



Cat and Fiddle, Clyst St Mary Updated Ecological Appraisal (Bats & Birds)

Report No: 17/3247.03
Date: September 2021
Client: St Austell Brewery

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Revision	Checked by	Signed	Dated
Initial Issue	[REDACTED]	Kitty Straghan BSc. (Hons) MCIEEM	02/09/2021

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Wildlife Checklist

A.1 Protected and priority species (relates to question 13a in the planning application form).

Species with no suitable habitat present have been omitted from this table.

Location:	Cat and Fiddle, Clyst St Mary	Grid reference for centre of site:	SX 990 908	Planning Application number:	17/2336/MFUL
Name of surveyor:	Li-Li Williams	Year that surveys carried out:	2017 & 2020	DWC report number:	17/3247.03

Species Terrestrial, intertidal, marine	Walkover shows that suitable habitat present and reasonably likely species will be found?	Detailed survey needed to clarify impacts and mitigation ?	Detailed survey carried out and included?	Species Present or Assumed to be present on site <u>Indicate with P or A and name the species</u>	Impact on species?	Detailed Conservation Action Statement included?	EPS offence committed? Three tests met?	Grid reference for specific location of species
Bats (roost)	✓	✓	✓	×	×	×	×	N/A
Breeding birds	✓	×	N/A	A	×	×	×	N/A

Executive Summary

Devon Wildlife Consultants (DWC) was commissioned by Boyer Planning on behalf of St Austell Brewery to undertake an updated Ecological Appraisal (Bats & Birds) of buildings located in Clyst St Mary, Devon.

The buildings are associated with a public house known as the Cat and Fiddle and are surrounded by hardstanding and garden areas. It is understood it is proposed to demolish buildings to the rear and carry out extensive alterations to the main pub buildings. It is also proposed to build a hotel in the existing car park of the public house.

No evidence of roosting bat activity was recorded during the Preliminary Ecological Appraisal. However, full access to the building was not possible therefore a further emergence survey was undertaken. The emergence survey ascertained that the Cat and Fiddle buildings and adjacent trees do not support roosting bats.

No evidence of nesting birds was noted within the buildings however there are opportunities for crevice nesting birds to utilise the structure.

In light of the survey results, the following construction compliance recommendations are provided:

No evidence of roosting bats currently using the buildings was identified. As a precautionary measure, an ecologist will be required to supervise removal of roofing materials in any high potential areas of the main pub building. If bats were discovered during the proposed works, then any sheltering materials should be replaced around the bat and works within the immediate vicinity ceased until advice can be sought from Natural England or Devon Wildlife Consultants.

The conversion of the main pub building should ideally be undertaken outside of the main bird nesting season which extends from March to August (inclusive) or following a nesting bird check.

The loss of an area of amenity grassland should be mitigated by inclusion of native and wildlife-attracting planting in the landscaping plan.

Recommendations to enhance the site post development are also provided to take into account the national biodiversity strategy detailed in the National Planning Policy Framework (NPPF) to preserve, restore and re-create priority habitats, ecological networks and to ensure the protection and recovery of priority species populations, linked to national and local targets.

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1 Introduction

1.1 Introduction

This report contains the results of an updated Ecological Appraisal (Bats & Birds) comprising an inspection and subsequent emergence survey of the buildings located in Clyst St Mary, east of Exeter, Devon at National Grid Reference SX 990 908.

An initial inspection and emergence survey was originally undertaken in 2017 (DWC Report No. 16/3247) with no evidence of roosting bats recorded.

The buildings present within the site were subject to an updated inspection to assess their potential to support roosting bats and nesting birds. Due to the location of the buildings close to a busy main road, evidence of roosting/nesting barn owl *Tyto alba* was not specifically searched for.

Potential for roosting bats in areas of the buildings which could not be inspected were identified and therefore further survey was undertaken to ascertain if bats were using the building as a roost, and if so, the species and number of bats utilising the building, their roost location and access points.

1.2 Development Proposals

It is understood that it is proposed to renew planning permission to demolish part of the flat roofed buildings to the rear, to convert/renovate the existing public house and to construct a new hotel in the car park to the west. This will involve the loss of an area of amenity grassland adjacent to the public house. The recommendations in this report are based on details provided by the client under the original planning application 17/2336/MFUL.

2 Survey Methodology

2.1 Initial Inspection

An external visual inspection of the buildings was undertaken utilising binoculars, an endoscope, a ladder and a torch to search for evidence of bat activity such as droppings, urine staining and/or actual bats. The buildings were also inspected for the presence of nesting birds, or their field signs such as droppings and/or nest debris. Legislation relating to these species is provided in Appendix 1.

The site was surveyed on 3rd and 5th August 2021 by Li-Li Williams, an accredited agent under Natural England Class Bat Licence Registration Number 2017-27979-CLS-CLS.

2.2 Emergence Survey

It was not possible to carry out a full internal survey, therefore, in line with the BCT (2016) guidelines, one evening emergence survey was undertaken. All surveys were undertaken in periods of suitable weather conditions.

The site was surveyed for emerging bats from 15 minutes before sunset until 1½ hours after sunset. Cloud cover, wind strength, precipitation and air temperature were all recorded at the start and on completion of the survey.

The surveys were undertaken by five surveyors who were positioned to cover all aspects of the buildings and identified trees. Particular emphasis was placed on the areas which were highlighted as having the potential to support roosting bats, where access was restricted or where a potential bat access point was identified.

Where relevant, if a bat was detected emerging, it was identified with its position and activity noted on a field base plan. The time and position of each emerging/re-entering bat was recorded, together with its direction of flight (light permitting) and, where possible, the specific point from/to which the bat was emerging/re-entering.

All bat activity was recorded using Batbox Duet frequency division detectors recording to Edirol recorders, or Peersonic full spectrum bat detectors. To aid species identification all recordings were analysed using Kaleidoscope computer software.

The buildings were surveyed for emerging bats on 3rd August 2021. The surveys were undertaken by Li-Li Williams MEnvSci MCIEEM, Carly Ireland MSc MCIEEM, Alex Parr MRes (Merit), Kitty Straghan BSc. (Hons) MCIEEM and Daniel Hooper BSc. (Hons).

2.3 Survey Limitations

Initial Inspection

The results of this survey will depend on signs of bat activity being identified, as it is unlikely that bats will be visible. A number of bat species roost in very small crevices, consequently it is possible that individuals may not be seen during the survey. In addition, it is possible that bird nests may be situated in concealed locations which may not be visible to the surveyor.

It was not possible to survey inside the loft space of the building due to the lack of safe ladder access over a stairwell.

Evening Emergence Surveys

It is not possible to distinguish between the calls of different species of the genera *Plecotus* or *Myotis* either in the field or during analysis. As such these species will be identified to genus unless key visual identification features were noted within the field which confirm identification to species level.

3 Results

3.1 Introduction

The landscape surrounding the site comprises a main road directly to the south, large mobile home park to the north, with grazing pasture and woodland in the wider surroundings. The buildings forming the Cat and Fiddle pub were subject to assessment. Details relating to evidence of roosting bat/nesting bird activity are presented in Section 3.2. A description of the buildings is provided in Appendix 2.

MAGIC (www.magic.defra.gov.uk) indicates that there are records of Natural England licences regarding common pipistrelle and serotine bat species within a 2km radius of the site.

3.2 Initial Inspection

3.2.1 Roosting Bats

An exterior inspection of the buildings identified gaps at the eaves and under tiles on the main building which has two pitched roofs. Limited gaps at the eaves and under roofing felt were noted on the flat-roofed buildings to the rear, including a large hole on the western aspect.

An inspection of two sheds located in the car park adjacent to the northern boundary identified gaps at the eaves.

Overall the suitability of the buildings for roosting bats is considered to be low due to the significant lighting on site, regular disturbance, low suitability for foraging and proximity to the busy main road. No evidence of bat use was recorded inside or outside of these buildings.

A mature oak on the northern boundary of the eastern car park (denoted TN1 on site map in Appendix 5) and a mature willow tree (denoted TN2) were previously identified as supporting a potential roost. The willow tree has a number of potential roost features including rot holes and split branches.

3.2.2 Nesting Birds

No evidence of bird nesting activity was identified either within or on the exterior of the building although there is potential for crevice-nesting bird species such as house sparrow *Passer domesticus* to be present.

3.2.3 Other Considerations

An updated walkover of the grounds situated around and to the west of the buildings and which may potentially be affected by the development was also undertaken. The boundary hedges and shrubs have the potential to support nesting birds.

3.3 Bat Emergence Survey Results

3.3.1 Introduction

The weather conditions recorded during the survey visit are presented Appendix 3.

3.3.2 Emergence Survey – 3rd August 2021

No bats were seen to emerge from the buildings or the two identified trees.

Non-emerging bat activity was limited to soprano pipistrelle *Pipistrellus pygmaeus* and common noctule *Nyctalus noctula* bats recorded foraging on the northern extent of the site.

3.3.3 Conclusion

No bats were observed to use the buildings or trees as a roost. It should be noted that the 2017 surveys also found no evidence of roosting bats.

4 Impacts and Recommendations

This section details design and construction compliance requirements, based on current UK and EU wildlife legislation and national and local planning policy. These recommendations must be followed to ensure the legislation is not contravened by the proposed development, including any site investigation or vegetation clearance works.

4.1 Construction Compliance

4.1.1 Roosting Bats

4.1.1.1 Buildings

No evidence of roosting bats currently using the buildings was identified and therefore there are no perceived legal implications for the proposed development regarding bat species. It is important to note that although no evidence of roosting bats was present at the time of the survey, bats may use a variety of roost sites throughout the year and may on occasion roost between/under roof tiles, the beams and joists and/or on the wall tops.

Therefore, as a precautionary measure an ecologist will be required to supervise removal of roofing materials in any high potential areas of the main pub building to ensure the building is free of bats. This will involve direct supervision on site during the initial phase of the demolition/roof removal.

If during any further works bats were discovered, then any sheltering materials should be replaced around the bat and works within the immediate vicinity ceased until advice can be sought from Natural England or Devon Wildlife Consultants.

4.1.1.2 Trees

No evidence of roosting bats was recorded in the willow and oak trees and it is understood these trees will be retained. As a precautionary measure, soft-felling measures should be utilised for any crown-lifting or pruning works required for these trees.

4.1.2 Nesting Birds

Demolition and/or renovation of the loft spaces of Cat and Fiddle should ideally be undertaken outside of the main bird nesting season of March to August (inclusive). Nesting can extend outside this period however this is often dependent on weather conditions and species, therefore undertaking works outside of the nesting bird season would minimise the risk of potential delays to the works programme.

If such works cannot be undertaken outside of the nesting season, a nesting bird check should be undertaken by an ecologist immediately prior to demolition works. The construction schedule should allow for potential delays in this case as any active nests must remain undisturbed until all the young have fledged naturally, which may take several months.

5 Conservation Action Statement

5.1 Introduction

This Conservation Action Statement is required in line with Devon County Council guidance (2017) to detail: Ecological impacts and how they will be avoided, mitigated and compensated; how enhancement measures will be implemented; overall net gain or loss for wildlife; and how the scheme complies with wildlife legislation and planning policy.

Enhancement recommendations are required under the National Planning Policy Framework (NPPF) which sets out the UK Government's national policies on enhancement of biodiversity and promotion of ecosystem services through the planning system

5.1.1 Roosting Bats

Two general purpose woodcrete boxes will be installed onto the retained mature trees on site. These should be mounted at a minimum height of 3m on the south and western aspect, away from any lighting.

5.1.2 Nesting Birds

A minimum of five bird boxes suitable for different species of birds should be installed on retained trees on the site.

Due to the proximity of the site to the A3052 and unsuitability of the habitat within the site it is emphasised that no biodiversity gain associated with barn owl should be incorporated into the proposed renovation/conversion due to the potential incidence of road mortalities (Ramsden, 2007).

5.1.3 Habitats

The landscaping plan for the site includes native and mixed species hedges on the site boundaries, in addition to field maple *Acer campestre* and oak *Quercus robur* tree planting.

Ecological Receptor	Geographical scale of impact	Potential impacts	Mitigation		Impact	
			Avoidance measures	Compensation & Enhancement measures	Short term	Long term
Roosting Bats	Local	Loss of potential future roost opportunities	N/A	Install a minimum of 2 general purpose woodcrete bat boxes at a minimum height of 3m onto the southern and western aspects of mature retained trees on site in an area where boxes are not directly lit	Neutral at site level	Neutral at site level
Amenity Grassland	Local	Loss of 0.2 ha of amenity grassland of low value	N/A	Amenity grass with native bulb planting	Neutral at site level	Neutral at Site level
Trees and conifer hedges	Local	Loss of individual semi-mature trees Loss of part of surrounding conifer hedge Loss of bird nesting habitat	Commence works outside bird nesting season	Install 5 general purpose woodcrete bird boxes at a minimum height of 2m on the northern and eastern aspect of mature trees on site. Native hedge and tree planting in landscaped areas.	Neutral at site level	Positive at Site level

Table 5.1 Conservation Action Statement

References

Bat Conservation Trust. (2016). *Bat Surveys – Good Practice Guidelines*. Bat Conservation Trust, London.

Conservation of Habitats and Species (EU Exit) Regulations 2019. HMSO

Countryside and Rights of Way Act (2000). HMSO

Devon County Council. (2017). *Validation Requirements for Planning Applications to Devon County Council*. Devon County Council, Exeter

Devon Wildlife Consultants (2017). *Ecological Appraisal (Bats & Birds) – Cat and Fiddle, Clyst St Mary*. Devon Wildlife Trust, Exeter

Devon Wildlife Consultants (2018). *Ecological Update – Cat and Fiddle, Clyst St Mary*. Devon Wildlife Trust, Exeter

Dietz, C. (2007) *Bats of Britain, Europe and Northwest Africa*. A & C Black Publishers Ltd.

English Nature. (2004). *The Bat Mitigation Guidelines*. English Nature, Peterborough

JNCC (2004). *Bat Workers Manual*. 3rd Edition. Joint Nature Conservation Committee, Peterborough

MAGIC. <http://magic.defra.gov.uk/>

Mitchell-Jones A.J. & Mcleish A.P. (2004). *Bat Mitigation Guidelines*. 3rd Edition. Joint Nature Conservation Committee, Peterborough

Natural Environment and Rural Communities Act (2006). HMSO

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

Appendices

Appendix 1: Legislation

Appendix 2: Building Descriptions

Appendix 3: Survey Weather Conditions

Appendix 4: Examples of Bird Nesting & Bat Roosting Provisions

Appendix 5: Site Map

Appendix 1 – Legislation

Bat Species

All British bats and their roosts are afforded strict protection under the Wildlife and Countryside Act 1981 (as amended), as well as the Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019. In combination, these pieces of legislation give substantial protection to bats and their roost sites, and make it an offence for any person to carry out the following acts:

Intentionally or recklessly kill, injure or take a bat.

Damage, destroy or obstruct access to any place that a bat uses for shelter or protection.

This is taken to mean all bat roosts whether bats are present or not.

Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection.

In order to undertake actions that would result in damaging, destroying or obstructing access to a roost, or to disturb bats (whether in a roost or not), a licence is required from Natural England. In effect, this means that development activities that may disturb ‘European protected species’ are subject to such licensing, in order to remain within the law.

Nesting and Nest Building Birds

All birds, their nests and eggs are protected under the Wildlife and Countryside Act 1981 (as amended). Nesting is determined as being from when birds first initiate nest building up until the point when fledglings stop returning to the nest. It is an offence to:

Intentionally kill, injure or take any wild bird.

Intentionally take, damage or destroy the nest of any wild bird.

Intentionally take or destroy the egg of any wild bird.

Appendix 2 – Building Descriptions

Walls	Stone and mortar.
Roof structure	<p>Pantile partly hipped roof, laid onto wooden beams.</p> <p>Underlining unknown as no access to roof voids.</p> <p>A small loft void exists in main pub building above staff accommodation in roof.</p> <p>An additional small loft void exists above the pub kitchen</p>
Potential access points for bats & birds	Gaps at eaves, under tiles, under missing tiles on bay window, under hanging shingles on porch.
Comments	Pub is brightly lit by numerous powerful floodlights and decorative lighting affixed to eaves of gable end.

Table A3.1 Main pub building

Walls	Rendered block/brick.
Roof structure	Flat roof – bitumen felt. No roof void.
Potential access points for bats & birds	Gaps at eaves. Lifted bitumen felt in top of roof.

Table A3.2 Rear flat roofed buildings

Walls	Shiplap timber
Roof structure	Pitched roof – bitumen felt / Corrugulux. Unlined and no roof void.
Potential access points for bats & birds	Gaps under warped wood on walls. Gaps at eaves.

Table A3.3 Sheds in rear car park

Appendix 3 – Survey Weather Conditions

Date: 03/08/2021					
Sunset: 20:58					
Parameter	Time	Temp (°C)	Wind Speed (Beaufort Scale)	Cloud Cover %	Precipitation
Start of Survey	20:43	17	F1	90	None
End of Survey	22:28	16	F1	95	None




Table A4.1 Survey 1


Appendix 4 – Examples of Bird Nesting and Bat Roosting provision

BAT ROOSTING PROVISION

This information is provided as an indication of different types of roosting provision, and is not comprehensive. DWC does not endorse any particular products or suppliers.

	<p>General Purpose Wooden & Woodcrete Bat Boxes e.g. Schwegler Bat Boxes 2F & 2FN for trees</p> <p>Woodcrete boxes e.g. Schwegler are more durable and provide more stable temperatures</p> <p>Position: Upon external walls or mature trees with a southerly aspect, at approximately 3m or higher from ground level.</p> <p>http://www.wildcareshop.com/product/nest-boxes-artificial-habitats/bat-boxes.html</p> <p>http://www.nhbs.com/bat_boxes_eqcat_421.html</p>
	<p>Bat boxes for external walls</p> <p>e.g. Schwegler 1FQ Bat Box (pictured)</p> <p>Position: On external walls with a southerly aspect, beneath eaves or approximately 3m or higher from ground level. Front panel can be painted to match building.</p>
	<p>e.g. Beaumaris Woodstone Bat Box (pictured)</p>



	<p>Integrated bat boxes</p> <p>e.g. Schwegler 2FR Bat Tube (pictured left) or Build-in WoodStone Bat Box (pictures right)</p> <p>Position: Within or on external walls with a southerly aspect, beneath eaves or approximately 3m or higher from ground level.</p> <p>Additional information: Can be painted or rendered. No maintenance required. The top can be removed to allow access to cavity walls, or optional holes in the sides mean that several units can be installed together to form a larger roost.</p>
	<p>Schwegler N27 Bat Box (pictured)</p> <p>Position: Within external walls with a southerly aspect, beneath eaves or approximately 3m or higher from ground level.</p>
	<p>Bat roost access panels/bricks</p> <p>e.g. Schwegler 1FE Bat Access Panel with Optional Back Panel (pictured above)</p> <p>By fitting the optional back panel the Schwegler 1FE becomes a self-contained bat roosting unit</p> <p>Alternative: Ibstock Bat Access Brick (pictured below)</p> <p>Position: Within or on external walls with a southerly aspect, beneath eaves or approximately 3m or higher from ground level.</p> <p>Additional Information: Installation of access panel alone would allow bats to access into a building, potentially into a cavity wall spaces or</p>

	<p>loft spaces. No maintenance required</p> <p>.</p>
	<p>Permanent provision within structure of the building</p> <p>It is possible to create more traditional access into the roof space and suitable crevices within a building, for example through raised ridge tiles or slates, or gaps behind the soffit boxes e.g. Tudor Roof tiles (pictured)</p> <p>http://www.tudorrooftiles.co.uk/bat.html</p>

BIRD NESTING PROVISION

This information is provided as an indication of different types of nesting provision, and is not comprehensive. DWC does not endorse any particular products or suppliers.

	<p>General Purpose Wooden & Woodcrete Bird Boxes e.g. Greenalyte range (pictured), Schwegler Bird Boxes 1B & 2H for trees, and Schwegler 1MR Avianex for buildings.</p> <p>Woodcrete boxes e.g. Schwegler are more durable and provide more stable temperatures</p> <p>A range of entrance hole sizes will cater for different species e.g. 26mm: Blue Tit, Coal Tit, possibly Wren. 32mm: Great Tit, Nuthatch, Pied Flycatcher. 45mm: Starling Open Fronted: Robin, Wren, Pied Wagtail.</p> <p>Position: External walls or mature trees with a northerly aspect, approximately 2m or higher from ground level, with nearby tree or hedge cover.</p> <p>http://www.wildcareshop.com/product/nest-boxes-artificial-habitats/bird-boxes.html</p> <p>http://www.nhbs.com/bird_boxes_eqcat_426.html</p>
	<p>Sparrows e.g. NHBS FSC sparrow terrace (pictured)</p> <p>Position: At a height of at least 2m upon external wall, facing east. Several boxes can be installed approximately 1.5m apart</p>

	<p>Swifts e.g. Schwegler Swift No. 16 Swift Box (pictured), No. 18 Schwegler Swift Box (for eaves), Ibstock swift bricks, WoodStone Built-in Swift Boxes and Bricks.</p> <p>Position: At a height of 5m or above. Within external walls with a northerly aspect or beneath eaves and out of direct sunlight. Away from windows, obstructions and creepers. Provide several boxes.</p> <p>Note: Swift calls can be played in May to help swifts locate the nest site http://www.swift-conservation.org/Nestboxes&Attraction.htm</p>
	<p>House Martins e.g. Schwegler House Martin Nesting Cups (pictured)</p> <p>Positioning: On unobstructed walls directly beneath eaves, at a height of 2m or above, facing north or east. Install a droppings board beneath, or install where droppings will not be an issue.</p> <p>Several nests can be placed together. House martins nest in colonies, and the cups may encourage birds to build their own nests.</p>
	<p>Swallows e.g. Schwegler No 10 Swallow Nest (pictured)</p> <p>Positioning: Inside of buildings or larger covered areas (e.g. carport or stables), ensuring clear flight path in and out of the structure. Nests should not be placed close together.</p>



Barn Owl nest boxes

Barn Owl Trust design has been developed to reduce juvenile mortality.

Positioning: Over 3m in height, facing towards open countryside (more than 1km from a motorway or dual carriageway).

Different designs for trees, poles and buildings are available from the Barn Owl Trust:

<https://www.barnowltrust.org.uk/shop/>



Barn Owl permanent provision

The best option for barn owls is to provide permanent space within a building. Further detailed information is available from the Barn Owl Trust:

<http://www.barnowltrust.org.uk/infopage.html?Id=244>

BEE PROVISION



Bee Brick

e.g. Green&BlueBuild range (pictured)

‘Britain has more than 250 bee species, but numbers have fallen dramatically due to disease, an increase in chemical use and habitat loss’ (Friends of the Earth, 2013).

Solitary bees are non-aggressive and as such are very pet and child friendly. Solitary bees will not sting you unless you squash them, and even then their stings are not painful.

Specification: Each concrete brick is 215mm x 105mm x 65mm.

Position: The bee brick has been created to be used either as an integral part of a building, used within landscaping, or to be positioned as a free standing bee nest in the garden. It offers the dual function of being a construction material that also promotes biodiversity. The bee brick should be positioned in a warm sunny spot, preferably a south facing wall, with no vegetation in front of the holes. They should be positioned at least 1m from the ground with no upward limit.

Function: Each Bee brick contains cavities for solitary bees to lay their eggs. Each cavity is moulded part way into the brick ensuring bees cannot enter the building. Bees lay their eggs inside the holes and seal the entrance with mud or chewed up vegetation. The offspring emerge the following Spring and begin the cycle again.

<https://greenandblue.co.uk/product/bee-brick/>

References and Further Information

Bat Conservation Trust

http://www.bats.org.uk/pages/accommodating_bats_in_buildings.html










Envisage Wildcare <http://www.wildcareshop.com/>

NHBS <http://www.nhbs.com/>

Williams, C. (2010) *Biodiversity for Low and Zero Carbon Buildings*. RIBA Publishing, London

Appendix 5 – Site Map

Legend

-  Target Notes
-  Introduced shrub
-  Trees
-  Leylandii hedge
-  Hedgebank
-  Fence
-  Buildings
-  Amenity grassland
-  Hard standing

Target Notes

1. Oak tree with potential to support roosting bats
2. Willow tree with potential to support roosting bats

Title: Extended Phase 1 Habitat Survey Map

Client: Boyer Planning

Site: Cat and Fiddle, Clyst St Mary

Drawing No.: DWC Drawing 17/3247.03-01

Date: September 2021

Scale: NTS

Drawn By: LW

Checked by: KS

