



**Bay Stables, New Road, Hambleton, Lancashire,
FY6 9DS**

Ecological Appraisal

Simply Ecology Limited

Ref: GAAQ027

September 2020

For:

Graham Anthony Associates,

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Control Sheet

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Version History

| Version | Date | Modified by | Approved by | Comment/Reason(s) |
|---------|----------|-------------|-------------|-------------------|
| 1 | 28/09/20 | N/A | JR | First Issue |
| | | | | |
| | | | | |

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1.0 INTRODUCTION

1.1 Background Information

1.1.1 In August 2020, Simply Ecology Limited was commissioned by Graham Anthony Associates to undertake an Ecological Appraisal of land at Bay Stables, New Road, Hambleton, Lancashire, FY6 9DS (OS grid reference SD 36554 43653). See Plan 1: Site Location.

1.2 Aims

1.2.1 The aims of this ecological assessment were to:

- To provide clear advice to the client, the Local Planning Authority and third parties, on the nature conservation value of the site and surrounding area.
- To confirm the presence or absence of protected species, such as badgers, bats, great crested newts, otter, etc) within the proposed development site.
- To enable the client to comply with legislation afforded to protected sites and species (see Annex A).
- To highlight the presence of any habitats or species of ecological importance, including Habitats and Species of Principal Importance (NERC Act, 2006).
- To identify any ecological constraints on future development.
- To make nature conservation recommendations.

1.2.2 To achieve this, an ecological appraisal of the habitats and any protected species on the site was undertaken on 14th September 2020. This submission presents the results of the ecological surveys at the site.

1.3 Site Description and Proposed Works

1.3.1 The 1.2ha site comprises two fields, an outdoor equine arena and a small selection of outbuildings and stables. The immediate surrounding landscape comprises improved agricultural grassland. This was a rural area of detached residential buildings in the surrounding landscape comprising farms, dwellings and a small caravan park. The River Wyre was located some 380m south-west of site. Proposed plans for this site comprise the construction of a small selection of new holiday units on the northern site boundary upon exiting agricultural land (See Plan 2).



Plan 1: Site Location



Plan 2: The development proposal.

2.0 SURVEY METHODOLOGY

2.1 Desk Study

- 2.1.1 An online search of the Multi Agency Geographical Information Centre (www.magic.gov.uk) was undertaken to identify the presence of nationally or internationally important sites receiving statutory protection. This included sites designated under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017. This covers Sites of Special Scientific Interest (SSSI), Special Protection Areas (SPA) and Special Areas of Conservation (SAC) all of which have legal protection. A search for Biological Heritage Sites (BHS) was undertaken using Lancashire MARIO (Maps & Related Information Online).
- 2.1.2 No paid commercial desk study was required in this case due to the small scale of the development proposals and the nature of the habitats to be affected. Impacts on wildlife and conservation sites were considered based on information gleaned from the Extended Phase One Habitats Survey.

2.2 Extended Phase 1 Survey

- 2.2.1 The Phase 1 habitat survey was undertaken by Kevin Heywood BSc (Hons) ACIEEM on 14th September 2020. The survey followed the Phase 1 habitat survey methodology (JNCC, 2010) which is a standard technique for recording and mapping habitats. During the Phase 1 survey the presence or potential for presence of protected species was recorded and assessed.
- 2.2.2 The survey involved walking the whole site, mapping and describing different habitats (for example: woodland, grassland, scrub). Evidence of fauna and faunal habitat is also recorded (for example droppings, tracks, or habitat such as ponds for breeding amphibians). The methods used for ecological survey are in accordance with those established and generally accepted methodologies for field survey, as published by the professional body, the Chartered Institute of Ecology and Environmental Management (CIEEM).

2.3 Invasive Alien Plants

- 2.3.1 During the Phase 1 habitat survey, observations of invasive alien plants listed under Schedule 9 of The Wildlife and Countryside Act 1981 (as amended) were made. The search included species such as Giant Hogweed (*Heracleum mantegazzianum*), Japanese knotweed (*Fallopia japonica*) and Himalayan balsam (*Impatiens glandulifera*).

2.4 Bats: Building Survey

- 2.4.1 The building survey was undertaken in accordance with the standard methods described in the 'Bat Worker's Manual' (JNCC 2004) and 'Bat Surveys – Good Practice Guidelines' (BCT 2016). The survey comprised the following elements:
- An inspection of the exterior of the buildings to look for obvious signs of bat activity (such as droppings on windowsills) and assessing the potential for entry/exit into the roof.

- An inspection of the interiors of all buildings, examining walls, the underside of roofs and within any loft spaces in the property to determine whether bats were present, to look for signs of bat activity (such as discarded prey items and droppings) and to assess suitability for bats. Lighting was provided by a Led Lenser XEO 19R (2,000lm) and Lezyne Mega Drive (1,200lm).
- An assessment of the surrounding habitat quality for bats was carried out by walking the area on foot and later from reference to aerial images (Bing Maps). These searches were used to identify important land use and habitat features known to be favoured by bats.

2.5 Ecological Value and Impact Assessment

- 2.5.1 The evaluation of the ecological features of the site and the magnitude of the likely impacts of the proposed development upon those features follows that published by the Chartered Institute of Ecology and Environmental Management (CIEEM 2019). Overall, the process adopts a geographical scale for valuing ecological features. The evaluation places the site within a hierarchy of perceived ecological importance. This hierarchy ranges from the highest value sites which have 'international' status, then down to 'national', 'regional', 'county', 'district' and 'parish' and finally through to 'local' in terms of diminishing importance (see Annex B for full description of evaluation criteria).
- 2.5.2 Once the site's ecological value has been rated, impacts are subsequently identified and ranked according to the comparative severity of their effects. The impact magnitude of the development is recorded with the following criteria: 'major', 'moderate', 'slight' and 'negligible'. Impacts can be both positive and negative (see Annex B for full description of impact magnitude criteria).
- 2.5.3 Once the above two stages have been completed, it is possible to determine the significance of impact. This involves the interaction of both impact magnitude and nature conservation value and is based upon an exercising of professional judgement (as per CIEEM 2019).

2.6 Personnel

- 2.6.1 The survey was undertaken by Kevin Heywood BSc (Hons) ACIEEM. Kevin is an Ecologist with Simply Ecology Ltd. Kevin graduated with a first-class honours degree in Ecology from Lancaster University in 2015. In addition to this, he has acquired experience since 2012 working as an ecologist in a freelance capacity and since 2015 as a full-time employee for Simply Ecology Ltd. During this time, he has developed numerous field skills and carried out a wide range of botanical and protected species surveys. His expertise predominantly lies with habitat mapping and undertaking protected species surveys including: bats, great crested newts, badgers, otters and reptiles. Kevin holds a protected species licence for all British bats and for Great Crested Newts.

2.7 Timing and Constraints

- 2.7.1 The Phase 1 Habitat Survey was carried out on 14th September 2020. This timing is fine as it is possible to identify sufficient species at this time of the year using vegetative characteristics to determine accurate phase one classifications.

- 2.7.2 Weather was fine on the day of the survey and there no constraints to carrying out a full survey of the site and the surrounding area. There were no obstructions to accessing and surveying the site at all.

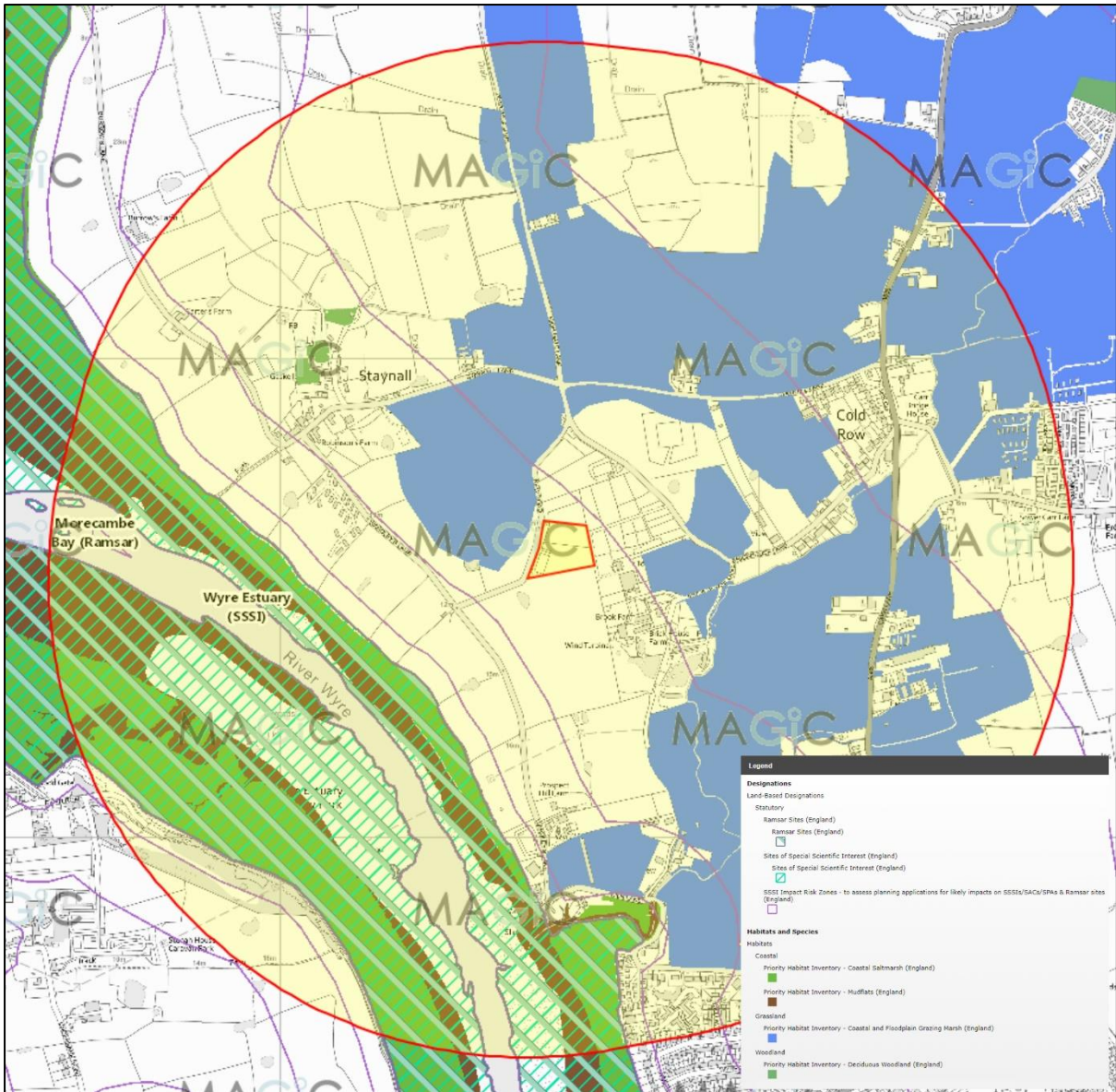
3.0 DESK STUDY RESULTS

3.1 Nature Conservation Sites

- 3.1.1 The desk study revealed one statutory protected site, comprising the Wyre Estuary SSSI, also categorised as part of the Morecambe Bay Ramsar site (see Plan 3 and ANNEX C). This was located west of site at the closest point some ~310m from site, resulting in the site being located within the Impact Risk Zone of the SSSI. The Morecambe Bay estuarine complex is of international significance for wintering wading birds and national significance for wintering wildfowl. The Wyre Estuary offers refuge for black tailed godwit, wintering turnstone and wintering teal over winter. In addition there are large areas of ungrazed saltmarsh as well as extensive freshwater swamp communities.
- 3.1.2 No other statutory protected sites were recorded in the area. The search on the Lancashire County Council MARIO tool found there to be no BHS sites within 1km of the site.

3.2 Priority Habitats

- 3.2.1 There were no Priority habitats within the site. Priority Habitats in the surrounding area included: Coastal Saltmarsh, Mudflats, Coastal and Floodplain Grazing Marsh and Deciduous Woodland (see Plan 3).



Plan 3: Nearby Statutory Sites, Priority Habitats and Impact Risk Zones.

4.0 EXTENDED PHASE 1 SURVEY RESULTS

4.1 Habitat Results

4.1.1 The 1.2ha site comprised a Manege just north of Hambleton village. All habitats on site are categorised and described below and illustrated on Plan 4. The full list of habitats on site comprised:

- Species Poor Semi-Improved Grassland
- Textile Substrate Arena
- Gravel Track
- Raised Beds
- Buildings
- Hardstanding
- Hedgerow

Species Poor Semi-Improved Grassland

The site predominantly comprised open species poor grassland managed and grazed by horses (see Plate 1). Grass species included dominant perennial ryegrass (*Lolium perenne*) with abundant annual meadow grass (*Poa annua*), creeping bent (*Agrostis stolonifera*) and occasional rough meadow grass (*Poa trivialis*). Forbs present within this grassland included: clover (*Trifolium repens*), broad leaved plantain (*Plantago major*), dandelion (*Taraxicum* agg.), spear thistle (*Cirsium arvense*), dock (*Rumex obtusifolius*) and knotgrass (*Polygonum aviculare*).



Plate 1: Looking across the heavily grazed grassland from the western side of the site.

Textile Arena

- 4.1.2 A single arena was present adjacent to stables with an artificial covering of textile materials (see Plate 2).



Plate 2: The arena had no botanical interest at all.

Gravel Track

- 4.1.3 A track linked throughout the site and predominantly had no botanical interest at all (see Plate 3). Towards the south of site some limited vegetation had become established (see Plate 4) including: locally frequent annual meadow grass, white clover, occasional lesser trefoil (*Trifolium dubium*), nettle (*Urtica dioica*), broad leaved plantain, knotgrass and scarlet pimpernel (*Anagallis arvensis*).



Plate 3: The entrance track had no botanical interest at all.



Plate 4: On the southern side of the site the gravel track had some low lying pioneering vegetation present.

Raised Beds

- 4.1.4 A small collection of raised beds were present on the western side of the site (see Plate 5). Deliberately planted agricultural species including pea and brassica species. Some common ruderal herbs and rough grasses also were present within these beds.



Plate 5: A view of the raised beds near the western boundary.

Buildings

- 4.1.5 There were a number of stables and sheds on site, as well as a static caravan (see Plate 6 and Plate 7).



Plate 6: There were a collection of stables present within the Manege.



Plate 7: The static caravan was present in the south-western corner of the site.

Hardstanding

- 4.1.6 Parts of the site were laid with concrete hardstanding that had no botanical interest at all (see Plate 8).



Plate 8: Hardstanding covered some parts of the ground adjacent to the stables/loose boxes.

Hedgerow

- 4.1.7 The western boundary comprised an intact native species poor hedgerow (see Plate 9). This was not considered to be classified as an 'Important Hedgerow' under the Hedgerow Regulations 1997. Woody species included: blackthorn (*Prunus spinosa*), hawthorn (*Crataegus monogyna*) and occasional ash (*Fraxinus excelsior*), pear (*Pyrus communis*), bramble (*Rubus fruticosus*) and dog rose (*Rosa canina*). Ground flora below this hedgerow included: false oat (*Arrhenatherum elatius*), cocksfoot (*Dactylis glomerata*), rough meadow grass, common reed (*Phragmites australis*), hedge bindweed (*Calystegia sepium*), cow parsley (*Anthriscus sylvestris*), hogweed (*Heracleum sphondylium*), dock, ground elder (*Aegopodium podagraria*), nettle, dandelion, nettle and herb Robert (*Geranium robertianum*).



Plate 9: A view of the western hedgerow looking north from the south west side.

4.2 Invasive Alien Species

- 4.2.1 No invasive species were recorded on this site.

4.3 Bats - Building Inspection

- 4.3.1 A close up inspection of all structures on site was carried out in search of signs of bat activity and/or potential roost features (see Plate 6 and Plate 8). The buildings on site comprised wooden sheds/stables. These were simple structures and it was possible to readily see the method of construction, with beams and uprights all visible both inside and out.
- 4.3.2 The roofs were variously made from single skin corrugated sheeting (See Plate 10). There were no gaps between the sheeting or around the edges which offered any bat roosting potential. End capping was inspected as this is typically an area where bats may roost. However, no one of the end capping on these stables had any gaps which were suitable for

bat roosting. Similarly, there were gaps behind the weather boarding which were inspected and found to be rather open free access into the sheds (see Plate 11).

- 4.3.3 The exterior of the stables had air gaps between the cladding and the stable doors were open. This would have permitted easy access to the interior for bats. The rather open nature of the stables may have reduced over all suitability somewhat as the interior would be prone to considerable thermal fluctuations each day, which makes them less suitable for bats which need to conserve energy in the roost(see Plate 12). There were no enclosed loft spaces present but the roofs were all in good condition and watertight.
- 4.3.4 A thorough search could find no crevices or potential areas to roost within any of the stable (see Plate 13). No signs of bats or bat activity (in the form of droppings, urine staining, prey remains) were present.
- 4.3.5 The static caravan in the south-western corner of site had no bat roosting potential either as it was completely sealed (see Plate 7). In addition, it was deemed to not be possible for bats to grip onto the external surfaces of the caravan, completely ruling out the possibility for bats to use this as a feature in any way. No signs of bat activity were seen anywhere near or within the buildings on site.
- 4.3.6 **In summary, the sheds, stables and caravan on site were considered to have no realistic bat roosting potential at all.**



Plate 10: The Stables had single-skin corrugated sheet roofs.



Plate 11: Gaps behind the weather boards were checked, but there were no signs of bats and they were relatively open and considered unsuitable for crevice dwelling bats.



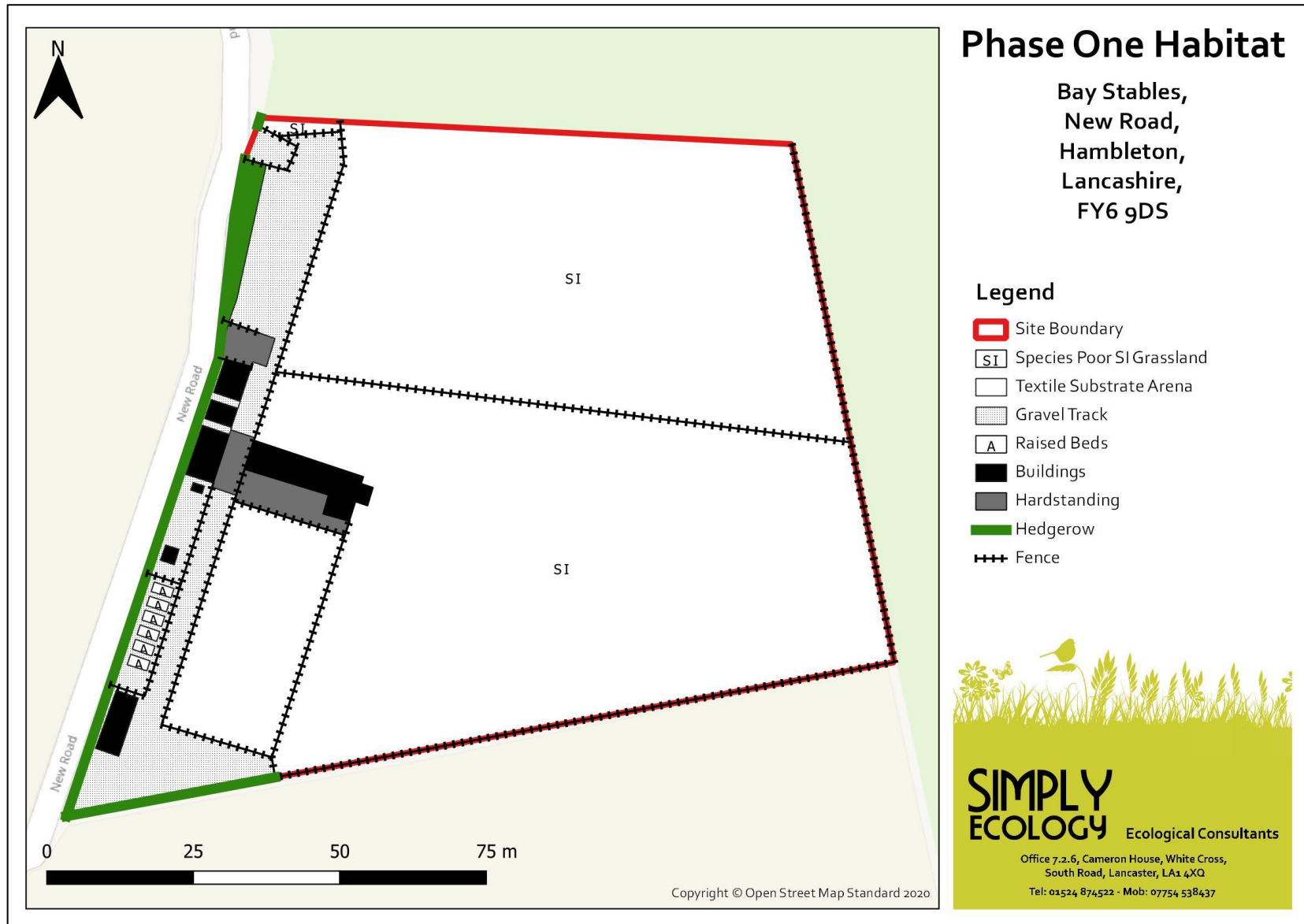
Plate 12: Doors were open and gaps in between wall boards offered bats potentially easy access into the buildings.



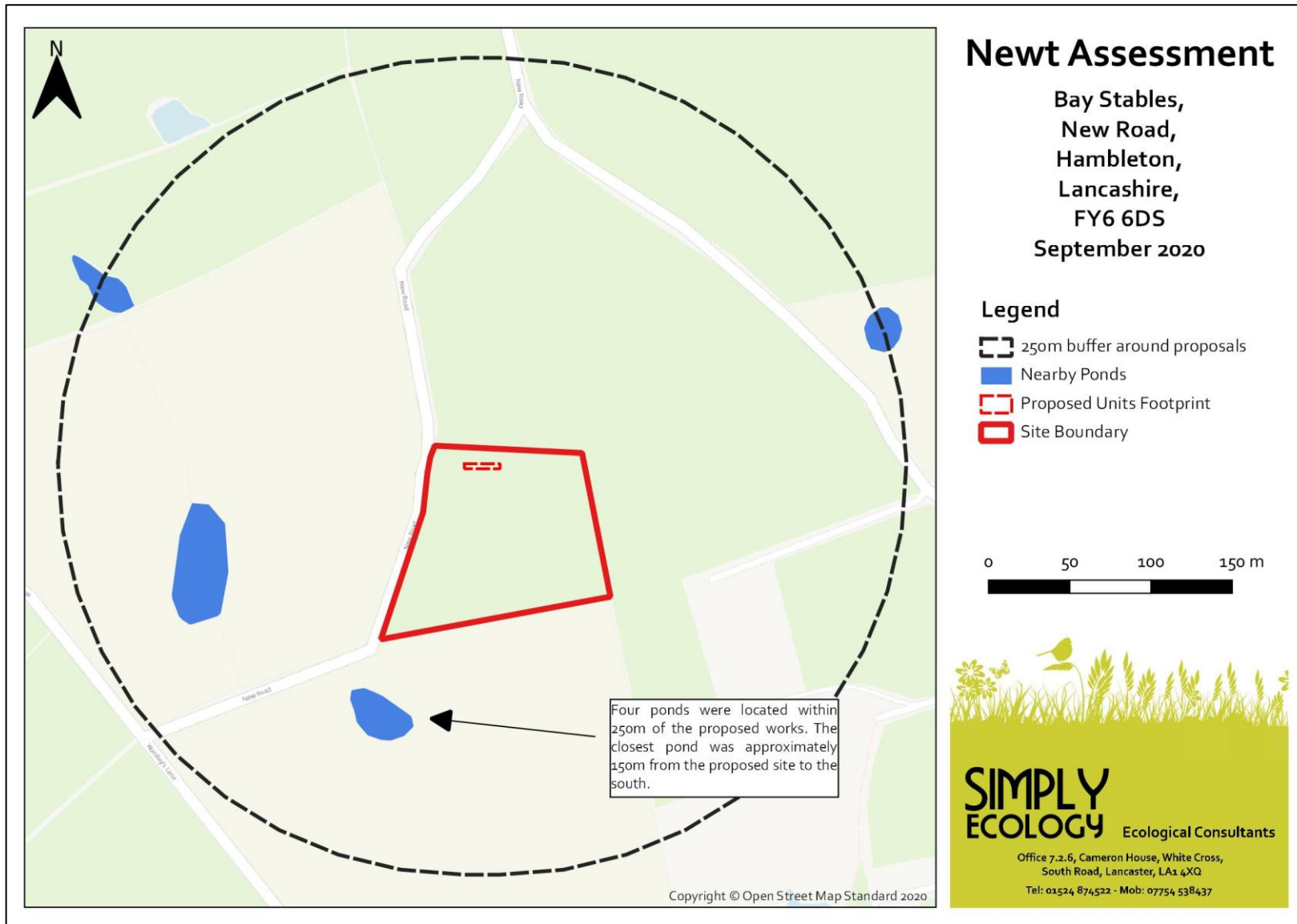
Plate 13: There were no features where bats could conceivably have roosted,. It was possible to search all areas within the sheds.

Great Crested Newts

- 4.3.7 There were no water bodies within the site and four were found within 250m of the site boundary (see Plan 5). The grassland around the site could conceivably support newts in their terrestrial phase, but the short sward grassland is not typical of the type of tussocky vegetation cover that newts require for foraging and shelter. As such it was viewed as sub-optimal habitat. Amphibians could potentially pass through the site, but it likely had very little realistic suitability for any ongoing amphibian presence.



Plan 4: Phase 1 survey map of the site.



Plan 5: Pond locations in relation to the proposed works area.

5.0 IMPACT ASSESSMENT

5.1 Nature Conservation Sites

- 5.1.1 The desk study revealed that the Wyre Estuary SSSI was located approximately 310m south west of site. The site was located within the impact risk zone as shown on Plan 3. The habitats on this improved agricultural site contrast to those present in the nearby SSSI. It is anticipated therefore that the small selection of holiday units to be constructed upon the existing species poor semi-improved pasture would likely have no impact upon the nearby SSSI.
- 5.1.2 Despite these findings however, the guidance provided on the MAGIC website for this particular site, (based on the location of the site in a relatively close impact risk zone – see ANNEX D & E), indicates that the "LPA should consult Natural England on Likely Risks From the Following":

"All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures."

- 5.1.3 No other nature conservation sites were identified in the surrounding 1km of the site.

5.2 Surrounding Priority Habitats

- 5.2.1 A small selection of BAP habitats were present within the surrounding 1km of site. This included the following: Coastal Saltmarsh, Mudflats, Coastal and Floodplain Grazing Marsh and Deciduous Woodland. None of these habitats are linked to the site and the small scale of the proposed works are not anticipated to result in any likely impact on nearby Priority Habitats.

5.3 Habitats on Site

- 5.3.1 The site comprised habitats of limited ecological value. The grassland had very little botanical interest and is a habitat that is widespread in the surrounding area. It was considered that there would be a 'Slight' loss of habitat valued at the 'Site level'. The habitat of greatest ecological value on site comprised the hedgerow on the western boundary. However, the proposed works are not anticipated to impact upon the hedgerow in any way.

5.4 Protected Species

Bats

- 5.4.1 The buildings on site were lacking any suitability for bats. As such, no impacts are considered likely to occur in this case.

Great Crested Newts

- 5.4.2 The short sward grassland habitat on the site was considered sub-optimal for amphibians. Great crested newts are known to use waterbodies and the terrestrial habitats locally (within 500m of a breeding pond, with core habitat typically within 50m). The risk of great crested

newts using the site was assessed using the Habitat Suitability Index and the Natural England GCN Licensing Risk Assessment Tool.

5.4.3 As can be seen from Table 1, the rapid risk assessment based upon the small size of the site and the distance to nearest pond (150m) concludes no likely impacts upon this species. Given the poor quality grassland habitat on or around the area where the works are proposed, (in agreement with the rapid risk assessment below), **it was the professional opinion of the ecologist that there would not be any likely impact at all upon GCN even if they are present within any nearby ponds.**

Table 1: GCN Impact Risk Assessment

| Component | Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom) | Notional offence probability score |
|--|---|------------------------------------|
| Great crested newt breeding pond(s) | No effect | 0 |
| Land within 100m of any breeding pond(s) | No effect | 0 |
| Land 100-250m from any breeding pond(s) | 0.001 - 0.01 ha lost or damaged | 0.005 |
| Land >250m from any breeding pond(s) | No effect | 0 |
| Individual great crested newts | No effect | 0 |
| | Maximum: | 0.005 |
| Rapid risk assessment result: | GREEN: OFFENCE HIGHLY UNLIKELY | |

Other Species

5.4.4 The footprint of the proposed development, as per Plan 2, is small, and will occur upon short sward permanent pasture. Our professional judgement is that there are no other anticipated protected species, or conservation priority species, which would be resident or frequenting the area that would be impacted as a result of this small scale development.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Summary of Findings

- 6.1.1 In August 2020, Simply Ecology Limited was commissioned by Graham Anthony Associates to undertake an Ecological Appraisal of land at Bay Stables, New Road, Hambleton, Lancashire, FY6 9DS (see Plan 1). The site comprised an area of horse grazed pasture and stables. This survey was conducted as part of a planning application for the construction of holiday units on the site (See Plan 2).
- 6.1.2 Habitats on site largely comprised species poor semi-improved grassland that was heavily grazed (see Plan 4). Boundary features comprised fence lines and the western site boundary comprised a species poor intact hedgerow, which was considered to be the feature of greatest ecological value on site.. As such, the hedgerow would remain intact and a small area of the low value grassland would be lost. This impact could be readily compensated for ensure overall enhancement of biodiversity on site.
- 6.1.3 In relation to protected species, the building inspection for bats revealed a lack of any potential suitability in any of the stables. Similarly, the poor grassland present was considered sub-optimal for amphibians and of a small scale and sufficient distance from any potential breeding ponds so that there was no realistic residual risk of any impact.
- 6.1.4 Recommendations with respect to nature conservation legislation and policy follow:

6.2 Nature Conservation Sites

- 6.2.1 There were no nature conservation sites associated with the site. No statutory protected sites were identified within the surrounding 1km and it was concluded that there would be no impact upon any such site in the wider area. Similarly, it was concluded that there would be no likely impact upon any nearby Biological Heritage Sites.

6.3 Habitats

- 6.3.1 The site itself was of relatively limited ecological value. However, there will be a 'negligible' loss of grassland which has 'site level' value. This habitat type is common and widespread in the area and the lasting ecological impact of such proposals will result in negligible ecological impacts. It is therefore anticipated that this could readily be compensated for by means of some small compensatory ecological measures.
- *It is recommended* that new trees should be introduced on site in order to add some ecological value for local wildlife. These features will easily compensate for a small loss of heavily grazed species poor pasture. Species should be native and should include fruit bearing trees (such as cherry, rowan, apple, plum) which would bring value for invertebrates and birds and complement the existing pear trees on site. **Reason:** This will ensure compliance with the Local Planning Authority's statutory duty to conserve and enhance biodiversity under The Natural Environment and Rural Communities Act 2006, as reflected in The National Planning Policy Framework and the Local Plan.

6.4 Species

Bats

6.4.1 The buildings on site had no suitability for bats. As such:

- *It is advised* that no Natural England licence is necessary in this instance as no impact upon any bat tree roost is predicted. This is due to the lack of any signs of current or historical use of the trees by bats on or within 50m. **Reason:** This will deliver compliance with: Section 9 (1 & 4) of The Wildlife & Countryside Act 1981 (as amended), Part 3 (43; 1 & 2) of The Conservation of Habitats and Species Regulations 2017 and Section 15 of The National Planning Policy Framework.

Great Crested Newts

6.4.2 The works were of a sufficiently small scale and great distance from the nearest ponds that no realistic impacts were considered likely.

- *It is advised* that no Natural England licence is necessary in this instance as no impact upon any great crested newts, or resting places of this species. This is due to the poor quality habitat on site, and the distance from the site in relation to the size of the development footprint. **Reason:** This will deliver compliance with: Section 9 (1 & 4) of The Wildlife & Countryside Act 1981 (as amended), Part 3 (43; 1 & 2) of The Conservation of Habitats and Species Regulations 2017 and Section 15 of The National Planning Policy Framework.

7.0 REFERENCES

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National Planning Policy Framework 2018:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/728643/Revised_NPPF_2018.pdf

Natural Environment and Rural Communities Act 2006:

http://www.opsi.gov.uk/acts/acts2006/ukpga_20060016_en_1

The Conservation of Habitats and Species Regulations 2017:

https://www.legislation.gov.uk/uksi/2017/1012/pdfs/uksi_20171012_en.pdf

Wildlife and Countryside Act 1981:

<http://www.legislation.gov.uk/ukpga/1981/69/contents>

ANNEX A: STATUTORY AND PLANNING CONTEXT

A.0.1 The client is advised that many species of British wildlife are legally protected. The following section provides a brief overview of the protection afforded to species commonly encountered during development. The Recommendations at the end of this report will advise as necessary, but it is also useful for the client to have an understanding of the legal protection as this helps to ensure that the law is complied with.

A.1 Badgers

A.1.1 Badgers are protected under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended) (WCA), and the Protection of Badgers Act 1992. It is illegal to:

- Kill, injure, take, possess or cruelly ill-treat a badger or to attempt to do so;
- Interfere with a badger sett by damaging or destroying it;
- Obstruct access to or any entrance of a badger sett;
- Disturb a badger when it is occupying a sett

A.1.2 A badger sett is “any structure or place that displays signs indicating current use by a badger”. Natural England, the Government’s statutory nature conservation body, classifies a sett as active if it has been occupied within the last 12 months.

A.1.3 Operations that might cause disturbance of an active sett entrance can be carried out under licence from Natural England. If any badgers are found during the course of the survey, this will be highlighted in this report.

A.2 Birds

A.2.1 All wild birds are protected against killing or injury under The WCA 1981 (as amended). This protection extends to bird’s nests during the breeding season, which makes it an offence to damage or destroy nests or eggs. Birds that are listed on Schedule 1 of the Act receive additional protection against intentional or reckless disturbance during the breeding season. This makes it an offence to disturb these species at or near to their nesting site.

A.3 European Protected Species (includes bats, otter, hazel dormouse, great crested newts, and others)

A.3.1 The client is advised that all bats and great crested newts are European Protected Species (EPS). These EPS are protected under European legislation that is implemented in England via The Conservation of Habitats and Species Regulations 2017 (Regulation 43). A full list of EPS is provided in Schedule 2 of the Regulations. In addition, these EPS also receive the protection of the Wildlife and Countryside Act 1981 (as amended) in respect of Section 9 (4)(b & c) and (5).

A.3.2 If both national and international legislation are taken together, the legislative protection afforded to these species makes it an offence to:

- Intentionally/ deliberately kill, disturb, injure or capture them.
- Intentionally or recklessly damage, destroy or obstruct access to any breeding site or resting place.
- Possess or control any live or dead specimen or anything derived from a European Protected Species.

A.3.3 If an activity is likely to result in any of the above offences, derogation from the legal protection can be issued in the form of a European Protected Species licence issued by Natural England. Licences for development purposes are issued under The Conservation of Habitats And Species Regulations (2017) and only allow what is permitted within the terms and conditions of the licence. If any EPS are found during the course of the survey, this will be highlighted in this report.

A.4 Protected Mammals and Reptiles (includes water vole, red squirrel, reptiles and others)

A.4.1 All native reptiles and a variety of British mammals also receive protection under The WCA 1981 (as amended). Schedule 5 of The WCA lists animals that are protected. The degree of protection varies. Water voles and red squirrel are examples of species with full protection. The Act makes it an offence to intentionally kill, injure, take, possess, or trade in any wild animal listed in Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places.

A.4.2 All native reptiles in the UK are protected. The commoner species such as grass snake, common lizard, slow worm and adder are protected only from unlawful killing and injuring. In practice this may require a reptile protection scheme before implementing a planning permission but no specific licence is required. Sand lizard and smooth snake listed as EPS (see A3.3 above).

A.4.4 If any protected species are found during the course of the survey, this will be highlighted in this report.

A.5 Non-native invasive species

A.5.1 A number of non-native plant species growing wild in the UK are listed on Schedule 9 of the WCA due to their invasive nature and the detrimental impact they can have on native habitats and wildlife. This legislation makes it an offence to plant or otherwise cause to grow in the wild any plant species which is included in Part II of Schedule 9.

A.5.2 This legislation should be considered during site clearance works which could lead to the spread of Schedule 9 listed plant species from the site if plant material is not properly handled and disposed of. Development proposals should also consider the removal of invasive species from areas of site that would otherwise remain unaffected by works in order to avoid the risk of these invasive plants spreading from the site in the future and enhance habitats within the site. This would in turn free up space for wildlife friendly planting, prioritising use of native species within planting schemes where appropriate.

A.6 Planning Considerations

A.6.1 When considering each planning application, the presence of protected species, such as those listed above, is a material consideration which must be fully considered by the Local Authority when granting planning permission. If a licence from Natural England is required, then prior to issuing any planning consent, the local planning authority will need to be satisfied that there is no reason why such a licence would not be issued. Therefore, in reaching the planning decision the local planning authority will need to have regard to the requirements of the Conservation of Habitats and Species Regulations 2017 (as amended). The three licensing tests given in the Regulations must be considered. In summary, these are that:

1. The development is required for the purpose of:
 - Preserving public health or public safety;

- For other imperative reasons of over-riding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;
 - For preventing serious damage to property.
2. There is no satisfactory alternative.
 3. The proposal will not be detrimental to the maintenance of the population of the species at a favourable conservation status.
- A.6.2 All necessary information would need to be provided to the planning authority as part of the planning application in order to address the above tests.
- A.6.3 The Natural Environment and Communities Act (NERC Act) 2006 extended the biodiversity duty set out in the Countryside and Rights of Way (CROW) Act to public bodies and statutory undertakers to ensure due regard to the conservation of biodiversity. The Duty is set out in Section 40 of the Act, and states that:
- "Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity"
- A.6.4 The Duty applies to all local authorities, community, parish and town councils, police, fire and health authorities and utility companies. Section 41 (S41) of this Act (the 'England Biodiversity List') also requires the Secretary of State to publish a list of habitats and species that are of principal importance for the conservation of biodiversity in England. This list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40(1) of the Act.
- A.6.5 Also, Local Authorities must follow the National Planning Policy Framework (NPPF) which provides guidance on the interpretation of the law in relation to wildlife issues and development. For each development proposal considered by the Local Planning Authority the NPPF states that the authority must aim to conserve and enhance biodiversity. If significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.

ANNEX B: IMPACT ASSESSMENT CRITERIA

Table 1: Valuing Ecological Features

| Level of Value | Examples |
|------------------|---|
| International | An internationally designated site or candidate site (SPA, pSPA, SAC, cSAC, pSAC, Ramsar site, Biogenetic Reserve). A viable area of a habitat type listed in Annex I of the Habitats Directive, or smaller areas of such habitat which are essential to maintain the viability of a larger whole. Any regularly occurring population of an internationally important species, which is threatened or rare in the UK, i.e. it is a UK Red Data Book species or listed as occurring in 15 or fewer 10km squares in the UK (Categories 1 and 2 in the UK BAP) or of uncertain conservation status or of global conservation concern in the UK BAP. A regularly occurring, nationally significant population of any internationally important species. |
| National | A nationally designated site (SSSI, ASSI, NNR, Marine Nature Reserve) or a discrete area, which meets the published selection criteria for national designation. A viable area of a priority habitat identified in the UK BAP, or of smaller areas of such habitat which are essential to maintain the viability of a larger whole. Any regularly occurring population of a nationally important species which is threatened or rare in the region or county (see local BAP). A regularly occurring, regionally or county significant number of a nationally important species. |
| Regional | Viable areas of key habitat identified in the Regional BAP or smaller areas of such habitat which are essential to maintain the viability of a larger whole. Viable areas of key habitat identified as being of Regional value in the appropriate Natural Area profile. Any regularly occurring population of a nationally important species which is not threatened or rare in the region. Any regularly occurring, locally significant population of a species listed as being nationally scarce which occurs in 16-100 10km squares in the UK or in a Regional BAP or relevant Natural Area on account of its regional rarity or localisation. A regularly occurring, locally significant number of a regionally important species. |
| County | Semi-natural ancient woodland greater than 0.25ha. County/Metropolitan sites and other sites which the designating authority has determined meet the published ecological selection criteria for designation, including Local Nature Reserves selected on County/metropolitan ecological criteria. A viable area of habitat identified in the County BAP. A regularly occurring, locally significant number of a County/Metropolitan 'red data book' or BAP species, designated on account of its regional rarity or localisation. A regularly occurring, locally significant number of a County/Metropolitan important species. |
| District/Borough | Semi-natural ancient woodland smaller than 0.25ha. Areas of habitat identified in a sub- County (District/Borough) BAP or in the relevant Natural Area profile. Sites/features that are scarce within the District/Borough or which appreciably enrich the District/Borough habitat resource. A diverse and/or ecologically valuable hedgerow network. A population of a species that is listed in a District/Borough BAP, because of its rarity in the locality or in the relevant Natural Area profile because of its regional rarity or localisation. A regularly occurring, locally significant number of a District/Borough important species during a critical phase of its life cycle. |
| Site | Areas of habitat or populations/communities of species considered to appreciably enrich the habitat resource within the context of the parish or neighbourhood, e.g. species-rich hedgerows. NB: Where species or habitats occur in more than one category, the highest value is applicable. |

Table 2: Impact Magnitude

| Impact Magnitude | Examples |
|------------------|---|
| Major | Loss of over 50% of a site feature, habitat or population. Adverse change to all of a site feature, habitat or population. For benefits, an impact equivalent in nature conservation terms to gain of over 50% of a site feature, habitat or population. |
| Moderate | Loss affecting 20-50% of a site feature, habitat or population. Adverse change to over 50% of a site feature, habitat or population. For benefits, an impact equivalent in nature conservation terms to a gain of 20-50% of a site feature, habitat or population. |
| Slight | Loss affecting 5-19% of a site feature, habitat or population. Adverse change to 20-50% of a site feature, habitat or population. For benefits, an impact equivalent in nature conservation terms to a gain of 5-19% of a site feature, habitat or population. |
| Negligible | Loss affecting up to 5% of a site feature, habitat or population. Adverse change to less than 20% of a site feature, habitat or population. For benefits, an impact equivalent in nature conservation terms to a gain of up to 5% of a site feature, habitat or population. |

ANNEX C: SSSI DESCRIPTION

| | | | |
|--|---|-------------------------------|--|
| | | File ref: | |
| County: | Lancashire | Site Name: | Wyre Estuary |
| District: | Wyre, Fylde | | |
| Status: | Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981, as amended. | | |
| Local Planning Authority: | Fylde Borough Council Wyre Borough Council | | |
| National Grid Reference: | SD 350440 | Area: | 1,488.03 (ha) 3,675.43 (ac) |
| Ordnance Survey Sheet 1:50 000 | 102 | 1:10 000 | SD 33 NE SD 34 NE SD 34 NW SD 34 SE SD 34 SW SD 35 SW |
| Date Notified (Under 1949 Act): | – | Date of Last Revision: | – |
| Date Notified (Under 1981 Act): | 27 January 1995 | Date of Last Revision: | – |
| Other Information: | | | |
| <ol style="list-style-type: none"> The site forms part of 'Morecambe Bay (including Wyre-Lune)' listed in 'A Nature Conservation Review', edited by D. A. Ratcliffe (1977), Cambridge University Press. The site is adjacent to the Lune Estuary Site of Special Scientific Interest and incorporates Barnaby Sands Marsh and Burrows Marsh SSSIs. The site is an integral part of the Morecambe Bay complex of estuaries and shore which collectively meet the criteria for inclusion within the Morecambe Bay Wetland of International Importance under the Ramsar Convention, and as a Special Protection Area under Article 4 of the European Community Directive 79/409/EEC on the Conservation of Wild Birds. | | | |
| Description and Reasons for Notification: | | | |
| <p>The Wyre Estuary, lying just south of Lune Estuary is an integral part of Morecambe Bay, one of the two largest areas of intertidal estuarine flats in Britain (the other being the Wash). The whole estuarine complex is of international significance for wintering wading birds and of national significance for wintering wildfowl. The Wyre in its own right is of national importance for wintering and passage black-tailed godwit, wintering turnstone and for wintering teal in times of hard weather. The Wyre Estuary, including those parts within Barnaby Sands Marsh and Burrows Marsh Sites of Special</p> | | | |

Scientific Interest, supports the largest area of ungrazed saltmarsh in North West England. The transitions from low to upper marsh are well developed and there are extensive transitions to freshwater swamp communities above high water mark.

The most extensive areas of saltmarsh are found on the east side of the estuary between Barnaby Sands and Staynall, on the west side north of Stannah and on the north side upstream of Shard Bridge. Much of the latter has recently developed on actively accreting mud.

The seaward edge of the saltmarsh is dominated by those species specialised to colonising bare mud and withstanding frequent tidal inundation – the glassworts *salicornia* spp., annual sea-blite *Suaeda maritima* and common saltmarsh-grass *Puccinellia maritima*. Common cord-grass *Spartina anglica* is abundant on some of the marshes but appears to be declining. Higher up the marshes there are extensive areas of saltmarsh communities characterised by grazing-sensitive species. The Wyre supports the largest area in Lancashire of saltmarsh dominated by sea-purslane *Halimione portulacoides* and also the largest area of a mixed community distinctive for the presence of common sea-lavender *Limonium vulgare*, sea plantain *Plantago maritima* and sea arrowgrass *Triglochin maritima*. The nationally scarce lax-flowered sea-lavender *Limonium humile* is also present. Most of the sea-purslane dominated saltmarsh is downstream of Shard Bridge. Upstream, especially on the north side, there are extensive areas dominated by sea aster *Aster tripolium*.

On the upper saltmarsh there is a mixture of communities with species typical of a less saline influence. Saltmarsh rush *Juncus gerardi*, sea rush *Juncus maritimus*, red fescue *Festuca rubra* and spear-leaved orache *Atriplex prostrata* are all present and, locally, there is long-bracted sedge *Carex extensa*. Of particular interest are the extensive transitions to brackish or freshwater habitats on the landward side. Here swamp is the dominant community with common reed *Phragmites australis* or sea club-rush *Scirpus maritimus*. In places the landward transition is to sea couch *Elymus pycnanthus*. Other transition species present include hemlock water-dropwort *Oenanthe crocata* and parsley water-dropwort *O. lachenalii*.

Ornithologically the Wyre Estuary is an integral part of the Morecambe Bay–Lune–Wyre system, the second most important intertidal area in Britain after the Wash for wintering and passage wading birds. The Wyre is nationally important in its own right for wintering and passage black-tailed godwit and wintering turnstone (numbers exceeding 1% of the British population). In spring and autumn the estuary regularly supports 200 black-tailed godwit and during the winter months about 100 feed and roost in the estuary. Peak numbers of turnstone feeding in the estuary have in recent years averaged at 640.

The Wyre is also known to be an important hard weather roost for teal. Large numbers of lapwing and golden plover use the estuary for roosting at low tide. Numbers of the former have in some years approached 1% of the UK population.

Movements of roosting and feeding birds within the Wyre and between this and other estuaries are complex with different parts of the estuary being important for birds at different stages of the tide. The major high tide roost in Armhill with smaller ones at Stannah, Burrows Marsh, Barnaby Sands and Knott End Skears. On spring tides birds are displaced from the smaller roosts to Armhill which, on occasions, can hold over one thousand birds. Along with black-tailed godwit, turnstone, lapwing and golden plover, other wading birds which regularly use the estuary include oystercatcher, redshank and dunlin. The oystercatchers and turnstones feed at the mouth of the estuary on the rocky skears at Rossall Point and Knott End. Golden plover and lapwing roost at low tide around the upstream of Shard Bridge, the former feeding on the Lune estuary to the north at high tide. Waders roosting on the Wyre may be using other parts of the Morecambe Bay complex at low tide.

ANNEX D: IMPACT RISK ZONES FOR SSSIS (2017)



**Natural England's
Impact Risk Zones for
Sites of Special Scientific Interest**
*(For use by Local Planning Authorities to assess
planning applications for likely impacts on
SSSIs/SACs/SPAs & Ramsar sites and determine when
to consult Natural England)*

User Guidance

- Version:** MAGIC v2.9
- Issue Date:** 04 September 2017
- Purpose:** To provide guidance on the interpretation and use of the *Impact Risk Zones for Sites of Special Scientific Interest* on the [Magic](#) website
- Enquiries:** For further information please email the Natural England Impact Risk Zones mailbox: neirzs@naturalengland.org.uk

www.gov.uk/natural-england

SSSI Impact Risk Zones User Guidance - MAGIC

Impact Risk Zones for Sites of Special Scientific Interest

Purpose of the Impact Risk Zones for SSSIs

As the government's conservation advisory body, Natural England has a number of statutory duties and general responsibilities in relation to SSSIs. These include providing advice to local planning authorities (LPAs) and developers on the potential impacts of development on SSSIs to ensure their protection and enhancement in line with the policies in the NPPF and development plans.

The Impact Risk Zones (IRZs) are a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts. The IRZs also cover the interest features and sensitivities of European sites, which are underpinned by the SSSI designation and "Compensation Sites", which have been secured as compensation for impacts on Natura 2000/Ramsar sites.

Local planning authorities (LPAs) have a duty to consult Natural England before granting planning permission on any development that is in or likely to affect a SSSI. The SSSI IRZs can be used by LPAs to consider whether a proposed development is likely to affect a SSSI and determine whether they will need to consult Natural England to seek advice on the nature of any potential SSSI impacts and how they might be avoided or mitigated. The IRZs do not alter or remove the requirements to consult Natural England on other natural environment impacts or other types of development proposal under the Town and Country Planning (Development Management Procedure) (England) Order 2010 (as amended) and other statutory requirements - see the gov.uk website for further information.

The SSSI IRZs can be used by developers, consultants and members of the public, who are preparing to submit a planning application. They will help them to consider whether a proposed development is likely to affect a SSSI and choose whether to seek pre-application advice from Natural England. This will allow any potential impacts to be taken into account within the planning application and so minimise the risk of delays at the formal planning stage. Further information on Natural England's pre-application Discretionary Advice Service (DAS) is available on the gov.uk website.

Access to the data and further information

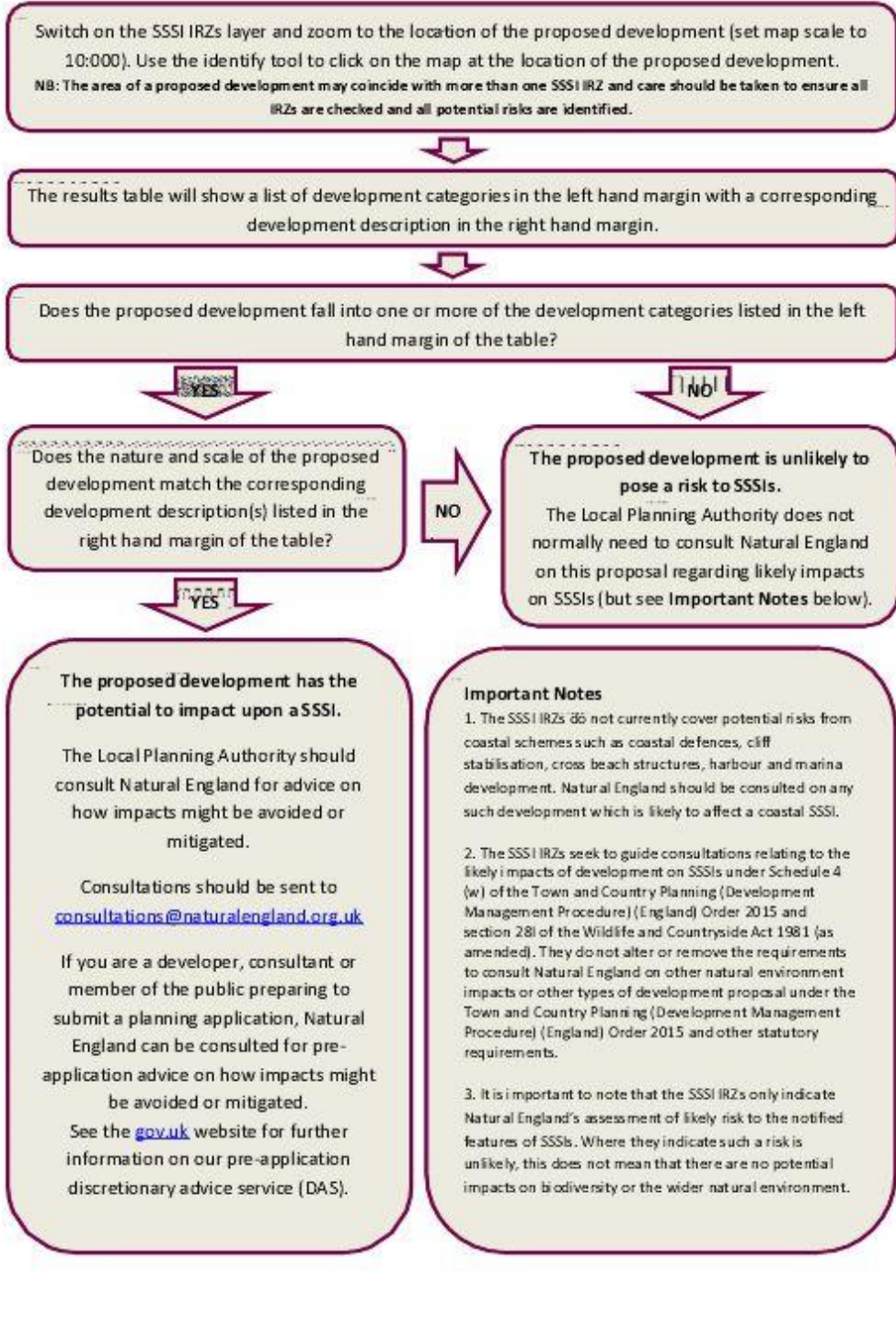
The SSSI IRZ Dataset can be downloaded from the [Natural England Open Data Geoportal](#) as an ESRI ArcMap Shapefile and used in combination with other spatial data in the users GIS. It is also available to view on [Magic](#). We have set up an Impact Risk Zones workspace on Huddle, a secure online collaboration and file sharing site, to allow us to share data, news and information about the SSSI IRZs with users. Members will be notified when an update has taken place and there is a discussion area where questions can be posted and answered.

If you would like to become a member of our Huddle Workspace, or require further information and/or advice on the SSSI IRZs please email the NE Impact Risk Zones mailbox: neirzs@naturalengland.org.uk.

Update of the SSSI Impact Risk Zone Dataset

The SSSI IRZ Dataset is updated regularly to reflect improvements in our evidence and understanding of the sensitivities and potential risks to SSSIs. Updates are undertaken every two months and users should ensure that they are always using the most up to date version of the dataset.

Step by step guide to using the SSSI IRZs Dataset



Questions and Answers

Purpose and Use

What are Natural England's SSSI IRZs?

The SSSI IRZs are a GIS tool/dataset. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

How does Natural England use the SSSI IRZs?

Natural England is a statutory consultee on development proposals that might impact on SSSIs. When a consultation is received, the SSSI IRZs are used to make a rapid initial assessment of the potential risks to SSSIs posed by development proposals. This allows Natural England to quickly determine which consultations are unlikely to pose risks and which require more detailed consideration.

How can Local Planning Authorities use the SSSI IRZs?

Local Planning Authorities (LPAs) have a duty to consult Natural England before granting planning permission on any development that is in or likely to affect a SSSI. The SSSI IRZs can be used by LPAs to consider whether a proposed development is likely to affect a SSSI and determine whether they will need to consult Natural England to seek advice on the nature of any potential SSSI impacts and how they might be avoided or mitigated. For a step-by-step guide to using the SSSI IRZs see the flow chart in [Appendix 1](#).

Do the SSSI IRZs reflect the interest features and sensitivities of European sites?

European sites are underpinned by the SSSI designation and their interest features and sensitivities are covered by the SSSI IRZs. Where the notified features of the European site and SSSI are different, the SSSI IRZs have been set so that they reflect both. The SSSI IRZs can therefore be used as part of a Habitats Regulations Assessment (HRA) to help determine whether there are likely to be significant effects from a particular development on the interest features of the European site. The SSSI IRZs also cover "Compensation Sites" which have been secured as compensation for impacts on Natura 2000/Ramsar sites. Each Compensation Site has been given the same IRZs as the Natura 2000/Ramsar site(s) it is providing compensation for.

Do the IRZs alter the arrangements to consult Natural England?

The IRZs seek to guide consultations relating to the likely impacts of development on SSSIs under Schedule 4 (w) of the Town and Country Planning (Development Management Procedure) (England) Order 2015 and section 28I of the Wildlife and Countryside Act 1981 (as amended). They do not alter or remove the requirements to consult Natural England on other natural environment impacts or other types of development proposal under the Town and Country Planning (Development Management Procedure) (England) Order 2015 and other statutory requirements.

For further information on when to consult Natural England on planning proposals see the [gov.uk](#) website.

All consultations should be sent to consultations@naturalengland.org.uk.

How can developers, consultants and members of the public use the SSSI IRZs?

The SSSI IRZs can be used by developers, consultants and members of the public who are preparing to submit a planning application. They will help them to consider whether a proposed development is likely to affect a SSSI and choose whether to seek pre-application advice from Natural England. This will allow any potential impacts to be taken into account within the planning application and so minimise the risk of delays at the formal planning stage.

For a step-by-step guide to using the SSSI IRZs see the flow chart in [Appendix 1](#).

Further information on Natural England's pre-application Discretionary Advice Service (DAS) is available on the gov.uk website.

What types of development are covered by the SSSI IRZs?

Potential impacts from most types of development requiring planning permission are covered by the SSSI IRZs. One important exception is any development proposal with the potential to impact on coastal processes. The SSSI IRZs do not currently cover potential risks from coastal schemes such as coastal defences, cliff stabilisation, cross beach structures, harbour and marina development. Natural England should be consulted on any coastal scheme which is likely to affect a coastal SSSI.

What does it mean when a development is indicated by the SSSI IRZs?

If the development descriptions in the SSSI IRZs at a chosen location match the nature and scale of a proposed development, this indicates the potential for impact and means that more detailed consideration is required. In this case, Natural England should be consulted for advice on any potential impacts on SSSIs and how these might be avoided or mitigated.

What does it mean when a development is not indicated by the SSSI IRZs?

If the development descriptions in the SSSI IRZs at a chosen location do not match the nature and scale of a proposed development, this signifies that the development, as proposed, is unlikely to pose a significant risk to the notified features of any SSSI(s) and normally no further consultation with Natural England regarding likely effects on SSSIs is required (see *Coastal Schemes* exception above).

When using the SSSI IRZs and interpreting the information they provide, it is important to note that they only indicate Natural England's assessment of likely risk to the notified features of SSSIs. Where they indicate such a risk is unlikely, this does not mean that there are no potential impacts on biodiversity or the wider natural environment.

Maintenance and Development**How often is the SSSI IRZ dataset updated?**

A new version of the dataset is uploaded onto [Magic](#) and the [Natural England Open Data Geoportal](#) every two months.

Do the SSSI IRZs reflect the site specific sensitivities of each SSSI?

Yes. The SSSI IRZs for each SSSI have been drawn to reflect the specific features for which the site is notified. Natural England's local team staff have reviewed the SSSI IRZs and where necessary the IRZs have been varied to reflect locally specific site sensitivities. Ensuring that the SSSI IRZs continue to reflect our understanding of locally specific site sensitivities is an ongoing process which will depend on the input of Natural England's area teams and our local partners.

Do the SSSI IRZs take into account local circumstances?

Yes. Natural England's local team staff have reviewed the SSSI IRZs and where necessary the IRZs have been varied to reflect specific local circumstances such as known water quality issues or particular development pressures. Ensuring that the SSSI IRZs continue to reflect local circumstances is an ongoing process which will depend on the input of Natural England's area teams and our local partners.

How are the SSSI IRZs kept up to date with emerging evidence and improvements of our understanding of SSSI sensitivities?

Natural England's specialists continue to review the evidence and advise the IRZ project on changes required to ensure the IRZs reflect our current understanding of SSSI sensitivities. We also welcome input from Natural England's area teams and their local partners, and encourage them to contribute to the update and development of SSSI IRZs in their area.

What can I do if I think the IRZs of a particular SSSI do not accurately reflect the sensitivities of the site?

Ensuring that the SSSI IRZs continue to reflect our current understanding of specific site sensitivities is an ongoing process which will depend on the input of Natural England's specialists, area teams and our local partners. If you think the IRZs for one or more SSSIs need to be reviewed and/or updated you should either speak to the area team IRZ lead or contact the IRZ project team directly through the Impact Risk Zones mailbox: neirzs@naturalengland.org.uk.

What can I do if I think that the potential impacts of a particular type of development type are not adequately reflected in the SSSI IRZs?

Ensuring that the SSSI IRZs continue to reflect our current understanding of the potential risks posed to SSSIs by different types of development is an ongoing process which will depend on the input of Natural England's specialists, area teams and our local partners. If you think there is a significant risk which is not reflected in the SSSI IRZs you should contact the IRZ project team directly through the Impact Risk Zones mailbox: neirzs@naturalengland.org.uk.

Attribute Data for SSSI Impact Risk Zones

The table below illustrates the structure of the attribute data table and sets out the development categories and descriptions used in the dataset. It also explains why Natural England is concerned about the different types of development reflected in the SSSI IRZs.

| Development Category | GIS Attribute Field Name | Example Description: the nature and scale of development proposals at the given location which have the potential to impact on an SSSI. Where a proposal meets the description consult NE for further advice. | Why is Natural England concerned about this type of development? |
|-----------------------|--------------------------|---|---|
| All Consultations | AllConsult | ALL PLANNING APPLICATIONS - Text may be qualified to exclude household applications or applications in existing settlements/urban areas that do not impact on greenspace, farmland or semi natural habitats or landscape features such as trees, hedged, streams, rural buildings/structures. | All developments within or in very close proximity to SSSIs present a range of risks of direct impacts. Extending further from the sites, potential impacts on Great Crested Newts (GCN), bats and birds are also reflected in this category, as they travel several kilometres from SSSIs to breed, roost, forage etc. Proposed developments outside or on the edge of existing settlements/urban areas can result in increased light pollution, loss or fragmentation of greenspace and loss or disturbance of functional habitat, all of which can affect these species. |
| Infrastructure | Infrastruc | Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals - Description may vary to include/exclude one or all of the above. | Pipelines, pylons and overhead cables can create a collision risk for birds and the footprint of the construction can affect local water supplies, which the SSSIs depend on. An increase in road traffic as a result of new or extended roads can cause local air pollution impacts and significant transport infrastructure projects can have impacts on water supply mechanisms, especially by introducing new drainage. New or extended aviation proposals can cause disturbance to birds, as well as collision with birds. Increased air traffic also has the potential for significant air pollution. |
| Wind & Solar Energy | WindSolar | Solar schemes with a footprint >0.5ha, all wind turbines - Description may vary to include/exclude one of the above. | Wind turbines can cause collision impacts and disturbance for birds. Solar schemes can impact on functional land outside SSSIs which birds depend on for feeding. |
| Minerals, Oil and Gas | MinOilGas | Planning applications for quarries – including new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. - Text may be qualified to exclude applications in existing settlements/urban areas that do not impact on greenspace, farmland or semi natural habitats. | These types of development often involve water abstraction, which can affect local water supplies that designated sites depend on. Waste drilling fluids that are returned to the surface may contain gases and other contaminants, which may be treated and discharged either to the ground to filter away from the site, or into a nearby watercourse. If the treated water flows towards a SSSI, it has the potential to impact on water quality sensitive features. Site activities and spoil generation can create dust or particles, which can physically smother leaves or be toxic to habitats and species on SSSIs. Flaring may give rise to local elevated levels of particulates, local ozone formation and NOx emissions. The development footprint and site activities can result in loss or fragmentation of greenspace and loss or disturbance to functional habitat, which birds depend on for feeding. Vibration from drilling can affect geological features. |
| Rural Non Residential | RuralNonRe | Any non-residential development outside of existing urban areas where net additional gross internal floorspace following development is 30m² or more. - Description may vary to specify different area thresholds. | Rural non-residential developments can impact on water quality, cause disturbance to birds and impact on functional land outside SSSIs, which they depend on for feeding. |
| Residential | Residentia | Any residential developments with a total net gain in residential units - Description may vary to specify thresholds for numbers of residential units. | New residential developments can impact water supply mechanisms, water quality and functional land outside SSSIs, which birds depend on for feeding. New houses also mean more people, which can increase disturbance to birds, and put more recreational pressure on sensitive sites. |
| Rural Residential | RuralResid | Any residential developments outside of existing settlements/urban areas with a total net gain in residential units - Description may vary to specify thresholds for numbers of residential units. | Rural housing developments can impact on catchments of water dependent and water quality sensitive SSSIs and on functional land outside site boundaries which SSSI birds depend on for feeding. New houses also mean more people, which can increase disturbance to birds, and put more recreational pressure on sensitive sites. |
| Air Pollution | AirPolluti | Any development that could cause AIR POLLUTION or DUST either in its construction or operation (incl: industrial/commercial processes and agricultural developments such as pig & poultry units, manure/slurry stores) - Description may vary to include/exclude one or all of the above. | Emissions from many different types of development can cause air pollution and/or dust affecting the habitats and species on SSSIs. Dust or particles can fall onto plants and physically smother the leaves, affecting photosynthesis, respiration, transpiration and leaf temperature. There may also be toxicity issues (caused by heavy metals, particles) and potential changes in pH (particularly if the dust is alkaline (e.g. cement dust)). Lichens can be directly affected by the dust (shading, chemical effects) or by changes in bark chemistry. |
| Combustion | Combustion | All general combustion processes. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/combustion - Description may vary to specify thresholds for energy input. | Emissions from combustion can cause air pollution affecting the habitats and species on SSSIs. More than 500m away from a SSSI, only combustion processes over a certain minimum size are likely to have an impact. A very large project and could cause air pollution on SSSIs up to 10km away. |
| Waste | Waste | Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management - Description may vary to specify particular type of waste proposal. | Landfill and waste treatment can cause air pollution and affect local water supplies, which designated sites depend on. Landfill sites attract large numbers of gulls which can impact on birds (Predation). An MBWT plant can generate significant amounts of ammonia. At high concentrations ammonia is toxic to vegetation; it also deposits to ecosystems and causes nitrogen enrichment and acidification of soils and freshwaters. |
| Composting | Compost | Any composting proposal. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management - Description may vary to specify thresholds for throughput in tonnes. | Emissions of ammonia from composting units can make a significant contribution to nitrogen deposition near to a sensitive site and cause severe localised impacts on semi-natural habitats as well as contributing to regional nitrogen deposition. More than 500m away from a SSSI, the amount of material composted needs to be over a certain amount to be likely to have an impact. |
| Discharges | Discharge | Any discharge of water or liquid waste that is discharged to ground (i.e. to seep away) or to surface water, such as a beck or stream (NB This does not include discharges to mains sewer which are unlikely to pose a risk at this location) - Description may vary to specify volume thresholds for discharges or to include discharges to main sewer. | Most foul water is removed from a development site by a mains sewer. Where this is not the case, foul water is usually treated on site and then discharged either to ground to filter away from the site, or into a nearby watercourse. If the treated water flows towards a SSSI, it has the potential to impact on water quality sensitive features. |
| Water Supply | Water_Sply | Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1000m² or any development needing its own water supply (eg remote rural housing) - Description may vary to include/exclude one of the above. | Large non-residential developments can have an impact on water supply mechanisms to SSSIs and rural housing developments, especially remote ones, can need their own water supply, such as an abstraction borehole or spring, which can affect water dependent SSSIs. |
| NOTES | NOTES | This field will be populated where there is additional planning policy/guidance that planners/developers need to be aware of. It does not alter or remove the requirement to consult NE when other IRZs indicate consultation is necessary. | |

ANNEX E: SSSI IMPACT RISK ZONES IN RELATION TO SITE

SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW?

2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:

All Planning Applications

All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures.

Infrastructure

Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.

Wind & Solar Energy

Solar schemes with footprint > 0.5ha, all wind turbines.

Minerals, Oil & Gas

Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.

Rural Non Residential

Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha.

Residential

Residential development of 10 units or more.

Rural Residential

Any residential developments outside of existing settlements/urban areas with a total net gain in residential units.

Air Pollution

Any development that could cause AIR POLLUTION (incl: industrial/commercial processes, livestock & poultry units, slurry lagoons/manure stores).

Combustion

All general combustion processes. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.

Waste

Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management.

Composting

Any composting proposal. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.

Discharges

Any discharge of water or liquid waste that is discharged to ground (ie to seep away) or to surface water, such as a beck or stream (NB this does not include discharges to mains sewer which are unlikely to pose a risk at this location).

Water Supply

Notes 1

New residential developments in this area should consider recreational disturbance impacts on the coastal designated sites. Please consider this issue in the HRA screening.

Notes 2

GUIDANCE - How to use the Impact Risk Zones

[/Metadata_for_magic/SSSI IRZ User Guidance MAGIC.pdf](#)