

R I C H A R D S

M O O R E H E A D & L A I N G L T D

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**A55 Junctions 15 and 16 Improvements**

**Appendix 8.6**

**Supplementary Ecological Survey Information – Reptile Survey Report for  
Junction 16**

for

**WELSH GOVERNMENT**

March 2021

3066



# R I C H A R D S

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## A55 JUNCTIONS 15 and 16 Improvements

### Appendix 8.6

### Supplementary Ecological Survey Information – Reptile Survey Report for Junction 16

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welsh GOVERNMENT

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## SUMMARY

Richards Moorehead & Laing Ltd (RML) were commissioned to undertake ecological surveys to inform the A55 Junctions 15 and 16 road improvement Scheme. As part of these surveys, habitat appraisals were conducted across the Scheme in 2017 and 2018 to assess the potential of these to support reptiles.

Following on from this habitat appraisal, two areas of land within Junction 16 which would be affected by the Scheme were identified for further survey work. One of which was found to contain reptiles. These surveys formed the basis for the assessment upon reptiles within Chapter 8 – Nature Conservation of the submitted Environmental Statement (ES)<sup>1</sup>.

To ensure that survey data remains valid, a programme of further ecology surveys were conducted during 2020. These were conducted in order to supplement the initial survey baseline and to advise as to whether the updated survey data alters the significance of effects upon reptiles as a result of the Scheme.

This report details the supplementary survey information collected, in respect of Appendix 8.1 – Reptile Survey Report<sup>2</sup> and of Chapter 8 of the A55 Junction 16 ES. This updated report follows the Appendix numbering as submitted, this document is Appendix 8.6.

This document should be read in conjunction with Chapter 8 of the A55 Junction 16 ES and Appendix 8.2. Where necessary, sections in these reports will be referred to in order to save repetition.

A peak count of eight slow worms were recorded, this is lower than the survey conducted in 2019, as such the population estimate for reptiles remains as medium. No additional reptile species were recorded.

The significance of effects on reptiles, based on the supplementary updated survey data have not changed. The mitigation measures and recommendations provided in Chapter 8 of the ES, in respect of reptiles, have not changed.

<sup>1</sup> September 2020 (revised December 2020): A55 Junction 16 Environmental Statement Chapter 8 Nature Conservation.

<sup>2</sup> Richards Moorehead & Laing Ltd (November 2019) A55 Junctions 15 and 16 Improvements Reptile Survey Report for Junction 16 for Welsh Government.



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## 1. INTRODUCTION

### 1.1 Background

1.1.1 Richards Moorehead & Laing Ltd (RML) were commissioned to undertake ecological surveys to inform the A55 Junctions 15 and 16 road improvement Scheme.

1.1.2 As part of these surveys, habitat appraisals were conducted across the Scheme in 2017 and 2018 to assess the potential of these to support reptiles. The site was then categorised as to whether it provides poor, good or exceptional habitat for reptiles, based on the extent of and occurrence of features which could support reptiles.

1.1.3 These Initial surveys formed the basis for the assessment upon reptiles within Chapter 8, Nature Conservation, of the published Environmental Statement (ES)<sup>3</sup>.

1.1.4 To ensure that survey data remains valid, a programme of further ecology surveys were conducted during 2020. These were conducted in order to supplement the initial survey baseline and to advise as to whether the updated survey data alters the significance of effects upon reptiles as a result of the Scheme, as reported in the published ES.

1.1.5 The Scheme proposals are detailed in Chapter 2 of the ES<sup>4</sup> and not repeated here.

### 1.2 Updates to Legislation, Planning Policy and Guidance

1.2.1 The initial surveys and assessment were undertaken in 2017, 2018 and 2019, before the UK's departure from the EU and before the adoption of amended Regulations noted below. It is confirmed that while the process may have changed slightly, the conclusions reached in the assessment are the same. These changes do not affect the UK legislation afforded to reptile species encountered at the site. There have been no changes to the Wildlife and Countryside Act (as amended) in respect of the protection of reptiles.

<sup>3</sup> September 2020 (revised December 2020): A55 Junction 16 Environmental Statement Chapter 8 Nature Conservation.

<sup>4</sup> December 2019 (revised February 2021: A55 Junction 16 Environmental Statement Chapter 2 The Scheme.



- 1.2.2 Edition 11 of Planning Policy Wales (PPW)<sup>5</sup> and the National Development Framework (published as Future Wales – the National Plan 2040)<sup>6</sup> were published in February 2021. These documents set out how the planning system at a national, regional and local level can assist in delivering sustainable development and improvement to the social, economic, environmental and cultural well-being of Wales, as required by the Planning (Wales) Act 2015, the Well-being of Future Generations (Wales) Act 2015 and other key legislation. Chapter 6 of PPW 11: Distinctive and Natural Places retains the objectives in relation to nature conservation, as well as a number of other environmental topics. Policy 9 – Resilient Ecological Networks and Green Infrastructure of the National Development Framework would ensure the enhancement of biodiversity, the resilience of ecosystems and the provision of green infrastructure in which the Welsh Government would work with key partners to achieve this.
- 1.2.3 It should be noted that during the preparation of the ES, the DMRB assessment guidance was updated. LA 108 Biodiversity<sup>7</sup> (formerly Volume 11, Section 3, Part 4 Ecology and Nature Conservation and IAN 130/10) is now the advised guidance and sets out the requirements for assessing and reporting the effects of highway projects on biodiversity.
- 1.2.4 In addition, DMRB (May 2005) Volume 10 Environmental Design and Management Section 4: The Good Roads Guide – Nature Conservation Part 7 HA 116/05 Nature Conservation Advice in Relation to Reptiles and Roads, has been superseded by LD 118 Biodiversity Design<sup>8</sup>.

<sup>5</sup> Welsh Government; Planning Policy Wales Edition 11 February 2021 accessed at

[https://gov.wales/sites/default/files/publications/2021-02/planning-policy-wales-edition-11\\_0.pdf](https://gov.wales/sites/default/files/publications/2021-02/planning-policy-wales-edition-11_0.pdf)

<sup>6</sup> Welsh Government; Future Wales The National Plan accessed at

<https://gov.wales/sites/default/files/publications/2021-02/future-wales-the-national-plan-2040.pdf>

<sup>7</sup> DMRB: Sustainability & Environment Appraisal LA108 Biodiversity Revision 1 (March 2020)

<https://standardsforhighways.co.uk/dmrB/search/af0517ba-14d2-4a52-aa6d-1b21ba05b465>

<sup>8</sup> DMRB: Sustainability & Environment Design LD118 Biodiversity Design Revision 0 (March 2020)

<https://www.standardsforhighways.co.uk/prod/attachments/9317652b-4cb8-4aaf-be57-b96d324c8965?inline=true>

1.2.5 These replacement guidelines have been reviewed and it is considered that they do not alter the survey methods, significance of effects or recommendations in respect of reptiles effected by the Scheme.

### 1.3 Aims of the Study

1. To reassess and evaluate the baseline in respect of reptiles;
2. To conduct updated surveys where necessary;
3. To advise as to whether the updated survey data alters the significance of effects upon reptiles as a result of the Scheme;
4. Identify any further mitigation measures required to ensure compliance with nature conservation legislation and to address any potentially significant ecological effects;
5. Identify any additional surveys that may be required to inform any future stages of the Scheme; and
6. To identify any additional appropriate enhancement measures.



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## 1.4 Survey Area Description

- 1.4.1 The survey area included all habitat to be affected by the Scheme.
- 1.4.2 The roundabout at Junction 16 consists of poor semi-improved grassland with the adjacent verges of a similar species composition. Broadleaved and mixed plantation woodland occurs around the slip roads to the west and east adjacent to Conway Road and Ysgubowen Road with scrub planting to the north of the A55 associated with the railway and cycle path.
- 1.4.3 Heading east, the grassland is a mixture of improved pasture and poor semi-improved grassland. The Afon Gyrach crosses the Scheme area and flows under the A55 to the east of the Scheme. The village of Penmaenmawr is located to the west of the Junction, whilst Dwygyfylchi is located to the east beyond which is a caravan park. A sewage works is located on the seaward side of the A55, beyond the railway, to the east of the Junction. The wider environs consist of improved pasture, woodland and heathland. The Scheme would traverse areas of improved and poor semi-improved grassland to the east of the Scheme, a new road is routed across the Afon Gyrach, in fields behind the shell garage through areas of scrub planting and grazed fields where it would join the existing slipway.
- 1.4.4 The location and extent of habitats present are shown on Drawing numbers A55J15J16-RML-30-16-DR-X-0803 to A55J15J16-RML-30-16-DR-X-805 of the submitted ES. The extent and distribution of habitats and their condition have not altered since the initial baseline was conducted.



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## 2. SURVEY METHODS

### 2.1 Personnel and Quality Assurance

2.1.1 RML is a registered Practice with the Chartered Institute of Ecology and Environmental Management (CIEEM).

2.1.2 All surveys were carried out in accordance with current best practice guidelines unless stated otherwise and under the supervision of senior staff and appropriately licensed and/or experienced ecologists. The updated surveys were led by Donna Hall and assisted by Robert Jones.

### 2.2 Desk Study and Consultations

2.2.1 The North Wales Environmental Information Service (Cofnod) was contacted in September 2017 and was updated in July 2019 and again in June 2020 to obtain the following ecological data:

- Details of any statutory and non-statutory nature conservation designations within 2 km of the site; and
- Records of any reptile species within 2 km of the site recorded within the last 10 years.

2.2.2 No further consultation was undertaken to inform the surveys conducted in 2020.



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## 2.3 Habitat Appraisal

- 2.3.1 An updated habitat appraisal was conducted across the Scheme based on those features described in Section 2.3.1 of Appendix 8.2. Particular attention was paid to those areas identified as providing ‘good’ reptile habitat from the initial surveys. The locations of these areas are provided on Drawing ref A55J15J16-RML-30-16-DR-X-810 and 811 provided in Volume 2 of the Environmental Statement.

## 2.4 Presence / Absence Surveys

- 2.4.1 The survey effort repeated those conducted in 2019, with the same number of refugia (thirty four) deployed at the same locations with a total of five presence/absence surveys conducted. The difference being was that surveys were conducted in June during 2020 whilst surveys in 2019 were conducted over August and September.

## 2.5 Survey Limitations

- 2.5.1 Sheep graze the field. However, no refugia were lost or displaced. No constraints identified.



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### 3. RESULTS

#### 3.1 Desk Study

3.1.1 There are no changes to the results of the desk study as reported within the ES Chapter 8 and Appendix 8.2

#### 3.2 Habitat Appraisal

3.2.1 No 'exceptional' habitat was noted, as previously.

3.2.2 Based on the updated habitat appraisal, no additional areas were identified for survey and one of the initial areas 'scoped in' was 'scoped out' for further survey owing to negative survey results during surveys conducted in 2019 and the area being heavily and consistently grazed by horses. This area is located to the south of Puffin Café as shown on drawing ref A55J15J16-RML-30-16-DR-X-811 of the submitted ES.

3.2.3 Further surveys were conducted to land to the north of Ysguborwen Rd, as shown on Drawing ref A55J15J16-RML-30-16-DR-X-817, provided in **Appendix A**.

#### 3.4 Presence / Absence Surveys

3.4.1 A peak count of eight slow worms were recorded within land to the north of Ysguborwen Rd compared to a peak count of eleven during the surveys in 2019. The positive records occurred in the same locations as the surveys conducted in 2019, with the majority recorded along the field boundaries to the east, adjacent to the residential properties. The locations are highlighted on Drawing ref A55J15J16-RML-30-16-DR-X-817, **Appendix A**.

3.4.2 The results of the presence / absence surveys conducted in 2020 are provided in Tables 1 – 6.

**Tables 1-6: Results of the presence absence surveys June 2020**

Visit number	1			
Date	2020-06-02			
Surveyor	RJ and DH			
Weather	Clear and Sunny			
Temperature	17			
Cloud cover (%)	0			
Time of survey	1045hrs			
Findings	Slow worm	Common lizard	Adder	Grass snake
Mat / area where found (number of individuals)				
109 (150-200mm length)	1			
37 (150-200mm Length-male)	1			
Total number of each species	2	0	0	0
Other notes				

Visit number	2			
Date	2020-06-08			
Surveyor	RJ and DH			
Weather	Sunny intervals			
Temperature	15			
Cloud cover (%)	80			
Time of survey	1112hrs			
Findings	Slow worm	Common lizard	Adder	Grass snake
Mat / area where found (number of individuals)				
80 (300mm length-Female)	1			
Total number of each species	1	0	0	0
Other notes				



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## A55 Junctions 15 &amp; 16 Improvements Supplementary Information – Reptile Survey Report

Visit number	3			
Date	2020-06-16			
Surveyor	RJ and DH			
Weather	Sunny intervals			
Temperature	16			
Cloud cover (%)	70-80			
Time of survey	1005hrs			
Findings	Slow worm	Common lizard	Adder	Grass snake
Mat / area where found (number of individuals)				
56 (200mm length-female)	1			
108 (<100mm length-Juvenile)	1			
80 (200-350mm length-females)	4			
Total number of each species	6	0	0	0
Other notes				

Visit number	4			
Date	2020-06-23			
Surveyor	RJ and DH			
Weather	Sunny intervals			
Temperature	17			
Cloud cover (%)	85			
Time of survey	1006hrs			
Findings	Slow worm	Common lizard	Adder	Grass snake
Mat / area where found (number of individuals)				
56 (<200mm length-male)	1			
63 (>200mm length-male)	1			
80 (200-350mm length-females)	4			
80 (>200mm length-male)	1			
70 (<200mm length-female)	1			
Total number of each species	8	0	0	0
Other notes				



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Visit number	5			
Date	30/06/2020			
Surveyor	RJ and DH			
Weather	Sunny intervals			
Temperature	17			
Cloud cover (%)	80			
Time of survey	1130hrs			
Findings	Slow worm	Common lizard	Adder	Grass snake
Mat / area where found (number of individuals)				
80 (200-350mm length-females)	4			
65 (<200mm length-female)	1			
56 (<200mm length-male)	1			
99 (>200mm length-male)	1			
Total number of each species	7			
Other notes				

At A Glance - Total Reptiles Found to Date			
SLOW WORM	COMMON LIZARD	ADDER	GRASS SNAKE
24	0	0	0

At A Glance - Peak Counts			
SLOW WORM	COMMON LIZARD	ADDER	GRASS SNAKE
8	0	0	0



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## 4. Conclusions

### 4.1 Summary of Findings

- 4.1.1 The findings of the surveys are summarised in this section. Information on species status and distribution has been obtained from The Wales Biodiversity Partnership.
- 4.1.2 Reptiles have suffered declines in Wales and across the UK and are particularly vulnerable to the effects of habitat loss, fragmentation and change in condition.
- 4.1.3 The habitats within the surveyed area have not altered since the initial surveys.
- 4.1.4 No ‘exceptional’ habitat for reptiles was noted within the Scheme footprint.
- 4.1.5 One area was identified for re-survey which provided ‘good’ habitat for reptiles and was subject to updated presence/ absence surveys.
- 4.1.6 A peak count of eight slow worms were recorded within this land, located to the north of Ysguborwen Rd. No other reptile species other than slow worm were encountered, as was the case during previous surveys.
- 4.1.7 **Table 2** below provides a summary of the findings from the supplementary surveys conducted in 2020 and whether there are any changes to the significant effects reported in the ES, Chapter 8.



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**Table 7: Summary of changes to ecological baseline data – reptiles and significance of effects**

VER / Value	Document and paragraph reference for relevant baseline information within the main ES	Additional surveys undertaken 2020	Supplementary survey information	Changes to construction impacts/effects reported in the main ES (Table 8.16)	Changes to operational impacts/effects reported in the main ES (Table 8.16)	Implications for ecology mitigation/ compensation provision reported in the main ES (Table 8.16)
Reptiles  Local – Scheme wide Medium Regional (Ysguborwen Rd)	8.5.99 – 8.5.106  Appendix 8.2	Five presence / absence surveys to land to the north of Ysguborwen Rd	No additional species encountered, slow worms noted, peak count of eight.	No changes, land adjacent to Ysguborwen Rd.  Additional area scoped out.	No change	No changes, exclusion of reptiles from land to the north of Ysguborwen Rd and habitat enhancement.



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## 5. REFERENCES

- Environment (Wales) Act 2016  
(<http://www.legislation.gov.uk/anaw/2016/3/contents>)
- HMSO, 1981. *The Wildlife & Countryside Act 1981* (as amended), Norwich: Her Majesty's Stationary Office.
- HMSO, 2017. *The Conservation of Habitats and Species Regulations 2017*: Her Majesty's Stationary Office.
- HMSO, 2019 Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019: Her Majesty's Stationary Office
- Ramboll (May 2020) A55 Junction 16 Environmental Statement Chapter 8 Nature Conservation
- Richards Moorehead and Laing (November 2019) A55 Junctions 15 and 16 Improvements Reptile Survey Report for Junction 16 (Appendix 8.2 of the ES)
- Wales Biodiversity Partnership <https://www.biodiversitywales.org.uk/Amphibians-Reptiles>



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## APPENDIX A

Drawing Ref A55J15J16-RML-30-16-DR-X-0817



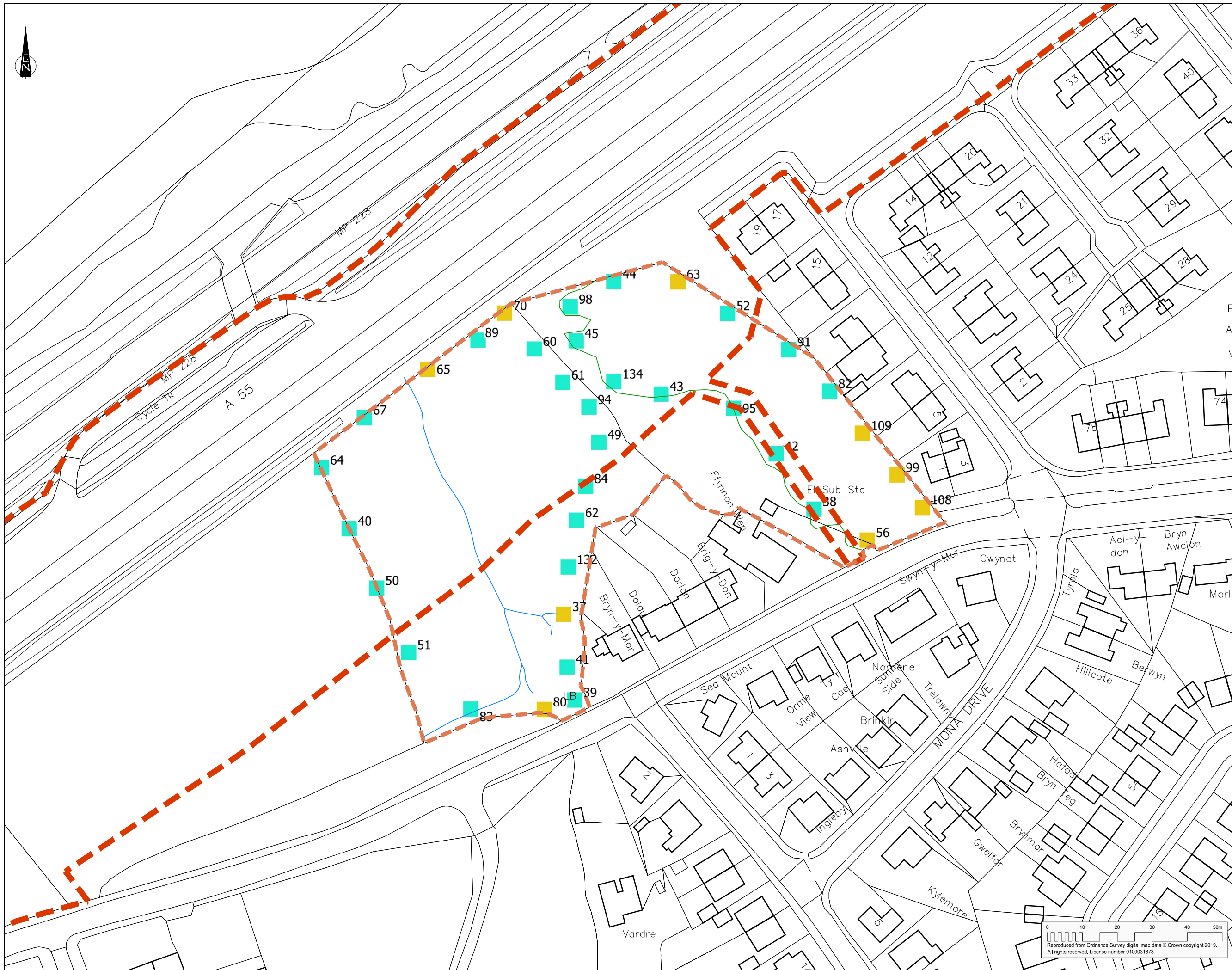
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

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- Notes
-  Proposed scheme extents
  -  Reptile survey areas
  -  Reptile survey artificial refugia - Highlighted yellow where present

Notes:  
 Artificial refugia placed at approximate 20m intervals to field margins and where suitable habitat was identified by the Ecologist. Numbers and text associated/shown with artificial refugia are for identification purposes onsite only.

A55 JUNCTION 15 & 16 IMPROVEMENTS



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JUNCTION 16  
 FIGURE 8.17  
 REPTILE SURVEY 2020  
 SHEET 01 of 01

Project No: 1620000620	Scale (041): 1:1,000	Drawn: RLJ	Date: FEB 21
Drawing No: A55J15J16-RML-30-16-DR-X-0817			Rev: 01

