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SG ESTATES LTD

LAND AT BRYN Y GROES, GRESFORD

BIOSECURITY RISK ASSESSMENT

AUGUST 2015

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SG ESTATES LTD

LAND AT BRYN Y GROES, GRESFORD

BIOSECURITY RISK ASSESSMENT

August 2015

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1 EXECUTIVE SUMMARY

- 1.1 Wardell Armstrong (WA) was commissioned by SG Estates to prepare a 'Biosecurity Risk Assessment' in relation to the residential development on land referred to as Bryn y Groes, Gresford, Wrexham. This report has been completed to discharge planning Condition 8 within planning permission P/2005/0613 which states:

'No part of the development shall commence until a Biosecurity Risk Assessment has been submitted to and approved in writing by the Local Planning Authority. The Assessment shall include appropriate measures to prevent the introduction of Invasive Non Native Species (INNS) during the construction phase, and measures to control INNS as are currently present on site. The measures and proposals shall be fully implemented in strict accordance with the details as are approved'.

2 DESCRIPTION OF LOCATION

- 2.1 The residential development area at Bryn y Groes is approximately 2.812ha in size and is located at national grid ref SJ: 347542, on the south side of Gresford near Wrexham. It is comprised of Bryn-y-Groes Hall and associated grounds which have remained unmanaged for a number of years. Habitats recorded comprise a mixture of planted and mature broad-leaved and coniferous trees, tall ruderal herbaceous growth and poor semi-improved grassland. Land directly to the north is occupied by existing housing development. The B5445 is directly adjacent the northwest beyond which is a school. Old Wrexham road runs along the eastern boundary of the site beyond which lies agricultural land and a caravan park. Land to the southwest is dominated by agricultural land used primarily for arable crops.
- 2.2 The purpose of this assessment is to recommend measures to prevent the introduction of INNS within the residential development area during the construction phase.
- 2.3 Habitat surveys and monitoring of the development area have been undertaken prior to and during the planning application process resulting in no INNS being identified on site or within its immediate surroundings.

3 LEGISLATION

- 3.1 The Wildlife and Countryside Act 1981 (WCA) is the principal legislation dealing with non-native species. The WCA has been amended in relation to England and Wales by various pieces of legislation, including the Wildlife and Countryside Act 1981 (Variation of Schedule 9) (England and Wales) Order 2010, the Natural Environment and Rural Communities Act 2006 and the Countryside and Rights of Way Act 2000.
- 3.2 Section 14 (1) of the WCA makes it illegal to release or allow to escape into the wild any animal which is not ordinarily resident in Great Britain and is not a regular visitor to Great Britain in a wild state, or is listed in Schedule 9 to the Act. It is also illegal to plant or otherwise cause to grow in the wild any plant listed in Schedule 9 to the Act. The Schedule 9 list of animal and plant species has been amended by the Wildlife and Countryside Act 1981 (Variation of Schedule 9)(England and Wales) Order 2010. Offences under section 14 carry a maximum penalty of a £5,000 fine and/or 6 months imprisonment on summary conviction (i.e. at Magistrates' Court) and an unlimited fine (i.e. whatever the court feels to be commensurate with the offence) and/or 2 years imprisonment on indictment (i.e. at Crown Court).

4 ACTIVITY RISK ASSESSMENT

4.1 A list of activities during the construction phase of the development are provided below:

- Staff/visitor vehicles on site;
- Delivery of materials to site; and
- Operational vehicles/machinery to site and site use.

4.2 To assess the severity (S), likelihood (L) and to calculate the overall risk (R) of the activities in spreading INNS the following risk assessment tables have been used:

Severity of Impact (S)

1	Minimal very local and /or very short term
2	Major changes at a local level
3	Moderate large change at a local level
4	Major long term changes to local area with possible impact at a wider level
5	Massive widespread and long term changes

Likelihood of spread (L)

1	Very unlikely – theoretically possible but not expected to occur	1 in 10,000 years
2	Unlikely – has not occurred anywhere in living memory	1 in 1,000 years
3	Possible – has occurred at least once somewhere but not locally	1 in 100 years
4	Likely – has happened on several occasions elsewhere, or at least once locally	1 in 10 years
5	Very likely – happens continually and expected to occur	Once a year

Overall risk for the activity (R)

Severity of impact (S)	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5
Likelihood of spread (L)						

Tables 1 & 2 below, are the site specific risk assessment criteria, rated by using the above risk analysis for each identified activity:

Table 1: Location and Reason for Assessment			
Location	Reason for Assessment	INNS or diseases known to be on or near site	Vulnerable species, habitats or assets that could be affected by INNS or disease
Development site	Construction phase of residential development	No INNS or disease identified on site or adjacent to site	Great crested newt. Retained habitat or adjacent agricultural fields

Table 2: Activity Risk Assessment (Site Specific)								
Activity	Hazard description	Risk rating			Control Measures	(Rr) after controls		
		S	L	R		S	RI	Rr
Staff / visitor vehicles on site	Vehicle tyres may spread INNS and/or diseases	3	3	9	- Keep to established tracks and park on site compound - Keep vehicles free from accumulated mud, pay attention to tyres and wheel arches - Clean vehicles off site if known to be on previous infected sites	1	1	1
Delivery of materials to site	Vehicle tyres may spread INNS and/or disease	3	3	9	- Delivery vehicles to off load within compound area only - Materials to be sourced by reputable companies	1	3	3
	Source of materials	4	2	8		2	1	2
Operational vehicles/machinery delivery to site and site usage	Vehicles/machinery may spread INNS and/or disease through previous other site work.	3	3	9	- Vehicles/machinery to be cleaned and disinfected prior to access and use on site - Vehicles/machinery to remain on site during the construction phase. If this is not possible due to security of the vehicles/machinery then re cleaning and disinfecting prior to use on site on each occasion.	1	3	3

4.3 The above site specific biosecurity risk assessment has been assigned a rating of 1-5 (low to high) for each activity to provide residual likelihood (RI) of INNS/diseases being spread after control measures have been implemented and recalculated to provide a residual risk (Rr).

5 SUMMARY AND CONCLUSIONS

- 5.1 The above assessment together with the implementation of biosecurity measures during the construction stage of the development, identifies that overall the risk of spreading INNS or disease has been reduced to below a residual risk (Rr) of 4, which is considered acceptable and in accordance with good practice and legislation.
- 5.2 Within the control measures is the possibility that disinfecting of vehicles and/or machinery may be required. This may have further health and safety implications such as use of disinfectants and the use and disposal of appropriate clothing or equipment. This must be taken in to account with job risk assessments and the requirement to undertake COSHH assessments for chemicals using information from the product label and/or the product safety data sheet.
- 5.3 This biosecurity assessment should be known and understood by all site operatives and displayed in an appropriate site office.

APPENDIX 1: SCHEDULE 9 OF THE WILDLIFE & COUNTRYSIDE ACT 1981.

Animals and plants to which section 14 applies.

Schedule 9 of the Wildlife and Countryside Act 1981.

Animals and plants to which section 14 applies

Part I

Animals which are established in the wild

Native and former native species are listed at the end of the table.

Common name	Scientific name	England & Wales	Scotland
Bass, Large mouthed Black	<i>Micropterus salmoides</i>	✓	✓
Bass, Rock	<i>Ambloplites rupestris</i>	✓	✓
Bitterling	<i>Rhodeus sericeus</i>	✓	✓
Budgerigar	<i>Melopsittacus undulatus</i>		✓
Coypu	<i>Myocastor coypus</i>		✓
Crab, Chinese Mitten	<i>Eriocheir sinensis</i>	✓	
Crayfish, Noble	<i>Astacus astacus</i>	✓	✓
Crayfish, Red Swamp	<i>Procambarus clarkii</i>	✓	
Crayfish, Signal	<i>Pacifastacus leniusculus</i>	✓	✓
Crayfish, Spiny-cheek	<i>Orconectes limosus</i>	✓	
Crayfish, Turkish	<i>Astacus leptodactylus</i>	✓	✓
Deer, Chinese Water	<i>Hydropotes inermis</i>	✓	
Deer, Mutjac	<i>Muntiacus reevesi</i>	✓	✓
Deer, Sika	<i>Cervus nippon</i>	✓	✓
Deer, any hybrid of Sika	Any hybrid of <i>Cervus nippon</i> , <i>Cervus</i> and any hybrid of the genus <i>Cervus</i>	✓	✓
Dormouse, Fat	<i>Glis glis</i>	✓	✓
Duck, Carolina Wood	<i>Aix sponsa</i>	✓	✓
Duck, Mandarin	<i>Aix galericulata</i>	✓	✓
Duck, Ruddy	<i>Oxyura jamaicensis</i>	✓	✓
Flatworm	<i>Kontikia andersoni</i>	✓	
Flatworm	<i>Kontikia ventrolineata</i>	✓	
Flatworm, Australian	<i>Australoplana sanguinea</i>	✓	
Flatworm, New Zealand	<i>Artiposthia triangulata</i>	✓	✓
Frog, Edible	<i>Rana esculenta</i>	✓	✓
Frog, European Tree (or Common Tree Frog)	<i>Hyla arborea</i>	✓	✓
Frog, Marsh	<i>Rana ridibunda</i>	✓	✓
Gerbil, Mongolian	<i>Meriones unguiculatus</i>		✓
Goose, Bar-headed	<i>Anser indicus</i>	✓	
Goose, Barnacle	<i>Branta leucopsis</i>	✓	
Goose, Canada	<i>Branta canadensis</i>	✓	✓
Goose, Egyptian	<i>Alopochen aegyptiacus</i>	✓	✓
Goose, Emperor	<i>Anser canagicus</i>	✓	
Goose, Snow	<i>Anser caerulescens</i>	✓	
Heron, Night	<i>Nycticorax nycticorax</i>	✓	✓

Limpet, Slipper	<i>Crepidula fornicata</i>	✓	
Lizard, Common Wall	<i>Podarcis muralis</i>	✓	✓
Marmot, Prairie (or Prairie dog)	<i>Cynomys</i>	✓	✓
Mink, American	<i>Mustela vison</i>	✓	✓
Newt, Alpine	<i>Triturus alpestris</i>	✓	✓
Newt, Italian Crested	<i>Triturus carnifex</i>	✓	✓
Owl, Eagle	<i>Bubo bubo</i>	✓	
Oyster Drill, American	<i>Urosalpinx cinerea</i>	✓	
Parakeet, Monk	<i>Myiopsitta monachus</i>	✓	
Parakeet, Ring-necked	<i>Psittacula krameri</i>	✓	✓
Partridge, Chukar	<i>Alectoris chukar</i>	✓	✓
Partridge, Rock	<i>Alectoris graeca</i>	✓	✓
Pheasant, Golden	<i>Chrysolophus pictus</i>	✓	✓
Pheasant, Lady Amherst's	<i>Chrysolophus amherstiae</i>	✓	✓
Pheasant, Reeves'	<i>Syrnaticus reevesii</i>	✓	✓
Pheasant, Silver	<i>Lophura nycthemera</i>	✓	✓
Pochard, Red-crested	<i>Netta rufina</i>	✓	
Porcupine, Crested	<i>Hystrix cristata</i>		✓
Porcupine, Himalayan	<i>Hystrix hodgsonii</i>		✓
Pumpkinseed (or Sun-fish or Pond-perch)	<i>Lepomis gibbosus</i>	✓	✓
Quail, Bobwhite	<i>Colinus virginianus</i>		✓
Rat, Black	<i>Rattus rattus</i>	✓	✓
Shelduck, Ruddy	<i>Tadorna ferruginea</i>	✓	
Snake, Aesculapian	<i>Elaphe longissima</i>	✓	✓
Squirrel, Grey	<i>Sciurus carolinensis</i>	✓	✓
Swan, Black	<i>Cygnus atratus</i>	✓	
Terrapin, European Pond	<i>Emys orbicularis</i>	✓	✓
Toad, African Clawed	<i>Xenopus laevis</i>	✓	✓
Toad, Midwife	<i>Alytes obstetricans</i>	✓	✓
Toad, Yellow-bellied	<i>Bombina variegata</i>	✓	✓
Wallaby, Red-necked	<i>Macropus rufogriseus</i>	✓	✓
Wels (or European catfish)	<i>Silurus glanis</i>	✓	✓
Zander	<i>Stizostedion lucioperca</i>	✓	✓

Native and former native species.

Common name	Scientific name	England & Wales	Scotland
Boar, Wild	<i>Sus scrofa</i>	✓	
Capercaillie	<i>Tetrao urogallus</i>	✓	✓
Chough	<i>Pyrrhocorax pyrrhocorax</i>	✓	
Corncrake	<i>Crex crex</i>	✓	
Crane, Common	<i>Grus grus</i>	✓	
Eagle, White-tailed	<i>Haliaeetus albicilla</i>	✓	✓
Goshawk	<i>Accipiter gentilis</i>	✓	
Kite, Red	<i>Milvus milvus</i>	✓	
Owl, Barn	<i>Tyto alba</i>	✓	✓

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Part II Plants

Common name	Scientific name	England & Wales	Scotland
Alexanders, Perfoliate	<i>Smyrnum perfoliatum</i>	✓	
Algae, Red	<i>Grateloupia luxurians</i>	✓	
Archangel, Variegated Yellow	<i>Lamiastrum galeobdolon</i> <i>subsp. argentatum</i>	✓	
Azalea, Yellow	<i>Rhododendron luteum</i>	✓	
Balsam, Himalayan	<i>Impatiens glandulifera</i>	✓	
Cotoneaster	<i>Cotoneaster horizontalis</i>	✓	
Cotoneaster, Entire-leaved	<i>Cotoneaster integrifolius</i>	✓	
Cotoneaster, Himalayan	<i>Cotoneaster simonsii</i>	✓	
Cotoneaster, Hollyberry	<i>Cotoneaster bullatus</i>	✓	
Cotoneaster, Small-leaved	<i>Cotoneaster microphyllus</i>	✓	
Creeper, False Virginia	<i>Parthenocissus inserta</i>	✓	
Creeper, Virginia	<i>Parthenocissus quinquefolia</i>	✓	
Dewplant, Purple	<i>Disphyma crassifolium</i>	✓	
False-acacia	<i>Robinia pseudoacacia</i>		✓
Fanwort (or Carolina Water-Shield)	<i>Cabomba caroliniana</i>	✓	✓
Fern, Water	<i>Azolla filiculoides</i>	✓	✓
Fig, Hottentot	<i>Carpobrotus edulis</i>	✓	✓
Garlic, Three-cornered	<i>Allium triquetrum</i>	✓	
Hogweed, Giant	<i>Heracleum mantegazzianum</i>	✓	✓
Hyacinth, Water	<i>Eichhornia crassipes</i>	✓	✓
Kelp, Giant	<i>Macrocystis angustifolia</i>	✓	✓
Kelp, Giant	<i>Macrocystis integrifolia</i>	✓	✓
Kelp, Giant	<i>Macrocystis laevis</i>	✓	✓
Kelp, Giant	<i>Macrocystis pyrifera</i>	✓	✓
Kelp, Japanese	<i>Laminaria japonica</i>	✓	✓
Knotweed, Giant	<i>Fallopia sachalinensis</i>	✓	
Knotweed, Hybrid	<i>Fallopia japonica</i> x <i>Fallopia sachalinensis</i>	✓	
Knotweed, Japanese	<i>Fallopia japonica</i>	✓	
Knotweed, Japanese	<i>Polygonum cuspidatum</i>		✓
Leek, Few-flowered	<i>Allium paradoxum</i>	✓	✓
Lettuce, water	<i>Pistia stratiotes</i>	✓	✓
Montbretia	<i>Crocasmia x crocosmiflora</i>	✓	
Parrot's Feather	<i>Myriophyllum aquaticum</i>	✓	
Pennywort, Floating	<i>Hydrocotyle ranunculoides</i>	✓	
Potato, Duck	<i>Sagittaria latifolia</i>	✓	
Primrose, Floating Water	<i>Ludwigia peploides</i>	✓	
Primrose, Water	<i>Ludwigia grandiflora</i>	✓	
Primrose, Water	<i>Ludwigia uruguayensis</i>	✓	
Rhododendron	<i>Rhododendron ponticum</i>	✓	
Rhododendron	<i>Rhododendron ponticum</i> x	✓	

28/06/2010

	<i>Rhododendron maximum</i>		
Rhubarb, Giant	<i>Gunnera tinctoria</i>	✓	
Rose, Japanese	<i>Rosa rugosa</i>	✓	
Salvinia, Giant	<i>Salvinia molesta</i>	✓	✓
Seafingers, Green	<i>Codium fragile</i>	✓	
Seafingers, Green	<i>Codium fragile tomentosoides</i>		✓
Seaweed, Californian Red	<i>Pikea californica</i>	✓	✓
Seaweed, Hooked Asparagus	<i>Asparagopsis armata</i>	✓	✓
Seaweed, Japanese	<i>Sargassum muticum</i>	✓	✓
Seaweeds, Laver (except native species)	<i>Porphyra</i> spp (except <i>P. amethystea</i> , <i>P. leucosticta</i> , <i>P. linearis</i> , <i>P. miniata</i> , <i>P. purpurea</i> & <i>P. umbilicalis</i>)	✓	✓
Shallon	<i>Gaultheria shallon</i>		✓
Stonecrop, Australian Swamp (or New Zealand Pigmyweed)	<i>Crassula helmsii</i>	✓	✓
Wakame	<i>Undaria pinnatifida</i>	✓	✓
Waterweed, Curly	<i>Lagarosiphon major</i>	✓	✓
Waterweeds	All species of the genus <i>Elodea</i> .	✓	

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