

BREEDING BIRD SURVEY
RELATING TO LAND AT THE PROPOSED WESTERN EXTENSION AT
DENBIGH QUARRY, DENBIGHSHIRE
APPLICATION FOR PLANNING PERMISSION
For Breedon Southern Limited
NOVEMBER 2019

PSL Report Reference Number: M18.155.R.013
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BREEDING BIRD SURVEY ON DENBIGH QUARRY, DENBIGHSHIRE

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BREEDING BIRD SURVEY
ON LAND AT
DENBIGH QUARRY,
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DENBIGH,
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Breeding Bird Survey
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1.0 INTRODUCTION

Background and Proposals

- 1.1 The Ecology Consultancy Limited supporting Pleydell Smithyman Limited (PSL) was instructed by Breedon Southern Limited to undertake breeding bird surveys of land at the proposed western extension of Denbigh Quarry, Denbighshire (hereafter referred to as the site).
- 1.2 The survey was required to inform the preparation and submission of a planning application for an extension to the live quarry and to help ensure compliance with national and European legislation.

Site Location

- 1.3 The site is located off Ffordd Y Graig Road, approximately 950m to the north of the centre of Denbigh in Denbighshire. The site is centred on grid reference SJ050671.

Site Description

- 1.4 The site comprises an existing working quarry with bare earth, open water and cliff faces. The working quarry is surrounded by areas of plantation and semi-natural woodland with small areas of scattered scrub. The proposed western extension is largely dominated by improved grassland with a number of scattered trees and a defunct species-poor hedgerow. The north-western boundary of the extension is bordered by Crest Mawr Wood Site of Special Scientific Interest (SSSI).
- 1.5 In the wider area, arable and pastoral land dominates the majority of the northern and western landscape, with the town of Denbigh present to the south and east. An industrial park is also present to the east.

Aims and Objectives of the Study

- 1.6 The aims and objectives of the surveys at Denbigh Quarry were to provide an assessment of the current status of breeding birds at the site and to undertake an assessment of the impacts and effects of the proposed extension of the quarry on the breeding assemblage.
- 1.7 The impact assessment is then used to inform the requirement for avoidance, mitigation and compensation measures which should be incorporated into the design of the proposed development.

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2.0 SURVEY METHODOLOGY

- 2.1 The survey method employed was a variation of the British Trust of Ornithology (BTO) Common Bird Census (CBC) methodology (Bibby et al., 2000, Gilbert et al., 1998). The survey was designed to:
- Identify which bird species were using the site, and to estimate their numbers;
 - Identify any areas of the site that are particularly important for breeding birds; and,
 - Identify the importance of the site for notable bird species.
- 2.2 Four survey visits were undertaken in 2019 within the wider survey area, encompassing the western extension and the active quarry workings (shown in Appendix 1), between late May and early July, with at least five days between each visit. Surveys were carried out in good weather conditions (i.e. good visibility, low to moderate wind speeds, no or light rain etc.), and within daylight hours, commencing approximately one hour after sunrise.
- 2.3 The starting position for each survey varied between visits in order to reduce survey bias, although the transect route remained the same throughout. Field maps were used to record the registrations/numbers of each bird species observed. All notable species, but particularly Birds of Conservation Concern (BoCC¹) red list species, were searched for during the survey. The registrations used comprised the standard BTO species and behaviour codes (Marchant, 1983).
- 2.4 An assessment was made of the breeding status of each species recorded in the survey area using the breeding evidence criteria adopted by the BTO (2011) and (Balmer et al., 2013²) with each species being assigned to one of four levels:
- non-breeding;
 - possible breeding;
 - probable breeding; and
 - confirmed breeding.

¹ Eaton, M., Aebischer, N., Brown, B., Hearn, R., Lock, L., Musgrove, A., Noble, D., Stroud, D., and Gregory, R. (2015) *Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands and Isle of Man*. British Birds 108 p708-746

² Definitions of breeding evidence are provided on the BTO website - <https://www.bto.org/volunteer-surveys/birdatlas/methods/breeding-evidence>

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Table 1. Breeding bird survey dates and weather conditions.

Date	Survey Start Time	Temp.	Cloud Cover	Rain	Beaufort Wind Scale	Visibility
23/05/2019	04:50	8°C	8/8	None	0	Good
02/06/2019	04:00	8°C	8/8	Light drizzle	0	Good
11/06/2019	04:15	12°C	8/8	Dry, followed by moderate rainfall from 05:55	2	Good
09/07/2019	04:45	14°C	8/8	None	0	Good

- 2.5 The ecological importance of bird populations has been assessed using the Chartered Institute of Ecology and Environmental Management (CIEEM) guidance on Ecological Impact Assessment which assesses nature conservation importance within a geographical context (CIEEM, 2019).
- 2.6 At each level of importance, an ornithological resource or one of the features (species population or assemblage of species) should meet the criteria set out in Table 2 below.

Table 2. Definition of Terms Relating to Nature Conservation Importance.

Scale of Nature Conservation Importance	Examples of Selection Criteria
International	A species which is part of the cited interest of an SPA and which regularly occurs in internationally or nationally important numbers. A species present in internationally important numbers (>1% of international population).
National	A species which is part of the cited interest of an SSSI and which regularly occurs in nationally important numbers. A nationally important assemblage
Regional	Species of Principal Importance (SPI) in Wales that are not covered above and regularly occur in regionally important numbers. Sustainable populations of species that are rare or scarce within region. Species on the Birds of Conservation Concern (BoCC) Red List and which regularly occurs in regionally important numbers.
County	SPI in Wales that are not covered above and regularly occur in numbers important at county scale.

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	<p>Species present in county important numbers (>0.5% of national population).</p> <p>Sustainable populations of species that are rare or scarce within a county or listed in a local BAP that is applicable at county level.</p> <p>A site designated for its county important assemblage of birds.</p> <p>Species on the BoCC Red List and which regularly occur in county important numbers.</p>
District	<p>SPI in Wales that are not covered above and rare in the locality or in the relevant Natural Area profile.</p> <p>Species present in numbers just short of county importance.</p> <p>Sustainable populations of species which are rare or scarce within the locality.</p> <p>A site whose designation falls just short for inclusion for its county important assemblage of birds.</p> <p>Other species on the BoCC Red List and which are considered to regularly occur in district important numbers.</p>
Local	<p>Other species of conservation interest (e.g. all other species on the BoCC Red and Amber List and Species of principal importance in England which are not covered above) regularly occurring in locally sustainable populations.</p>
Site	<p>All other BoCC green- listed common and widespread species.</p>

2.7 In combination with the above assessment method, the breeding bird assemblage was assessed against the Wales Local Wildlife Site criteria to establish the importance of the site for breeding birds in relation to local standards.

2.8 These combined assessment methods were used to calculate the importance category of the breeding bird assemblage present on the site.

Survey Constraints and Limitations

2.9 The 2019 breeding bird survey was not commissioned until May so the survey visits were carried out over a more restricted period than might be considered ideal. Consequently, some early nesting species may have been missed.

2.10 Standard methodology for the CBC states that 10 survey visits should be undertaken across the breeding season. This suite of surveys only comprises four visits and cannot provide a complete census of all birds nesting in the wider habitat. It does, however, provide sufficient evidence to assess the wider breeding assemblage present at the site.

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- 2.11 Standard methodology for the CBC states that survey visits should 'ideally' be separated by at least 10 days. This was not possible due to the shortened survey window and access requirements, and as surveys are spaced by at least 5 days, this is not considered to impact upon the survey results.

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3 **RESULTS**

- 3.1 In total, 29 bird species were observed within the site, of which six were confirmed as breeding, seven were probable breeders, 14 were possible breeders, and two species were not breeding. Table 3 lists these species and includes the peak count measured as the maximum number of individuals detected on any one survey visit.
- 3.2 The majority of species recorded during the surveys in 2019 are assessed as being 'fairly common' or more abundant within Denbighshire according to the North-East Wales Bird Report 2017³. Where birds are assessed as being 'uncommon' or greater rarity, these have been assessed in further detail.

³ Clwyd Bird Recording Group (2018) North-East Wales Bird Report 2017. (The most recent edition available).

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Table 3. Breeding Bird status and survey results.

Common Name	Latin Name	Conservation Status ⁴	Denbighshire Status ⁵	Peak Count	Breeding Status
Blackbird	<i>Turdus merula</i>	Green List	Very common	17 recorded on visit 2	Confirmed – An adult was observed carrying food for young on the second survey visit
Blackcap	<i>Sylvia atricapilla</i>	Green List	Fairly common	2 recorded on visit 2	Confirmed – An adult was observed carrying food for young on the second survey visit
Blue tit	<i>Cyanistes caeruleus</i>	Green List	Very common	14 recorded on visit 1	Probable - permanent territory presumed through registration of territorial behaviour (song etc.) on at least two different days a week or more apart at the same place
Buzzard	<i>Buteo buteo</i>	Green List	Common	2 recorded on visit 4	Possible – species observed in suitable nesting habitat
Canada goose	<i>Branta canadensis</i>	No status	Very common	2 recorded on visits 3 and 4	Possible – species observed in suitable nesting habitat
Carrion crow	<i>Corvus corone</i>	Green List	Abundant	30 recorded on visit 1	Possible – species observed in suitable nesting habitat
Chaffinch	<i>Fringilla coelebs</i>	Green List	Abundant	3 recorded on visit 1	Probable – pair observed in suitable nesting habitat
Chiffchaff	<i>Phylloscopus collybita</i>	Green List	Common	1 on visit 1	Possible – male singing in suitable nesting habitat
Common gull	<i>Larus canus</i>	Amber List	Abundant	29 recorded on visit 3	Non-breeding – birds observed foraging/loafing or flying over

⁴ Listed on Schedule 1 of the WCA, Section 7 of E(W)A or on the Red/Amber/Green List for BoCC.

⁵ North-East Wales Bird Report 2017.

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Coot	<i>Fulica atra</i>	Green List	Common	1 recorded on visit 4	Confirmed – Juvenile observed on visit 4
Dunnock	<i>Prunella modularis</i>	Section 7 Amber List	Common	1 recorded on visit 2	Possible – species observed in suitable nesting habitat
Great spotted woodpecker	<i>Dendrocopos major</i>	Green List	Fairly common	2 recorded on visit 1	Possible – species observed in suitable nesting habitat
Great tit	<i>Parus major</i>	Green List	Very common	5 recorded on visit 1	Probable - permanent territory presumed through registration of territorial behaviour (song etc.) on at least two different days a week or more apart at the same place
House sparrow	<i>Passer domesticus</i>	Section 7 Red List	Abundant	1 recorded on visit 3	Possible – species observed in suitable nesting habitat
Jackdaw	<i>Corvus monedula</i>	Green List	Abundant	31 recorded on visit 2	Confirmed – An adult was observed carrying food for young on the first survey visit
Jay	<i>Garrulus glandarius</i>	Green List	Uncommon	3 recorded on visit 1	Probable - permanent territory presumed through registration of territorial behaviour (song etc.) on at least two different days a week or more apart at the same place
Lesser black-backed gull	<i>Larus fuscus</i>	Amber List	Abundant	15 recorded on visit 3	Non-breeding – birds observed foraging/loafing or flying over ⁶
Long-tailed tit	<i>Aegithalos caudatus</i>	Green List	Common	2 recorded on visit 4	Probable – pair observed in suitable nesting habitat
Mallard	<i>Anas platyrhynchos</i>	Amber List	Very common	5 recorded on visit 4	Possible – species observed in suitable nesting habitat
Mistle thrush	<i>Turdus viscivorus</i>	Red List	Common	2 recorded on visit 4	Possible – species observed in suitable nesting habitat
Nuthatch	<i>Sitta europaea</i>	Green List	Common	1 recorded on visit 2	Possible – species observed in suitable nesting habitat

⁶ Three first year birds were recorded during survey visit 4, fledged birds of this species are capable of significant geographical movement and no evidence of direct breeding was found within the survey area.

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Peregrine	<i>Falco peregrinus</i>	Schedule 1 Green List	Scarce	2 recorded on visit 4	Probable - permanent territory presumed through registration of territorial behaviour (song etc.) on at least two different days a week or more apart at the same place
Pheasant	<i>Phasianus colchicus</i>	No status	Common	3 recorded on visit 2	Confirmed – Juvenile observed on visit 4
Raven	<i>Corvus corax</i>	Green List	Common	2 recorded on visit 2	Possible – species observed in suitable nesting habitat
Robin	<i>Erithacus rubecula</i>	Green List	Very common	2 recorded on visit 2	Possible – species observed in suitable nesting habitat
Song thrush	<i>Turdus philomelos</i>	Section 7 Red List	Common	7 recorded on visit 2	Confirmed – Juvenile observed on visit 2, also two birds feeding young on visit 2
Treecreeper	<i>Certhia familiaris</i>	Green List	Uncommon	1 recorded on visit 3	Possible – species observed in suitable nesting habitat
Woodpigeon	<i>Columba palumbus</i>	Green List	Abundant	7 recorded on visit 2	Probable - permanent territory presumed through registration of territorial behaviour (song etc.) on at least two different days a week or more apart at the same place
Wren	<i>Troglodytes troglodytes</i>	Green List	Common	2 recorded on visits 1,2 and 4	Possible – species observed in suitable nesting habitat

Notable Birds: Status and Distribution

- 3.3 Of the recorded species, 8 are 'notable' either appearing on Schedule 1 of the W&CA; the BoCC Red or Amber Lists; or listed on Section 7 of the Environment (Wales) Act 2016, which replaces the duty in section 42 of the NERC Act 2006.
- 3.4 Mallard is a very common "breeding resident and winter visitor" within Denbighshire and is noted as being "found on most coastal and inland waterbodies". A peak count of 5 birds was recorded on visit 4. All records of this species were associated with the large waterbody within the active quarry (Pond 1). Mallard was not recorded within the extension area and the habitats are considered poor to support breeding attempts by this species.
- 3.5 Neither common gull or lesser black-backed gull breed within the extension area or the wider site. However, first-year lesser black-backed gulls were recorded foraging/loafing within the extension area on the fourth visit. The habitats present within the western extension do not provide suitable habitat for these species to breed.
- 3.6 Common gull is a "passage migrant and winter visitor", however the North-East Wales Bird Report 2017 does acknowledge that this species is recorded generally year-round, but in very low numbers through the breeding season when most birds move to their more northerly breeding areas. A count of 25 loafing on and adjacent to the waterbody in the quarry on visit 3 is notable, but not unusual at this time of year.
- 3.7 Lesser black-backed gull is a "passage migrant and breeding resident", with this species recorded as breeding at only three sites in Denbighshire in 2016. With the exception of four recorded loafing on visit 4 (including three first-year birds) this species was recorded flying over site. It is likely that the habitats present provide limited foraging and loafing suitability which is commonly found throughout the wider area.
- 3.8 Peregrine is classified as a "breeding resident", however breeding was confirmed at only one site in Denbighshire in 2017, with probable breeding at two further sites. This species was recorded calling in the woodland to the east of the quarry on visits 2 and 4, with a further observation of a raptor, identified as likely peregrine heard in the same location during visit 1. On two occasions a bird was spotted in the same tree, which may be a favoured plucking post, and indicative of territoriality and breeding close by, potentially within the eastern quarry face. This would be an important record for Denbighshire if this species was

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confirmed to breed within the quarry, however on the evidence currently presented, the species remains a probable breeder only. However, under the precautionary principle, assessments have been progressed as though breeding has been confirmed on site.

- 3.9 Song thrush was recorded with confirmed breeding evidence at two woodland locations across the wider site on visit 2 and is considered to be a "breeding resident and winter visitor" in the North-East Wales Bird Report 2017, with only 11 confirmed records of breeding in that year. Whilst it is likely that the species is more widespread, two confirmed breeding territories could be notable. This species was only recorded flying over the western extension area where works are scheduled to be undertaken.
- 3.10 Mistle thrush is also noted as a "breeding resident and winter visitor" however within the site, individuals were recorded in woodland parcels in the west and south. No evidence of the species was found using the western extension area.
- 3.11 House sparrow is classified as a "breeding resident" and was only recorded on visit 3 on the woodland fringe to the west of the active quarry. Whilst house sparrows do nest in woodland sites, this is infrequent where other more suitable habitat is present and it is likely that this is a single bird foraging through the wider area, and that the site holds only supporting value for this species.
- 3.12 Dunnock is classified as a "breeding resident" and was recorded on a single visit (visit 2) in Crest Mawr woodland. This bird is common in Denbighshire and is likely to be under-recorded breeding, as noted by the 2017 report, due to its reduced vocal activity during nesting. The presence of dunnock within the wider site is not considered to be notable, however the species may breed in the hedgerows within the western extension area.

Uncommon Species

- 3.13 Jay is classified as a "breeding resident and winter visitor", and in 2017 there was a single confirmed breeding record for Denbighshire, although the species was recorded in one third of BTO BBS transect squares. This species was recorded in the woodlands to the east and west of the active quarry on multiple visits and has been assessed as a probable breeder. It is not considered that this species is found at greater abundance within the site than would be expected for the county. The species was not found in the western extension due to a lack of suitable habitat.

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- 3.14 Treecreeper is classified as a "breeding resident" and in 2017 there were only three confirmed breeding records for Denbighshire, two of which were broods which failed to fledge a single juvenile. This species was recorded on a single visit in suitable habitat and is therefore classified as a possible breeder. With the habitats present on site, it is considered that this species is not found at notable numbers within the survey area, even allowing for the cryptic nature of the species. This species is a woodland specialist, and the habitats within the western extension provide limited suitability for this species to breed.

Evaluation

- 3.15 Under the guidelines for the Selection of Local Sites in Wales, a site supporting a breeding population of any size of a list of species, which includes peregrine, could be considered to be designated as a Local Wildlife Site. However, the species recorded are common and widespread in Denbighshire. Further, only two species recorded, lesser black-backed gull and song thrush, are listed as contributing species. At least eight such species are required for assessment as a Local Wildlife Site.
- 3.16 As such, the wider site, including the active quarry is considered to be of importance at the Local scale for Peregrine. The importance of the site would be increased to District scale where peregrine breeding is confirmed due to the low number of records of this species in Denbighshire.
- 3.17 The wider site is considered to be of importance at the Site level for the breeding bird assemblage.
- 3.18 The area where the extension is due to be undertaken is considered to be of negligible importance for breeding birds and has been scoped out of further consideration.

4 IMPACT ASSESSMENT

- 4.1 A total of 29 species were recorded within the wider site boundary, with six assessed to be confirmed breeders, seven assessed as probable breeders and 14 assessed as possible breeders.

Potential Operational Impacts – Disturbance, displacement and habitat loss

- 4.2 The proposals at the site will involve the removal of arable fields, internal hedgerows and the current western face of the active quarry. It is expected that the area of active quarry, including the waterbody, will remain unaltered.
- 4.3 In the absence of mitigation and sensitive works timing, the works could involve the killing and/or injury of birds where habitat is removed.
- 4.4 The area of improved grassland into which the quarry is due to extend is considered to be of negligible importance for breeding birds, with numbers low in comparison to the wider site.
- 4.5 The hedgerows and broad-leaved plantation woodland scheduled to be removed provide suitable breeding/foraging habitat for common species including blackbird, robin and tit species.
- 4.6 The removal of the current quarry face, in which jackdaws are nesting, will result in the displacement of this species. Birds will either leave the area or move to the eastern quarry face, where there is some evidence of peregrine nesting.
- 4.7 The operational effects will impact upon Crest Mawr SSSI woodland to the west of the site through noise, light and dust disturbance, and the potential loss of fringe habitats due to a narrow buffer. This may reduce the suitability of these fringe habitats for a variety of woodland species recorded including song thrush and dunnoek.

Species Assessment

- 4.8 Mallard was only recorded in association with the waterbody in the active quarry and no impacts are anticipated. Therefore, this species is not considered further.
- 4.9 Common and lesser black-backed gulls forage and loaf in the fields associated with the extension to the quarry. Whilst this habitat will be lost as part of the proposed extension, it is extensive in the wider area. Impacts are, therefore, considered to be non-significant.

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- 4.10 Peregrine show some evidence of nesting on the eastern face of the active quarry. Assuming presence given the suitability of habitats present, this species is unlikely to be directly affected by the proposed extension as a level of habituation to disturbance will be evident due to the ongoing quarrying activities. However, there may be impacts due to the displacement of corvid species from the western face of the quarry looking for replacement roost/nesting opportunities. Impacts associated with these indirect effects would be temporary, reversible, negative and significant at the local level if peregrines were to abandon the quarry. Once works had been completed, further opportunities for nesting on quarry benches and faces on the new western face would open up to both jackdaws and peregrines.
- 4.11 Song and mistle thrush were both recorded in Crest Mawr woods, and whilst this habitat will be retained and protected, edge effects associated with quarry activities adjacent to the woodland may be incurred. These impacts include noise, lighting and dust disturbance and may negatively affect these species nesting attempts and reduce foraging opportunities. As such the impacts would be temporary, reversible, negative and significant at the site level upon these species.
- 4.12 House sparrow was recorded foraging within the northern woodland fringe of the quarry in an area that will not be impacted by the extension works and therefore, this species is not considered further.
- 4.13 Dunnock was recorded in Crest Mawr woodland and may nest in hedgerows associated with the western extension, though the species was not recorded at this location. Therefore, the species may be subject to edge effects associated with quarry activities adjacent to the woodland may be incurred. These impacts include noise, lighting and dust disturbance and may negatively affect these species nesting attempts and reduce foraging opportunities. As such the impacts would be temporary, reversible, negative and significant at site level upon these species.
- 4.14 Both jay and treecreeper were recorded in Crest Mawr woodland, and these species may be subject to edge effects associated with quarry activities adjacent to the woodland. These impacts include noise, lighting and dust disturbance and may negatively affect these species nesting attempts and reduce foraging opportunities. As such the impacts would be temporary, reversible, negative and significant at site level upon these species.

5 RECOMMENDATIONS AND MITIGATION MEASURES

- 5.1 The proposed development has the potential to indirectly impact on species included on the Schedule 1 List of the Wildlife and Countryside Act 1981 (as amended) (peregrine) through displacement and disturbance related issues.
- 5.2 All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended). All works that could disturb nesting birds, for example the removal of buildings and/or vegetation (scrub, hedgerows, woodland, grassland and wetland habitats) should be timed to avoid the main bird nesting season (March to September, inclusive) to avoid any potential offences relating to nesting birds.
- 5.3 Where this is not possible, a search for nesting birds no more than 48 hours prior to vegetation clearance taking place must be undertaken by an experienced ecologist. If any nests are found, the nests are to be protected by an exclusion zone around the nest. Works may then proceed up to, but not within, this exclusion zone until such time as an ecologist confirms the young have fledged the nest. If nesting birds are found at any time during clearance works, work must stop immediately and an ecologist consulted before they can recommence.
- 5.4 There is the potential for a temporary increase in competition for nesting sites on the eastern face of the quarry whilst works are undertaken to the western extent of the quarry, where jackdaws nested in 2019. In order to try and reduce the likelihood of competition between peregrines and jackdaws on the eastern face, which may lead to peregrines abandoning a nest site, then it is recommended that additional nesting provision for jackdaws is provided near to the western face of the quarry by the installation of additional nest boxes on poles or trees where appropriate.

Enhancements

- 5.5 The following enhancement measures are recommended to provide breeding habitat, food sources and commuting opportunities for the species recorded in the wider area.
- 5.6 As hedgerows, trees and raised cliffs are to be removed during the works, nesting opportunities for breeding bird species will be reduced. Therefore, in areas of boundary woodland and where necessary, on poles, it is recommended that bird boxes are erected. This should include a variety of nest boxes for a wide range of species with particular regard

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to those subject to displacement from the additional works including jackdaws. These boxes should be installed prior to the removal of any trees on the site.

- 5.7 The installation of two peregrine nest boxes, or the maintenance of clear areas of quarry bench prior to the breeding season should retain favourable locations for peregrines to breed. If any evidence of a nest site is found on the eastern quarry face, measures should be taken to preserve this site in situ.

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6 **CONCLUSIONS**

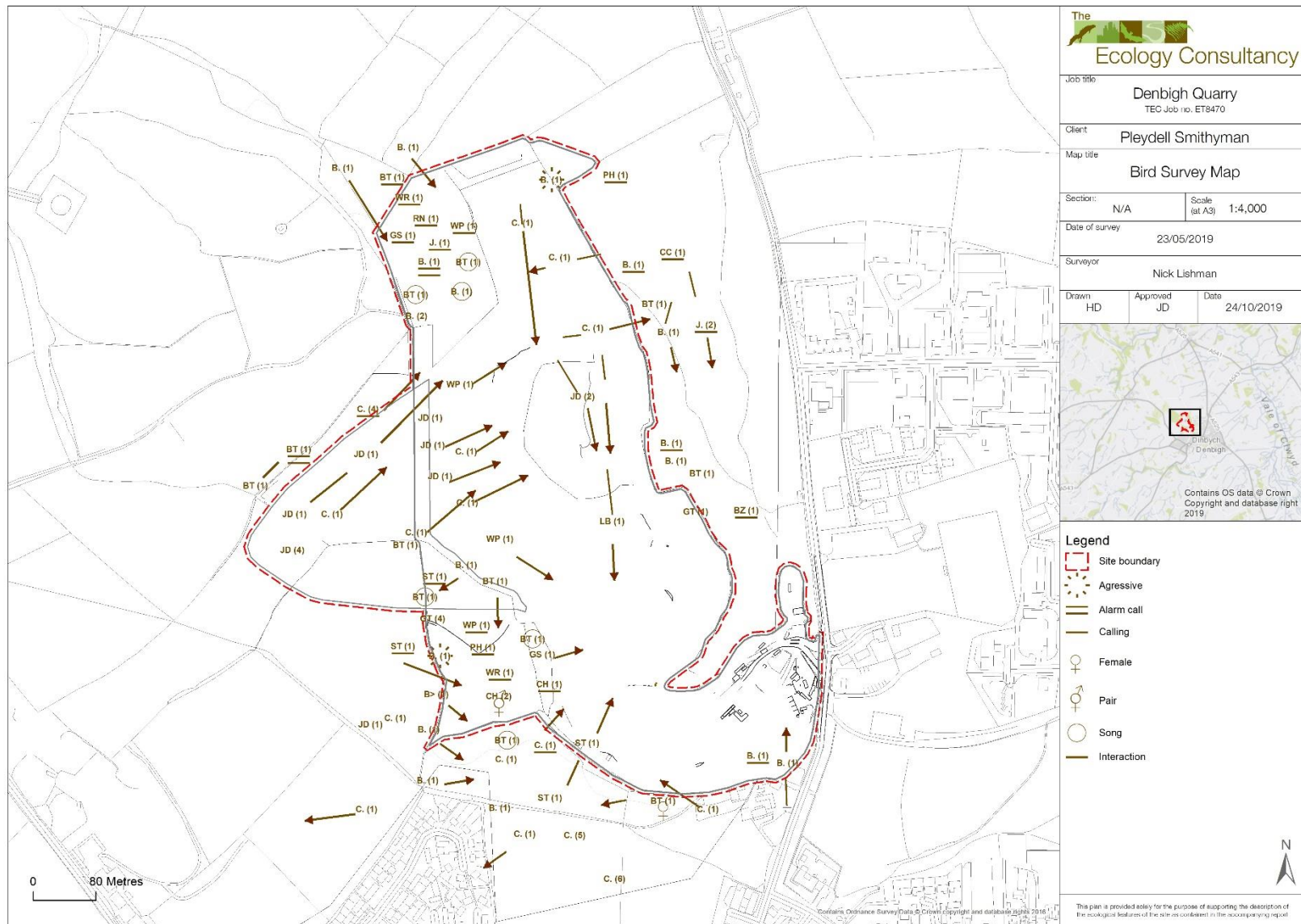
- 6.1 A total of 29 bird species were recorded using the full extent of the site, of which, 27 were recorded as confirmed, probable or possible breeding species. The breeding bird assemblage is only of value to at a Site level.
- 6.2 It is not considered that there will be any significant impacts on the breeding assemblage within the western extension or wider habitats.
- 6.3 The proposed works on the site may have a direct impact on one out of the six bird species of conservation concern (i.e. notable species) that were recorded showing evidence of breeding – peregrine.
- 6.4 The proposed works on the site may have an indirect impact on three out of the six bird species of conservation concern (i.e. notable species) that were recorded showing evidence of breeding - song thrush, mistle thrush and dunnock.
- 6.5 The proposed works may also indirectly impact on two species recorded as uncommon in Denbighshire – jay and treecreeper.
- 6.6 In the absence of mitigation, significant negative impacts are predicted to occur as a consequence of the proposed quarry extension. If mitigation is applied as outlined in Chapter 5, then impacts are considered to be not significant on peregrines within the wider landscape.

7 **REFERENCES**

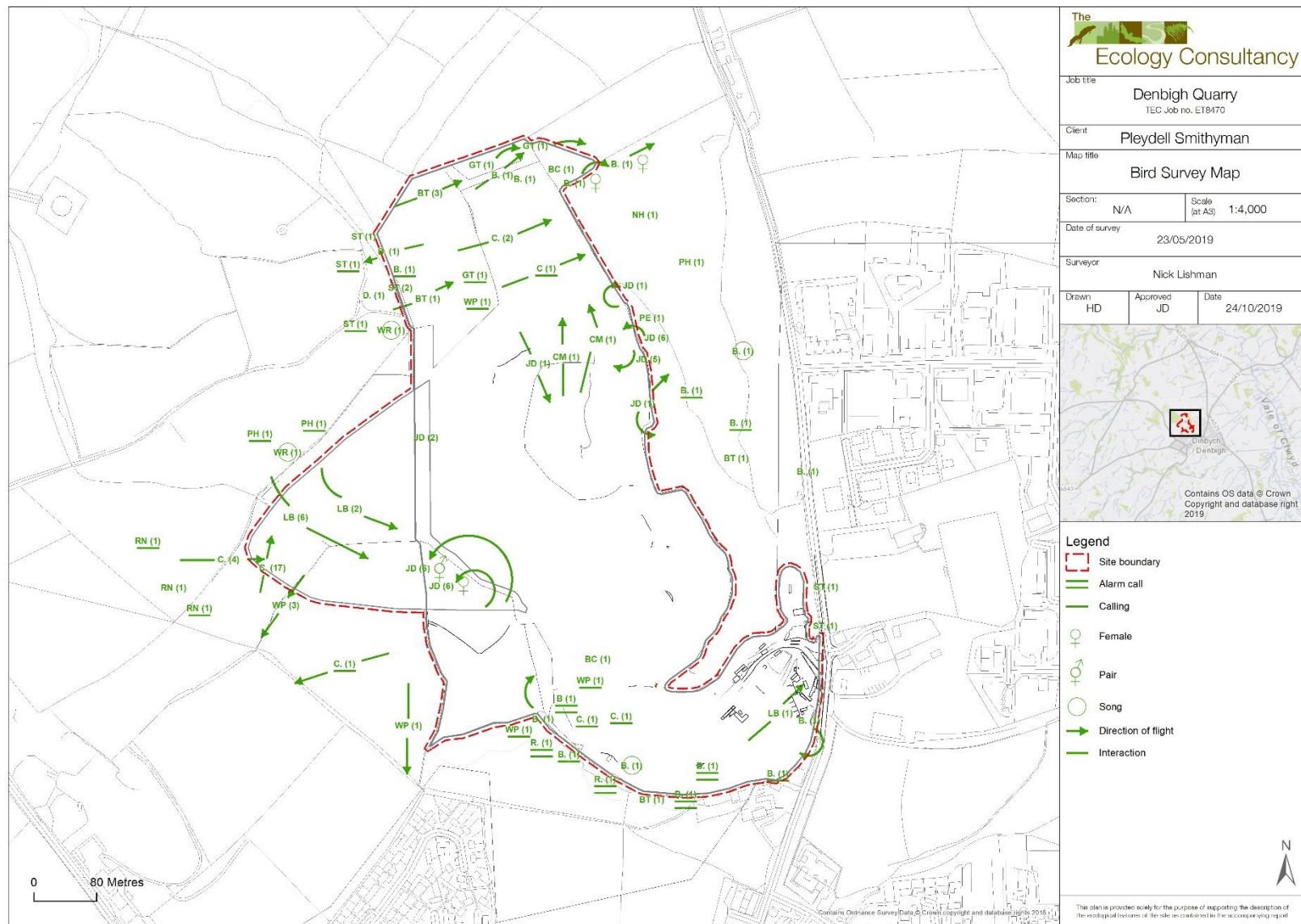
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DRAWINGS

BREEDING BIRD SURVEY ON DENBIGH QUARRY, DENBIGHSHIRE



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