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Ecological Consultants
Environmental and Rural Chartered Surveyors

Ecological Appraisal

CGP, Mainsgate Road, Millom

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ACCURACY OF REPORT

This report has been compiled based on the methodology as detailed and the professional experience of the surveyor. Whilst the report reflects the situation found as accurately as possible, all of the protected species this survey covers are wild and can move freely from site to site. Their presence or absence detailed in this report does not entirely preclude the possibility of a different past, current or future use of the site surveyed.

We would ask all clients acting upon the contents of this report to show due diligence when undertaking work on their site and/or in their interaction with protected species. If protected species are found during a work programme, and continuing the work programme could result in their disturbance, injury or death, either directly or indirectly an offence may be committed.
If in doubt, stop work and seek further professional advice.

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1. INTRODUCTION

1.1 Background

1.1.1 In November 2020 Envirotech NW Ltd were commissioned by CGP to carry out an Ecological Appraisal of land CGP Mainsgate Road, Millom, central grid reference SD 174 795. A site investigation was undertaken and a report compiled which includes recommendations for any future actions and or mitigation required.

1.1.2 The survey was requested in connection with the proposed construction of an extension to an existing industrial unit.

1.2 Objectives

1.2.1 The main objectives of the study were:

- The completion of a Phase 1 Habitat Survey including the preparation of a vegetation and habitat map of the site and the immediate surrounding area.

- The survey and assessment of all habitats for statutorily protected species.

- An evaluation of the ecological significance of the site.

- The identification of any potential development constraints and the specification of the scope of mitigation and enhancement required in accordance with wildlife legislation, planning policy and other relevant guidance, and;

- The identification of any further surveys or precautionary assessments that may be required prior to the commencement of any development activities.

2. METHODOLOGY AND SOURCES OF INFORMATION

2.1 Data Search

2.1.1 The Envirotech Dataset, Cumbria Biodiversity Data Centre "CBDC" and the Multi-Agency Geographic Information for the Countryside (MAGIC) were searched to establish the presence of any records of statutorily protected, notable or rare species, and any designated sites of international, national, regional or local importance within a 2km radius of the site boundary.

2.1.2 The Envirotech dataset is compiled from extensive field surveys from the period 2004-present, as well as records obtained from third parties during this time.

2.1.3 Google Earth and Google Street View were consulted to establish the presence of any features of ecological importance within the local area.

2.2 Vegetation and Habitats

2.2.1 A vegetation and habitat map was produced for the site and the immediate surrounding area. The mapping is based on the Joint Nature Conservation Committee Phase 1 Habitat Survey methodology (JNCC 2003).

2.2.2 Searches were made for uncommon, rare and statutorily protected plant species, those species listed as protected in the Wildlife and Countryside Act (1981) and indicators of important and uncommon plant communities. All plant nomenclature follows Stace (1991).

2.2.3 Searches were carried out for the presence of invasive species, including those listed on Schedule 9 of the Wildlife and Countryside Act (1981), namely Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*) on terrestrial habitat and aquatic species such as floating pennywort (*Hydrocotyle ranunculoides*), water Hyacinth (*Eichhornia crassipes*) and New Zealand pygmyweed (*Crassula helmsii*).

2.2.4 The survey was also informed by questioning the landowner/site agent to ascertain the recent history of the site.

2.3 Timing and Constraints

2.3.1 The site and surrounding land was visited on the 4th January 2015 by Chris Arthur BSc (Hons), MSc, Grad CIEEM and Matthew Thomas BSc (Hons), Grad CIEEM and 30th November 2020 by Andrew Gardner BSc (Hons), MSc, MRICS.

2.3.2 Full access to the site was possible.

2.3.3 The simple habitats present could be adequately assessed at the time of year the survey was undertaken.

3. PHASE 1 SURVEY RESULTS

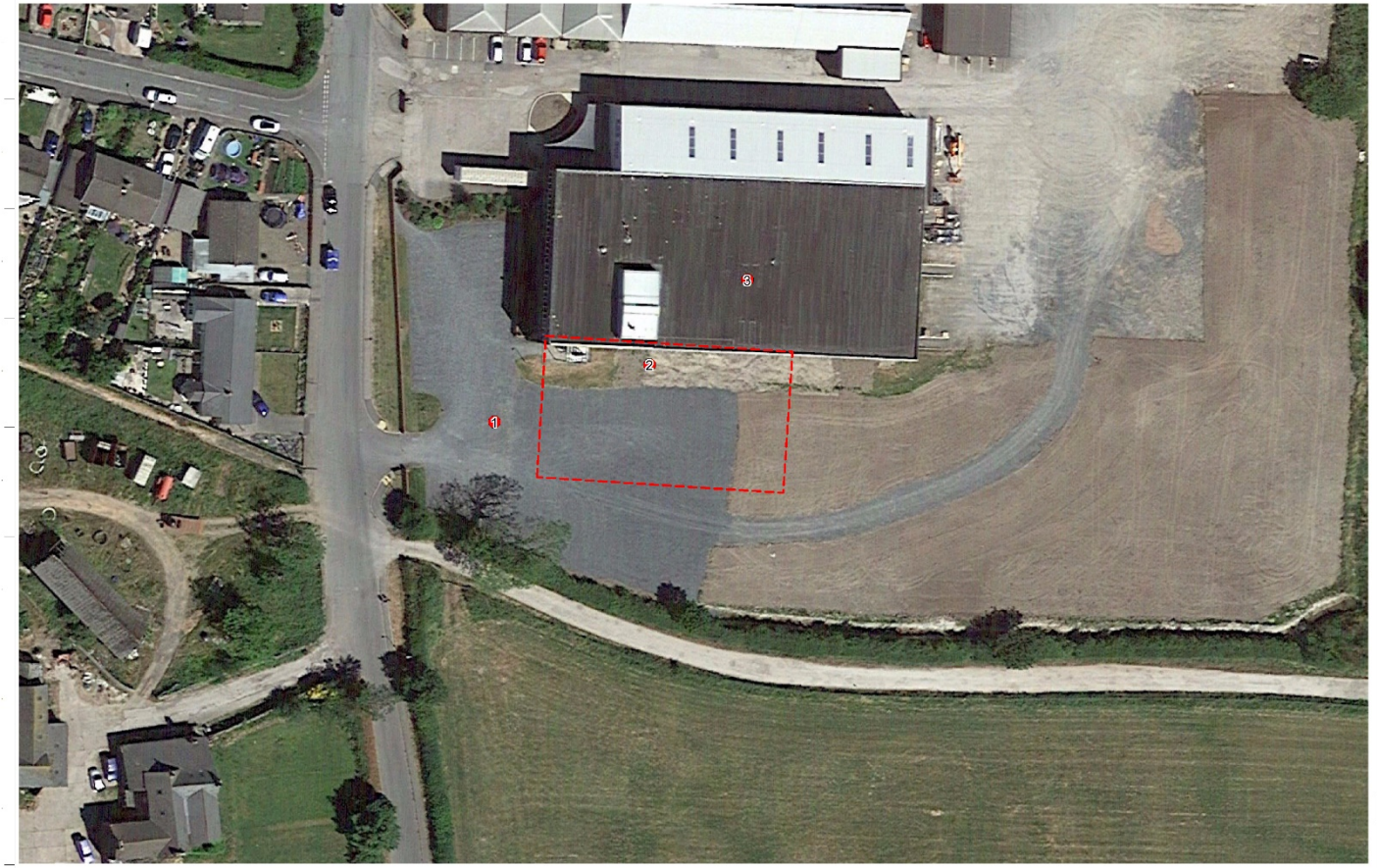
3.1 Habitat Results

3.1.1 The sites comprise an area of hardstanding (BTN2) with a building on its South and West boundary, further hardstanding and buildings to the East and a fence and hedge to the North, and; a patch of amenity grassland (BTN3) with a building to the South and hardstanding to all other sides.

3.1.2 See Figure 1 for the Phase 1 Habitat Plan and Table 1 for the descriptive Botanical and Faunal Target Notes, hereafter referred to as BTN and FTN.

Target Note	Description	Comment
BTN1	Hardstanding	The primary development area comprises an open and compacted area of hardstanding comprising compacted gravel which is used as a carpark. This area is of negligible ecological value.
BTN2	Cultivated/disturbed land - amenity grassland	A small bank to the side of the building to be extended comprises short mown amenity grassland which is again, of negligible ecological value. Species growing here include annual meadow grass (*Poa annua*), daisy (*Bellis perennis*), white clover (*Trifolium repens*), dandelion (*Taraxacum officianale),* creeping buttercup (*Ranunculus repens*) and ragwort (*Jacobaea vulgaris*).
BTN3	Other habitat	The existing building to be extended comprises a modern metal clad building.

Table 1 *Details of Botanical and Faunal Target Notes.*



Key

- Site Boundary
- Botanical Target Note

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Figure 1

Results* of Extended Phase 1 Habitat Survey

SCALE: 1cm = xxM

REV 01

  	**The development area comprises an open area of compacted gravel with a small grass bank to the side of the building**

Table 1 *Photographs of the site.*

4. SPECIES SURVEY METHODOLOGY

4.1 Amphibian

4.1.1 Great crested newts (*Triturus cristatus*) are listed on Annexes II and IV of the EC Habitats Directive and Appendix II of the Bern Convention. It is protected under Schedule 2 of the Conservation (Natural Habitats) Regulations (2010) and Schedule 5 of the Wildlife & Countryside Act (1981).

4.1.2 The great crested newt baseline survey involved a pond screening assessment to determine the presence and suitability of ponds located within the study area using a Habitat Suitability Index.

4.1.3 No ponds are located within 250m of the site and therefore further survey effort for this species was considered to be unwarranted.

4.1.4 Natterjack toads (*Epidalea calamita*) are listed on Annex IV of the Habitats Directive (European Protected Species), are protected under Section 9 of the Wildlife and Countryside Act 1981 (as amended) (Schedule 5) and Regulation 39 of the Conservation (Natural Habitats &c) Regulations 1994 (as amended) (Schedule 2) as European Protected Species.

4.1.5 A natterjack toad baseline survey involved a screening assessment to determine the presence of suitable habitats for this species within the immediate vicinity of the site.

4.2 Badger

4.2.1 Badgers (*Meles meles*) and their setts are protected under the Protection of Badgers Act (1992). This legislation arises from animal welfare issues (rather than on the basis of nature conservation grounds) and essentially protects badgers from killing, injuring or disturbance. The main issue on proposed development sites tends to be the potential disturbance of badgers in their setts as a result of construction operations. Natural England recommends that the use of heavy machinery in proximity of a sett entrance should be avoided, with a 'disturbance free-zone' being established. The degree of disturbance attributed to construction activity is a function of the background level of activity badgers are accustomed to and that which will be attributed to a proposed activity. The "disturbance free zone" is therefore site specific.

4.2.2 The survey for badgers comprised an assessment of all suitable habitat within and outside the study area boundary (where this was possible) for indications of use by badgers.

4.2.3 Signs of badgers which were searched for included:

- Setts - 'D' shaped entrances at least 25cms wide and wider than they are high with large spoil mounds
- Discarded bedding at sett entrances (this includes grass and leaves)
- Scratching posts on shrubs and trees close to a sett entrance

- The presence of badger hairs which are coarse, up to 100mm long with a long black section and a white tip
- Dung pit latrines and footprints
- Habitual runs through vegetation and beneath fences
- Hedgehog carcases
- Surveys were also undertaken at night, during the bat surveys, by scanning the study area with a torch.

4.3 Bats

4.3.1 All British bat species are fully protected under Schedule 5 of the Wildlife and Countryside Act (1981), and are included on Schedule 2 of the Conservation (of Natural Habitats) Regulations (2010), as European Protected Species. Taken together, these pieces of legislation make it an offence to:

- Intentionally or recklessly kill, injure or capture bats;
- Deliberately or recklessly disturb bats (whether in a roost or not);
- Damage, destroy or obstruct access to bat roosts.

4.3.2 The Bat Conservation Trust (Hundt (2012)) issued guidelines on bat survey methodology, a key feature of their recommendation is for the undertaking of a pre-survey assessment – an initial desk-study and a walkover assessment of the survey area and its surrounding area to identify the relative value of the habitats present for bats and likely commuting routes. This is to be followed by a survey program that is appropriate to the likely level of bat activity within the survey area to be determined by and based on the experience of the surveyor.

4.3.3 The potential value of the survey area for foraging bats was assessed through consideration of two main factors: professional knowledge of bat ecology and foraging behavior in combination with the geographical location, topography and habitats present within the survey area and surrounds. This resulted in the production of a map showing habitat quality both on and adjacent to the site.

4.3.4 Due to the low suitability of the site for use by bats for foraging and/or roosting, no further survey effort for these species was deemed necessary.

4.4 Birds

4.4.1 All breeding birds, other than pest species, are protected under the Wildlife and Countryside Act of 1981 when building a nest, rearing young or sitting on eggs. Some bird species, such as barn owl (*Tyto alba*), are protected when near an active nest site. Several birds are listed as UK and or County BAP species.

4.4.2 The poor quality habitat suggested a low potential for breeding bird species of interest.

4.4.3 Bird species and behavior was noted during the other field surveys. All areas are covered equally, in order to avoid the subjective survey of better quality 'bird habitat'.

4.5 Invertebrates

4.5.1 A general assessment was made of the study area's suitability for supporting invertebrates during the phase 1 survey. The study area's lack of habitat diversity, species-poor composition and uniformity of vegetation structure (i.e., lack of variation in height and microtopography) resulted in our belief that a low diversity of invertebrates would be likely to occur across the site.

4.5.2 The presence of invertebrates was noted during the other surveys which were undertaken. The extent of sampling was limited in that it could be confirmed that no priority or BAP species would be likely to be affected by the proposal.

4.6 Reptiles

4.6.1 All native reptiles are protected in Britain under the Wildlife and Countryside Act of 1981. It is an offence to intentionally kill, injure, sell or advertise to sell any of the six native species.

4.6.2 The survey for these species was based on assessing the habitat type and suitability of the site. This comprised an assessment of satellite imagery for the site and surrounding area as well as comparison of the results from the records searches with habitat types. The general habitat at the site was evaluated in terms of its suitability to reptiles for foraging or breeding.

4.6.3 An assessment was made of the sites suitability to support these species. Habitat at the site was not considered sufficiently suitable for a full presence/absence survey to be warranted.

4.7 Survey limitations

4.7.1 Given the low ecological value of the habitats to be developed; there were not considered to be any significant survey limitations.

5. RESULTS

5.1 Data Search

5.1.1 Envirotech and CBDC hold no records of protected or notable species for the site. There are however records of protected or notable species within 2km. These are discussed in the relevant sections below.

5.1.2 The nearest non-statutory site is 550m to the South of the site being RSPB Hodbarrow coastal lagoon (Figure 3).

5.1.3 The nearest statutory protected site is the Duddon Estuary SSSI, SAC, SPA, 1000m to the East (Figure 4). This is isolated from the site by the village of Natland.

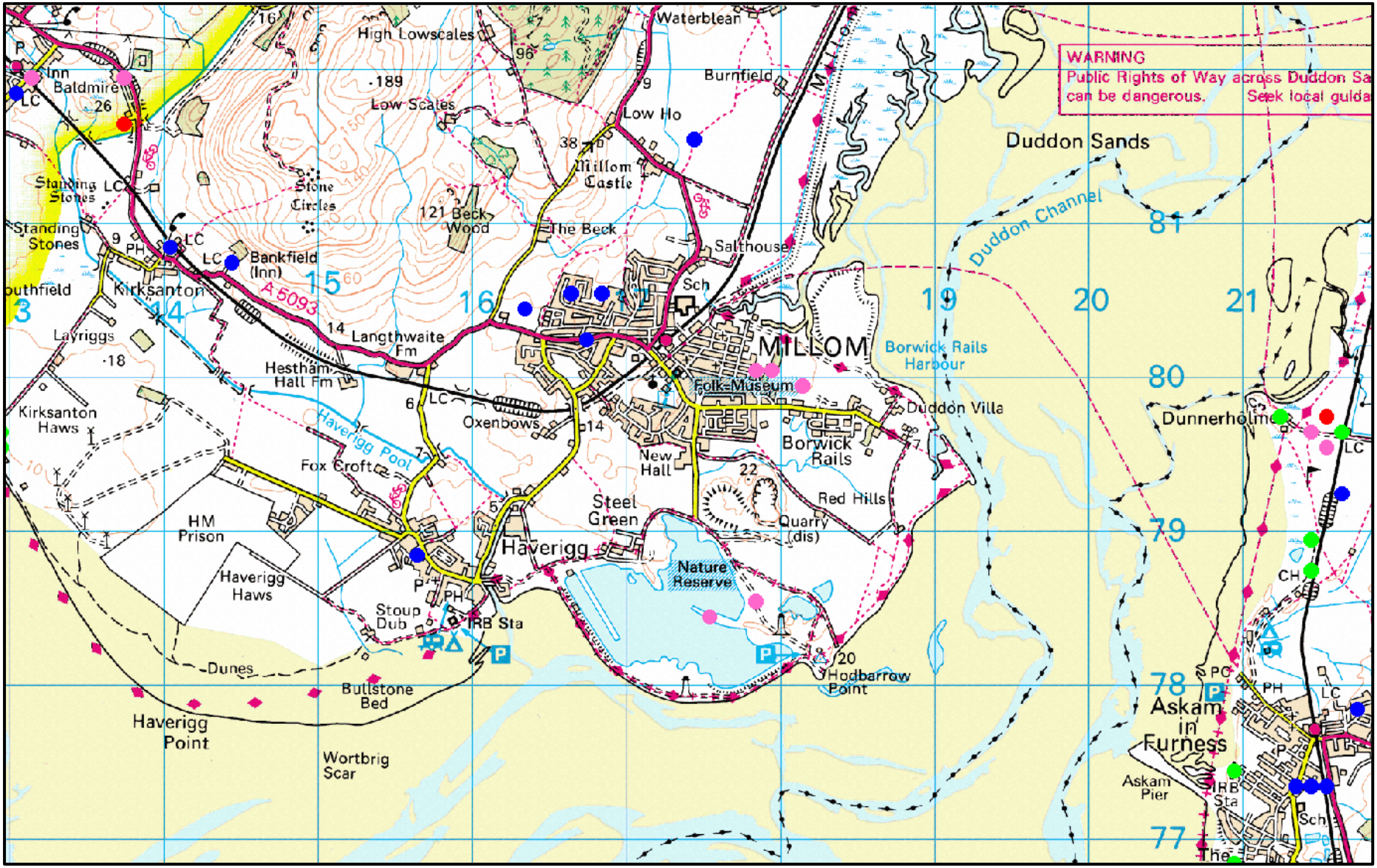

Figure 2 *Protected species records in the local area where blue represents bat records, pink represents reptiles, green represents natterjack toads (Epidalea calamita) and red represent common toad (Bufo bufo).*

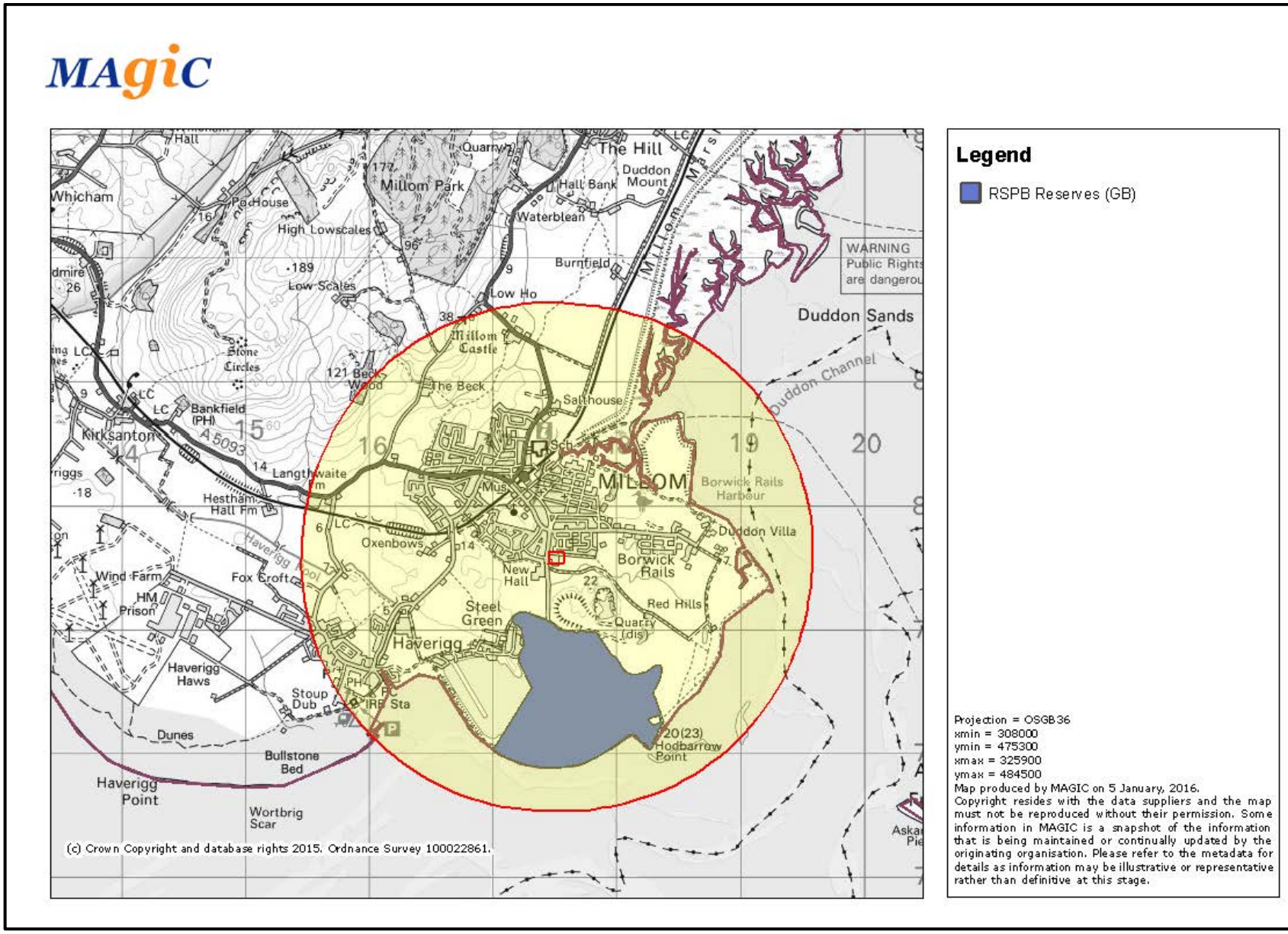

Figure 3 *Non-statutory designated sites 2km buffer.*

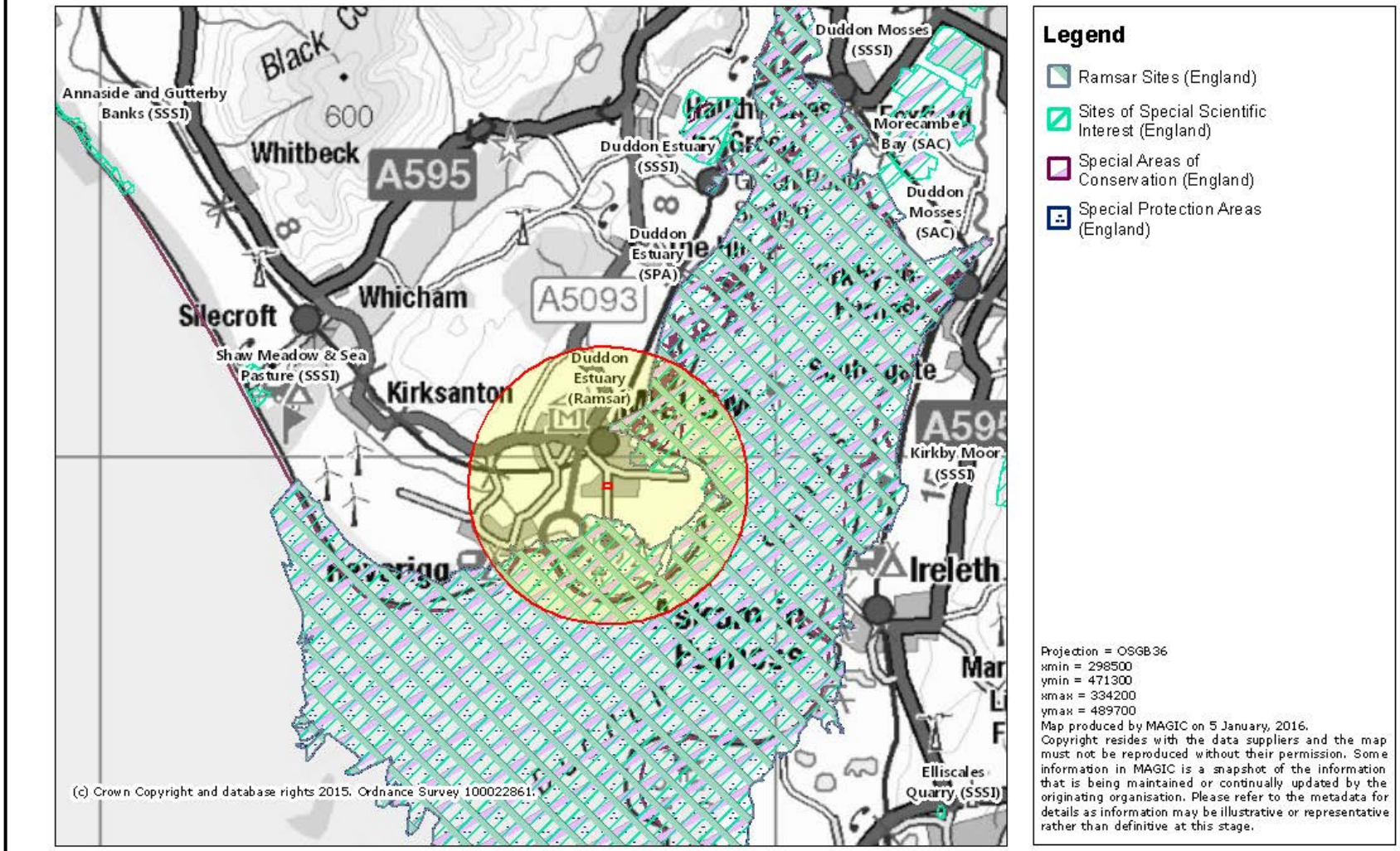

Figure 4 *Statutory designated sites 2km buffer.*

5.2 Vegetation

5.2.1 Details of the plant species found on site are included in the target notes. Species recorded are all commonly occurring and undoubtedly occur elsewhere in similar habitats in the local area.

5.2.2 The amenity grassland has a very low species diversity and ecological value.

5.2.3 The compacted gravel hardstanding has no botanical and no ecological value.

5.2.4 There are no trees within the bounds of the site, or within 30m of the proposed works.

5.2.5 There is no evidence of Japanese knotweed, giant hogweed or Himalayan balsam on the site. No other invasive or notable weed species listed on Schedule 9 (Section 14) of the Wildlife and Countryside Act (1981) (as amended) was identified within the site or adjacent land.

5.3 Amphibian

5.3.1 There are two records of amphibians within 2km of the site. These records are both for natterjack toads.

5.3.2 There is no standing water on site, or within 500m of the site. The nearest body of standing freshwater is located in the quarry ~600m to the South-east, and is of a size where it is highly likely to contain fish.

5.3.3 The records for natterjack toads are over 1km from the site. This species is very specific in its habitat requirements; none of which are represented on the site. Boundary features would be impassable to this species which comprise dense hedges. A large open quarry to the south would also be a complete barrier to the passage of this species.

5.3.4 None of the areas of the site subject to works have any habitats of value to amphibians. There are no habitats suitable for foraging and no rock or log piles suitable for refuge or hibernacula.

5.4 Badger

5.4.1 There are no records of badgers within 2km of the site. Badgers do however occur in the wider area.

5.4.2 There was no evidence of badger activity (foraging, latrines, runs or sett digging) on site or within 30m of the site boundaries.

5.4.3 The site does not appear to contain any habitats that would be suitable for use by this species.

5.4.4 The sites porosity to the passage of badgers will not change as a result of the proposed works at the site.

5.5 Bats

5.5.1 There are 8 records of two species of bat within 2km of the site.

5.5.2 The foraging habitat at the site is very poor for bat species being open and exposed. It is not considered the site would offer more than passing foraging opportunities to bats (Figure 5).

5.5.3 The site does not fall between two high quality habitats and is unlikely to form a significant commuting route.

5.5.4 The building on site which is to be extended, was considered to offer only negligible roosting opportunities. The building is of very simple construction; with a steel portal frame and sheet metal corrugate forming a flat roof and cladding the walls. A thin strip of fascia covers the joint between the walls and roof. The building offers negligible roosting opportunities for bats and no evidence of use by bats was found.

5.5.5 There are no mature trees on site and no trees capable of supporting roosting bats within 50m of the proposed works.


Key
Site Boundary
High Quality Habitat
Medium Quality Habitat
Low Quality Habitat
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Figure 5
Assessment* of
Foraging Habitat Potential
SCALE: NTS
REV 01
*Habitats outside the site boundary are indicative only
and have been mapped from within the site boundary or from publicly accessible land

5.6 Birds

5.6.1 There are numerous records of birds within 2km of the site. The majority of which are in relation to the RSPB Hodbarrow reserve and the Duddon Estuary to the East. A variety of migratory wildfowl, raptors and seabirds visit the reserve during the winter months.

5.6.2 None of the habitats on site are representative of those with the reserve or within the Duddon estuary.

5.6.3 The proposed development will not stand taller than the buildings currently on site and will therefore not cause any interference to the overflight by birds.

5.6.4 Herring gulls are known to nest on the roof of the buildings in low numbers, but only in specific places around flues on the South elevation of the Northern building. These birds are highly unlikely to be disturbed by the works at the site.

5.6.5 There are no opportunities for ground nesting birds within the areas of the proposed works.

5.6.6 There are no trees with rot holes or areas of scrub which could offer nesting opportunities to birds.

5.6.7 Overall it is unlikely that birds would be affected by works to the site.

5.7 Invertebrates

5.7.1 Numerous notable invertebrates have been recorded within 2km of the site.

5.7.2 No deadwood or vegetation on site was recorded which would provide an important resource for invertebrates in the local area.

5.7.3 There are no dunal areas or other sand banks on the site which would offer suitable nesting sites for burrowing wasps or bees.

5.7.4 There are no other habitats on site which would offer significant opportunities to any species of invertebrate.

5.8 Reptiles

5.8.1 There are numerous records of reptiles within 2km of the site. These records are common lizard (*Zootoca vivipara*).

5.8.2 The habitats on the site are not suitable for use by this species, due to both shade and lack of ground cover. There are however suitable habitats for this species in the immediate area.

5.8.3 There are no log, rock or refuse piles in the area of works which would offer refugia or hibernacula opportunities for reptiles.

5.9 Statutory and Non-Statutory Sites

Direct Impacts:

5.9.1 There are no statutory or non-statutory sites which are connected to the site such that site development would directly affect the dispersal of species between them or directly impact upon their integrity.

5.9.2 The habitats on site do not represent or are linked to those found in any of the statutory or non-statutory sites locally.

Indirect Impacts:

5.9.3 There are no statutory or non-statutory sites which are connected to the site such that site development would indirectly affect the dispersal of species between them or indirectly impact upon their integrity.

6. MITIGATION/RECOMMENDATIONS

6.1 Compensatory planting and habitat enhancement

6.1.1 The roots of the hedge to the North of the site but outside the site boundary should be adequately protected during the works in accordance with industry standards.

6.1.2 Any landscaping scheme should utilise plants which are native and wildlife friendly. In particular night flowering species would be beneficial to bats.

6.1.3 Wildflower seed could be used to plant verges to enhance the ecological value of the site and continuity between the site and the wider area.

6.2 Amphibians

6.2.1 There is no requirement for specific mitigation for these species. There are currently no suitable breeding sites on or near the site. However, as a precautionary measure, in the unlikely event that any signs of any amphibian activity is subsequently found, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

6.2.2 In order to further minimise impacts on amphibians the following points should also be followed.

- All work must take place during daylight hours as amphibians are more likely to be commuting over night and this will ensure the risk to any amphibians commuting through the site will be minimised.

- During the development, measures should be put in place to discourage amphibians from using the development area, the creation of any piles of earth, materials and rubble which could form potential artificial hibernacula and refuge should be avoided at all times. It is recommended that any spoil or rubble will be removed immediately to skips, or on hard standing or short grass. This will ensure that no potential amphibian hibernation or resting sites are created.

- The storage of all loose materials must be palletised or similar so they are off the ground whenever possible.

- Should any trenches and excavations be required, an escape route for animals that enter the trench must be provided, especially if left open overnight. Ramps should be no greater than of 45 degrees in angle. Ideally, any holes should be securely covered. This will ensure amphibians are not trapped during work.

- All excavations left open overnight or longer should be checked for animals prior to the continuation of works or infilling. Back filling should be completed immediately after any excavations, ideally back filling as an on-going process to the work in hand.

6.3 Badger

6.3.1 Badgers are likely to occur within the local area. No setts will be undisturbed by works at the site but in order to minimise impacts on badgers passing over the site the following points should also be followed.

- All work must take place during daylight hours as badgers are more likely to be commuting over the site at night and this will ensure the risk to any badgers passing through the site will be minimised.

- Should any trenches and excavations be required, an escape route for animals that enter the trench must be provided, especially if left open overnight. Ramps should be no greater than of 45 degrees in angle. Ideally, any holes should be securely covered. This will ensure badgers are not trapped during work.

- All excavations left open overnight or longer should be checked for animals prior to the continuation of works or infilling. Back filling should be completed immediately after any excavations, ideally back filling as an on-going process to the work in hand.

- Boundary fences/walls should incorporate gaps at their base to facilitate the passage of badgers across the site.

6.4 Bats

6.4.1 Work at night should be restricted.

6.4.2 New planting within the site should enhance structural diversity.

6.4.3 Overall it is considered that bats are highly unlikely to be affected by works to the site.

6.5 Birds

6.5.1 Nesting by birds within the development area is considered unlikely to occur. Birds may nest on the roof of the red brick building, but these will be unaffected the development.

6.5.2 Any vegetation to be trimmed or cleared should be checked for nesting birds before it is removed. Ideally this should occur outside the bird nesting period March - September. If vegetation clearance is to occur in the March-September period a check for nesting birds should be conducted first by a suitably qualified individual.

6.5.3 If nesting birds are found at the site all site works shall cease and further ecological advice shall be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

6.6 Invertebrates

6.6.1 Landscaping should include native or wildlife friendly species including night flowering plants.

6.6.2 Contaminants should not be allowed to enter the soils on site during work. To this effect, spill kits should be provided on site. Re-fuelling of all plant and machinery should be undertaken away from open drains and water courses. Drip trays should be used under static machinery.

6.7 Reptiles

6.7.1 There is no requirement for specific mitigation for these species. However, as a precautionary measure, in the unlikely event that any signs of any reptile activity is subsequently found, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

6.7.2 The points in respect of not leaving open trenches without means of escape detailed for badgers are also applicable to these species.

7. CONCLUSION

7.1.1 Ecological surveys, site appraisals and impact assessments were carried out with respect to land comprising bare ground and short mown amenity grassland at CGP, Mainsgate Road, Millom. It is proposed a small extension will be added to the existing warehousing at the site.

7.1.2 Lizards and bats are known to occur in the local area, there was however no conclusive evidence of any specifically protected species regularly occurring on the site or the surrounding areas which would be negatively affected by site development following the mitigation proposed.

7.1.3 The vegetation to be cleared has a low ecological significance in the local area; the areas to be developed consist of hardstanding and short mown grassland.

7.1.4 Contractors will be observant for protected species and all nesting birds. Should any species be found during construction, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.