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## Ecological Site Inspection;

### High Leys SR - NY 05714 19409.

#### Description of Works:

Taken from 'MEICA Env Planning Requirements' spreadsheet, provided by Glenn Entwistle via email on 02/02/2021;

Our Ref. No.: ADVANCE20PEA039  
Date: 03 May 2021  
Your Ref.: PO 70111549

| Scope - Civil  | Scope - MEICA   |
|--|---|
| Excavation and prep; chemical slab; delivery area (interceptor, pipework and valves); ducts; footpath; | Chemical dosing unit; Shower; Control Panel; Dosing Lines; Cabling; Telemetry Installation; |

In order to complete this work, the following site set-up will be required;

- Ecotoon Unit Anti Vandal;
- Drying Unit;
- Messroom Unit;
- Toilet Unit;
- Stores Shipping Container;
- Temp Hardcore for access road/hardstanding;
- 12 yard skip;
- Camwatch Mobile CCTV tower;

There is sufficient room within the existing development site boundary to accommodate this and the works compound will therefore be located within the existing development site boundary.

#### Background

The High Leys SR site was subject to a full Ecological Scoping Survey in 2018 (See - 'Ecological Scoping Survey; Land at High Leys, Pasture Road, Rowrah, Cumbria, CA26 3XN: 2018', Ref. No. JNB18SCO001.2 by Hesketh Ecology) immediately prior to commencement of construction so as to inform the construction site management plan.

Hesketh Ecology have been employed on the site since that time to oversee works and ensure compliance with the site management plan and conditions imposed on its construction as part of the West Cumbria Supply Project. Hesketh Ecology have conducted a minimum of one visit per week since November 2018 and continue to conduct weekly (minimum) site visits.

This brief report relates to a proposal for some minor Mechanical, Electrical, Instrumentation, Control and Automation (MEICA) works and has been informed by a desk based investigation and site visit in April 2020 and by a further dedicated site visit on 08/04/2021.

**Hesketh Ecology.**

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**Designated Sites:**

Desk based search using Natural England's MAGIC website (<http://www.magic.gov.uk>), conducted on 09/04/2020 and through Cumbria Biodiversity Data Centre (CBDC), conducted on 29/04/2018.

| Designation Level | Designated Sites within 2km of NY 05714 19409                                       | Connectivity?                            | Predicted Impacts after mitigation |
|-------------------|---|--|------------------------------------|
| European          | River Derwent and Bassenthwaite Lake Special Area of Conservation (SAC) - 1.1km NE  | None (see below for further information) | None                               |
| Domestic          | River Derwent and Tributaries Site of Special Scientific Interest (SSSI) - 1.1km NE | None (see below for further information) | None                               |
|                   | High Leys Site of Special Scientific Interest (SSSI) - 1.1km SE                     | None                                     | None                               |
| Local             | Low Leys Meadow (1km NE)  | None                                     | None                               |
|                   | Arlecdon Church Field (1km NW)  | None                                     | None                               |
|                   | Kelton Head Quarry LGS (1.1km SE)   | None                                     | None                               |
|                   | High Leys Meadow CWS (1.1km S)  | None                                     | None                               |
|                   | Rowrah Hall Quarry (1.2km S)  | None                                     | None                               |
|                   | Stockhow Hall Quarry CWS (1.9km SE)   | None                                     | None                               |
|                   | Stockhowhall Quarry LGS (1.9km SE)  | None                                     | None                               |
|                   | High Park (nr Alecdon) [sic.] CWS (1.9km NW)  | None                                     | None                               |
|                   | Windergill Mine, Winder, Lamplugh LGS (2km SW)                                      | None                                     | None                               |

**Species:**

Data search commissioned from Cumbria Biodiversity Data Centre (CBDC) for all records of rare, scarce, protected or invasive non-native species within a 2km radius of Nat. grid Ref. NY 05714 19409, conducted on 29/04/2018.

| Taxon Group   | Number of Historic Records | Number of Species |
|---|----------------------------|-------------------|
| Fungus  | 3                          | 1                 |
| Moss  | 0                          | 0                 |
| Conifer   | 1                          | 1                 |
| Flowering Plant   | 14                         | 5                 |
| Mollusc   | 0                          | 0                 |
| Millipede   | 0                          | 0                 |
| Crustacean  | 0                          | 0                 |
| Spider  | 0                          | 0                 |
| Insect  | 5                          | 4                 |
| Cartilagenous fish  | 0                          | 0                 |
| Jawless Fish  | 0                          | 0                 |
| Bony Fish   | 8                          | 1                 |
| Amphibian   | 12                         | 3                 |
| Reptile   | 10                         | 2                 |
| Bird  | 1888                       | 99                |
| Marine Mammal   | 0                          | 0                 |
| Terrestrial Mammal<br>(including 'unidentified<br>bat species' records) | 85                         | 12                |
| <b>TOTAL</b>  | <b>2026</b>                | <b>128</b>        |

**Habitat Description:**

High Leys is a mid-construction Service Reservoir. The site was fully surveyed by Hesketh Ecology in May 2018, prior to works commencing on site. At that time the site was found to consist of improved grassland and marshy grassland enclosed within stock fence and fragmented hedgerows, with loose connectivity to the River Derwent and Bassenthwaite Lake SAC / River Derwent and Tributaries SSSI via Hole Gill (and Colliergate Beck) which flows along the southern boundary.

As the site is currently an active construction site, much of the ground within the site boundary is currently bare ground. The vegetation structure within vegetated ground has increased significantly since the cessation of grazing, but species composition has not altered. The existing development site boundary (which consists of bare ground) is segregated from vegetated ground within the site boundary and the watercourse beyond by a recently completed pipeline easement which includes pre- and post- construction drainage, allowing control of any site run-off leaving the construction area.

Site wide measures are therefore already in place to mitigate any potential impacts to the River Derwent SAC / SSSI as a result of surface run-off mobilising silt towards watercourses adjacent to the site. This will be unaffected by the proposed MIECA works but will ensure there is no direct connectivity between this piece of work and the River Derwent SAC / SSSI

#### **Protected, Priority and Invasive non-native Species:**

##### Bats:

A total of 2 historic record of bats have been identified from within 2km of the site. The species concerned are unconfirmed pipistrelle sp. bats (*Pipistrellus sp.*). These historic records appear to be duplicates as both relate to the same location and date. The record is of a maternity roost containing 50 individuals in Asby (c.1.6km from the site).

All built structures on site are effectively mid-construction. None of these are considered to offer any potential for bats to roost. Temporary structures do exist on site, including site offices and stores. None of these are considered to offer any potential for bats to roost. No large mature trees exist on site.

**The risk of bats being affected by the works is considered to be 'nil'.**

##### Amphibians:

A total of 12 historic records of amphibian species, but including no historic records of great crested newts (*Triturus cristatus*), have been identified within 2km of the site.

No ponds or other bodies of open standing water exists anywhere within 100m of the site boundary. **The risk of great crested newts being affected by the works is considered to be 'nil'.**

##### Otter:

A total of 4 historic records of otter (*Lutra lutra*) have been identified from within 2km of the site in the CBDC database. These historic records come from Colliergate Beck and Dubb Beck.

Otter have been recorded on site by Hesketh Ecology during routine ECoW visits on only 2 occasions since May 2018. These records have not yet been submitted to CBDC and therefore do not appear on the database. On both occasions otter presence was confirmed by footprints in soft ground only and tracks suggested this was an adult individual (probably female) moving through the site, with no evidence of any more significant usage (such as lying-up or hunting).

**The risk of otters being affected by the works is 'negligible'.**

##### Badger:

A total of 2 historic records of badger (*Meles meles*) have been identified within 2km of the site. Of these records, neither relate to setts or occupied holes. The closest field record is c.0.8km from the site.

Badger have not been recorded on site by Hesketh Ecology during routine ECoW visits since May 2018.

**The risk of badgers being affected by the works is considered to be 'nil'.**

Reptiles:

A total of 10 historic record of reptiles have been identified within 2km of the site. The species previously recorded in the area are common lizard (*Zootoca vivipara*) and adder (*Vipera berus*). These historic records comes from 1.8km from the site boundary. The vegetated ground within the site boundary currently appears superficially suitable for common lizards but this is a relatively recent development and common lizards, nor any other reptile species, occurs on site.

**The risk of reptiles being affected by works is considered to be 'nil'.**

Birds:

A total of 1888 historic records of birds, relating to 99 species have been identified from within 2km of the site. The majority of species recorded are identified as either possible, probable or confirmed as breeding. The precise location of bird records, specifically nest sites, is rarely provided in historic data.

As an operational construction site consisting primarily of bare ground, opportunities for breeding birds are limited. Disturbance is high in and around all areas (with the exception of the remaining marshy grassland adjacent Hole Gill on the southern boundary).

The proposed works will occur within the existing development footprint, **the risk of breeding birds being affected by works within the site is considered to be 'negligible'.**

Red Squirrels:

A total of 44 historic records of red squirrel (*Sciurus vulgaris*) have been identified from within 2km of the site. The closest historic record of red squirrels to the site is 0.7km, but red squirrels have been recorded throughout the wider area in suitable habitat.

During routine ECoW site visits since 2018, Hesketh Ecology have never recorded red squirrels on site. A small population of red squirrels uses woodland lining Hole Gill at the southern end of Asby Banks.

**The risk of red squirrels being affected by the work is 'nil'.**

'Other Mammals':

A total of 28 historic record of 'other mammals', relating to 8 species, have been identified from within 2km of the site. These are hedgehog (*Erinaceus europaeus*), water shrew (*Neomys fodiens*), common shrew (*Sorex araneus*), polecat (*Mustela putorius*), stoat (*Mustela erminea*), weasel (*Mustela nivalis*), roe deer (*Capreolus capreolus*), brown hare (*Lepus europaeus*).

Moles (*Talpa europaea*) occur within the wider site boundary but not within the active construction area. **The risk of 'other mammals' being affected by the work is 'negligible'.**

Invasive Non-Native Species:

A total of 2 invasive non-native species have been previously recorded within 2km of the site. These are Japanese knotweed (*Fallopia japonica*) and Himalayan balsam (*Impatiens glandulifera*) which have been recorded no closer than 1.2km from the site boundary. No historic records of invasive non-native species come from the site itself.

**No invasive non-native species occur on site. The risk of spreading an invasive non-native species is 'nil'.**

**Conclusion:**

Based on a desk based investigation, pre-existing knowledge of the site - and analysis of historic biological records from within 2km of the site, it is concluded that the risks to designated sites and protected / priority species are 'nil' / 'negligible' only.

No further survey effort is recommended and no mitigation measures are necessary.

**Sam Griffin BSc. ACIEEM.**