John Paul Jones, Whitehaven

784-B064930

Update Ecological Appraisal and Bat Roost Assessment Report

BEC

September 2024

Document prepared on behalf of Tetra Tech Limited. Registered in England number: 01959704

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EXECUTIVE SUMMARY

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Site Location	The site is located off Strand Street, Whitehaven, Cumbria, CA28 7UW and is centred at Ordnance Survey National Grid Reference NX 97300 18296.
Proposals	We understand the current proposal involves the demolition of the building known as John Paul Jones (B1) and use of the area as an interim contractor lay down area for works associated with the refurbishment of the nearby Whittles building.
Scope of this Survey(s)	The scope of this survey was to record broad habitat types in accordance with the UKHab Classification Professional Edition V2 (UKHab Ltd, 2023), a technique for environmental audit. A previous surveys had been undertaken by Tetra Tech (formerly WYG) in 2019 (WYG, 2019a & WYG, 2019b) however this assessment is now deemed out of date and an update assessment required. The scope of the survey also included a search for evidence of and potential for notable and protected species. This included an update preliminary roost assessment of the buildings on site as to their continued suitability for use by roosting bats. The survey also included presence/likely absence surveys for roosting bats.
Results and Evaluation	The site was dominated by developed land, sealed surface (u1b) with two buildings (u1b5) as well as a small area of modified grassland (g4) and scattered urban trees (32). The habitats within in the site were common and widespread with negligible botanical value. B1 was rated as moderate roosting suitability for summer roosting and classic hibernation suitability. B2 was previously a confirmed a single common pipistrelle transitional / day roost and confirmed as still active during the 2024 surveys and as such retains this status. B2 was not considered suitable for hibernation. The buildings were also assessed for breeding birds and considered suitable for urban bird nesting. Also of note were three urban trees located within the northwest area of the site. The trees did not have bat roosting suitability but were suitable for bird nesting, as such disturbance to these trees within the bird nesting season should be considered. All other species groups were considered likely absent from the site due to the highly urbanised nature of the site and absence of suitable habitats.
Recommendations	○ No bat roost was identified in B1. However, B1 was considered suitable for hibernating bats due to the presence of the cellar and wall cavities and

Contents	Summary
	the absence of heating and occupation. As the building was in a poor state of repair it was considered unsafe for a full hibernation inspection. It is recommended that a precautionary approach is adopted and building demolition is timed to avoid the peak hibernation season which runs from November to March (inclusive) and a bat licensed Ecological Clerk of Works is present during demolition to inspect for any evidence of bat use o B2 was previously a confirmed common pipistrelle transitional / day roost and confirmed still active and present, though the feature would be retained as part of the partial demolition works. o If the works are done under a precautionary working methodology to minimise possible disturbance and the feature is being retained, no European Protected Species License would be required. o All demolition contractors would require a toolbox talk and works removing suitable bat features be undertaken by a bat licence (level 2 and higher) ecologist. o No further bat activity surveys are recommended as the site was dominated by buildings and hardstanding and located within an urban area with limited connectivity to the wider landscape. Compensation for the loss of roosting provision is required in the form of three bat boxes, two general purpose and one suitable for hibernation. If demolition or clearance is to be undertaken between March to September, the building must be checked for active nests 24 hours prior, by a suitably qualified ecologist, with particular attention to possible pigeon and gull nesting, including atop the roof. Should a nest be identified a suitable buffer zone would be required until the chicks have fledged of their own accord. It is recommended that soft landscaping is included within the final layout design to contribute towards Biodiversity Net Gain. The inclusion of a green and/or brown roof, as well as green walls, should also be explored. The inclusion of bat boxes, bird nest boxes and insect bricks should also be considered within the final design.

1.0 INTRODUCTION

1.1 BACKGROUND

Tetra Tech was commissioned by BEC on 12th June 2024 to undertake an Update Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) of the former John Paul Jones public house off Strand Street, Whitehaven, hereafter referred to as "the site".

This report has been prepared by Senior Ecologist, Jade Armstrong, BSc (Hons) MSc, and the conditions pertinent to it are in Appendix A.

1.2 SITE DESCRIPTION

The site is located off Strand Street, Whitehaven, Cumbria, CA28 7UW and is centred at Ordnance Survey National Grid Reference NX 97300 18296 (Figure 1). It comprises two derelict buildings, developed land, sealed surface, modified grassland and scattered urban trees.

1.3 DEVELOPMENT PROPOSALS

We understand the current proposal involves the demolition of the former public house, the John Paul Jones (B1 – location shown on Figure 1) and use of the area as interim contractor lay down area for works associated with the refurbishment of the nearby Whittles building.

1.4 PURPOSE OF REPORT

The purpose of this report is to:

- Undertake a desk study to obtain existing information on statutory and non-statutory sites of nature conservation interest and relevant records of protected/notable species within the site and its zone of influence;
- Present the results of an extended UK Hab Habitat Survey, involving a walkover of the site to record habitat types and dominant vegetation, including any invasive species and evidence of protected fauna or habitats capable of supporting such species;
- Assess suitability of buildings on site for roosting bats; and
- Evaluate potential ecological receptors on site and within the zone of influence; identify any constraints to the sites development and make any recommendations for further surveys, mitigation or enhancement.

Scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading.

1.5 QUALITY

Jade Armstrong holds Natural England Class 2 survey licence for bats (reference number 2024-11827-CL18-BAT) and barn owl *Tyto alba* disturbance licence (reference number CL29/00531).

Our ecologists follow CIEEM's Code of Professional Conduct (2022).

1.6 VALIDITY

This report will be considered to remain valid for 12 months, i.e. until 28th August 2025, in accordance with CIEEM guidance (2019). After this time, it may be appropriate to consult an ecologist to confirm if an update assessment is required. The recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals upon which this report was based.

2.0 METHODOLOGY

2.1 HISTORIC SURVEYS

Previous reports relevant to the site were reviewed. These reports include:

- WYG (2019a), Ecological Appraisal, North Shore Phase 1 – Mark House, Whitehaven
- WYG (2019b), Bat Report, North Shore Phase 1 – Mark House, Whitehaven

2.2 DESK STUDY

The desktop study comprised two elements:

- A data search obtained from Cumbria Biodiversity Data Centre (CBDC) in June 2024; and
- Online element including a search using: Multi Agency Geographic Information for the Countryside (Magic) (https://magic.defra.gov.uk) website and Ordnance Survey (OS) and Aerial Imagery (https://www.bing.com/maps).

The geographical extent of the search area was related to the significance of sites and species and potential zones of influence. For this site the following search areas were considered appropriate:

- 10km for sites of International Importance (e.g. Special Areas of Conservation (SAC), Special Protection Area (SPA), Ramsar sites;
- 2km for sites of National or Regional Importance (e.g. Sites of Special Scientific Interest (SSSI) and non-statutory designated sites of County Importance (e.g. County Wildlife Sites (CWS));
    - In addition, any SSSI Impact Risk Zones (IRZ) (for identifying likely impacts on SSSIs/SACs/SPAs & Ramsar sites) overlapping the site were identified.
- 2km for biological records, and
- 1km for ancient woodland and mapped priority habitats.

The data search did not cover Tree Preservation Orders (TPOs); or Conservation Areas designated for their special architectural and historic interest.

2.3 FIELD SURVEYS

The following methodologies have been used to identify the ecological receptors present on or near the site and which are relevant to the proposed development. The zone of influence is extended to a distance of 50m beyond the site boundary, where accessible.

2.3.1 Habitats

An extended UK Hab survey was undertaken on the site on 20th June 2024 by Tetra Tech Senior Ecologist Jade Armstrong BSc (Hons) MSc and Tetra Tech Graduate Ecologist Ashleigh Toomey BSc (Hons). The weather conditions were 18°C, clear and dry with a light breeze.

The habitats present on site were mapped in accordance with the UK Habitat Classification Professional Edition – Version 2.0 (UK Hab Ltd., 2023). The habitats have been classified to a minimum of level 3, to identify the presence of any Habitats of Principal Importance (HPIs) listed under the Natural Environment

and Rural Communities (NERC) Act 2006. Where habitats occur in multiple areas of the site or are of different condition, additional polygons of the same habitat have been mapped so that their condition may be assessed independently.

The minimum recording unit for habitat is 25m² or 5m length. Dominant plant species were recorded for each habitat present using standard nomenclature (Stace, 2019). Lists of plants recorded on site are provided in Appendix B.

2.3.2 Protected and Notable Species

The site was inspected for evidence of, and its potential to support, protected or notable species, especially those listed under the Schedule 2 of the Habitat Regulations 2017 (as amended), Schedule 5 of the Wildlife and Countryside Act (W&CA) 1981 (as amended), the Countryside Rights of Way (CRoW) Act 2000, those given extra protection under the Natural Environment and Rural Communities (NERC) Act 2006, and species included in the Cumberland Council Local Biodiversity Action Plan (LBAP).

The presence or likely absence of some species was determined using standard best practice guidance and are listed below.

Bats

Preliminary Roost Assessment (PRA) Bats – Buildings

Buildings on site were assessed from the ground for their suitability to support breeding, resting and hibernating bats using survey methods based on the BCT *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2023) – hereafter referred to as the 'BCT Guidelines'. The survey was undertaken in line with BS42020 (BSI, 2013).

The roost assessment was completed to assess the likelihood of bats using the buildings within the site for summer roosting and winter hibernation.

External Inspection

The buildings were systematically inspected during daylight using high powered torch and any features suitable for bats were noted such as soffit boxes, gaps in brickwork, cracks, crevices, lifted lead flashing slipped or broken tiles and missing mortar below ridge tiles. Features located at height were viewed from the ground using binoculars. Any potential bat access points were inspected for signs of bat presence such as:

- Bat droppings on the ground outside, on the floor inside or stuck to walls;
- Other evidence of bats such as feeding remains;
- Suitable entry and exit points around cladding, eaves, flashing, under tiles or gaps in mortar;
- Live bats, bat corpses or skeletons; and
- Oily marks (from fur) or localised clean spots around possible access points and roost areas.

Internal Inspection

The internal areas of the buildings were not fully accessed for a detailed assessment (see Section 2.4 below). The bat roost assessment was undertaken with survey methodology based on current industry standard practice guidance (Collins, 2023). The assessment noted any potential or actual bat presence and noted the presence / condition of the following and the likelihood of use as access / roost location by bats:

- Sarking (wooden/felt/other);
- Insulation;
- Roof construction (modern truss, king post, queen post;
- Ridge beam and the floor below;
- Any areas of missing mortar on chimney breasts or gable walls; and
- Any gaps in beams/mortice joints/roof timbers/where beams meet.

Many of the UK bat species are crevice dwellers and as such areas between the sarking and tiles cannot be fully inspected without potentially damaging or destroying a potential roost location.

Categorisation

The outcome of the PRA survey was to categorise the buildings in accordance with the BCT Guidelines given in Table 1.

Table 1: Categories of Bat Roost Suitability (BCT Guidelines)

Suitability	Typical Roosting Features
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, condition (for example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.) and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats)
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation - the categorization described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by large numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g., maternity, or classic cool/stable hibernation site ding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation - the categorization described in this table is made irrespective of species conservation status, which is established after presence is confirmed).

Hibernation

The buildings were also assessed for hibernation suitability using the categories in the BCT Guidelines. 'Classical sites' for hibernation would include underground sites such as cellars and caves, that allow stable weather conditions of temperature and humidity (cool and damp) throughout the winter period. Most buildings and structures come under the 'non-classical site' category but should also be considered for hibernation, especially for void dwelling bats such as brown long-eared bats *Plecotus auritus*, which may linger in derelict buildings where conditions may remain stable without heating of the building in winter. In addition, *Pipistrellus* species are crevice-dwelling bats which may also benefit from small gaps within a cavity wall under the same circumstances and are known to use large concrete structures such as tower blocks for hibernation which would be considered a non-classical site. Table 2 below outlines the rationale taken when assessing hibernation suitability and the requirement for further surveys.

Table 2. Categories of Bat Roost Suitability in Classical Sites during the Daytime Bat Walkover (DBW) (BCT Guidelines).

Are there suitable hibernation features	Typical Roost Features
No / Very limited	Treat as low. No further surveys required.
Yes – Classical site	Treat as high. Further surveys required between November and March inclusive.
Yes – Non-classical site	Treat as moderate. Further surveys may be required. Need to consider what can be surveyed.

Foraging / Commuting Bats

Potential habitat for foraging and commuting bats were assessed on site according to the BCT Guidelines.

Table 3. Categories of Bat Potential Flight Paths and Foraging Habitats (BCT Guidelines)

Suitability	Potential Flight Paths and Foraging Habitats
None	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).
Negligible	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	Habitat that could be used by small numbers of bats as flight-paths such as gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well

Suitability	Potential Flight Paths and Foraging Habitats
	connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

Ground Level Tree Assessment (GLTA)

The survey methodology for the GLTA was based on BCT Bat Surveys for Professional Ecologists: Good Practice Guidelines 4th Edition (Collins, 2023). Trees were inspected systematically and surveyed consistently around all parts of the tree (from all angles and from both close to the trunk and further away) using binoculars and high-power torch. The surveys were completed in daylight hours and not during poor light conditions.

All information was collected using the Survey 123 App that collected enough data to allow surveyors to identify the tree/features again when needed. All the following potential roosting features (PRFs) were recorded during the assessment (refer to Table 4). All terms provided in the report are consistent with the arboricultural professions and all descriptions of features are consistent with Bat Roosts in Trees - Bat Tree Habitat Key (Andrews, 2018).

Table 4: PRF types that can be exploited by bats and how they form.

PRFs formed by disease and decay	PRFs formed by damage	PRFs formed by association
Woodpecker Holes	Lightning Strikes	Fluting
Squirrel Holes	Hazard Beams	Ivy
Knot Holes	Subsidence Cracks	
Pruning Cuts	Shearing Cracks	
Tear Outs	Transverse Snaps	
Wounds	Welds	
Cankers	Lifting Bark	
Compression Forks	Desiccation Fissures	
Butt Rot	Frost Cracks	

Categorisation of Trees

All trees were categorised to highlight whether additional assessment is required referring to the categories in Table 5. Professional judgement was used to identify trees where features could be obscured by foliage or other branches. If a feature was identified on the tree the tree was categorised as PRF as the tree has at least 1 PRF present.

Table 5: Categorisation of trees on site

Suitability	Description
None	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF	A tree with at least one PRF present

Categorisation of Sub Features

Once trees with features were identified all sub features were categorised in accordance with Table 6. The categorisation was completed using professional judgement and provides an informed view on a further approach following the ground level assessment.

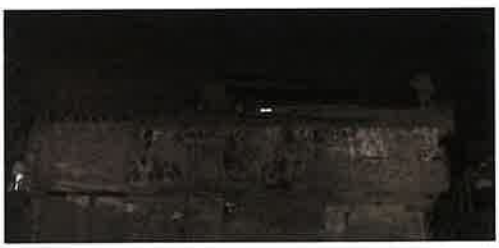
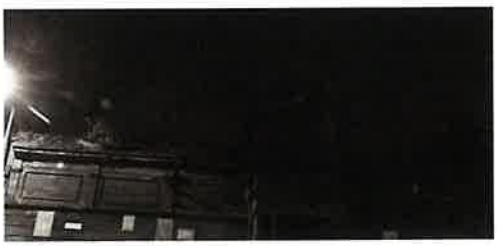
Table 6: Categorisation of sub features on a tree

Suitability	Description
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitat.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

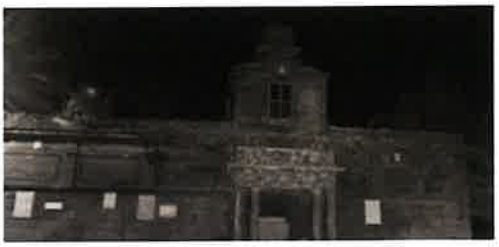
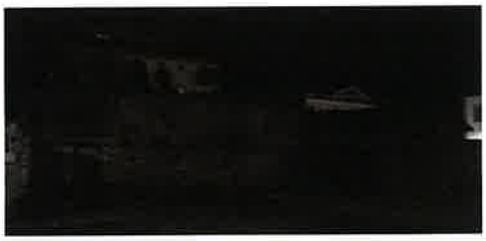
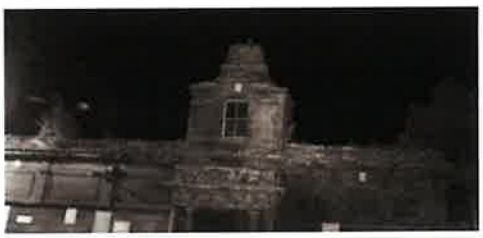
Nocturnal Bat Surveys of buildings

In accordance with BCT Guidelines, dusk emergence surveys were undertaken of buildings B1 and B2 to update roosting status of B2 (previously confirmed roost) and determine presence / likely absence of B1. The surveys were undertaken between May and August, spaced at least three weeks apart, with at least one survey undertaken in the peak maternity period (i.e. before end of August). The dusk emergence surveys commenced 15 minutes before sunset and continued for 1.5 hours after sunset. Survey dates, timings and weather conditions are detailed in Table 7 below.

Table 7: Surveyors, date and weather conditions for bat emergence surveys.

Date of survey	Sunset	Start (S)	Finish (F)	Temperature (in °C) S/F	Rain S/F (mm/hr)	Wind speed[1] S/F	Cloud cover[2] % S/F
16/07/2024	21:39	21:08	23:09	16/14	0/0	3/2	40/100
Surveyor names	Tetra Tech Project Ecologist Elizebeth Ferrier Tetra Tech Consultant Ecologist Jordane Marsh Tetra Tech Assistant Ecologist Chris Duff Tetra Tech Assistant Ecologist Charlie Baker						
Structures Surveyed	B1(moderate) and B2(previous confirmed roost)						
IR cameras used (darkest point)	B2.1 			B2.3 			
07/08/2024	21:02	20:31	22:32	18/17	0/0	3/2	80/100
Surveyor names	Tetra Tech Project Ecologist Elizebeth Ferrier Tetra Tech Consultant Ecologist Jordane Marsh Tetra Tech Consultant Ecologist Alex Cropper						

[1] *Beaufort scale*
[2] *Oktas Scale*

Date of survey	Sunset	Start (S)	Finish (F)	Temperature (in °C) S/F	Rain S/F (mm/hr)	Wind speed[1] S/F	Cloud cover[2] % S/F
	Tetra Tech Graduate Ecologist Ashleigh Toomey						
Structures Surveyed	B1(moderate) and B2(previous confirmed roost)						
IR cameras used (darkest point)	B2.1: 				B2.3: 		
28/08/2024	20:14	19:43	21:44	15/15	<0.25mmhr/0	2/2	80/100
Surveyor names and survey licence number where applicable	Tetra Tech Project Ecologist Elizebeth Ferrier Tetra Tech Field Ecologist Suzanne Collinson						
Structures Surveyed	B2(previous confirmed roost)						
IR cameras used (darkest point)	B2.1: 				B2.3: 		

During the surveys, surveyors and Night Vison Aids (NVAs) were positioned to view the PRFs identified on each building for any bats emerging from (or returning) to the roost. Incidental bat activity was also recorded (e.g., roosting at neighbouring properties). B1 was surveyed with surveyors only (no NVA) due to security reasons (see limitations) and it was considered B1 was appropriating lit by street lighting. Surveyor and Infrared Camera (IR) positions were used on B2. Surveyors and camera locations are shown in Figure 2.

During the surveys, bat emergences and / or returns were recorded on Esri Survey123 and their calls recorded using Elekon BatLogger Ms or M2s. Bat surveys were completed during the period when bats are active, within the optimum survey season and within suitable weather conditions (above 10°C, dry and with calm winds). NVA in the form of infra-red cameras (and associated infra-red lights) were used in lieu of a surveyor (where possible) on B2 only, in line with the BCT Guidelines. The cameras used were Canon XA40 infrared camera with additional infrared illuminator lights. Cameras were positioned in such a way to

cover the key roosting potential features of a building and were paired with detectors such as Elekon Batlogger M or M2 detectors to record bat calls. Where possible, cameras were periodically checked for illumination levels. The IR were set to record the duration of the survey, with the same timings as stated in Table 7.

IR footage analysis was undertaken using Motion Meerkat (Weinstein, 2015) which was used to identify motion events which were subsequently analysed manually. The following settings were used: Background variation 3; organism speed 3; minimum object size 0.01% (parameters were tested against known activity before analysis). The subsequent images were reviewed and cross referenced with time of the movement to the sound files obtained by the Elekon BatLogger M & M2 detectors set alongside the camera to identify any bats recorded.

All of the survey leads were experienced in bat surveys and all bat surveyors had bat survey training in line with BCT Professional Training Standards for Professional Ecologists Working with Bats (2020) Level 1 in line with BS42020.

Birds

Bird species identified at the time of survey were noted and nesting birds recorded as seen. An assessment of habitats was undertaken to determine the likely value to breeding and foraging birds.

Invertebrates

The site habitats were appraised for suitability to support assemblages of invertebrates and commented on in the report as appropriate.

Other Species

The site was also appraised for its suitability to support other protected or notable fauna with regard to the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and BS42020:2013 Biodiversity – Code of Practice for Planning and Development (BSI, 2013). Evidence of any current or historical presence of such species was recorded.

Invasive Species

Evidence of species listed on Schedule 9 of the Wildlife and Countryside Act (1981) as amended, were recorded as seen.

Scoped Out

A number of species were scoped out due to the absence of suitable habitat within the site or the range of the species. Species scoped out include:

- Badger *Meles meles* due to the absence of suitable sett building habitat within the site and immediate surrounding area;
- Great crested newts *Triturus cristatus* due to the absence of suitable terrestrial and aquatic habitat within the site and lack of waterbodies within the surrounding area;
- Hazel dormouse *Muscardinus avellanarius* due to the absence of suitable habitat such as woodland or scrub within the site;
- Otter *Lutra lutra* and water vole *Arvicola amphibius* due to the absence of watercourses within the site; and
- Reptiles due to the absence of suitable vegetation and hibernacula.

These species are considered absent and as such will not be considered further within this report.

2.4 LIMITATIONS

Any absence of desk study records cannot be relied upon to infer absence of a species/habitat as the absence of records may be a result of under-recording within the given search area.

The optimal period to undertake an extended UK Hab survey is April-September, inclusive. The survey was undertaken in June which is within the optimal survey window. As such, this is not considered to be a limitation to the survey methodology as the dominant species of the respective vegetation types were visible and identifiable.

To determine presence or likely absence of protected species usually requires multiple visits at suitable times of the year. This survey focuses on assessing the potential of the site to support species of note, which are considered to be of principal importance for the conservation of biodiversity with reference to those given protection under UK or European wildlife legislation, from only a single visit. This report cannot, therefore, be considered a comprehensive assessment of the ecological interest of the site. However, it does provide an assessment of the ecological interest present on the day the site was visited and highlights areas where further survey work may be recommended.

The 50m buffer of the boundary was not fully surveyed due to the presence of privately owned properties however given the urban location of the site this was not considered to pose a significant constraint.

During the PRA both buildings were subject to an internal inspection however the inspection was significantly limited due to the derelict condition of the buildings. A number of areas of the buildings including the second floors and roof void of B1 were deemed unsafe to enter due to significant water damage causing degradation of the structure, flooring removed during the decommissioning of the pub and the presence of asbestos identified within the cellar areas of the pub during an asbestos survey, as such this area was not surveyed due to health and safety risks. The restricted access did pose a constraint to the summer and hibernation assessment and a precautionary approach is adopted.

Visibility to the southwest façade of B1 was also obscured due to the presence of black tarpaulin style material used to weatherproof that area of the building, this is not considered a significant constraint as it is considered likely that the tarpaulin would dissuade bats from using any features which may be present in this area.

The optimal period to undertake bat presence/likely absence surveys is between May and August, although surveys in April and September may aid in identifying pre-maternity gathering roosts or transitional roosts. The surveys were completed in July and August which is INSIDE the optimal survey window and are therefore compliant with the levels of survey effort required for the suitability assigned to these buildings. Each survey was separated by a period of at least three weeks and weather conditions were suitable for the entirety of each survey. Therefore, there WERE NOT any constraints associated with survey timing or weather conditions.

During the survey it was not possible to deploy cameras at every vantage point due to the risk of damage or theft from the general public. Therefore, surveyors were positions at the vantage points where it was not possible to secure cameras safely. This was not considered a significant limitation as the area was generally well lit and it was considered appropriate for surveyors only on B1; and a mixture of surveyors

and cameras on B2. Although light rain was recorded on the third survey visit of B1, this was not considered a significant limitation as bats were still active and the light rain was for a short duration at the start only.

The surveys were completed with the assistance of bat detectors. Bat detector surveys may not record all bats due to weak echolocation calls, such as brown long-eared bats. Some bat calls are variable dependent on the habitats they fly in and on their activity (commuting, foraging, social interaction, etc) and extremely similar between species. In these cases, it is accepted that species are identified to genus level or group level (e.g. *Myotis*, *Myotis / Plecotus* and *Nyctalus / Eptesicus*) (Collins, 2016). Where call parameters are inconclusive the species has been labelled as 'unknown'. This allows the dataset to be interpreted accurately and transparently.

Notwithstanding the limitations highlighted above, the survey effort applied is considered sufficient to meet the aims of the survey and this report, in accordance with the BCT Guidelines (2023).

Based on the latest guidelines (CIEEM, 2019 & Section 2.6.16-22 of the BCT Guidelines) the details within this report are considered valid for 12 months from the last survey date (until August 2025). Beyond these periods, if works have not yet been undertaken, it is recommended that a review of the buildings and potential roost status is undertaken; until April 2026 this will include an assessment of hibernation potential of the buildings /structures (based on building occupancy) and following this date it may include an assessment of properties to check for any significant changes to bat roost suitability and/ or update nocturnal surveys of properties. The level of update surveys required will be dependent on a number of considerations including limitations of the initial surveys, age of the data and potential impacts as agreed with the Project Ecologist.

3.0 RESULTS & EVALUATION

3.1 HISTORIC SURVEYS

WYG (2019a), Ecological Appraisal, North Shore Phase 1 – Mark House, Whitehaven
A Preliminary Ecological Appraisal assessment was completed on the site however a PRA was not completed at the time of survey. The site was noted to have limited botanical value with hard standing, amenity grassland, scattered trees, buildings and ephemeral vegetation present. Recommendations for a detailed bat roost assessment were made to assess the buildings' suitability for roosting bats, along with recommendations for nesting bird checks should clearance commence within the nesting bird season.

WYG (2019b), Bat Report, North Shore Phase 1 – Mark House, Whitehaven
A PRA was completed for both buildings on site. Several features with potential to be used by roosting bats were identified throughout both buildings including gaps under poorly fitted tiles, gaps within soffit boxes, under lead flashing, ventilation slats, gaps between sandstone blocks and gas within the brickwork. No signs of bats or droppings were recorded during the external and internal inspections of B1 and B2 and as such both buildings were graded as moderate suitability for roosting bats with no hibernation suitability. Further nocturnal bat dusk emergence and dawn re-entry surveys were completed and a common pipistrelle *Pipistrellus pipistrellus* transitional / day roost was identified within the southern elevation of B2. Recommendations for a European Protected Species Mitigation licence prior to works commencing were made.

3.2 PROTECTED SITES

European and National designated sites identified within 10km of the proposed development are presented in Table 8 with the designation, qualifying features and proximity from the development site also indicated. Details of local non-designated sites within 2km and obtained from the CBDC are also included.

Table 8. Statutory and non-statutory designated sites identified during the desk study.

Site Name	Designation	Distance and direction from Site	Reasons for designation
St. Bees Head	SSSI	1.2km southwest	The biological interest of the site is represented in a number of different habitats including natural cliff-top grassland and heath, sheer cliff face and cliff-fall rubble, shingle and wave-cut platform. The sheer cliffs which provide the only breeding site on the coast of Cumbria for a variety of colonial seabirds. These include over 2,000 pairs of guillemots *Uria aalge* along with lesser numbers of fulmar *Fulmarus*, kittiwake *Rissa*, razorbill *Alca torda*, cormorant *Phalacrocoracidae*, puffin *Fratercula*, shag *Phalacrocorax aristotelis* and herring gull *Larus argentatus*. The cliffs are, in addition, the only breeding site on the entire coast of England for black guillemots *Cepphus grylle*.

Site Name	Designation	Distance and direction from Site	Reasons for designation
River Ehen	SAC	6.4km southeast	Annex II species that are a primary reason for selection of this site: The River Ehen supports the largest freshwater pearl mussel *Margaritifera margaritifera* population in England. Exceptionally high densities (greater than 100m²) are found at some locations, with population estimates for the entire river exceeding 100,000. The conservation importance of the site is further enhanced by the presence of juvenile pearl mussels, indicating recruitment since 1990. Annex II species present as a qualifying feature, but not a primary reason for site selection also include Atlantic salmon *Salmo salar*.
River Derwent & Bassenthwaite Lake	SAC	9.5km northeast	Annex I habitats that are a primary reason for selection of this site include Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*. Bassenthwaite Lake in the Lake District, north-west England, is an example of a mesotrophic waterbody (Type 5), an unusual type in mountain areas. It is a large lake with an extensive catchment area and consequently is subject to rapid through-flow of water and moderate nutrient status. A wide variety of pondweeds *Potamogeton spp.* are found. The lake also supports one of only two surviving UK populations of a rare fish, vendace *Coregonus albula*. Annex II species that are a primary reason for selection of this site include marsh fritillary butterfly *Euphydryas (Eurodryas, Hypodryas) aurinia*, sea lamprey *Petromyzon marinus*, brook lamprey *Lampetra planeri*, river lamprey *Lampetra fluviatilis*, Atlantic salmon *Salmo salar*, otter *Lutra lutra*, and floating water-plantain *Luronium natans*.
Redness Point	CWS	0.5km north	No citation provided by CBDC.
Hope Mission Pond	CWS	1.9km northeast	No citation provided by CBDC.
Castle Park Wood	CWS	0.4km east	No citation provided by CBDC.
Woodhouse Quarry	CWS	1.6km south	No citation provided by CBDC.
Midgey Gill	CWS	0.6km southeast	No citation provided by CBDC.

The site also lies within the IRZ of St Bees Head SSSI however the proposals are not of a type that would require further consultation with Natural England.

Ancient Woodland and Priority Habitats

Within 1km of the site lies areas the following priority habitats: saline lagoons (priority habitat) (closest 25m northwest), deciduous woodland and broadleaved woodland (closest 300m north), maritime cliffs and slopes (closest 350m north of the site) and an area of ancient semi-natural woodland (660m southwest).

The site lies within in urban area immediately surrounded by commercial and residential with limited connectivity to the majority of aforementioned habitats. However, residual connectivity to the closest saline lagoon (25m north-west) is considered likely due to the close proximity of this area from site.

3.3 HABITATS

The following habitats have been identified through our assessment, detailed Target Notes and Photographic Plates included in Appendix B, as appropriate.

Table 9. Habitats present.

Habitat	Result	Importance assessment
Modified Grassland (g4) & scattered trees (32)	A strip of modified grassland with scattered trees formed the northwest boundary of the site. The grassland was heavily managed with a short sward. Species composition included dominant Yorkshire fog *Holcus lanatus*, frequent perennial ryegrass *Lolium perenne* and white clover *Trifolium repens*, rare greater plantain *Plantago major*, cleavers *Galium aparine*, creeping buttercup *Ranunculus repens*, broadleaved dock *Rumex obtusifolius*, dandelion *Taraxacum agg.*, fern sp. *Filix sp.* and common ragwort *Jacobaea vulgaris*. The scattered trees were pine species *Pinus sp.*	Negligible importance
Developed land, sealed surface (u1b)	Hardstanding dominated the site forming a car park.	Negligible importance
Buildings (u1b5)	Two derelict buildings were present within the site, full building details can be found in Appendix B.	Negligible importance
Building linear feature (u1e)	The boundary of the site was formed from a wall and also concrete fence posts with wire.	Negligible importance

3.4 PROTECTED AND NOTABLE SPECIES

Data purchased from the CBDC confirmed the presence of a number of protected and notable species within 2km of the site. Relevant data are discussed in Table 10 below.

Protected and notable species identified as a receptor for the site are detailed in Table 10. Further information on legislation can be found in Appendix C.

Table 10. Protected and Notable Species

Species	Legal protection	Result	Importance assessment
Bats	Conservation of Habitats and Species Regulations 2017 Schedule 2 (as amended); Wildlife and Countryside Act 1981 (as amended) Schedules 5 & 6; Natural Environment and Rural Communities 2006 Section 41.	***Desk Study***: A single bat mitigation licence was identified within 2km of the site: 2017-31499-EPS-MIT, for the destruction of a resting place for common pipistrelle, located 300m southwest of the site. The desk study returned two records for bats within 2km of the site and within the previous 10 years. The species included pipistrelle species *Pipistrellus sp.* and an unidentified bat species *Chiroptera sp.* B2 was previously a confirmed common pipistrelle transitional / day roost (WYG, 2019). ***Results***: *Roosting*: Two buildings were present within the site B1, was a derelict former public house, John Paul Jones, and B2 was a derelict former Baths. B1 was categorised as offering moderate roost suitability for bats owing to small access points suitable for crevice dwelling species such as pipistrelle species. The building was constructed from brick with a pitched tiled roof. It was two storeys with a cellar area. The building internally had been decommissioned and was in a poor state of repair with floors missing. B2 was noted to be in similar condition to the previous assessment as such retained the categorisation and legal protection of the previously identified roost. B2 was constructed from a mixture of sandstone, brick and breeze block with a large proportion of the roof area missing. Internally the building was in a poor state of repair with significant water damage. Full detailed descriptions and photos can be found in Appendix B. The site is located within a highly urbanised area with frequent street lighting however some species such as pipistrelle species have been observed to be more	Roosting: Unknown; further survey recommended. Foraging & Commuting: Local importance for common species.

Species	Legal protection	Result	Importance assessment
		abundant around white and green light areas as insects are attracted to the light and thus increasing prey abundance (ILP, 2023). Due to the derelict and unheated nature of B1, presence of a cellar and the absence of full access the building was considered to be a potential hibernation site for bats, in particular brown long-eared bats with the void areas such as loft spaces and cellars and common pipistrelle within the cavity walls. The cellar area was also considered a classical potential hibernation site. B2 was exposed and in poor condition and considered unlikely to be suitable for hibernating bats. *Foraging and Commuting:* The site was dominated by two buildings and developed land, sealed surface with a parcel of modified grassland and scattered urban trees. It is considered likely that the site and the adjacent tree line may be used for occasional commuting and foraging for a low number of common species such as common pipistrelle. Given the site's size and location it was not considered likely to provide a particularly important foraging area or commuting route for bats. It is therefore classed as negligible for foraging/commuting suitability.	
Birds	Wildlife and Countryside Act 1981 (as amended).	Feral pigeons *Columba livia 'domestica'* were identified nesting within areas of B2 during the survey. The derelict nature of the buildings lends themselves favourably to gull species (for example *Larinae sp.*) and feral pigeons nesting requirements.	Local importance for common and widespread species.
Invertebrates	Some invertebrates are protected under Conservation of Habitats and Species Regulations 2017 (as amended) and Wildlife and Countryside Act 1981 (as amended).	No protected or priority invertebrates were recorded during walkover and based on its habitat types and urban encapsulation the site is highly unlikely to offer suitable habitat for notable assemblages of invertebrates.	Negligible importance, limited habitat present.

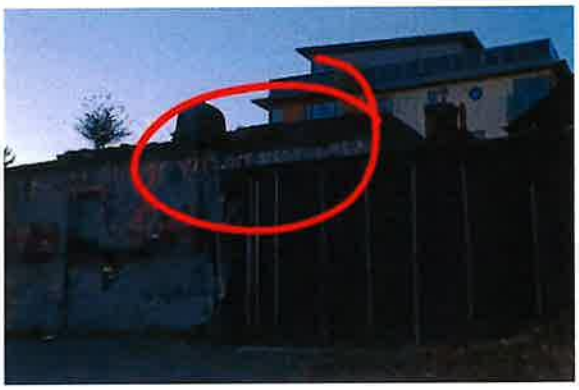
Species	Legal protection	Result	Importance assessment
	Many invertebrates are also listed as rare and most threatened species under Section 41 of the Natural Environment and Rural Communities Act (2006).		
Invasive species	Wildlife and Countryside Act 1981 (as amended) Schedule 9	No invasive species were identified during the survey.	No invasive species present.

3.5 PRESENCE / LIKELY ABSENCE NOCTURNAL SURVEYS – BUILDINGS / STRUCTURES

Survey 1: B1 and B2 – 16/07/2024

During the first survey visit, a single common pipistrelle was recorded emerging from a hole below roof on B2, observed from survey position B1.1 at 22:12 (64 minutes after sunset) - see Figure 4. The access point is shown in Photograph 1.

Photograph 1: Location of roosting point on B2



During the survey bat activity including foraging and commuting was recorded with species composition noted as common pipistrelle and soprano pipistrelle *Pipistrellus pygmaeus.*

Survey 2: B1 and B2 – 07/08/2024

During the second survey visit, no bats were recorded emerging from B1 or B2.

During the survey bat activity including foraging and commuting was recorded, species composition included common pipistrelle, soprano pipistrelle and noctule *Nyctalus noctula.*

Survey 3: B2 - 28/08/2024

During the third and final survey of B2, no bats were recorded emerging.

During the survey bat activity including foraging and commuting was recorded, species composition included common pipistrelle and soprano pipistrelle.

4.0 RECOMMENDATIONS

4.5 MITIGATION

All of the works outlined below in Table 11 should be assumed as likely requirements for the pre-planning stage to inform a planning application, unless otherwise stated.

Table 11. Mitigation and Assessment

Ecological Receptor	Assessment	Mitigation required	Opportunity for enhancement
Designated sites	The nearest internationally designated sites are River Ehen SAC located 6.4 km southeast and River Derwent & Bassenthwaite Lake SAC located 9.5 km northeast of the site. The River Ehen is designated for its population of freshwater pearl. The proposed development will not result in the direct loss or degradation of the qualifying feature of the SAC. Indirect effects (noise, vibration, dust) are not considered likely as the site is a sufficient distance, with no direct routes of connectivity (e.g. hydrological), from the designated site. Therefore, no further assessment is required in relation to the above SAC's. St Bees Head SSSI was located 1.2km southwest, this is also considered likely to be a sufficient distance from the site that indirect impacts are unlikely.	A Construction Environmental Management Plan (CEMP) should be produced outlining measures to reduce impacts on dust and other pollution on the adjacent saline lagoon.	N/A

Ecological Receptor	Assessment	Mitigation required	Opportunity for enhancement
	A saline lagoon (priority habitat) lies 25m northwest of the site and as such effects from dust need to be considered.		
Habitats	The habitats within the site were common and widespread as such no further botanical surveys are deemed appropriate of necessary.	N/A – habitats considered common and widespread.	As per the Environment Act 2021 a 10% Biodiversity Net Gain in habitats is required. This may be achieved by the inclusion of planting within the masterplan and possibly the inclusion of a green roof. These would also provide beneficial resources for invertebrates and in turn bats. More detailed habitat enhancement measures can be provided at detailed design stage.
Bats	Two buildings were present within the site. B1 is proposed for demolition and B2 for partial demolition and partial retention. B1 was graded as moderate suitability for summer roosting bats, however no roosting bats were identified on the nocturnal surveys. B1 is considered suitable for hibernating bats as the building was unoccupied and unheated and had an accessible cellar through the loft void (internal areas open missing doors allowing bats access to the entire structure). The building was in a poor state of repair and considered unsafe for a full hibernation inspection. Furthermore, the building was considered suitable for hibernating pipistrelle	A precautionary working methodology will be required for the site before works can continue, which will stipulate required actions, such as direct supervision of suitable features being removed. All demolition contractors are to have a toolbox talk delivered by a licensed bat ecologist prior to demolition works commencing, regarding the potential presence of bats; and working methods to be used. The licensed bat ecologist will supervise works and inspect the potential hibernation features as they become accessible during demolition. Lighting schemes must be developed in accordance with the Institute of Lighting	The inclusion of at least two general purpose roosting bat boxes and one hibernation bat sited on retained trees or sections of B1 are required as compensation. The boxes should be sited 3-4m high and should be high enough to avoid direct illumination, placed out of the way of strong winds and positioned south-east to south-west where they can get sun for part of the day. Once installed, any disturbance including maintenance of a bat box must be completed under supervision of a licensed bat ecologist.

Ecological Receptor	Assessment	Mitigation required	Opportunity for enhancement
	species within the cavity walls which are unlikely to be identified during inspections. It is recommended that a precautionary approach adopted and building demolition timed to avoid the peak hibernation season which runs from November to March inclusive. B2 was previously a confirmed day/transitional roost for common pipistrelle, and this roost was confirmed active following the 2024 surveys. The roosting feature and access point will be retained within the façade, which is being retained as part of the works. The site was dominated by buildings and hardstanding and located within an urban area with limited connectivity to the wider landscape. The site was noted to have streetlights adjacent due to the urban location of the site and as such lighting levels may further reduce bat activity within the site. As a result, the site has been assessed as having negligible suitability to support commuting or foraging bats, and further activity surveys are not recommended.	Professionals (ILP) Guidance Note 08/8 Bats and artificial lighting in the UK (ILP, 2023).	
Birds	The buildings and scattered trees were considered suitable for nesting gulls and feral pigeon. The site is unlikely, however, to	Any site clearance and demolition should ideally be undertaken outside of the typical bird nesting season (March to August inclusive). If	The inclusion of at least three nest boxes suitable for common passerine species such as the Vivara Pro Seville 32mm WoodStone

Ecological Receptor	Assessment	Mitigation required	Opportunity for enhancement
	provide suitable breeding habitat for any specially protected bird species and does not support habitat which is underrepresented within the local landscape. No further breeding bird surveys are recommended however should site clearance commence within the nesting bird season a nesting bird check would be required.	clearance is to be undertaken during this period, the building should first be checked for nests by a suitably experienced Ecological Clerk of Work (ECoW) in the 24 hours prior to commencement of site clearance. If a nest is discovered it should be left undisturbed, with a minimum of a 5m stand-off buffer, however, a larger buffer may be required for some species (buffer areas will be advised by the ECoW), until it can be determined that any young have fledged. This could also include a short period of delays. It must also be noted that pigeon can nest all year round and as such it is recommended that the buildings should first be checked for nests by a suitably experienced Ecological Clerk of Work (ECoW) in the 24 hours prior to commencement of site clearance.	within the landscape plan would make a valuable enhancement to the site.
Invertebrates	The site was dominated by buildings and hardstanding with a small parcel of heavily managed modified grassland and scattered trees. As such the site is likely to support common and widespread species only. No further survey required, species assemblage considered likely to be common and widespread.	N/A	The landscape plan should include provisions to encourage invertebrates to the site such as bee bricks. Landscape plan should incorporate suitable native pollinator species (potentially within a green roof) to attract invertebrates to the site.
Invasive species	The survey did not identify any invasive species within the site. The site was dominated by buildings and hard standing with a parcel of modified grassland and the	If invasive species are found during subsequent visits to the site, a biosecurity plan must be drawn up to treat and prevent the spread of the species outside of the site.	N/A

Ecological Receptor	Assessment	Mitigation required	Opportunity for enhancement
	presence of invasive species considered unlikely as such no further surveys are recommended.		

5.0 CONCLUSIONS

The development proposals are considered to have a negligible impact on the statutory designated sites as the proposed development will not result in the direct loss or degradation of the qualifying feature of the SAC. Indirect effects (noise, vibration, dust) are not considered likely as the site is a sufficient distance, with no direct routes of connectivity (e.g. hydrological), from the designated site. Therefore, no further assessment is required. The site also lies within the Impact Risk Zone (IRZ) of St Bees Head however the proposals are not of a type that would require further consultation with Natural England. The site lies adjacent to a saline lagoon (priority habitat) as such a CEMP must be produced outlining measures to reduce impacts on dust and other pollution on the adjacent saline lagoon.

The habitats within in the site were common and widespread with negligible botanical value.

The site has the potential to support roosting bats and nesting birds. Further survey and assessment are recommended as follows:

- Bats:
    - B1 was considered suitable for hibernating bats due to the presence of the cellar and the absence of heating and occupation. The building was in a poor state of repair and considered unsafe for a full hibernation inspection. Furthermore, the building was considered suitable for hibernating common pipistrelle within the cavity walls which are unlikely to be identified during inspections. It is recommended that a precautionary approach is adopted and the building demolition is timed to avoid the peak hibernation season which runs from November to March. A licensed bat ecologist will be required during demolition to deliver a toolbox talk to contractors and inspect for evidence of bat use.
    - B2 was previously a confirmed common pipistrelle transitional / day roost and confirmed still active and present, though the feature would be retained as part of the partial demolition works. If the works are done under a precautionary working methodology to minimise possible disturbance and the feature is retained, no European Protected Species License would be required.
    - All demolition contractors are to have a toolbox talk delivered by a bat licenced ecologist prior to demolition works commencing regarding the potential presence of bats and working methods to be used. The roofs and any other features within B1 and B2 with suitability for bats should be subject to soft strip demolition under the direct supervision of bat licensed ecologist.
    - Three bat boxes are to be installed to provide compensation for the loss of roosting provision in B1. Two are to be general purpose and one hibernation.
    - No further bat activity surveys are recommended as the site was dominated by buildings and hardstanding and located within an urban area with limited connectivity to the wider landscape.
- Birds:
    - It is recommended that building demolition and site clearance is to be completed outside of the typical nesting bird season (March to September inclusive).

- If clearance is to be undertaken within the typical nesting bird season, the building must be checked for nests 24 hours prior to clearance by a suitably qualified ecologist with particular attention on possible pigeon and gull nesting, which could include the roof.
- Should a nest be identified a suitable buffer zone would be required until the chicks have fledged. Furthermore, there could be a risk of delays until breeding birds have completed their breeding cycle and fledged the nest site. Any buffer zones or delays should be co-ordinated with a suitably qualified ecologist.

Provided the mitigation measures and licencing requirments within this report are adhered to, it is anticipated that a design could be brought forward for this site that would be compliant with current local and national biodiversity planning policy.

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FIGURES