2179

TACP

Development of Plot C4, Wrexham Industrial Estate, Wrexham

Ecological Method Statement

May 2015

Welsh Government

DEVELOPMENT OF PLOT C4, WREXHAM INDUSTRIAL ESTATE, WREXHAM

ECOLOGICAL METHOD STATEMENT

MAY 2015

TACP
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CARDIFF
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Project Number: **2179**
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DEVELOPMENT OF PLOT C4
ECOLOGICAL METHOD STATEMENT MAY 2015

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DEVELOPMENT OF PLOT C4
ECOLOGICAL METHOD STATEMENT MAY 2015

A Introduction

This Ecological Method Statement has been produced following completion of an ecological assessment and subsequent Great Crested Newt (GCN) European Protected Species (EPS) licence submission in relation to future development works on Plot C4 within the Wrexham Industrial Estate. Site visits were carried out in May 2013 to survey the site, update previous surveys carried out in relation to other developments and the current ecological value of the site determined based on the results of these surveys. Following this a Great Crested Newt EPS licence was obtained from Natural Resources Wales (NRW) in order to undertake the necessary mitigation and translocation works and permit the construction works to proceed. This management plan has been produced to ensure that the development is sustainable and protects the ecological and nature conservation value of the site and the surrounding area, including the requirements of the GCN EPS licence.

B Background

The site is located on the north-western side of Abenbury Way, to the north-west of the existing Wrexham Industrial Estate area, in between Abenbury Way and Erlas Lane, as shown in the Planting Proposals Plan – 2179/001.

The development plot comprises of a variety of habitats including semi-improved grassland, broad-leaved semi-natural woodland along the northern and southern site boundaries, dense/continuous scrub extending across the southern area of the site, and a watercourse located within the woodland to the south of the site.

No statutorily designated nature conservation sites have been identified within 1 kilometre of the survey area. The Erlas Wood (Wrexham Industrial Estate) Wildlife Site is located approximately 370m to the south-east of the survey area and the Big Wood Wildlife Site is located approximately 530m to the south-west of the site.

There are two designated sites that include GCN as part of their designatory features within 10km of the scheme as detailed below:

- Johnstown Newt Sites SAC – 7km
- Stryt Las and Hafod SSSI- 7km

C Baseline Information

A desk study was undertaken including a Cofnod records search commissioned for species and designated sites within 1km of the site, which highlighted a number of species of nature conservation importance in the area. The relevant legislation concerning the species' highlighted by the desktop study are detailed within the Ecological Assessment Report June 2013 (J.W Ecological Ltd).

The site surveys did not record any habitats of regional or national importance however some of the habitats present were noted to have county and local value under the Natural Environment and Rural Communities (NERC) Act 2006. Some of the habitats present were also noted to have potential for the presence of protected species. Site surveys recorded a small number of the species of nature conservation importance including bats, badger, breeding birds, reptiles and amphibians including Great Crested Newt. Water vole potential

was considered to be sub-optimal and their presence was not confirmed however it was noted that this species should be taken into consideration if works were to be undertaken within 8m of the watercourse to the southern site boundary. The relevant legislation concerning these features is summarised below.

Bats are European Protected species listed on Annex IV of the Habitats Directive 1992 which is transposed into UK law by the Conservation (Natural Habitats &c) Regulations 1994 or "Habitats Regulations" and consolidated within The Conservation of Habitats and Species Regulations 2010. Certain bat species such as Lesser Horseshoe Bats (Rhinolophus hipposideros) are also given greater levels of protection through European Law through being listed on Annex II of the Habitats Directive. Bats are also protected through Schedules 5 and 6 of the Wildlife and Countryside Act 1981 (as amended). A number of species are listed as Species of Principal Importance for Conservation of Biological Diversity in Wales under Section 42 of the Natural Environment and Rural Communities (NERC) Act 2006. Certain of the species are also Priority Biodiversity Action Plan (BAP) Species on the UK BAP and are included in the Wrexham Local BAP.

Badgers (Meles meles) are afforded full UK protection under the Protection of Badgers Act 1992 which protects both the individual animals and their setts. However habitats used for any other purpose are not afforded any form of protection under this or other legislation. This species is also listed on Schedule 6 of the Wildlife and Countryside Act 1981 (as amended) which outlaws certain methods of taking and killing when this is necessary.

A number of **bird** species are likely to be found in the area given the habitats highlighted by the desk study although there were no records provided on the NBN Gateway database. All bird species including their eggs and nests are protected under the WCA 1981 to varying degrees. Further protection is afforded to those listed on Schedule 1 of this Act and through other legislation.

There were a number of records for **reptiles**, which are protected against killing, injuring and sale under U.K. legislation through their inclusion in Appendix III of the Bern Convention (1979), Schedule 5 of the WCA 1981 (as amended) and the NERC Act 2006 and are included in the Wrexham Local BAP.

All **amphibians** are protected under Schedule 5 of the WCA 1981 (as amended) and are included in the Carmarthenshire Local BAP. This means that it is an offence to sell frogs, toads or newts collected in the wild without a licence. Common Toad (Bufo bufo) is also listed as a Species of Principal Importance for Conservation of Biological Diversity in Wales under Section 42 of the NERC Act 2006, as a UK BAP Priority Species.

The **Great Crested Newt** (Triturus cristatus) is listed on Annex II and Annex IV of the Habitats Directive 1992 which is transposed into UK law by the Conservation (Natural Habitats &c) Regulations 1994 or "Habitats Regulations". This species is also listed in Schedule 5 of the WCA 1981, as amended by the Countryside and Rights of Way Act 2000. Great Crested Newts are listed as a UK BAP Priority and are also listed as a Species of Principal Importance for Conservation of Biological Diversity in Wales under Section 42 of NERC Act 2006.

The **Water Vole** (Arvicola amphibius) has been afforded full protected under the WCA 1981 (as amended) in Wales since August 2008. This species is also listed as a Species of Principal Importance for Conservation of Biological Diversity in Wales under Section 42 of NERC 2006 and is also a UK BAP Priority Species.

D Method Statements

The Ecological Assessment Report and the GCN EPS licence identified a number of mitigation measures which would conserve and enhance the ecological and nature conservation value of the site. These measures are detailed within the method statements below.

D1 Aquatic Habitats

Within the proposed mitigation area to the north of the development site, four new ponds have been created each with an approximate surface area between 100-150m^2 to a depth of approximately 1.0m. Each pond has mixed sloped and stepped sides with shallow margins that have been left to naturally recolonize. The sloping sides will provide suitable access/egress for amphibians including GCN and Grass Snake which are known to be in the area.

The creation of these four ponds introduces a new link and opportunity to the existing population within the Wrexham Industrial Estate area, as well as strengthening the link to the ponds to the east of the proposed development (as detailed within the GCN EPS licence and ARC Modelling Report, Feb 2014).

D2 Species Rich Grassland

Species rich grassland will be created within the mitigation area across disturbed and bare areas in order to increase floral diversity, as well as between the two areas of car parking to allow for retention of trees and allow for wildlife areas within the completed site.

The Ecological Assessment Report identified the loss of semi-improved grassland which is of some ecological and nature conservation value for local wildlife. This area is not included under any of the UK BAP Priority Habitats however it can be considered under the Broad Habitat Action Plan for Neutral Grassland. This area has value for invertebrates, reptiles, amphibians, breeding birds and foraging bats and so the loss of the area needs to be mitigated for through the creation of wildflower and grassland areas.

The wildflower areas identified within the landscape plan (refer to drawing number 2179/001 May 2015 (refer to Appendix 1.0)) should be cleared of any weedy vegetation using non-residual herbicides or hand held cutting equipment and the cuttings removed from site before being seeded in early March to early May or early August to mid-September when conditions are suitably warm and damp to allow successful germination. The seed mixes should consist of locally sourced native species wherever possible and be free of all non-native invasive species. The seed mixes recommended should be as similar as possible to those detailed below, which will be combined and sown together at rates of 5 and 1 gramme per square metre respectively:

Wildflower Mix WFG6

Species Name	**Common Name**	**%**
Cynosurus cristatus	Crested Dogstail	25
Festuca arundinacea	Tall Fescue	25
Festuca ovina	Sheeps Fescue	25
Phleum bertolonii	Small Leaved Timothy	5
Centaurea nigra	Common Knapweed	2.5
Plantago lanceolata	Ribwort Plantain	2.5
Leucanthemum vulgare	Oxeye Daisy	2

Ranunculus acris	Meadow Buttercup	2
Rumex acetosa	Common Sorrel	2
Ranunculus repens	Creeping Buttercup	1.95
Filipendula ulmaria	Meadow Sweet	1.5
Prunella vulgaris	Self Heal	1.5
Silene alba	White Campion	1.45
Medicago lupulina	Black Medick	1
Achillea millefolium	Yarrow	0.5
Anthyllis vulneria	Kidney Vetch	0.25
Hypochaeris radicata	Cats-Ear	0.25
Geranium pratense	Meadow Cranesbill	0.2
Lychnis flos-cuculi	Ragged Robin	0.2
Stachys officinalis	Betony	0.2

Wildflower Mix WF10

Species Name	**Common Name**	**%**
Agrostemma githago	Corncockle	70
Anthemis arvensis	Corn Chamomile	7.5
Centaurea cyanus	Cornflower	7.5
Chrysanthemum segetum	Corn Marigold	7.5
Papaver rhoeas	Corn Poppy	7.5

During the first year following seeding the sward should be cut every six to eight weeks with the cuttings removed. This will prevent grasses dominating the sward and out competing the slower growing wildflower species. In subsequent years cutting should only be undertaken once a year in late September to October and the cuttings removed. Please refer to aftercare recommendations on drawing number 2179/001 in Appendix 1.0 and advice from the landscape architects.

D3 Existing Grassland

The existing grassland areas are to be retained where possible and an increased floral species diversity encouraged through appropriate management, particularly within the mitigation area to the northern part of the site. This management should involve cutting the sward every six to eight weeks for one year with the cuttings removed to reduce the dominance of grasses and the nutrient content of the soil. In subsequent years cutting should only be undertaken once a year in late September to October and the cuttings removed.

D4 Amenity Grassland

The amenity grassland areas will be seeded with a suitably durable species mix which will have limited ecological value but will ensure vegetation cover. The seed mix should consist of locally sourced native species wherever possible and be free of all non-native invasive species. The seed mix recommended should be as similar as possible to that detailed below:

Amenity Grassland Mix

Variety	**Common Name**	**%**
CORAIL	Strong Creeping Red Fescue	60
JOANNA	Chewings Fescue	20
BLACKWATCH	Tall Fescue	15
HIGHLAND	Bentgrass	5

These areas will be managed for amenity and visual purposes, being primarily the boundaries to those areas where levels are to change, and are likely to be cut on a regular basis however it is recommended that such cutting is kept to a minimum wherever possible and the cuttings removed. This will encourage a more diverse sward with a greater proportion of wildflower species increasing the potential ecological value of these areas. Please refer to aftercare recommendations on drawing number 2179/001 in Appendix 1.0 and advice from the landscape architects.

D5 Woodland Scrub Planting

Woodland scrub planting will be located along the boundaries of the proposed area of hard standing to allow connectivity and provide wildlife corridors around the site.

A number of native woodland scrub areas have been identified within the landscape scheme (refer to drawing number 2179/001 May 2015 (refer to Appendix 1.0)). Planting of these areas should be undertaken between October and March during the dormancy period. Plant stock should be of local provenance propagated from genetic material originating in biogeographical regions 303 or 304, wherever possible. The planting mix recommended should be as similar as possible to that detailed below:

Woodland Scrub Mix

Species Name	**Common Name**	**%**
Alnus glutinosa	Alder	20
Corylus avellana	Hazel	20
Crategus monogyna	Hawthorn	10
Prunus spinosa	Blackthorn	10
Rosa canina	Dog Rose	5
Salix alba	White willow	10
Salix caprea	Goat willow	10
Sambucus nigra	Elder	10
Viburnum opulus	Guelder Rose	5

Future management of these scrub areas should be undertaken outside of the breeding bird season (March to August inclusive) to avoid disturbance to nesting and breeding birds. If management is required during this time, the relevant areas should be surveyed for breeding bird activity by a suitably qualified ecologist. If any nesting or breeding activity is recorded then work within a 10m buffer of the nest location would have to be postponed until the young have fledged.

Please refer to aftercare recommendations on drawing number 2179/001 in Appendix 1.0 and advice from the landscape architects.

D6 Existing Broadleaf Trees

There are a number of existing broadleaf trees and woodland areas that are to be retained on site with protective fencing to be installed as per the Tree Protection Plan 2179/002 in Appendix 2.0. These areas should be left unmanaged.

D7 Artificial Refugia/Hibernacula Creation

A number of refugia and hibernacula have been created within the mitigation area to the north of the development area and within the retained habitats along the western and northern boundaries. Six larger refugia have been created around the edges of the new

ponds within the mitigation area using soil removed from the excavation works with additional refugia/hibernacula created from the logs and brash resulting from the development site vegetation clearance works. These are of varying size to a height of approximately 500mm then capped with a 50-100mm turf layer.

These should be inspected annually during construction and for 21 years' post construction (as required by the GCN EPS licence) to ensure they remain in good condition. Repair and replacement of such features is to be undertaken under the guidance and/or supervision of a suitably experienced ecologist.

D8 Bat Box Installation

It has also be recommended that bat boxes are to be installed on retained trees within or adjacent to the site following consultation with Wrexham County Borough Council on the type and number required.

These boxes will need to be inspected annually during construction and for a minimum of three years post construction to ensure they remain in good condition. Repair and replacement of boxes is to be undertaken under the guidance and supervision of a licenced bat specialist.

D9 Bird Box Installation

It has also be recommended that bird nest boxes are to be installed on retained trees within or adjacent to the site following consultation with Wrexham County Borough Council on the type and number required. These should include a variety of types including those with open fronts and entry holes and should be positioned following advice from a bird specialist.

These boxes will need to be inspected annually during construction of for a period post construction to be agreed with Wrexham County Borough Council to ensure they remain in good condition. Repair and replacement of boxes should be undertaken outside of the breeding bird season (March to August inclusive, weather dependent).

E Monitoring

Monitoring of the Great Crested Newt mitigation measures is required throughout construction and for 21 years' post construction (as stated within the EPS licence). This monitoring is to be undertaken by suitably experienced ecologists in accordance with the Great Crested Newt Mitigation Guidelines and is to include the following:

- Annual condition assessment of new aquatic and terrestrial habitats, including development site planting and habitat corridor creation, and artificial refugia/hibernacula to be undertaken in May/June each year with the results used to inform the need for management actions such as pond clearance, mowing regimes, replacement planting and maintenance requirements.
- Population class assessments requiring six survey visits between mid-March and mid-June with at least three between mid-April to mid-May) using a minimum of three different survey techniques. This would be conducted in Years 1, 3, 5, 8, 11, 14, 17 and 21 post construction (unless otherwise agreed with NRW) at which point the management plans should be reviewed.

The monitoring should also include survey for the presence of invasive species and assessing the success of the wildflower and scrub planting in relation to species composition and health.

It is also recommended that monitoring of the replacement bat boxes should also be undertaken with checks made by a licensed bat worker at least twice a year to determine whether they are in use and by which species. This monitoring will be need to be agreed with NRW and Wrexham County Council.

F Timetable of works

Activity	Timing	Notes
Commencement of installation of exclusion/one-way fencing	September 2014	Completed following granting of GCN Licence
Commencement of mitigation works on site	September/October 2014	Completed following installation of one way fencing and 2 week period to allow amphibian and GCN dispersal.
Commencement of Trapping/Translocation of GCN	September/October 2014	30 day period under suitable weather conditions – completed December 2014 following consultation with NRW
Vegetation clearance of development area	November 2014/2015	Completed March 2015
Start of construction works on site	July 2015	
Completion of construction works (15-16 months)	July 2016	Perimeter exclusion fencing to be removed following agreement from NRW
Seeding within mitigation area grassland	September 2015	
Landscape planting works including seeding and scrub planting	November 2015 to March 2016	

Construction works are programmed for completion in July 2016, which will be followed by a post development 21 year monitoring, management and maintenance period, undertaken by the relevant organisations as stated in Section E.

G Biodiversity Risk Assessment

A biodiversity risk assessment has been produced for the pre, during and post construction stages. This has been included in Appendix 3.0

H Appendices

Appendix 1.0: Landscape Planting Plan 2179/001

Appendix 2.0: Tree Protection Plan 2179/002

Appendix 3.0: Biodiversity Risk Assessment May 2015

Appendix 1.0

GROUND PREPARATION
Clear existing scrub vegetation.
Break up existing subsoil in all areas to depths of 450mm to relieve soil compaction. All tree roots and debris over 150x150mm to be removed.

TREE PLANTING
All feathered stock to be planted in 1100x1100x900mm pits
Break up subsoil in base of tree pits to a depth of 200mm
Backfill tree pits with approved topsoil to BS 3882 as per specification and mix 3:1, topsoil:compost.
Compost to be recycled green compost in accordance with PAS 100 supplied and from an approved source.
Feathered stock to be single staked.

WOODLAND PLANTING
Woodland Planting Mix to be planted at 1.0m centres.
All transplants to be planted in 450x450x600mm pits
Break up subsoil in pits to a depth of 200mm
Backfill pits with approved topsoil to BS 3882 as per specification and mix 3:1, topsoil:compost. Compost to be recycled green compost in accordance with PAS 100 supplied and from an approved source.

All plants to be kept weed free within 1m diameter of plants by application of herbicide. All plants to be well watered immediately after planting. All labels to be removed. Rabbit guards to be included for all trees, shrubs and transplants to be open mesh-type guard 75mm diameter (for transplants) & 250mm diameter (for shrubby species) and 600mm high fixed to 25x25x900mm softwood stake driven into the ground by 400mm guard fixed to stake with 3 releasable ratchet ties.

Area between woodland transplants to be left to allow natural regeneration of grassland species.

AMENITY GRASS AREAS
To be seeded with British Seed Houses mix A3, at 35g/m2.
Prior to seeding include 150mm depth topsoil as BS3882 (2007). Topsoil to be broken up to full depth, Reduce top 25mm to a fine tilth and remove surface stones larger than 25mm.

WILDFLOWER AREAS
To be seeded with British Seed Houses mix WFG6, at 5g/m2 with WF10 at 1g/m2. To be sown onto earth mounds and into areas of existing grass. Existing turf to be removed prior to seeding and top 50mm of soil to be scarified. Sowing shall be immediately followed by lightly evenly raking the surface of the soil to cover the seeds.

Wildflower maintenance:-.
Maintenance Year 1
March/April Cut to 7cm if required no later than the end of April.
September/October Cut to 4-7cm to prevent grasses and annuals out-competing Perennial Species.

All arising area to be removed from site. Prior to removal arising should be shaken to ensure that all seeds are dispersed.

Pond 1
Pond 1
Pond 3
Pond 4
Wildflower grass seeding to earth mounds and to pond margins to increase floral diversity
EMERGENCY GENERATOR
CYCLES
NEWT UNDERPASS
Grass seeding to make
ABENBURY WAY
PUBLIC FOOTPATH 20 METRES FROM SITE ENTRANCE

LEGEND

- Proposed Tree
- Existing Retained Tree
- Root Protection Area
- Ornamental planting around car park and entrance
- Woodland Scrub Mix - see below
- Earth Mounds /pond edges to be seeded with wildflower grass. To be British Seed Houses - Mix WFG6: Heavy Clay Soils Sowing rate - 5g/m² and Mix WFG10 at Sowing rate - 1g/m²
- **Grass Seeding : To make good areas of excavation** British Seed Houses - Mix A3: Low Maintenance Areas Sowing rate - 35g/m²
- Great Crested Newt underpass
- Close boarded fence
- Mitigation pond
- Existing woodland/ scrub to be retained
- Mitigation log piles

Trees	Age/condition	Girth (cm)	Overall height	Clear stem	Root condition
Betula utilis jacquemontii	2x	10-12	300-350	175-200	RB

WOODLAND SCRUB MIX	Overall height	Root Condition	Age/condition or times transplanted	Habit	Min no. of breaks	% mix
To be transplants planted at 1.0m centres All species to be certified British Native Plant Stock						
Alnus glutinosa	40-60cm	BR	1+1			20
Corylus avellana	40-60cm	BR	1+1	branched	2	20
Crategus monogyna	40-60cm	BR	1+1			10
Prunus spinosa	40-60cm	BR	1+1	branched		10
Rosa canina	40-60cm	BR	1+0	branched		5
Salix alba	60-80cm	BR	0/1			10
Salix caprea	60-80cm	BR	1+1	branched	2	10
Sambucus nigra	40-60cm	BR	1+1	branched		10
Viburnum opulus	40-60cm	BR	1+1	branched		5

Species List for Ornamental Shrub Planting For Car park	Abbrv.	Density /m2	Overall height	Root Condition	Min pot size	Habit	Min no. of breaks
Lonicera 'Loughall Evergreen'	Lon	5	30-40	C	3L	Bushy	3
Hebe 'Marjorie'	He M	5	30-40	C	3L	Bushy	5
Hedera helix	He h	8	30-40	C	0.5L	veral shoc	3
Prunus lauocerasus 'Otto Luyken'	Pr l	6	30-40	C	3L	Bushy	3
Rosa rugosa	Ro r	5	40-60	C	2L	Branched	3
Rubus tricolor 'Betty Asburner'	Ru t	6	30-40	C	2L	Branched	4
Symphoricarpus chenaultii 'Hancock'	Sy c	3	40-60	C	3L	Bushy	3
Viburnum davidii	V da	3	20-30	C	3L	Bushy	3
Vinca minor	Vin m	6		C	1L		

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CYTEC
Plot C4 - Wrexham Industrial Estate
Planting Proposals

Drawn EMK Checked PMcC Scale 1:250@A1 Date May 2015 Office Cardiff Drwg No 2179/001

Appendix 2.0

BIOSECURITY RISK ASSESSMENT

Activity/Task: General Site Activities During Site Construction and Post Construction Monitoring.	**Date: 15.05.15**
Project: Wrexham Industrial Estate Plot C4	**Revision : 0**
Carried out by: Samantha Shove	**Project Ecologist: Samantha Shove**

The function of the Biosecurity Risk Assessment is to identify all possible INNS and known diseases that could harm or negatively impact upon the environmental conditions on site. All known pathways / actions that could result in cross contamination from one site to the next are identified and appropriate mitigation and reasonable avoidance strategies are recorded.

AQUATIC HABITATS

Environmental Element	Assessment	Presence	Additional comments
Aquatic habitats	Are aquatic habitats present on site?	Yes	4 new ponds have been created within the mitigaiton area to the northern part of the site. There is also 1 pond located within 20m of the site boundary and ponds located within 2km of the site
	Are aquatic habitats proposed as part of development including mitigation or compensation scheme?	No	The 4 ponds identified within the mitigation strategy have been created, these ponds are to recolonise naturally however planting may be required if this is not successful. No further aquatic habitats are required at present
Assessment of Plants within aquatic habitats	Are invasive species recorded at ponds subject to survey?	No	None recorded to date

AMPHIBIAN SURVEYS AND TRAPPING

Environmental Element	Assessment	Results	Additional comments

Great Crested Newts (GCN)	Mitigation - Construction (Main Works)	Reasonable Avoidance Measures (RAMs)/ Translocation	The construction area has been fenced and amphibians/GCN translocated in advance of construction and will remain so until construction is complete, the additional mitigation areas have also been fenced (one-way fencing), this will be removed under RAMs as soon as conditions allow. Four new ponds have been created along with a number of refugia/hibernacula. Habitat creation and enhancement will be undertaken in the mitigation area to the northern end of the site and adjacent to Erlas Road as part of the landscaping works.
	Total number of ponds post construction (monitoring) to be surveyed	Four newly created ponds on site	The completion date for construction is July 2016 after which the monitoring period will begin. Monitoring will be undertaken for a minimum of 21 years post construction as per the GCN EPS licence requirements
	Geographical Extent of all surveys carried out per annum	Terrestrial and aquatic habitats within the site only	Terrestrial habitats will be monitored once while population surveys require 6 separate surveys within the aquatic habitats per year
	Range of all surveys carried out per annum	Site only	Site only
	Amphibian monitoring - Method of surveys undertaken.		Combination of nocturnal torchlight surveys, egg searching and netting/bottle trapping of ponds monitored within the mitigation area, annual condition assessment of habitats and refugia
TERRESTRIAL HABITATS			
Environmental Element	**Assessment**	**Presence**	**Additional comments**
Terrestrial habitats	Are terrestrial habitats present on site?	Yes	Mixed semi-improved grassland habitats with small woodland and scrub areas

	Are floral INNS present on site?		No	Being mointored as part of the ecological site visits, licence supervision etc. Will also be monitored post construction.
Materials	Does the scheme include the removal of soils or any		No	No material will be removed from site
	If yes please state reception area(s) if known?			
	Will the scheme require the import of material from		No	
INNS	Do site visitors, workers including contractors, sub-contractors, and their vehicles work on or visits other sites where INNS are present or likely to be present?		Yes for TACP unknown for other site visitors	It is to be assumed that all workers have come into contact with INNS elsewhere and therefore appropriate control measures will be applied.
	Are procedures in place to reduce risk of accidental		Yes	
		If yes, please state actions.		All site workers are made aware of the risks of and procedures with regard to INNS. If INNS are found on site all equipment and machinery used within contaminated areas will be cleaned prior to removal. Movement of machinery and equipment from external sites where INNS is present is discouraged and where this is necessary decontamination measures are put in place to ensure that no INNS are imported from elsewhere. Monitoring for the presence of INNS species is ongoing and will continue during post construction
		If no please confirm why		

Landscaping	Does the scheme include any landscaping?	Yes	The scheme will combine various landscape elements in order to retain existing habitat were possible and enhance and replace that which is lost. Aquatic habitats (4 new ponds) and refugia/hibernacula have already been created. Species rich grassland creation and enhancement and scrub planting are to be undertaken as part of the landscaping works.
	Does the landscaping scheme include planting invasive non native species?	No	Planting proposed to be incorporated within the mitigation will include scrub vegetation consisting of native species where possible and native tree species will be use where additional trees are proposed to be planted. All planting material will be sourced appropriately to minimise the risk of introducing INNS
	If yes which species?		

Actions to Minimize Risks:

Ensure all site staff are aware of the potential presence of INNS and the procedures required to minimise their spread
Avoidance of working within water-bodies wherever possible
Cleaning of all equipment and machinery where work is required within waterbodies during construction
Use of site specific monitoring equipment and cleaning of all equipment after each survey if INNS identified
Cleaning of all equipment and PPE, especially footwear, after each survey if INNS identified
Best practice to be applied in accordance with ARG-UK Advice Note 4

Approved by: Peter McComiskey **Proposed Review date: 15/05/2016**

Appendix 3.0