

APPENDIX 7.3 ECOLOGICAL SURVEY FOR COMMON LIZARD

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ECOLOGICAL SURVEY FOR COMMON LIZARD

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1 INTRODUCTION

1.1 INTRODUCTION

RPS was commissioned by Northern Ireland Electricity (NIE) Networks to undertake an Ecological Survey for Common Lizard along the route of a Proposed Development to construct a 33 kV Overhead Line (OHL) and Underground Cable (UGC) from Strabane Main Sub-Station to Curraghinalt 33 kV Connection, County Tyrone. The Proposed Development is an integral part of the proposed Curraghinalt mine which is currently under consideration under planning application LA10/2017/1249/F. A full description of the Proposed Development can be found in Chapter 2 Project Description of the Environmental Statement (ES).

1.2 ECOLOGICAL SURVEY FOR COMMON LIZARD

The aim of the report is to provide a description of the common lizard survey methods used; to provide the detailed results of common lizard surveys; and to provide an interpretation of the results. The Ecological Survey for Common Lizard Report has been used to inform an EclA. The EclA identifies the impacts associated with the Proposed Development, evaluates the likely significance of effects on common lizard and applies the mitigation hierarchy to avoid, reduce or offset any significant negative effects on common lizard.

1.3 LEGISLATION

Common lizard is protected under the Wildlife (Northern Ireland) Order 1985 (as amended). Under the Order it is illegal to intentionally or recklessly kill, injure or take a common lizard or intentionally or recklessly; damage, destroy or obstruct access to any structure or place which common lizard use for shelter or protection; damage or destroy anything which conceals or protects any such structure; or disturb common lizard while it is occupying a structure or place which it uses for shelter or protection.

2 METHODOLOGY

2.1 STATEMENT OF AUTHORITY

The author and lead surveyor, Dave Welsh, is an Ecologist with RPS and holds a BSc (Hons) in Marine Science, a MSc in Ecological Management and Conservation Biology with over seven years of experience in conservation and three years of experience in ecological consultancy. Dave has extensive experience of habitat and mammal survey and is a protected species licence holder. Dave is an Associate member of the CIEEM and a volunteer with the Northern Ireland Bat Group and Northern Ireland Badger Group.

The assistant surveyor, Joseph Baird, is a Graduate Ecologist with RPS and holds a BSc (Hons) in Environmental Biology with over two years of experience in environmental and ecological consultancy. Joseph has experience of ecological field survey including habitat and mammal survey.

The information prepared and provided is true and accurate at the time of issue of the report and has been prepared and provided in accordance with the CIEEM Code of Professional Conduct (CIEEM, 2019). We confirm that the professional judgement expressed herein is the true and bona fide opinion of our professional ecologists.

2.2 CONSULTATION

Consultation was undertaken with the Centre for Environmental Data and Recording (CEDaR) and the National Biodiversity Data Centre (NBDC) in order to identify the existence of any records of common lizard within 1 km of the Proposed Development to provide historical information on the local distribution of common lizard that may be present along the route of the Proposed Development and in the surrounding environment. The information gathered during consultation is third party controlled data purchased for the purposes of this report only. RPS cannot guarantee its accuracy and cannot be held liable for any inaccuracies.

A desk study was also undertaken to review the Curraghinalt Project Environmental Statement (ES) (SRK 2017), Curraghinalt Gold Project Addendum to Environmental Statement (SRK 2019) and Curraghinalt Gold Project Second Addendum to Environmental Statement (SRK 2020) associated with the Proposed Development.

2.3 COMMON LIZARD SURVEY

The Phase 1 Habitat Survey was extended to include a common lizard habitat survey in order to identify the extent of suitable habitat for common lizard along the route of the Proposed Development.

A licence to survey for common lizard was obtained from the Northern Ireland Environment Agency (NIEA) and a survey was undertaken in accordance with the NIEA specific requirements for Common Lizard Surveys (DAERA, 2017). The aim of the survey was to identify the presence of common lizard along the route of the Proposed Development. The surveys were carried out over a period of three visits in September 2020. The survey methodology, during each visit, included a combination of direct observation and the use of artificial refugia. All surveys were undertaken in suitable weather conditions when the temperature was between 9°C and 18°C. Details of dates and meteorological conditions at the time of survey can be found below in Table 1.

Table 1: Dates & Meteorological Conditions of Common Lizard Surveys

Date	Temperature	Weather Conditions
16/09/20	17-18°C	Cloudy, light breeze
23/09/20	10-11°C	Patchy cloud and sunny, light breeze to calm
29/09/20	9-10°C	Patchy cloud and sunny, light breeze

Artificial Refugia

The results of the Phase 1 Habitat Survey were used to identify five survey sites along the route of the Proposed Development. The survey sites were designed to be representative of the most frequent suitable habitats along the route of the Proposed Development that have potential to support common lizard. These habitats included wet dwarf shrub heath, mosaic habitat, marshy grassland, and wet modified bog. An initial site visit was undertaken to identify suitable microhabitats for the positioning of artificial refugia.

A total of 10 artificial refugia consisting of 500x450mm corrugated bitumen roofing sheets were positioned in suitable habitat within each of the five survey locations along the route of the Proposed Development (see **Figure 1.0**). The artificial refugia were spaced at a baseline density of ten per hectare (Froglife, 2013). The artificial refugia were deployed and left for 22 days prior to the initial survey for the presence of basking lizards on top of refugia and sheltering lizards beneath refugia.

Direct Observation

Direct observation involved a search of all potential existing refugia within suitable habitat along the route of the Proposed Development. The search involved lifting and searching underneath rocks, debris and other materials for the presence of lizards. Further artificial refugia were placed around the site in suitable habitat to increase the chances of finding lizards. A walked transect was set up to search for lizards whilst moving between artificial refugia. Each transect was walked slowly, scanning the ground 3-4m in front for the presence of basking lizards in suitable habitat.

3 RESULTS

3.1 CONSULTATION & DESK STUDY

Consultation and desk study identified no historical records of common lizard within 1 km of the Proposed Development. A review of the Curraghinalt Project ES highlighted the presence of common lizard within the site of the Curraghinalt mine (SRK 2017).

3.2 COMMON LIZARD SURVEY

Common lizard was confirmed at a total of three locations along the route of the Proposed Development during the common lizard survey. Figure 1-6 illustrate the location of survey sites along the route of the Proposed Development, the arrays of artificial refugia at each site and the confirmed presence of common lizard.

A single common lizard was confirmed at one location during the breeding bird surveys along the route of the Proposed Development. The lizard was spotted basking approximately 630m from Pole 2243, outside the 80m working corridor.

Survey Site 1 consists of mosaic habitat between Poles 2289 - 2292. A single common lizard was recorded under artificial refugia on the 16th September 2020 (see **Figure 2.0**).

Survey Site 2 consists of wet dwarf shrub heath between Poles 2245 - 2247. No common lizards were recorded during the survey (see **Figure 3.0**).

Survey Site 3 consists of wet dwarf shrub heath and marshy grassland between Poles 2225 - 2228. No common lizards were recorded during the survey (see **Figure 4.0**).

Survey Site 4 consists of wet modified bog between Poles 2090A - 2091. A single common lizard was recorded under artificial refugia on the 23rd of September 2020 (see **Figure 5.0**).

Survey Site 5 consists of wet modified bog between Poles 2068 - 2070. A single common lizard was recorded under artificial refugia on the 16th of September 2020 (see **Figure 6.0**).

The results of the common lizard survey can be found below in Table 2.

Table 2: Common Lizard Surveys Results

Site Reference	Date	Time	Weather	No. of Lizards Recorded
1	16.09.20	13.00	Cloudy, light breeze, 18 oC	1
	23.09.20	10.24	Patchy cloud, calm, 10 oC	0
	29.09.20	10.00	Sunny, light breeze, 9 oC	0
2	16.09.20	11.46	Cloudy, light breeze, 18 oC	0
	23.09.20	11.35	Sunny, calm, 10 oC	0
	29.09.20	10.50	Sunny, light breeze, 10 oC	0
3	16.09.20	11.16	Cloudy, light breeze, 17 oC	0
	23.09.20	12.30	Sunny, light breeze, 12 oC	0
	29.09.20	11.42	Sunny, light breeze, 9 oC	0
4	16.09.20	10.44	Cloudy, light breeze, 17 oC	0

Site Reference	Date	Time	Weather	No. of Lizards Recorded
	23.09.20	13.38	Patchy cloud, light breeze, 11 oC	1
	29.09.20	12.48	Patchy cloud, light breeze, 9 oC	0
	16.09.20	11.30	Cloudy, light breeze, 18 oC	1
5	23.09.20	14.25	Sunny, light breeze, 11 oC	0
	29.09.20	13.52	Sunny, light breeze, 9 oC	0

4 DISCUSSION & ANALYSIS OF RESULTS

The lizard survey locations were chosen as representative samples of habitats that occur along the route of the Proposed Development which are considered most likely to support common lizard. The aim of the survey was to establish lizard presence and not to estimate population sizes.

A total of four common lizards were observed at four different locations in suitable habitat. A single common lizard was observed outside the 80m Working Corridor approximately 630m from Pole 2243. The remaining three lizards were observed within the 80m Working Corridor between Poles 2289 – 2292, Poles 2090A – 2091 and Poles 2068 – 2070. It has been assumed from the results of the survey that common lizards are present in all suitable habitats along the route of the Proposed Development.

Chapter 7 Terrestrial Ecology and Ornithology of the ES identifies the impacts associated with the Proposed Development, evaluates the likely significance of effects on smooth newt and sets out mitigation measures in relation to smooth newt.

5 REFERENCES

CIEEM (2017) *Guidelines for Ecological Report Writing*, Chartered Institute of Ecology and Environmental Management, Winchester.

DAERA (2017) *Common or Viviparous Lizard Surveys NIEA Specific Requirements*, Department of Environment and Rural Affairs, [online] Available at: <https://www.daera-ni.gov.uk/sites/default/files/publications/daera/marsh-fritillary-butterfly-survey-specifications.pdf>.

SRK Consulting (UK) Ltd (2017) *Environmental Statement for The Curraghinalt Project, County Tyrone, Northern Ireland*, Unpublished.

Froglife (2013) <https://www.froglife.org/wp-content/uploads/2013/06/Reptile-survey-booklet-3mm-bleed.pdf>

FIGURES

Figure 1: Lizard Survey Locations

Figure 2: Lizard Site 1

Figure 3: Lizard Site 2

Figure 4: Lizard Site 3

Figure 5: Lizard Site 4

Figure 6: Lizard Site 5

Figure 1: Lizard Survey Locations

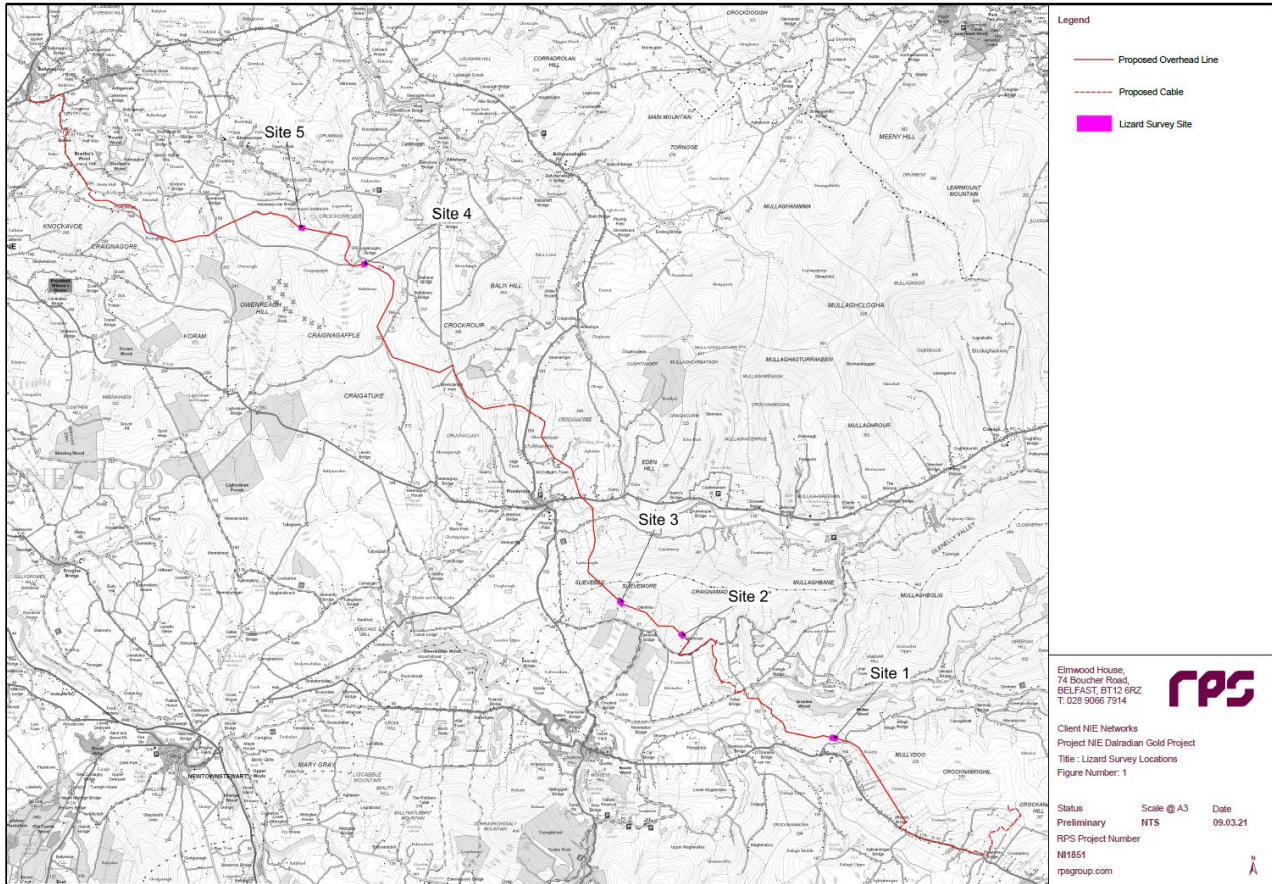


Figure 2: Lizard Site 1

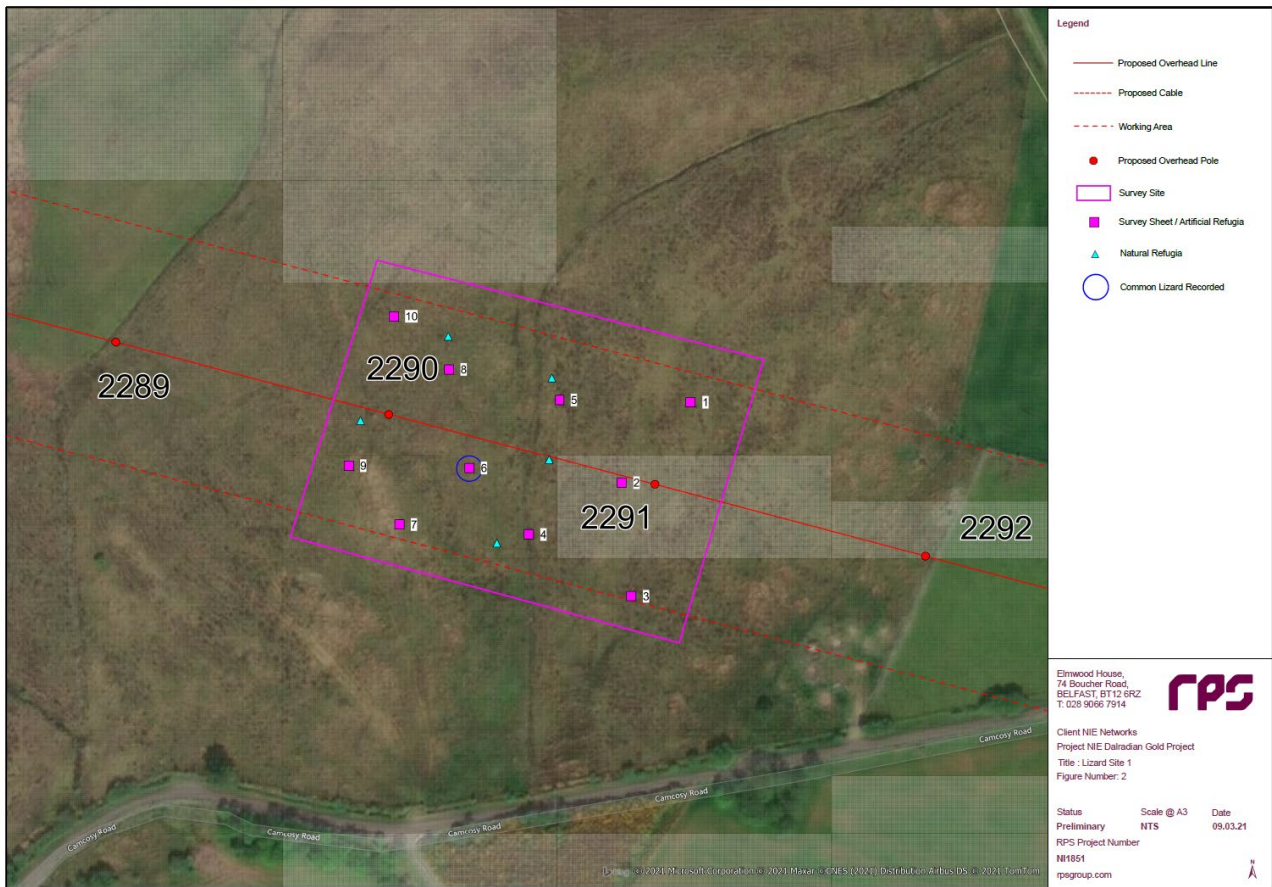


Figure 3: Lizard Site 2

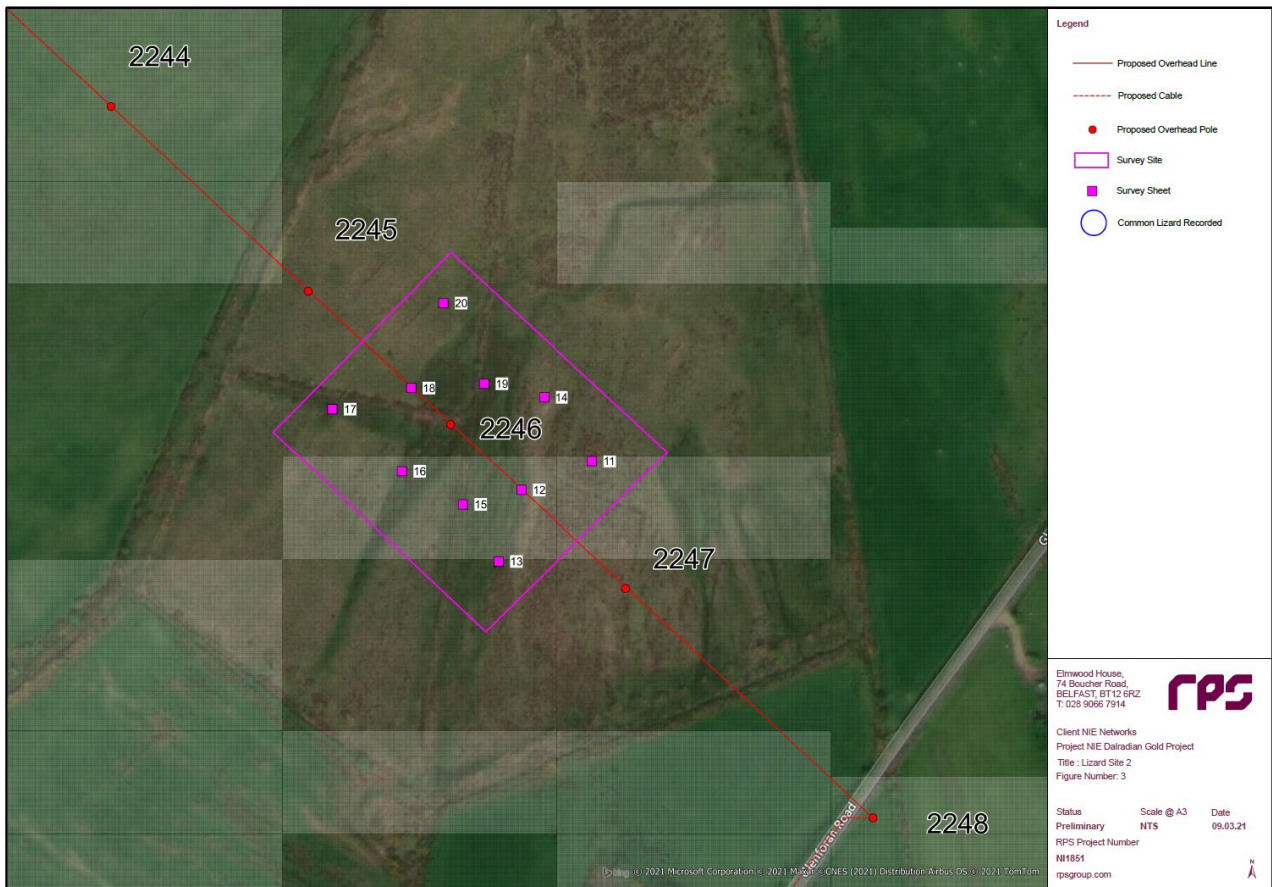


Figure 4: Lizard Site 3



Figure 5: Lizard Site 4

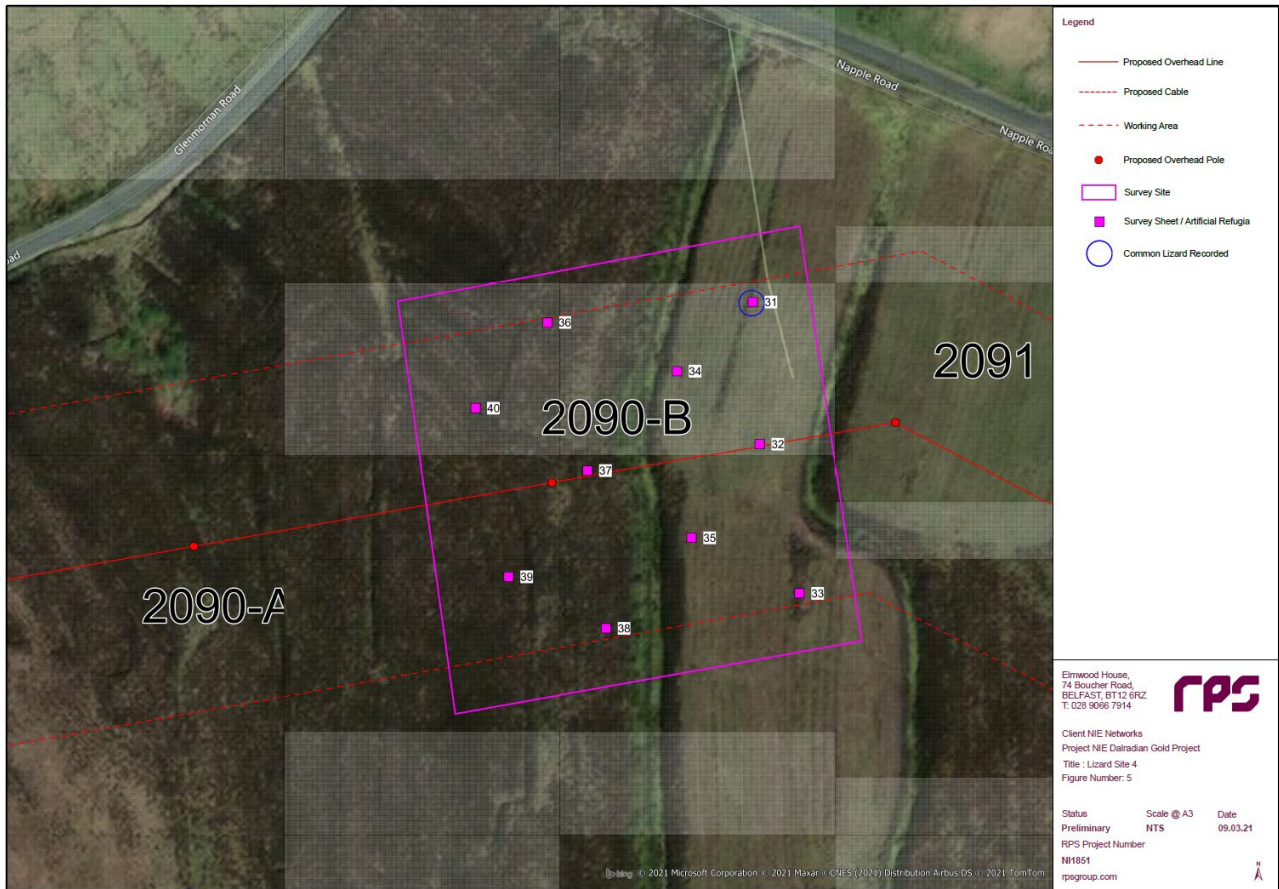


Figure 6: Lizard Site 5

