



Reptile Assessment

Presence/Absence Surveys

of

Land at

Coventry Stadium,

Binley Woods,

Warwickshire

For

Brandon Estates Limited

(9th October 2020)

2020-01(08)

(Revision B)

PROTECTED SPECIES

This report contains sensitive information relating to protected species. The information contained herein should not be disseminated without the prior advice of Ecolocation.

Survey dates: 17th August & 7th, 10th, 14th, 18th, 21st 28th September and 1st October 2020

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This report has been prepared in accordance with the CIEEM Guidelines for Ecological Report Writing Second Edition (2017) and is compliant with the CIEEM Code of Professional Conduct.

Summary

- A reptile presence/ likely absence survey was carried out of the land at Coventry Stadium, Binley Woods, Warwickshire. It was understood that the Site would be subject to a future planning application for residential development.
- The reptile presence/likely absence assessment was carried out at the site under suitable weather conditions in the period between 07.09.2020 and 01.10.2020 by suitably qualified ecologists. The surveys were carried out following a recommendation in the Ecological Appraisal survey of the Site carried out by Ecolocation in October 2020 and to update the previous surveys in 2014. This initial survey identified potential for reptiles such as grass snakes and slow worms within the mosaic of habitats at the site.
- The Site, an area of predominantly grassland, comprised of a mosaic of habitats offering suitable basking and foraging opportunities to reptiles such as the areas of bare ground and soil. A number of watercourses in the form of a ditch network was noted in reasonable proximity to the Site, offering potential foraging habitat for grass snake.
- A total of 210 reptile refugia were placed in suitable locations around the site. These were then allowed to “bed-in” for a total of two weeks, thus allowing any reptiles, within the vicinity of the site, to acquaint themselves with these locations. Seven survey visits to the site were undertaken at an appropriate time of year and in suitable weather conditions using direct observation and use of artificial refugia to record any reptiles present and estimate the population size.
- The results of the detailed reptile surveys revealed no evidence of reptiles using the Site. It was therefore considered that the risk of injury and/or death of reptiles, as a result of the proposed works, was low. Works should therefore proceed with caution by the developer in order to ensure this remains the case.

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1 Introduction

1.1 Instruction

Ecolocation were commissioned by Brandon Estates Limited to undertake an ecological assessment of an area of land adjacent to Coventry Stadium, Binley Woods in Warwickshire (hereafter referred to as the 'Site'), which was understood would be subject to a future planning application for residential development.

1.1.1 Preliminary Survey

This report should be read in conjunction with the Ecological Impact Assessment report prepared by Ecolocation dated October 2020. This Ecological Impact Assessment recommended that due to the potential for reptiles on Site and previous records for the Site and suitable habitat presence for reptiles such as grass snake from a further survey is undertaken to establish presence/absence of species and population sizes.

1.1.2 Site location

The Site (grid reference SP 40713 77299) was located some 4.5km to the east of the City of Coventry. It was located between the city of Coventry and the village of Brandon. There was woodland to the northwest, residential properties to the west and south, a paddock to the north and a derelict garden centre to the northeast.

1.1.3 Proposed Plans

The proposed plans for the Site detail a residential development of approximately 125 units. A floodlit sports facility is also proposed to be located in the western extent of the Site. The following drawing was used to support this report.

- Drawing number 27510-001 Rev I titled 'Illustrative Landscape Masterplan' dated 01.07.2021.



Figure 1: Survey boundary

1.2 Survey Purpose

Following the results of the Ecological Appraisal survey, further surveys were recommended to assess the overall level of reptile activity across the Site and determine the value of the habitats within the site for reptiles.

The aims of the survey were to:

- evaluate the habitats present on site and their potential to support reptiles
- conduct detailed reptile surveys to determine presence/absence
- if reptiles are recorded on site, employ sufficient survey effort to establish population size
- assess the ecological impact of the proposals in relation to reptiles
- identify any constraints/opportunities on site in relation to reptiles
- provide a detailed mitigation plan, where appropriate

1.3 Legislation & Planning Policies

The four reptile species which are widespread across the UK (grass snake, common lizard, slow worm and adder) are listed under Schedule 5 of the Wildlife and Countryside Act (as amended) and are protected from killing and injury.

The ODPM Circular 06/05 makes the presence of a protected species a material consideration within the planning process. It states that it is essential for the presence of protected species and the extent they may be affected by proposed development be established through appropriate surveys before the planning permission is granted and encourages the use of planning conditions to secure the long-term protection of the species.

The NERC Act 2006 places a duty on public authorities to conserve biodiversity. Additionally, this Act states that a list of priority species and actions must be drawn up and published, to contain species and habitats of principal importance for the purpose of conserving biodiversity. The list of Priority Species, which encompass the previous UK Biodiversity Action Plan (BAP) species, are those identified as being the most threatened and requiring

conservation action. Priority species were chosen based on international importance, rapid decline and high risk. The list includes grass snake, adder, common lizard and slow worm.

The National Planning Policy Framework (NPPF) section 15 outlines how applications need to conserve and enhance the natural environment. Paragraphs 174 to 177 state that sites with biodiversity value should be protected and enhanced, minimising impacts on biodiversity and establishing ecological connectivity. Furthermore, the protection of priority sites and species through developments is outlined and states where significant harm is unavoidable through alternatives or mitigation, planning permission should be refused. Finally, this section concludes that developments with aims to conserve or enhance biodiversity should be supported and any improvement around developments should be encouraged to achieve net gains for biodiversity.

In Policy NE1 in the Rugby Borough Council Local plan (adopted 2019) it is stated (*inter alia*), “Development will be expected to deliver a net gain in biodiversity and be in accordance with the mitigation hierarchy below. Planning permission will be refused if significant harm resulting from development affecting biodiversity cannot be:

- Avoided, and where this is not possible;
- Mitigated, and if it cannot be fully mitigated, as a last resort;
- Compensated for.

All development proposals in the proximity of ancient woodland shall have buffers having regard to Natural England’s standing advice.”

2 Methodology

2.1 Desk Study

Prior to the site visit a desk-top data gathering exercise was undertaken. The MAGIC website was accessed to search for statutory designated sites within a 1km radius of the Site. The Warwickshire Biological Records Centre (LERC) was contacted for information on reptile species records within a 1km radius of the Site.

2.2 Reptile Presence/Absence Survey

A presence/absence survey of the Site for reptiles was undertaken by suitably experienced ecologists, led by Laura Carter, in accordance with Froglife Advice Sheet 10 - Reptile Survey. Surveyor experience has been summarised in Table 1. Each survey visit lasted approximately 1 hour and weather conditions at the time of survey were recorded.

Table 1: Survey personnel and qualifications

Personnel	Relevant survey experience (years)
Laura Carter Graduate Ecologist	4
Tamsin Harper	2
Cameron Mason	1
Paul Carter	1
James Green	1

All visits were undertaken during suitable weather conditions (9-18°C; sunshine with little or no cloud; and little or no wind) and at suitable times of day typically between 08:30 and 11:00, or 16:00 and 18:30; and included the use of two survey techniques during each visit. The first technique used was direct observation and the second technique was the use of artificial refugia.

The recommended density of refugia for presence/absence surveying is 5-10/ha. Therefore, 210 refugia were distributed through the Site. The artificial refugia were placed in suitable locations close to cover, in locations which would gain adequate hours of sunlight during the day. Bituminous felt sheets were used to attract reptile species (*pers. obs*) and were located at the approximate locations illustrated on the map in Appendix 1.

2.3 Limitations

There were no significant limitations at the time of survey.

3 Results & Evaluation

3.1 Desk Study

3.1.1 Habitat Connectivity

The habitat connectivity of the Site was considered to be average, as summarised in Figure 2 (below) The landuse immediately adjacent to the site is woodland to the northwest, residential properties to the west and south, a derelict garden centre to the northeast and a paddock to the north. The wider surrounds comprise a mixture of farmland with hedgerow boundaries, and blocks of woodland.

Immediately adjacent the Site to the west was the A428 trunk road, which may have created a barrier to the free movement of species from this direction. Adjacent the Site to the north, beyond Gossett Lane, stretched New Close and Birchley Wood; both designated Local Wildlife Sites for their ancient woodland habitat. The habitats created by such woodlands may have provided good shelter and forage habitat for a number of species. The increased human influences, such as noise and light pollution, created by the Site's current use and its close proximity to residential properties and the A428 to the west may have deterred a number of species.

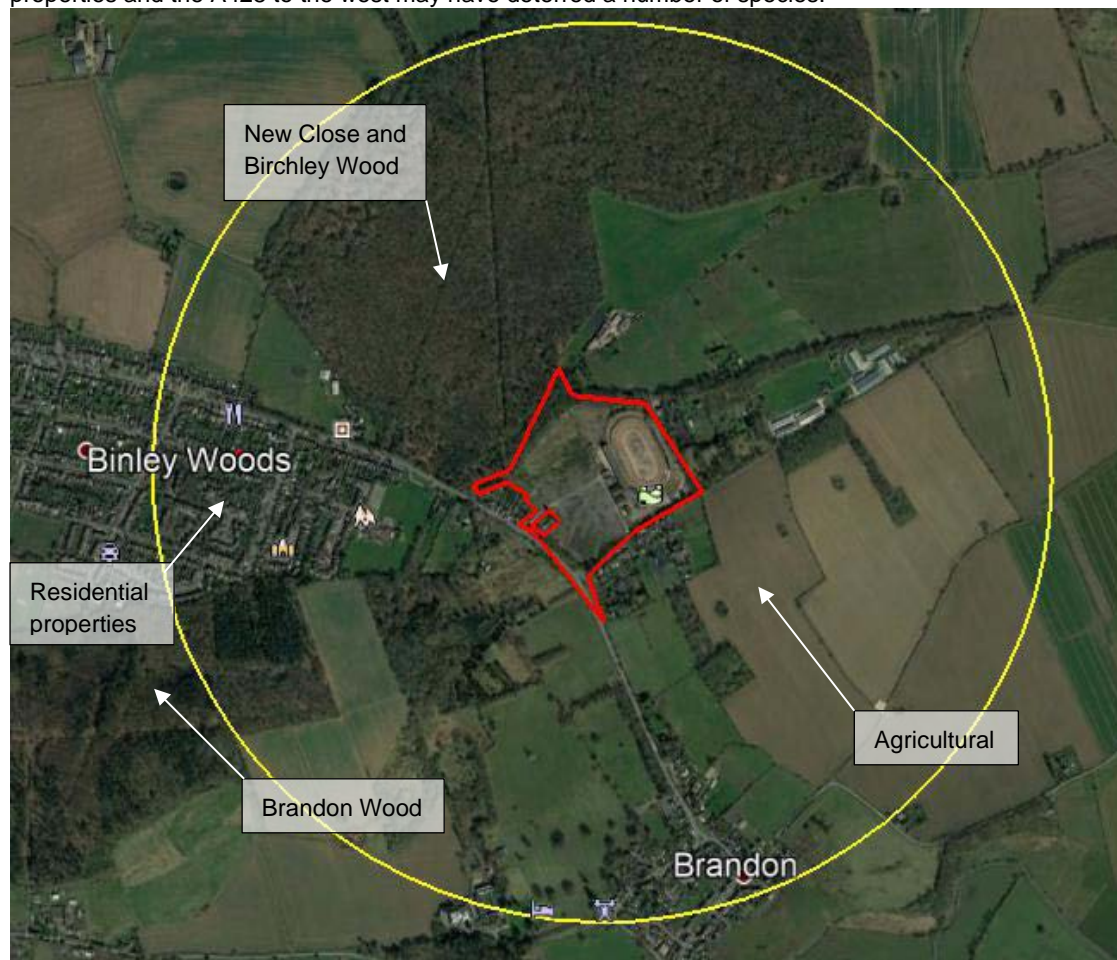


Figure 2: Habitat connectivity features within a 1km radius of the Site

3.1.2 Reptile records

There was 1 record of slow worm (*Anguis fragilis*) within a 1km radius of the Site recorded in 1981 within Brandon Wood to the south of the Site. In addition to the during our previous reptile survey on the Site in 2014 a single juvenile grass snake was noted on Site.

3.1.3 Site Description

The Site was considered to offer good habitat opportunities for reptiles. The Site was largely south east facing and had good potential to catch the morning sun. The boundary hedgerows and scrub areas provided a number of sheltered areas for harbourage and commuting. The grassy sward had been left to grow long and provided adequate cover for reptiles during foraging, as well as likely supporting a good invertebrate population for food. Finally, the new bare ground and soil heaps provide a number of new basking opportunities for reptiles, particularly where those are south facing and still loose offering areas for hiding from predators.

3.1.4 Weather conditions

The weather conditions during the surveys were recorded and can be seen in Table 2.

Table 2: Weather conditions during reptile survey visits

Visit	Date	Time	Weather				
			Air Temperature (°C)	Ground Temperature (°C)	Wind Speed (Beaufort Scale)	Precipitation	Cloud Cover (%)
1	07/09/2020	8:30am	13	14	1	None	26-50%
2	10/09/2020	8:35am	12	12	0	None	26-50%
3	14/09/2020	8:30am	13	15	0	None	0-10%
4	18/09/2020	8:30am	11	12	1	None	26-50%
5	21/09/2020	9:00am	13	14	0	None	0-10%
6	28/09/2020	10:00am	11	13	1	None	11-25%
7	01/10/2020	9:15am	11	13	1	None	26-50%

3.1.5 Reptile Survey

The surveys found no reptiles on the Site during the seven visits.

4 Discussion & Conclusions

A preliminary ecological appraisal of land at Coventry Stadium was undertaken by Ecolocation in June 2020 and noted the presence of suitable habitat for supporting reptiles and local records of slow worm and previous records of a juvenile grass snake on the Site noted from surveys conducted by Ecolocation in 2014. In line with the recommendation within this report, presence/absence surveys were undertaken at the Site to establish the status of reptiles within the Site and whether any mitigation would be required.

The Site would be subject to a future planning proposal for the erection of residential properties.

Seven presence/absence surveys for reptiles were carried out at the Site in September 2020, by suitably experienced ecologists. No reptiles were recorded on any of the survey visits.

Given the presence of a good foraging source for grass snake noted previously (surrounding waterbodies including wet ditches around the Site boundary) and a previous confirmed presence of grass snake within the Site boundary, it was considered there was a low possibility that grass snake would commute through the Site, on occasion whilst foraging.

The occasional presence of slow worm or common lizard is highly unlikely given that both species have very small commuting distances and do not disperse readily. Adder, smooth snake and sand lizard are not found in this area.

With all of this in mind, the risk of direct mortality, harm or injury to reptiles as a result of the proposed works was considered low. Nevertheless, sensitive working practices for grass snake are considered necessary during the course of works.

Providing this mitigation is undertaken, no adverse impacts to any reptile populations as a result of the proposed development are anticipated.

5 Recommendations

The National Planning Policy Framework paragraph 174 states that "To protect and enhance biodiversity and geodiversity, planning policies should: ...promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species populations". In order to ensure no net loss of biodiversity in accordance with NPPF & Circular 06/2005 recommendations are made below.

- Clearance works must be carried out in a phased and directional manner towards any retained vegetation to enable reptiles and amphibians that may be within the works area to escape.
- Any herpetofauna or other protected species found during the clearance works which can be moved without requiring a licence (such as frogs, toads, smooth newts and grass snake) should be moved carefully by hand to an area to be left undisturbed by the works in a similar habitat.

Providing this mitigation is undertaken, no adverse impacts to any reptile populations as a result of the proposed development are anticipated.

5.1 Reasonable Avoidance Measures

Where possible, boundary hedgerow and boundary vegetation should be retained and protected during development in order to retain suitable habitat for potential hibernating amphibians and reptiles.

Removal of the scrub within the northern part of the site should be undertaken carefully under advice from a suitably qualified ecologist to avoid harm to individual animals on Site, if found to be present. Any brash generated during the construction period should be removed from Site to avoid creating suitable sheltering and hibernation habitat for reptiles. The clearance should be undertaken by working towards area of suitable habitat so that any animals are directed at all times towards suitable cover.

The grassland, tall ruderal vegetation within the Site should be strimmed to a height of 5cm prior to works to deter animals from entering this area. The sward length should be maintained at this height for the duration of development works.

Any deep excavations, which will be left open overnight, should have sturdy rough cut or textured sloping wooden boards placed in them to provide exit ramps to allow for animals which may forage or commute across the Site to escape.

Any clearance of trees, scrub and hedgerow vegetation must be carried out during spring to autumn, in conditions above 5°C, in order to avoid encountering hibernating animals such as reptiles. If occurring in nesting bird season between March and September, management of scrub or hedgerow vegetation should be carried out immediately following a check for active nests by a suitably qualified ecologist.

Should any non-protected species, including small mammals and common amphibians, be discovered on site during works, these should be carefully moved from the construction area, unharmed, to an area of cover to be left undisturbed by the works, such as the far woodland to the north of the site.

If evidence of reptiles, such as slow worm or grass snake, is found during works, further advice should be sought from an experienced ecologist before works are able to proceed.

6 References

CIEEM, 2015. Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.

Circular 06/2005 Biodiversity and Geological Conservation – Statutory Obligations and Their Impact Within the Planning System.

Ecolocation Impact Assessment of Land at Coventry Stadium, Binley Woods, for Brandon Estates Ltd, 2020-01(08) (2020).

Froglife Advice Sheet 10 - Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation (1999) Froglife.

Institute of Environmental Assessment, 1995. Guidelines for Baseline Ecological Assessment. London: E & FN Spon.

MAGIC, 2013. Available from: <http://www.magic.gov.uk/>.

National Planning Policy Framework, July 2018.

Rugby Borough Plan (adopted June 2019)

The Conservation of Habitats and Species Regulations, 2012.

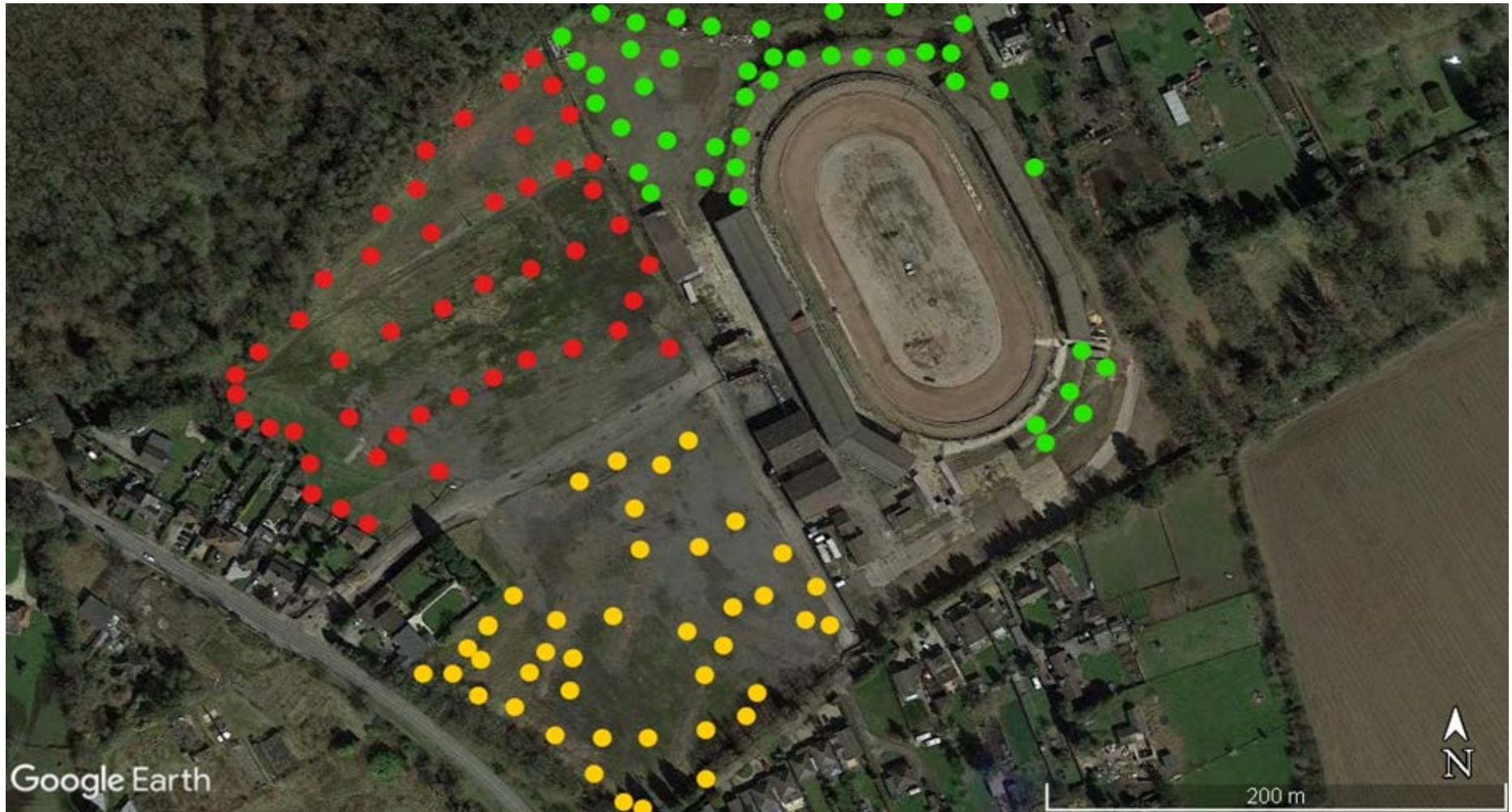
UK BAP Priority Species and Habitats, available at:

<http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/prioritylist.aspx>.

Warwickshire Biological Record Centre

Wildlife & Countryside Act, 1981. HMSO (as amended).

Appendix 1- Map of artificial refugia placement



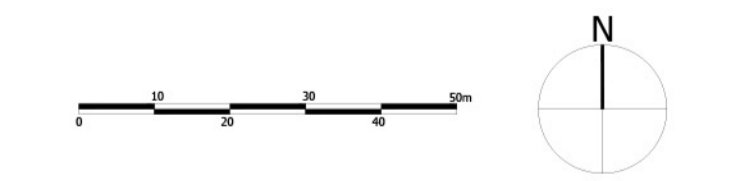
Appendix 2- Proposed plan



The scaling of this drawing cannot be assured

Revision	Date	Drm	Ckd
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- LEGEND**
- Boundaries and Rights of Way**
- Site Boundary
 - Existing PROW- Footpath
 - Existing PROW- Bridleway
 - Existing PROW- Twelve O'Clock Ride
- EXISTING ELEMENTS**
- Existing Tree/ Hedgerow Planting
- PROPOSED ELEMENTS**
- Planting**
- Proposed Trees/ Hedgerow Planting around Boundary
 - Proposed trees
 - Proposed hedges
 - Proposed Boundary Hedge & fence: the extent and alignment of new hedge will be subject to detailed condition survey of existing vegetation
 - Wetland Planting
 - Meadow Grassland
 - Bunding
 - Proposed Rain Garden
 - Proposed Grass Planting
 - Proposed Car Parking
 - Proposed Overflow Parking
- Surfacing and Paving**
- Cycle/Footpath - Bitmac with crushed stone surface dressing
 - Informal Path - Worn/Mown Grass
 - Enhanced Highway Paving
 - Enhanced Pedestrian Paving
- Waterbodies**
- Attenuation Ponds & Basins
- Playspaces**
- Play Area
 - 3G ATP Pitch
 - Trim Trail
 - Sculpture / Public Art
- Buildings**
- Proposed Pavilion with Green Roof



Project
Brandon Stadium
Coventry

Drawing Title
Illustrative Landscape Masterplan

Date 01/07/21	Scale 1:1000 @ A1	Drawn by LA	Check by RMcW
Project No 27510	Drawing No 001	Revision I	