2020	3 years	February 2021	17 months
70	Vale of White Horse District Council	Townsend Road, Shrivensham	P15/V0663/O	06/05/2016	116	40%	Bovis Homes	P17/V0800/RM	18/04/2018	3 years	December 2018	30 months
71	Vale of White Horse District Council	Main Street, East Hanney	P15/V0343/O	03/05/2016	55	40%	Bovis Homes	P17/V2973/RM	23/08/2018	18 months	May 2019	36 months
72	Wealden District Council	Mill Road, Hailsham	WD/2016/0658/MAO	26/05/2016	165	35%	Linden Homes	WD/2017/1708/MRM	24/10/2017	3 years	December 2017	19 months
73	West Oxfordshire District Council	Cote Road, Aston	15/01550/OUT	28/04/2016	41	50%	Mears Group	17/0782/RES	20/10/2017	5 years	January 2018	21 months
74	West Oxfordshire District Council	Burford Road, Witney	14/1215/P/OP	25/08/2016	260	40%	BDW Homes	17/0338/RES	02/02/2018	2 years	April 2018	20 months
75	West Oxfordshire District Council	New Yatt Road, North Leigh	15/01934/OUT	02/11/2016	76	50%	Bellway Homes	17/02463/RES	13/03/2018	2 years	March 2018	16 months
76	West Oxfordshire District Council	Former Stanton Hardcourt Airfield	16/01054/OUT	06/08/2017	50	50%	Hayfield Homes	18/01611/FUL	22/01/2019	3 years	April 2019	20 months
77	Wycombe District Council	Barn Road, Longwick	14/06956/OUT	19/05/2016	160	40%	Bellway Homes	17/00691/REM	19/10/2017	3 years	December 2017	19 months

### Monday to Friday - 3 - Kidderminster, Bus Station - Kidderminster, Bus Station

<b>Bus Station</b> Kidderminster (Stand 7)	05:40	06:10	06:40	07:10	07:30	07:50	08:10	08:30	08:50	09:10	09:30	09:50	10:10	10:30	10:50	11:10	11:30
<b>Birchen Coppice Shops</b> Birchen Coppice (SW)	05:50	06:20	06:50	07:20	07:40	08:00	08:20	08:40	09:00	09:20	09:40	10:00	10:20	10:40	11:00	11:20	11:40
<b>York Street</b> Stourport-on-Severn (NW bound)	05:58	06:28	06:58	07:28	07:48	08:08	08:28	08:48	09:08	09:28	09:48	10:08	10:28	10:48	11:08	11:28	11:48
<b>Wenlock Way</b> Areley Kings (W) <input type="button" value="Arrive"/>	06:07	06:37	07:07	07:37	07:57	08:17	08:37	08:57	09:17	09:37	09:57	10:17	10:37	10:57	11:17	11:37	11:57
<b>Wenlock Way</b> Areley Kings (W) <input type="button" value="Depart"/>	06:10	06:40	07:10	07:40	08:00	08:20	08:40	09:00	09:20	09:40	10:00	10:20	10:40	11:00	11:20	11:40	12:00
<b>High Street</b> Stourport-on-Severn (NE)	06:17	06:47	07:17	07:47	08:07	08:27	08:47	09:07	09:27	09:47	10:07	10:27	10:47	11:07	11:27	11:47	12:07
<b>Birchen Coppice Shops</b> Birchen Coppice (NE)	06:25	06:55	07:25	07:55	08:15	08:35	08:55	09:15	09:35	09:55	10:15	10:35	10:55	11:15	11:35	11:55	12:15
<b>Worcester Road Island</b> Kidderminster (Eastbound)	06:31	07:01	07:31	08:01	08:21	08:41	09:01	09:21	09:41	10:01	10:21	10:41	11:01	11:21	11:41	12:01	12:21
<b>Bus Station</b>	06:35	07:05	07:35	08:05	08:25	08:45	09:05	09:25	09:45	10:05	10:25	10:45	11:05	11:25	11:45	12:05	12:25
<b>Bus Station</b> Kidderminster (Stand 7)	11:50	12:10	12:30	12:50	13:10	13:30	13:50	14:10	14:30	14:50	15:10	15:30	15:50	16:10	16:30	16:50	17:10
<b>Birchen Coppice Shops</b> Birchen Coppice (SW)	12:00	12:20	12:40	13:00	13:20	13:40	14:00	14:20	14:40	15:00	15:20	15:40	16:00	16:20	16:40	17:00	17:20
<b>York Street</b> Stourport-on-Severn (NW bound)	12:08	12:28	12:48	13:08	13:28	13:48	14:08	14:28	14:48	15:08	15:28	15:48	16:08	16:28	16:48	17:08	17:28
<b>Wenlock Way</b> Areley Kings (W) <input type="button" value="Arrive"/>	12:17	12:37	12:57	13:17	13:37	13:57	14:17	14:37	14:57	15:17	15:37	15:57	16:17	16:37	16:57	17:17	17:37
<b>Wenlock Way</b> Areley Kings (W) <input type="button" value="Depart"/>	12:20	12:40	13:00	13:20	13:40	14:00	14:20	14:40	15:00	15:20	15:40	16:00	16:20	16:40	17:00	17:20	17:40
<b>High Street</b> Stourport-on-Severn (NE)	12:27	12:47	13:07	13:27	13:47	14:07	14:27	14:47	15:07	15:27	15:47	16:07	16:27	16:47	17:07	17:27	17:47
<b>Birchen Coppice Shops</b> Birchen Coppice (NE)	12:35	12:55	13:15	13:35	13:55	14:15	14:35	14:55	15:15	15:35	15:55	16:15	16:35	16:55	17:15	17:35	17:55
<b>Worcester Road Island</b> Kidderminster (Eastbound)	12:41	13:01	13:21	13:41	14:01	14:21	14:41	15:01	15:21	15:41	16:01	16:21	16:41	17:01	17:21	17:41	18:01
<b>Bus Station</b>	12:45	13:05	13:25	13:45	14:05	14:25	14:45	15:05	15:25	15:45	16:05	16:25	16:45	17:05	17:25	17:45	18:05
<b>Bus Station</b> Kidderminster (Stand 7)	17:30	17:50	18:10	18:30	19:00	19:30	20:00	21:00									
<b>Birchen Coppice Shops</b> Birchen Coppice (SW)	17:40	18:00	18:20	18:40	19:09	19:39	20:09	21:09									
<b>York Street</b> Stourport-on-Severn (NW bound)	17:48	18:08	18:28	18:48	19:15	19:45	20:15	21:15									
<b>Wenlock Way</b> Areley Kings (W) <input type="button" value="Arrive"/>	17:57	18:17	18:37	18:57	19:21	19:51	20:21	21:21									
<b>Wenlock Way</b> Areley Kings (W) <input type="button" value="Depart"/>	18:00	18:20	18:40	19:00	19:23	19:53	20:23	21:23									
<b>High Street</b> Stourport-on-Severn (NE)	18:07	18:27	18:47	19:07	19:30	20:00	20:30	21:30									

<b>Birchen Coppice Shops</b> Birchen Coppice (NE)	18:15	18:35	18:55	19:15	19:36	20:06	20:36	21:36	
<b>Worcester Road Island</b> Kidderminster (Eastbound)	18:21	18:41	19:01	19:21	19:42	20:12	20:42	21:42	
<b>Bus Station</b>	18:25	18:45	19:05	19:25	19:46	20:16	20:46	---	

\* Not including bank holidays

### Saturday - 3 - Kidderminster, Bus Station - Kidderminster, Bus Station

<b>Bus Station</b> Kidderminster (Stand 7)	07:00	07:30	08:00	08:30	09:00	09:30	---	10:00		<b>20</b>	<b>40</b>	<b>00</b>		17:20	17:40
<b>Birchen Coppice Shops</b> Birchen Coppice (SW)	07:06	07:36	08:06	08:36	09:06	09:40	---	10:10		<b>30</b>	<b>50</b>	<b>10</b>		17:30	17:50
<b>York Street</b> Stourport-on-Severn (NW bound)	07:12	07:42	08:12	08:42	09:12	09:48	09:30	10:18		<b>38</b>	<b>58</b>	<b>18</b>		17:38	17:58
<b>Wenlock Way</b> Areley Kings (W) <b>Arrive</b>	07:19	07:49	08:19	08:49	09:19	09:57	09:37	10:27	then at these mins	<b>47</b>	<b>07</b>	<b>27</b>	until	17:47	18:07
<b>Wenlock Way</b> Areley Kings (W) <b>Depart</b>	07:21	07:51	08:21	08:51	09:21	10:00	09:39	10:30		<b>50</b>	<b>10</b>	<b>30</b>		17:50	18:10
<b>High Street</b> Stourport-on-Severn (NE)	07:27	07:57	08:27	08:57	09:27	10:07	09:45	10:37		<b>57</b>	<b>17</b>	<b>37</b>		17:57	18:17
<b>Birchen Coppice Shops</b> Birchen Coppice (NE)	07:33	08:03	08:33	09:03	09:33	10:15	09:51	10:45		<b>05</b>	<b>25</b>	<b>45</b>		18:05	18:25
<b>Bus Station</b>	07:43	08:13	08:43	09:13	09:43	10:25	10:01	10:55		<b>15</b>	<b>35</b>	<b>55</b>		18:15	18:35

<b>Bus Station</b> Kidderminster (Stand 7)	18:00	18:30	19:00	19:30	20:00	21:00									
<b>Birchen Coppice Shops</b> Birchen Coppice (SW)	18:10	18:40	19:10	19:40	20:06	21:06									
<b>York Street</b> Stourport-on-Severn (NW bound)	18:18	18:48	19:18	19:48	20:12	21:12									
<b>Wenlock Way</b> Areley Kings (W) <b>Arrive</b>	18:27	18:57	19:27	19:57	20:19	21:19									
<b>Wenlock Way</b> Areley Kings (W) <b>Depart</b>	18:30	19:00	19:30	20:00	20:21	21:21									
<b>High Street</b> Stourport-on-Severn (NE)	18:37	19:07	19:37	20:07	20:27	21:27									
<b>Birchen Coppice Shops</b> Birchen Coppice (NE)	18:45	19:15	19:45	20:15	20:33	21:33									
<b>Bus Station</b>	18:55	19:25	19:55	20:25	20:43	21:43									

\* Not including bank holidays

## Sunday - 3 - Kidderminster, Bus Station - Kidderminster, Bus Station

<b>Bus Station</b> Kidderminster (Stand 7)	09:10		<b>10</b>		16:10	17:10
<b>Birchen Coppice Shops</b> Birchen Coppice (SW)	09:20		<b>20</b>		16:20	17:20
<b>York Street</b> Stourport-on-Severn (NW bound)	09:28		<b>28</b>		16:28	17:28
<b>Wenlock Way</b> Areley Kings (W) <b>Arrive</b>	09:37	then at these mins	<b>37</b>	until	16:37	17:37
<b>Wenlock Way</b> Areley Kings (W) <b>Depart</b>	09:40		<b>40</b>		16:40	17:40
<b>High Street</b> Stourport-on-Severn (NE)	09:47		<b>47</b>		16:47	17:47
<b>Birchen Coppice Shops</b> Birchen Coppice (NE)	09:55		<b>55</b>		16:55	17:55
<b>Bus Station</b>	10:05		<b>05</b>		17:05	18:05

\* Not including bank holidays

Generated on 01/01/2023 00:21

Our additional ecological information

Megan Streets  
Planning Manager  
Gladman

Sent via email: M.Streets@gladman.co.uk

12<sup>th</sup> January 2023

Dear Megan,

1. Our responses are set out below with regards to the additional biodiversity information requested by the Local Planning Authorities, Wyre Forest District Council and Malvern Hills District Council for the above application. For ease, each comment is listed *in italics* with our response below it.

***The LPAs require a 'Biodiversity Constraints and Opportunities Plan' to demonstrate that the recommended mitigation and enhancements can be delivered on site with the amount of development proposed and that measurable biodiversity net gains can be achieved.***

***The 'Biodiversity Constraints and Opportunities Plan' should include:***

- a. The area for mitigation required for the badger sett(s)***
- b. Wildlife dark corridors within the site to ensure the conservation of bats and other nocturnal protected species can be achieved***
- c. All other biodiversity mitigation and enhancement measures identified in the submitted reports***

2. This plan is appended to this letter.

***It would also be necessary to submit the following information:***

- o ***The data behind the dormice conclusions.***

3. The location of the dormouse nest tubes was shown in Figure 8 of the Ecological Appraisal 1 (September 2022). The appraisal stated that no dormouse nests were recorded in any of the tubes in the May, June, July, and August surveys. The Ecology Addendum 2 (October 2022) states that no dormouse nests were recorded in any of the tubes in the September survey. Methodology follows recognised survey guidelines and is detailed within the Ecological Appraisal. There is no further data to provide.

<sup>1</sup> FPCR September 2022, LAND AT ARELEY COMMON, ASTLEY CROSS, STOURPORT-ON-SEVERN, ECOLOGICAL APPRAISAL RevD. Produced for Gladman.

<sup>2</sup> FPCR October 2022, LAND AT ARELEY COMMON, ASTLEY CROSS, STOURPORT-ON-SEVERN, ECOLOGY ADDENDUM. Produced for Gladman.

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- **Evidence to show the significance of the on-site badger sett(s);**
4. The badger sett location is shown on Figure 10 of the Ecological Appraisal. As stated within this report, it is an active sett comprising of five entrance holes. Whilst no bedding material was found, all five holes showed signs of recent activity with fresh spoil and digging evidence and well-worn tracks between them. At this stage it is assumed to be a main sett but further monitoring would be completed if a licence were to be required. Further monitoring is not considered necessary due to the retention of the sett within greenspace.
- **Reptile mitigation strategy to demonstrate there would be no conflict between the proposed mitigation and recreational provision.**
5. The strategy has been appended to this letter.
- **Further evidence to demonstrate that consideration has been made to the cumulative impact on breeding birds from other developments in the locality (notably application 21/0031/FUL for 329 dwellings on allocated greenfield site within WFDC and 17/01710/FULL for 57 dwellings on unallocated greenfield site, both within Astley Cross) and the ability of the wider landscape to support displaced populations.**

#### Application 21/0031/FUL

6. No information on breeding bird surveys is available for this site so the assemblage present is unknown.
7. The 21/0031/FUL Site measures 15.08 ha and comprises an arable modified grassland surrounded by hedgerows and a thin linear woodland belt. These hedgerows and woodland are to be retained and thus only the arable land is to be lost (approximately 15.08 ha). The current Site supports 8.38 ha of arable habitat and supported a single pair of skylarks *Alauda arvensis* (although not confirmed breeding), so it could be assumed with the available arable habitat that the 21/0031/FUL Site could support a maximum of two pairs of skylark and thus cumulatively, up-to three pairs of skylarks could be displaced by the two projects.
8. It is unlikely that any other species of bird would be displaced as the woodland and hedgerows are to be retained and all other bird species were associated with these habitats. Both this Site and the 21/0031/FUL site propose large areas of high diversity grassland with wetlands and additional tree planting that would enhance overall habitat diversity for breeding birds.

#### Application 17/01710/FULL

9. No breeding bird surveys appear to have been conducted for this site and thus the assemblages present are unknown.
10. The site is in part of an arable field with a single hedgerow. At only 2 ha, the 17/01710/FULL site is unlikely to support more than a single pair of skylarks. The cumulative impact on

skylark for all three Sites is unlikely to be more than four pairs (and there is no evidence to show that there is any breeding skylark on any of the Sites in question).

11. The ecological mitigation and enhancement scheme for the 17/01710/FULL site is shown to retain the hedgerow and to create wetlands, diverse grasslands, and additional trees; all of which will enhance the foraging and breeding opportunities for birds overall.
12. It is considered that all three sites in isolation will provide a betterment for a general assemblage of breeding birds and thus in combination, the betterment will be significant across Astley Cross due to the additional trees, scrub, grassland, and wetland to be created at all three. The potential displacement of a maximum of four skylark pairs can be accommodated in the surrounding arable land which is still extensive in nature.
  - o **Further evidence to show that the ecological surveys considered several records of notable plant species that have been identified within the site**
13. The following table summarises the notable plant records returned during the desk study with notes on their relevance to the Site. None of these species were recorded during the Extended phase 1 survey on 09 December 2021 or the update survey on 08 June 2022. There is potential to include some of the locally notable species within the landscaping scheme.

Scientific Name	Common Name	Most Recent Record	Status	Potential to be on Site
<i>Adiantum capillus-veneris</i>	Maidenhair Fern	08/06/2016	Nationally Scarce	no habitat on site
<i>Achillea ptarmica</i>	Sneezewort	2002	Locally Nb	potential to be in grassland but not recorded. Old record
<i>Agrostis canina sens.lat.</i>	Velvet Bent	07/10/1998	Locally Nb	grassland is not damp enough - unlikely to be present. Old record
<i>Aira caryophyllea</i>	Silver Hair-grass	23/07/2004	Locally Nb	no heath/dune habitat on site
<i>Aira praecox</i>	Early Hairgrass	31/07/2004	Locally Nb	no heath habitat on site
<i>Alopecurus aequalis</i>	Orange Foxtail	31/07/2004	Locally Nb	no pond/ditch margin habitat on site
<i>Anthriscus caucalis</i>	Bur Chervil	01/06/2019	Locally Nb	potential to be in the grassland but not recorded
<i>Anthyllis vulneraria</i>	Kidney Vetch	17/08/2016	Locally Nb	potential to be in the grassland but not recorded. Potentially include in planting
<i>Arabis glabra</i>	Tower Mustard	18/05/2019	NERC s.41 UKBAP Nationally Scarce Locally Nb	potential to be in the grassland but not recorded. Potential to include in planting

Scientific Name	Common Name	Most Recent Record	Status	Potential to be on Site
<i>Berula erecta</i>	Lesser Water-parsnip	31/07/2004	Locally Nb	no wetland habitat on site
<i>Bidens tripartite</i>	Trifid Bur-marigold	14/08/1998	Locally Nb	no wetland habitat on site
<i>Blackstonia perfoliata</i>	Yellow-wort	2001	Locally Nb	no dune or disturbed habitat on site
<i>Blechnum spicant</i>	Hard Fern	19/08/2002	Locally Nb	potential to be in woodland but not recorded. Woodland retained. Old record
<i>Butomus umbellatus</i>	Flowering Rush	01/08/1996	Locally Nb	no wetland habitat on site
<i>Calluna vulgaris</i>	Heather	31/07/2004	Locally Nb	no heath or moorland habitat on site
<i>Cardamine impatiens</i>	Narrow-Leaved Bitter-Cress	2001	Locally Nb Nationally Scarce	potential to be in woodland but not recorded. Woodland retained. Old record
<i>Carex acuta</i>	Slender Tufted sedge	07/10/1998	Locally Nb	no wetland habitat on site
<i>Carex curta</i>	White Sedge	31/07/2004	Locally Nb	no wetland habitat on site
<i>Carex disticha</i>	Brown Sedge	19/08/2002	Locally Nb	no wetland habitat on site
<i>Carex echinate</i>	Star Sedge	01/06/2019	Locally Nb	no wetland habitat on site
<i>Carex muricata</i> <i>ssp. Lamprocarpa</i>	Prickly Sedge	30/10/2001	Locally Nb	no wetland habitat on site
<i>Carex nigra</i>	Common Sedge	23/07/2004	Locally Nb	no wetland habitat on site
<i>Carex pilulifera</i>	Pill Sedge	30/07/2004	Locally Nb	no wetland habitat on site
<i>Carex pseudocyperus</i>	Cyperus Sedge	07/10/1998	Locally Nb	no wetland habitat on site
<i>Carex rostrata</i>	Bottle Sedge	06/02/2006	Locally Nb	no wetland habitat on site
<i>Carex strigose</i>	Thin-spiked Wood-sedge	17/05/1999	Locally Nb	no wetland habitat on site
<i>Carex vesicaria</i>	Bladder-sedge	30/07/2004	Locally Nb	no wetland habitat on site
<i>Carex viridula</i> <i>subsp. Oedocarpa</i>	Common Yellow-sedge	01/06/2019	Locally Nb	no wetland habitat on site
<i>Carpinus betulus</i>	Hornbeam	14/05/2003	Locally Nb	potential to be in woodland but not recorded. Woodland retained
<i>Centaureum pulchellum</i>	Lesser Centaury	01/09/2007	Locally Nb	potential to be in the grassland but not recorded. Potential to include in planting
<i>Cerastium pumilum</i>	Dwarf Mouse-Ear	11/05/2006	Locally Nb Nationally Scarce	potential to be in the grassland but not recorded. Potential to include in planting
<i>Cerastium semidecandrum</i>	Little Mouse-ear	11/05/2001	Locally Nb	potential to be in the grassland but not recorded. Old record

Scientific Name	Common Name	Last Recent Record	Status	Potential to be on Site
<i>Ceratophyllum demersum</i>	Rigid Hornwort	31/07/2004	Locally Nb	no wetland habitat on site
<i>Clinopodium ascendens</i>	Common Calamint	02/09/1999	Locally Nb	potential to be in the grassland but not recorded. Old record
<i>Colchicum autumnale</i>	Meadow Saffron	2001	Locally Nb	potential to be in the grassland but not recorded. Old record
<i>Cynoglossum officinale</i>	Hound's-tongue	1998	Locally Nb	potential to be in grassland and woodland margins but not recorded. Woodland retained. Old record
<i>Danthonia decumbens</i>	Heath-grass	29/07/2002	Locally Nb	no heath or moorland habitat on site
<i>Deschampsia flexuosa</i>	Wavy Hairgrass	30/07/2004	Locally Nb	no heath or moorland habitat on site
<i>Descurainia sophia</i>	Flixweed	29/07/2002	Locally Nb	potential to be in arable margins and roadsides but not recorded. Old record
<i>Dryopteris affinis</i> ssp. <i>Affinis</i>	a buckler-fern	19/05/1999	Locally Nb	potential to be in woodland but not recorded. Woodland retained. Old record
<i>Dryopteris carthusiana</i>	Narrow Buckler-fern	23/07/2004	Locally Nb	potential to be in damp woodland but not recorded. Woodland retained.
<i>Epilobium palustre</i>	Marsh Willowherb	31/07/2004	Locally Nb	no wetland habitat on site
<i>Epipactis purpurata</i>	Violet Helleborine	04/08/2018	Locally Nb	potential to be in woodland but not recorded. Woodland retained. Old record
<i>Equisetum fluviatile</i>	Water Horsetail	14/08/1998	Locally Nb	no wetland habitat on site
<i>Erica cinerea</i>	Bell Heather	01/06/2019	Locally Nb	no heath or moorland habitat on site
<i>Erica tetralix</i>	Cross-leaved Heath	01/06/2019	Locally Nb	no heath or moorland habitat on site
<i>Erigeron acer</i>	Blue Fleabane	19/08/2002	Locally Nb	no dune or waste ground habitat on site
<i>Eriophorum angustifolium</i>	Common Cottongrass	06/02/2006	Locally Nb	no bog or moorland habitat on site
<i>Erophila majuscula</i>	Hairy Whitlowgrass	01/04/2018	Locally Nb	no limestone grassland on site
<i>Euphrasia nemorosa</i>	an eyebright	11/08/1999	Locally Nb	potential to be along roadsides and field margins but not recorded. Old record.

Scientific Name	Common Name	Most Recent Record	Status	Potential to be on Site
<i>Festuca filiformis</i>	Fine-leaved Sheep's-fescue	23/07/2004	Locally Nb	grassland too coarse and closed
<i>Filago minima</i>	Small Cudweed	01/06/2019	Locally Nb	potential to be along field margins but not recorded
<i>Filago vulgaris</i>	Common Cudweed	29/07/2002	Locally Nb	potential to be along field margins but not recorded. Old record.
<i>Fumaria bastardii</i>	Tall Ramping-Fumitory	1996	Locally Nb	potential to be along field margins but not recorded. Old record.
<i>Fumaria capreolata subsp. Babingtonii</i>	Ramping Fumitory	19/05/1999	Locally Nb	potential to be along field margins but not recorded. Old record.
<i>Galium saxatile</i>	Heath Bedstraw	01/06/2019	Locally Nb	no heath or moorland habitat on site
<i>Helleborus foetidus</i>	Stinking Hellebore	26/10/2000	Locally Nb Nationally Scarce	potential to be in woodland but not recorded. Woodland retained. Old record
<i>Hyacinthoides non-scripta</i>	Bluebell	09/05/2008	WCA	potential to be along hedgerows but not recorded. Potential to include in planting
<i>Hydrocotyle vulgaris</i>	Marsh Pennywort	31/07/2004	Locally Nb	no wetland habitat on site
<i>Hypochaeris glabra</i>	Smooth Cat's-ear	01/06/2019	Locally Nb	grassland too coarse and closed
<i>Jasione montana</i>	Sheep's-bit	1998	Locally Nb	no sea cliffs or heaths on site
<i>Juncus bulbosus</i>	Bulbous Rush	31/07/2004	Locally Nb	no wetland habitat on site
<i>Juncus compressus</i>	Round-fruited Rush	31/07/1995	Locally Nb	no wetland habitat on site
<i>Juncus squarrosus</i>	Heath Rush	29/07/2002	Locally Nb	no wetland habitat on site
<i>Lemna gibba</i>	Fat Duckweed	02/09/1999	Locally Nb	no wetland habitat on site
<i>Luzula pilosa</i>	Hairy Woodrush	22/03/2015	Locally Nb	potential to be in grassland but not recorded
<i>Luzula sylvatica</i>	Great Woodrush	31/10/2001	Locally Nb	potential to be in grassland but not recorded. Old record
<i>Melampyrum pratense</i>	Common Cow-wheat	1995	Locally Nb	no acidic heath habitat on site
<i>Menyanthes trifoliata</i>	Bogbean	06/02/2006	Locally Nb	no bog or moorland habitat on site
<i>Misopates orontium</i>	Weasel's-Snout	22/10/1996	Locally Nb	limited disturbed ground on site
<i>Molinia caerulea</i>	Purple Moor-grass	31/07/2004	Locally Nb	no moorland habitat on site

Scientific Name	Common Name	Most Recent Record	Status	Potential to be on Site
<i>Myosotis ramosissima</i>	Early Forget-me-not	11/05/2001	Locally Nb	grassland too coarse and closed
<i>Nardus stricta</i>	Mat-grass	23/07/2004	Locally Nb	no heath or moorland habitat on site
<i>Nepeta cataria</i>	Catmint	01/09/1999	Locally Nb	potential to be in hedgerows and field margins but not recorded. Old record
<i>Oenanthe aquatica</i>	Fine-Leaved Water-Dropwort	03/08/2006	Locally Nb	no wetland habitat on site
<i>Ononis repens</i>	Common Restharrow	07/06/1996	Locally Nb	no dune or sandy grassland habitat
<i>Orchis morio</i>	Green-winged Orchid	25/04/2017	Locally Nb	grassland too coarse and closed
<i>Origanum vulgare</i>	Wild Marjoram	11/05/2001	Locally Nb	potential to be in grassland but not recorded
<i>Ornithopus perpusillus</i>	Bird's-foot	14/08/2004	Locally Nb	grassland too coarse and closed
<i>Paris quadrifolia</i>	Herb Paris	04/05/2019	Locally Nb	damp woodlands
<i>Pedicularis sylvatica</i>	Lousewort	14/03/2002	Locally Nb	no moorland or heath habitat on site
<i>Populus nigra</i>	Black poplar	11/05/2006	WorcBAP	potential to be in woodland but not recorded
<i>Potamogeton perfoliatus</i>	Perfoliate Pondweed	01/08/1996	Locally Nb	no wetland habitat on site
<i>Potamogeton polygonifolius</i>	Bog Pondweed	29/07/2002	Locally Nb	no wetland habitat on site
<i>Potamogeton pusillus</i>	Lesser Pondweed	31/07/2004	Locally Nb	no wetland habitat on site
<i>Potentilla argentea</i>	Hoary Cinquefoil	01/06/2019	Locally Nb	grassland too coarse and closed
<i>Potentilla palustris</i>	Marsh Cinquefoil	01/06/2019	Locally Nb	no wetland habitat on site
<i>Ranunculus lingua</i>	Greater Spearwort	13/03/2008	Locally Nb	no wetland habitat on site
<i>Rosa pimpinellifolia</i>	Burnet Rose	19/08/2002	Locally Nb	no limestone pavement
<i>Rumex hydrolapathum</i>	Water Dock	14/08/1998	Locally Nb	no wetland habitat on site
<i>Sagittaria sagittifolia</i>	Arrowhead	31/07/2004	Locally Nb	no wetland habitat on site
<i>Salix triandra</i>	Almond Willow	22/10/1996	Locally Nb	potential to be in woodland but not recorded. Old record. Woodland retained
<i>Saxifraga granulata</i>	Meadow Saxifrage	14/05/1995	Locally Nb	grassland too coarse and closed
<i>Scirpus sylvaticus</i>	Wood Club-rush	31/10/2001	Locally Nb	no wetland habitat on site
<i>Scleranthus annuus</i>	Annual Knawel	01/06/2019	NERC s.41 UKBAP Locally Nb	possibly in arable margins but not recorded

Scientific Name	Common Name	Last Recent Record	Status	Potential to be on Site
<i>Sedum anglicum</i>	English Stonecrop	Jun-05	Locally Nb	no dry rocky places
<i>Senecio sylvaticus</i>	Heath Groundsel	31/07/2004	Locally Nb	potential in grassland but not recorded
<i>Silene conica</i>	Sand Catchfly	14/08/2004	Locally Nb Nationally Scarce	potential to be in arable margins but not recorded
<i>Solidago virgaurea</i>	Goldenrod	29/06/2004	Locally Nb	potential in grassland but not recorded
<i>Sparganium emersum</i>	Unbranched Bur-reed	08/06/2016	Locally Nb	no wetland habitat
<i>Spergularia rubra</i>	Sand Spurrey	31/07/2004	Locally Nb	grassland too coarse and closed
<i>Spirodela polyrhiza</i>	Greater Duckweed	31/07/1995	Locally Nb	no water habitat
<i>Teesdalia nudicaulis</i>	Shepherd's Cress	01/06/2019	Locally Nb	grassland too coarse and closed
<i>Thymus polytrichus</i>	Thymus polytrichus	01/06/2019	Locally Nb	grassland too coarse and closed
<i>Trifolium arvense</i>	Hare's-foot Clover	17/08/2016	Locally Nb	potential in field margins but not recorded
<i>Trifolium striatum</i>	Knotted Clover	01/06/2019	Locally Nb	potential in field margins and road edge but not recorded
<i>Ulex gallii</i>	Western Gorse	30/07/2004	Locally Nb	not recorded on site
<i>Umbilicus rupestris</i>	Navelwort	31/10/2001	Locally Nb	potential to be on roadside verge but not recorded. Old record
<i>Vaccinium myrtillus</i>	Bilberry	11/05/2001	Locally Nb	no habitat on site
<i>Vaccinium oxycoccos</i>	Cranberry	06/02/2006	Locally Nb	no habitat on site
<i>Veronica scutellata</i>	Marsh Speedwell	01/06/2019	Locally Nb	no habitat on site
<i>Vicia lathyroides</i>	Spring Vetch	May-05	Locally Nb	grassland too coarse and closed
<i>Viola palustris</i>	Marsh Violet	Jun-98	Locally Nb	no habitat on site
<i>Zannichellia palustris</i>	Horned Pondweed	31/07/2004	Locally Nb	no habitat on site
<i>Cladonia portentosa</i>	Reindeer Moss	May-05	Habitat & Sp. Directive; 5	no habitat on site
<i>Hypnum imponens</i>	Pellucid Plait-moss	02/08/2008	Nationally Scarce	no habitat on site
<i>Sphagnum palustre</i>	Blunt-leaved Bog-moss	02/08/2008	Habitat & Sp. Directive; 5	no habitat on site
<i>Sphagnum recurvum var. mucronatum</i>	Flat-topped Bog-moss	02/08/2008	Habitat & Sp. Directive; 5	no habitat on site

14. We trust the above is sufficient to address the LPA's requirements for further information relating to the site's ecology in addition to the ecological information already submitted in support of the application.

Yours sincerely



**r S anne      ans ield** MCIEEM CMLI | Director  
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Gladman Developments Limited

LAN AT ARELEY O ON, ASTLEY ROSS,

STO RPORT ON SE ERN

## **Reptile Mitigation Strategy**

January 2023

**FPCR Environment and Design Ltd**

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**FIGURE**

Figure 1: Reptile Trapping and Exclusion Areas

**APPENDIX**

Appendix A: Reptile Fencing Design

## 1.0 INTRODUCTION

- 1.1 On outline application (M/22/00573/OUT) has been submitted by Gladman for land at Areley Common, Astley Cross in Stourport-on-Severn (hereafter referred to as the 'Site'). The Site measures approximately 10.72 ha and is centred on ordnance survey grid reference SK454044.
- 1.2 The proposals are for a residential development for up to 145 dwellings with associated access, drainage, and green space. Green infrastructure (GI) incorporates the required ecological mitigation and habitat creation, retained hedges and trees, sustainable drainage features and play and recreation space.
- 1.3 The Site encompasses three arable field parcels, a field of poor semi-improved grassland and an area of woodland and is bounded and delineated by hedgerows.
- 1.4 A good population of slow worm *Anguis fragilis* and grass snake *Natrix natrix* have been recorded within the Site and FPCR have been commissioned by Gladman to produce this Reptile Mitigation Strategy.

## 2.0 LEGISLATION

- 2.1 The four widespread species of native UK reptiles; grass snake, slow worm, adder *Vipera berus* and common lizard *Zootoca vivipara* receive some protection under the Wildlife and Countryside Act 1981, as amended. Only part of sub-section 9(1) and all of sub-section 9(5) apply, which prohibits intentional killing, injuring and trade (i.e. sale, barter, exchange, transporting for sale and advertising to sell or to buy).
- 2.2 All UK reptiles are also listed as species of principal importance under the Natural Environment and Rural Communities (NERC) Act 2006, under Section 41.
- 2.3 These species are recognised in the National Planning Policy Framework (NPPF)<sup>1</sup>, which advises that when determining planning applications, Local Planning Authorities (LPA's) should aim to conserve and enhance biodiversity by applying a set of principles including:
  - *If significant harm resulting from a development cannot be avoided....., adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*  
*Development proposals where the primary objective is to conserve or enhance biodiversity should be encouraged.*

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<sup>1</sup> Department for Communities and Local Government. (2021). *National Planning Policy Framework*.

### 3.0 DISCUSSION AND RECOMMENDATIONS

#### Baseline

- 3.1 FPCR conducted an Extended Phase 1 habitat survey during December 2021 which was updated in June 2022 and areas were recorded that were considered to offer suitable habitat to support reptile species. These areas included the semi-improved grassland field parcel in the east of the Site and the arable field margins. The woodland offers some (albeit limited due to shade) habitat for reptiles but was not surveyed as it is to be retained.
- 3.2 Subsequently, reptile surveys were then undertaken during between May and September 2022. The details of the Extended Phase 1 habitat survey and the reptile survey, including information on the methodologies, results, discussions, and recommendations, are provided in full within the Ecological Appraisal for the Site<sup>2</sup>.
- 3.3 During the surveys, a maximum count of 16 slow worms were recorded including adults and juveniles, confirming that the site or immediate local area is used for breeding. A maximum count of six grass snake were recorded also, with only juveniles recorded, also showing the Site or local area is likely used for breeding. The numbers recorded correspond with a 'good' population of each species according to the criteria stated in the Key Reptile Site Register<sup>3</sup>.
- 3.4 The reptiles were only recorded within the semi-improved grassland field in the east with none recorded in the arable field margins across the Site.

#### Potential Impacts

- 3.5 In the absence of appropriate mitigation, the following impacts on reptiles are perceived:
- Direct harm to reptiles during vegetation clearance works; and
  - Permanent loss of habitat during site redevelopment works.
- 3.6 In the absence of mitigation, it is considered that construction operations are likely to result in accidental killing or injuring of slow worms and grass snake, which as a result of the protection afforded to them, will need to be avoided.
- 3.7 As described above it is the grassland, field margins and woodland that provides suitable habitat for reptiles, with the unsuitable habitat including the arable fields and the shady interiors of the woodland. Proposals will result in the permanent loss of the suitable grassland.

#### Rationale for Proposed Approach

- 3.8 Where reptiles are confirmed as present on land that is to be affected by development, guidance<sup>4,5</sup> recommends that:

<sup>2</sup> FPCR September 2022, LAND AT ARELEY COMMON, ASTLEY CROSS, STOURPORT-ON-SEVERN, ECOLOGICAL APPRAISAL RevD. Produced for Gladman.

<sup>3</sup> Froglife. (1999). *Reptile survey: An introduction to planning, conducting and interpreting surveys for snake and lizard conservation*. Froglife Advice Sheet 10. Froglife. Halesworth

<sup>4</sup> Herpetofauna Groups of Britain and Ireland. (1998). *Evaluating local mitigation/translocation programmes: maintaining best practice and lawful standards. HGBI advisory notes for Amphibian and Reptile Groups (ARGs)*. HGBI, c/o Froglife Halesworth . Available at: <http://www.arguk.org/external-publications/view-category> [Accessed 09/11/2015].

<sup>5</sup> English Nature. (2004). *Reptiles: guidelines for developers*. Peterborough: English Nature. Available at: [http://www.lbp.org.uk/downloads/Publications/PlanningGuidance/NE\\_reptilesguidelines.pdf](http://www.lbp.org.uk/downloads/Publications/PlanningGuidance/NE_reptilesguidelines.pdf) [Accessed 25/10/2015].

- The animals should be protected from injury or killing during construction operations; and
- Mitigation should be provided to maintain the conservation status of the species locally.

3.9 A strategy of mitigation is therefore required to protect reptiles from harm and to maintain the conservation status of the local population. The following provides a rationale for the approach that is proposed.

#### **Assessment of Potential Receptor Site**

3.10 Due to the extent of the greenspace provision on the Site, it is considered possible to mitigate for the good population of slow worm and grass snake within the Site boundary.

3.11 Guidance published by the Herpetofauna Groups of Britain and Ireland<sup>4</sup> states that a suitable receptor site should ideally:

- *Be local to the donor site;*
- *Not currently support a population of the species translocated, for known reasons, but be capable of supporting them given remedial works if necessary;*
- *Not be subject to planning or other threats in the foreseeable future;*
- *Be subject to a written agreed and funded pre- and post-translocation management agreement; and*
- *Be subject to a written agreed and funded pre- and post-translocation monitoring programme.*

3.12 The parkland area proposed for the south of the Site provides a much larger area than the grassland area to be lost and will be landscaped with appropriate habitats for reptiles.

## 4.0 MITIGATION STRATEGY

- 4.1 The following section details the proposed mitigation strategy, which is considered sufficient to avoid the risk of harm to reptiles and to maintain the local conservation of these species.

### Receptor Site Preparation

- 4.2 This area is currently part of a large arable field and is not suitable to support reptiles.
- 4.3 Whilst the detailed landscaping is not available at this outline stage, landscape proposals for this area are to create areas of high diversity flowering grassland, areas of tussocky grassland and areas of scrub. The proposed parkland will link to the existing woodland in the east and a wide green corridor through the development to the north as well as a large SUDs area to the west which will also be managed for wildlife. A wide green corridor will remain on the eastern boundary of the grassland field which links to additional grassland fields in the wider area, as well as the existing woodland on site and the new parkland area to be created. The location of the parkland and created green corridors can be found in **Appendix B** of the Ecological Appraisal.
- 4.4 Prior to the commencement of the translocation, the receptor area must be in a suitable condition to accept the animals. Therefore, the landscaping on this parkland area and the green corridor along the eastern boundary must be completed and habitats established prior to commencement of development. Some additional enhancements will be required prior to the translocation commencing to make the habitat more suitable sooner; these have been identified as:
- The provision of hibernacula; and
  - The strategic placement of log piles.

### Hibernacula Construction

- 4.5 The exact location of the hibernacula will be decided at the detailed landscape design stage.
- 4.6 The hibernacula design will be based upon a modification of those described by Stebbings (2000)<sup>6</sup> and Showler *et al.* (2005)<sup>7</sup>. The hibernacula will be at least 2m wide, 4m long and 1m high and their construction will be supervised by a suitably experienced ecologist. The hibernacula will be constructed in sunny positions on an east-west orientation within areas of high habitat quality in order to create a feature where reptiles can both overwinter and bask on top of. To optimise these opportunities each hibernaculum will be constructed in a crescent shape, however, the final construction is likely to be influenced by local conditions.
- 4.7 Construction will involve the following key steps:
- Use of a mini digger to create a trench of appropriate dimensions.
  - Laying a 200mm of gravel at the base of the trench will help facilitate adequate drainage.
  - In-filling with inert rubble (that is contamination free), logs and mulch, to create a range of crevices with a humid microclimate.

<sup>6</sup> Stebbings R. (2000). Reptile hibernacula - providing a winter refuge. *Enact*, 4-7

<sup>7</sup> Showler D.A., Aldus N., & Parmenter J. (2005). Creating hibernacula for common lizards *Lacerta vivipara*, The Ham, Suffolk, England. *Conservation Evidence*. 96-98. [online]. Available at: <http://www.conservationevidence.com/individual-study/2175> [Accessed 10/11/2015].

- Access into the hibernacula interior will be facilitated with gaps left in the capping material at ground level.
  - Back-filling with earth and capping with turf and brush; and
  - The hibernacula will be left to vegetate naturally.
- 4.8 To minimise potential impact of ground compaction low ground pressure vehicles will be used throughout the operations.
- 4.9 In order to prevent any structural damage to the hibernacula from the general public, a small area around each hibernaculum will be fenced. These fenced off areas will be left to develop a rank, tussocky structure, with the areas strimmed on a three-year rotation. One third will be cut in any one year, each third being uncut for successive years. The newly constructed fencing will be of the exact specifications used across the rest of the site, in order to minimise visual impact.

### Translocation

- 4.10 The following strategy will be put in place covering the measures required to translocate reptiles prior to development. This strategy involves the displacement trapping of individuals from the affected habitats.
- 4.11 Prior to commencing the trapping exercise, temporary reptile fencing will be erected, during suitable weather conditions around the grassland field (where the reptiles are to be removed from) and the newly landscaped areas created for the translocated animals (to ensure they do not stray from these areas on the construction site). The proposed location of the fencing is shown in **Figure 10**.
- 4.12 The fencing design will follow that detailed within Annex B of the *Design Manual for Roads and Bridges vol.10 Section 4, part 7 HA 116/05: Nature Conservation Advice in Relation to Reptiles and Roads*<sup>8</sup> (see **Appendix A**).
- 4.13 The compartmentalisation of the grassland field will enable trapping efforts to be concentrated in areas of highest reptile densities. The exclusion fencing found the newly created reptile receptor sites will be maintained during the construction phase of the development to avoid the risk of any reptiles entering the active site.
- 4.14 Installation of the fencing will be carried out by a suitably experience sub-contractor under the guidance of the supervising ecologist. Clearance of the fence line will be carried out as described below:
- Where appropriate all woody material within this area will be cut to a height of 30cm using hand tools (e.g., chainsaws and heavy-duty hand-held brush cutters) during November - February in order to remove any possible constraints from breeding birds later in the season.
  - Herbaceous vegetation will first be slowly directionally strimmed during the active reptile season and during suitable weather conditions (April to October and temperatures above 10°C with no rain).

<sup>8</sup> Highways Agency (2005). *Design Manual for Roads and Bridges. Volume 10 Environmental Design and Management. Section 4 The Good Roads Guide: Nature Conservation. Part 7. Nature Conservation Advice in Relation to Reptiles and Roads*. [online] Available at: [www.standardsforhighways.co.uk/dmrb/vol10/section4/ha11605.pdf](http://www.standardsforhighways.co.uk/dmrb/vol10/section4/ha11605.pdf) [Accessed 25/10/2015].

- The vegetation will be given two cuts, the first to 200mm and the second 1-2 hours later to 50mm.
  - All arisings will be completely removed from the working area to prevent potential areas of refugia from being used by reptiles moving across the area; and
  - A fingertip search of the working area will be made immediately prior to any ground works to ensure that all common reptiles are absent from the area of work. Further operations will only continue once common reptile species have been confirmed to be absent from the working area.
- 4.15 Within the trapping compartment, refugia comprising 50cm x 50cm tin or felt sheets will be laid at a rate of at least 200 per ha, twice the recommended density in order to increase trapping efforts. The refugia will then be left for at least 5 days to ‘bed in’ before trapping commences.
- 4.16 Any trees and scrub that are not to be incorporated within the green infrastructure of the site will also be cut to a height of 30cm using hand tools during November - February. Reducing vegetation to this height will maintain potential reptile hibernation sites within the cleared vegetation, while removing potential constraints from breeding birds later in the season. All arisings will be removed from the site to prevent potential areas of refugia from being used by reptiles moving across the area.
- 4.17 Trapping and translocation will be undertaken by suitably qualified ecologist and only during the active period for slow worms, between March to early-October, i.e., when the daytime temperature is between 9- 18°C and little or no wind.
- 4.18 Give the observed population size it is considered that trapping will require approximately 60 suitable days of trapping. Translocation will cease when (i) within 60 days of trapping, reptiles have been shown to be absent from the entire site for a full 5 clear days, or (ii) if following 60 days of trapping, a reasonable rate of capture has been achieved. The latter will be determined in consultation with Malvern Hills and Wyre Forest District Councils and is likely to depend upon the observed capture rate at the 60-day period.
- 4.19 During the translocation, any reptiles caught will be swiftly transferred into clean, cloth bags, taken to the receptor site and released immediately in order to minimise stress to individuals. All translocated reptiles are to be placed within the newly created hibernacula so that the individual reptiles can seek immediate shelter to avoid predation.
- 4.20 Once the rate of capture decreases across the site, habitat manipulation will be used to enhance capture methods. Selected areas of suitable habitat within the compartment will be reduced through passive displacement. The width of vegetation trimmed on any one occasion will be no greater than 2 meters, i.e., approximately the working area of a hand-held brush cutter. This method aims to concentrate the remaining reptile population within ‘islands’ of suitable habitat around which a more efficient capture efforts may then be concentrated.

**e etation learance Nestin Birds**

- 4.21 All wild bird species and their dependent young are protected while nesting by the Wildlife and Countryside Act (WCA) 1981 (as amended). Some bird species are also afforded special protection from disturbance while nesting by Schedule-1 of the WCA 1981 (as amended).

- 4.22 It is anticipated that the majority of woody vegetation will be removed outside the bird nesting season (April – September, inclusive). In the event that any site clearance takes place during this period then a nesting bird check will be required. No trees, scrub or other suitable nesting habitat will be removed during the bird nesting season until the absence of nesting birds has been confirmed by a suitably qualified ecologist. If nesting birds are confirmed to be present then an exclusion zone, as determined by the ecologist, will be maintained around the nest until the chicks have fledged.

#### **Reptile Search**

- 4.23 Once a reasonable capture effort has been achieved, a destructive search will be undertaken during the reptile active season and suitable weather conditions. Therefore, in the event ground conditions fall below the minimum temperature of 9°C or torpid animals are found during this exercise all destructive operations will be stopped immediately and completed when suitable conditions recommence.
- 4.24 During the destructive search any remaining vegetation and topsoil would be stripped from the affected areas by a machine fitted with a long-toothed bucket. All clearance works of suitable slow worm habitat would be completed under the supervision of two suitably experienced ecologists. All potential hibernation sites present within the working area shall be removed carefully by hand by experienced ecologists. This includes piles of rubble, mammal holes and tree roots. Any reptiles captured during the destructive search will be recorded and translocated to the offsite receptor site, as above.

#### **Monitoring**

- 4.25 Slow worm breed biannually and can take 3-5 years to become sexually mature. Therefore, monitoring should be undertaken for a minimum of 5 years post development in order to ascertain whether a breeding population has developed within the receptor site.
- 4.26 Monitoring will involve seven refugia checks during suitable conditions. The peak count and spatial distribution of the translocated population will help determine the effectiveness of the translocation and highlight any management issues. Additionally, the habitat suitability of the receptor site will also be assessed each year in order to determine whether the grazing regime is maintaining good quality reptile habitat.
- 4.27 It is recommended that a report is be prepared annually and distributed to Malvern Hills District Council and Wyre Forest District Council, detailing the results of the monitoring programme, the methodology used and any recommendations for appropriate aftercare within the receptor site. Records of the monitoring programme will also be sent to the local records centre. Overall, the scheme is also likely to provide useful information on the potential success of other similar translocation schemes.

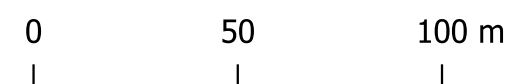
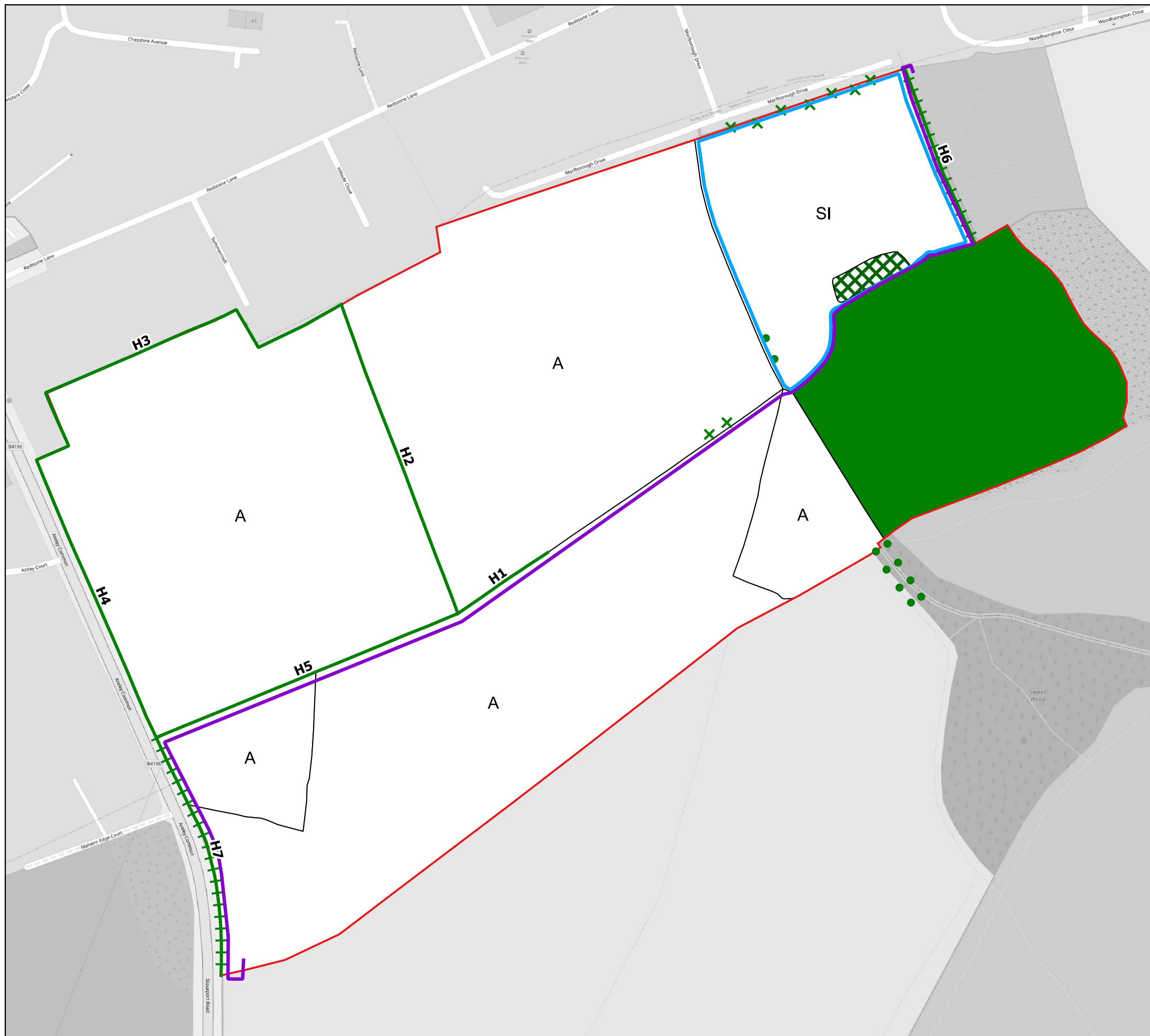
#### **Avoiding Recreational Disturbance**

- 4.28 The parkland area to be public open space. A detailed Landscape and Ecology Management Plan will be produced for the Site in general which will set out measures to reduce recreation disturbance both on the habitats to be created and the animals they will support (especially reptiles). These measures will likely include:

- Fencing of created hibernacula (as detailed above);
- Creation of mown or surfaced pathways within this parkland to direct footfall.
- Creation of taller, tussocky areas to add structural diversity and create areas that are less desirable to enter by the public.
- Fencing of the SUDs area to avoid public access entirely; and
- Installation of information signs in the parkland alerting the public to the presence of grass snake and slow worm and how to avoid harming them.

### Key

- Site Boundary
- Broadleaved woodland - semi-natural
- A Cultivated/disturbed land - arable
- SI Poor semi-improved grassland
- Scrub - dense/continuous
- Intact hedge - species-poor
- Hedge with trees - species-poor
- x Scrub - scattered
- Broadleaved tree
- Reptile Trapping Compartment
- Exclusion Fencing



client  
**Gladman**

project  
**Land at Astley Cross,  
Stourport**

drawing title  
**Reptile Trapping and Exclusion Areas**

scale @ A3  
1:1850

drawing / figure number  
**Figure 1**

drawn  
BS / VF

issue date  
6/1/2023



Gladman Developments Ltd

**Land at Areley Common, Astley, Stourport-on-Severn**

**Reptile Mitigation Strategy Appendix A:**

**Example Reptile Fencing Design**

January 2023

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## ANNEX B DESIGN OF REPTILE-PROOF FENCING

VOLUME 10 SECTION 4  
PART 7 HA 116/05

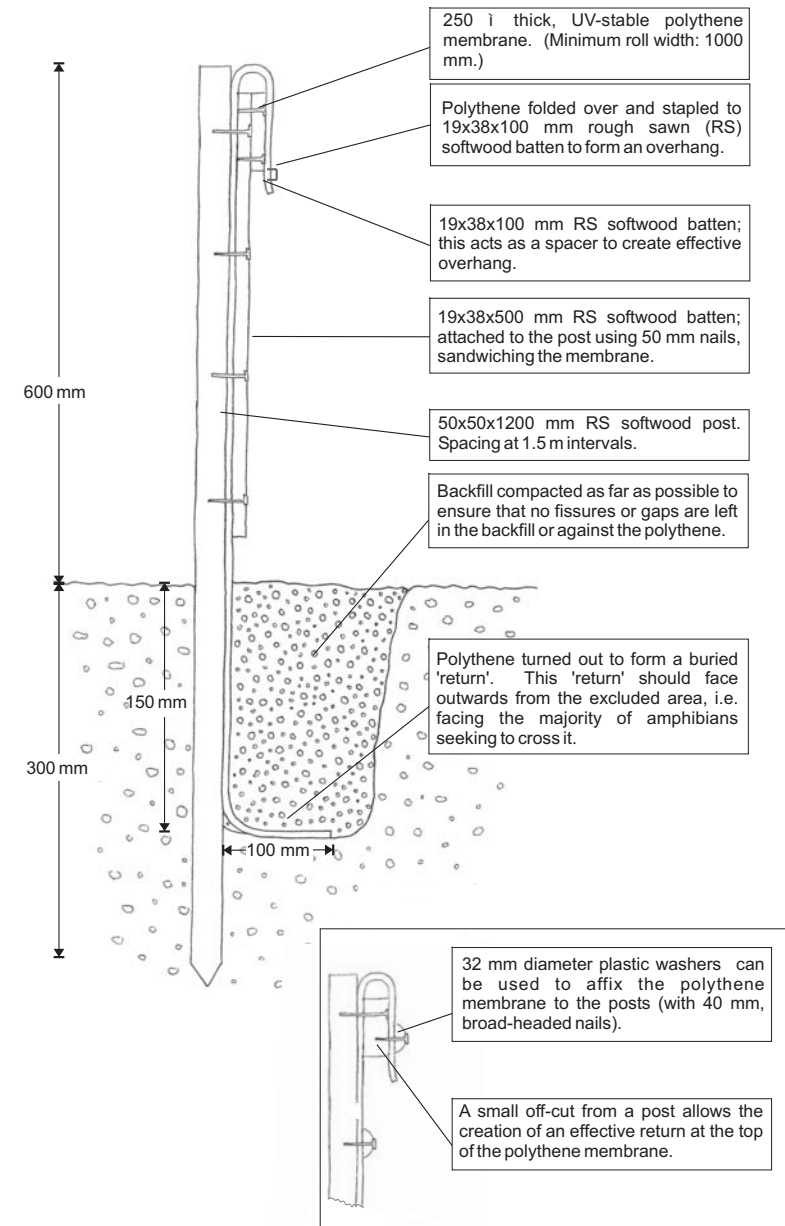
### Temporary Reptile Fence

This is a standard temporary fence design which can be utilised in situations where it is necessary to create a reptile-proof barrier for periods usually not exceeding a single season. Although this design will effectively prevent the passage of reptiles in either direction, the 'returns' on the fence should face outwards, i.e. facing the direction from which the majority of any reptiles are expected to approach. It can be constructed from relatively inexpensive materials, but is easily damaged or vandalised, and will degrade over time. Fences of this type are less appropriate in windy situations where damage will be more frequent. Also if placed close to areas where plants operate regularly and/or earthworks are taking place, a membrane fence of this kind is usually best protected by a more robust fence, for example a wooden paling fence.

Care needs to be taken when undertaking the necessary maintenance works to ensure that vegetation does not grow over the fence. If undertaken mechanically, this can easily damage the membrane.

The use of a nail gun is recommended to attach the battens securely to the posts. Not only is this advantageous for speed, but prevents any loosening of the posts which can be associated with the repeated impacts of a hammer.

Some practitioners prefer the use of flexible plastic washers to hold the membrane in place, as an alternative to softwood battens. (An example of this is shown inset.) The result is similar in strength and durability to that of the previous design, but precludes the use of a nail gun, as the washers require a large headed nail and cannot withstand the force produced by the gun.



## ANNEX B DESIGN OF REPTILE-PROOF FENCING

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### Temporary One-way Reptile Fence

This design can be utilised either as a 'stand-alone' fence, or can be installed as short sections along a standard temporary fence. Though far less expensive than either the semi-permanent or permanent designs, this type of fence must be very carefully installed and maintained to prevent damage to the membrane. In particular, the mounding against the membrane needs to comprise loose, light unconsolidated spoil. Where the fence is installed on heavy soil, this can be partly replaced by cut vegetation.

If the ground conditions are such that the trench cannot be backfilled effectively, then the membrane may be laid on the ground surface and soil can be mounded on top of it. If this method is used, then the mounded material must extend far enough beyond the membrane to act as sufficient barrier.

In addition, where ground conditions are soft, it may be necessary to support the fence with additional posts periodically along its length.

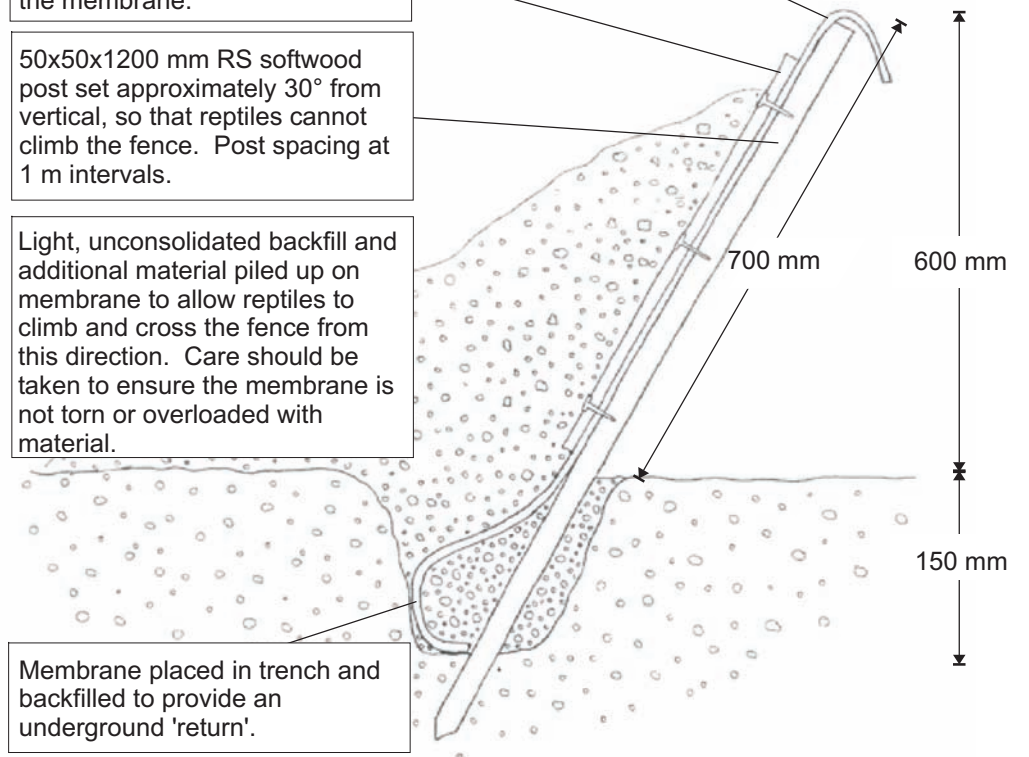
Heavy duty plastic membrane to take weight of backfill without tearing or stretching. (Minimum roll width: 1200 mm.)

19x38x500 mm rough sawn (RS) softwood batten; attached to post with 50 mm nails, sandwiching the membrane.

50x50x1200 mm RS softwood post set approximately 30° from vertical, so that reptiles cannot climb the fence. Post spacing at 1 m intervals.

Light, unconsolidated backfill and additional material piled up on membrane to allow reptiles to climb and cross the fence from this direction. Care should be taken to ensure the membrane is not torn or overloaded with material.

Membrane placed in trench and backfilled to provide an underground 'return'.



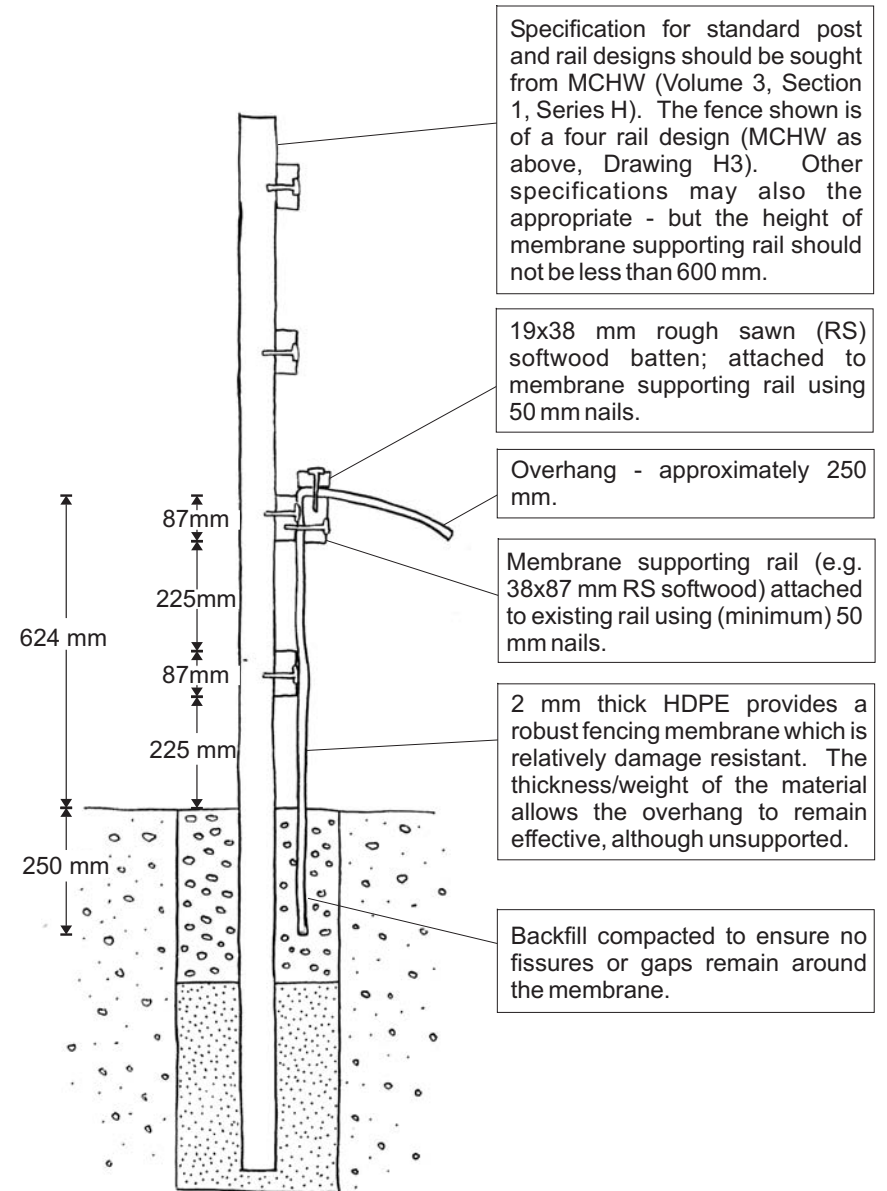
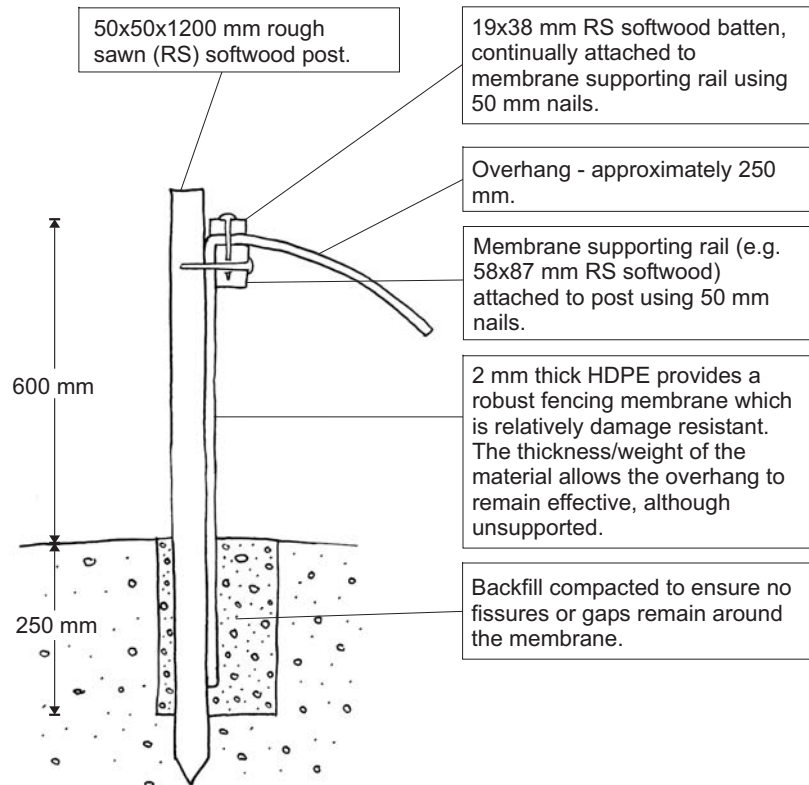
## ANNEX B DESIGN OF REPTILE-PROOF FENCING

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### Semi-permanent Reptile Fencing: Free-standing or attached to boundary fences

2 mm thick HDPE sheeting is a material which has been used to create effective semi-permanent reptile barriers. Although the membrane material is relatively expensive, these fences can be easy to install, potentially buried using a modified plough rather than a trench. The use of this kind of membrane also produces a more robust fence than the lighter-weight membranes and generally do not need to be protected by additional fences (however they tend to be marginally less robust than part-buried 'half-pipe' designs).

This fence design can be used in conjunction with timber post and rail highway boundary fencing, or as a stand-alone fence. The diagrams below show both of these alternatives. (It is also possible to install the membrane clear of the post footings due to the flexible nature of the materials.)

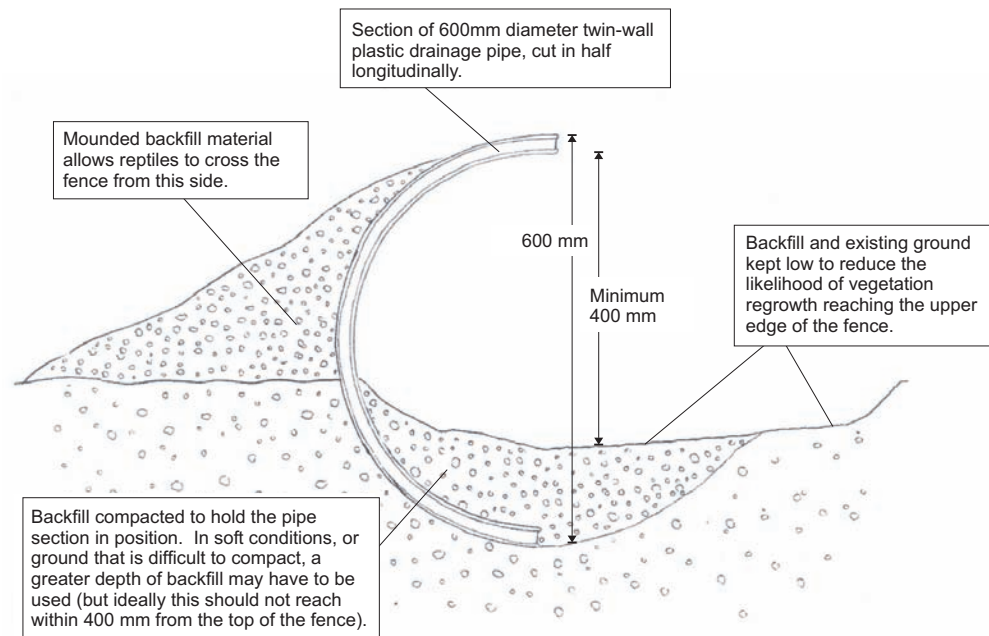


## ANNEX B DESIGN OF REPTILE-PROOF FENCING

VOLUME 10 SECTION 4  
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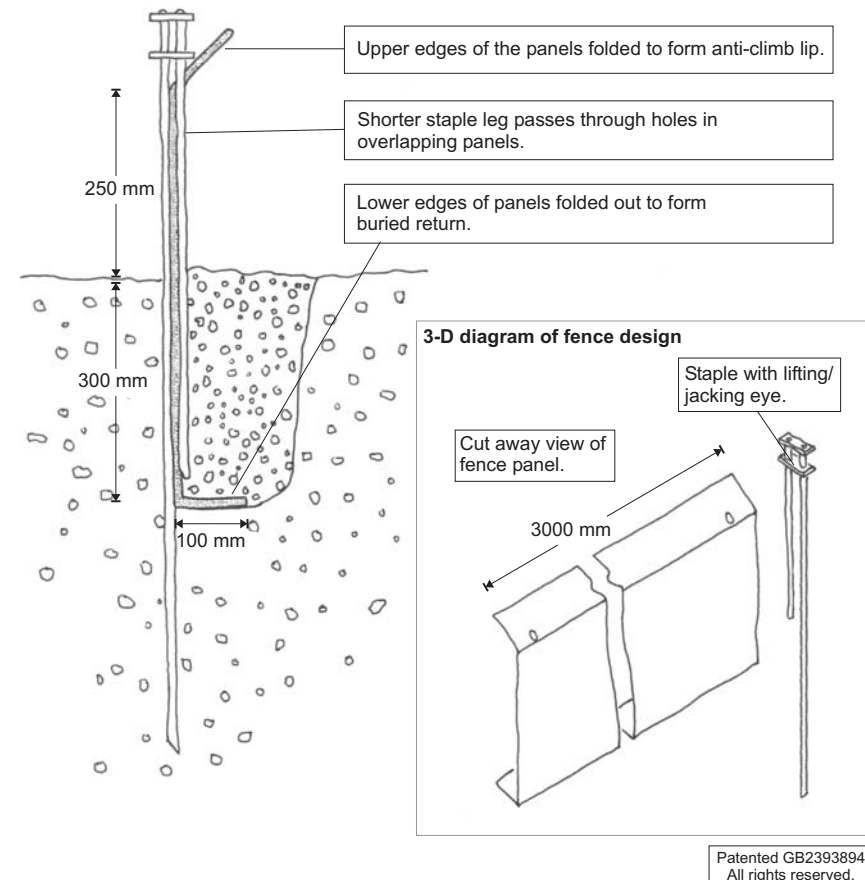
### Semi-permanent One-way Reptile Fence

This fence design, utilising twin-wall plastic drainage pipe, is more cost-effective than that of the permanent solution overleaf, but is comparably robust when well constructed. It is also a more effective design than temporary membrane fences in situations where damage is likely to occur, and generally does not require a second protective fence except in areas where plant is operating very close to the fence. In addition, this design is more effective in allowing reptiles to negotiate the fence in one direction and is far less visually obtrusive. It can be useful as a short section in a longer membrane fence where animals (such as badgers) may damage a membrane fence, or in strategic locations to allow the one-way movement of reptiles. In addition, it represents a more robust alternative where a temporary fence is required to cross particularly difficult ground conditions.



### Modular Reptile Fence Design

This type of reptile fencing is a new design, but provides a versatile system which is easy to install. It may be used as a vertical (as shown) or angled, one-way design, and is constructed from ready-made polypropylene sheets held in place by galvanised steel staples. Three grades of sheeting are available, which are suitable for temporary installation, semi-permanent installation and permanent installation respectively. Panels are also available in different sizes – the diagram shows a fence suitable for the exclusion of slow-worms, but a larger size may be more suitable for other species.

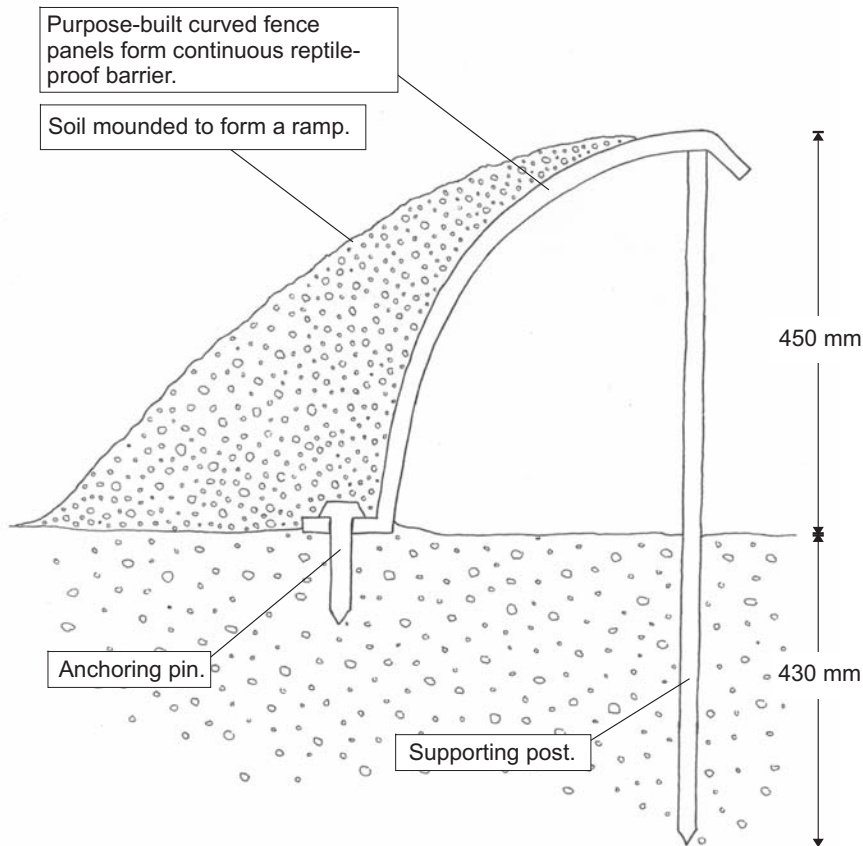


## ANNEX B DESIGN OF REPTILE-PROOF FENCING

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### Permanent One-way Reptile Fence

This type of fencing design is designed to be used in those few situations where a permanent reptile-proof barrier is required. It is constructed using purpose-built moulded plastic panels, with anchoring pins and supports. This design also allows reptiles to cross in one direction by climbing up the mounded ramp. Once vegetation has grown over the soil ramp this design has a very low visual impact. Regular maintenance is required to ensure that vegetation does not grow up in front of the fence and compromise the integrity of the barrier (this is important for all fence designs, but is of particular importance for fences which are to remain *in situ* for long periods).



### General Notes on Reptile Fencing

- All reptile fences must be checked regularly and maintained to ensure they remain fully effective throughout their working life.
- All fence designs require some degree of backfilling of trenches or spaces beside the fence membrane, or mounding of earth. The substrate used for this should be friable and, in the case of back-fill, firmly compacted to prevent the formation of any gaps or fissures which reptiles may use to find a route beneath the fence, or as a refuge. Where available substrates are not sufficiently loose or able to be compacted, additional materials should be imported to ensure a reptile-proof barrier is maintained.
- In all fence designs, all timber should be untreated rough sawn (RS) softwood obtained from a renewable source.
- Modular fencing panels and 'half-pipe' fencing may be re-used or recycled (provided they are appropriately installed), providing a significant cost saving on, for example, phased development sites.
- The precise fence design and specifications should be 'tailored' to the reptile species concerned. For example, where common lizards need to be excluded, the taller fence options need to be chosen, with an effective top return throughout, and particular effort needs to be directed at avoiding vegetation falling against or over the fence. Where slow-worms alone are concerned, lower fencing options can be considered, and most attention needs to be given to the compaction of backfill and the maintenance of an effective below-ground barrier, particularly on uneven surfaces.
- The majority of these reptile-proof fencing solutions are equally applicable as temporary, semi-permanent and permanent fencing in the context of mitigation schemes for amphibians.
- Permanent one-way fencing should be in place before the road opens.

## Key

- Site Boundary
- 10538 - Badger Survey Results**
  - 10538 - Badger Survey Data
  - 10538 - Badger Survey Data - 10m Buffer
  - 10538 - Badger Survey Data - 20m Buffer
  - 10538 - Badger Survey Data - 30m Buffer

- 1. Directional lighting at development edges to ensure greenspace remains dark.**
- 2 No lighting in parkland area.**
- 3 Parkland to be a mix of high diversity grassland with scrub and tree planting to provide habitat for badgers, birds, reptiles and bats.**
- 4 Paths and signage to be included to avoid trampling in all areas and direct foot fall.**
- 5 SuDS area to be managed for wildlife with permanent water areas and marginal planting.**
- 6 Badger sett and buffer zone to be included within green space.**
- 7 Himalayan balsam control in the woodland.**
- 8 Bird and bat boxes installed on new dwellings and existing trees.**

