ECOLOGICAL MITIGATION AND MANAGEMENT PLAN

Kemsley SEP,

Kemsley, Kent

July 2013

Our Ref: JPP1804-MP-001d

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QUALITY MANAGEMENT

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EXECUTIVE SUMMARY

The development of the new Sustainable Energy Plant (SEP) at Kemsley, Kent, adjacent to the current DS Smith Kemsley Paper Mill was granted planning permission in May 2011, subject to the satisfactory agreement of a Section 106. Part of this agreement related to the production of an Ecological Mitigation and Management Plan (EMMP) for the site to address ecological impacts identified during the planning process.

This report identifies the habitat creation and mitigation actions required to ensure the long term survival of protected species both within the site boundary and in the wider area. It covers the mitigation required in relation to issues arising from the siting of the SEP on land to the east of DS Smith Kemsley Paper Mill. This includes habitat creation to be undertaken on a former landfill site to the immediate south of the proposed SEP.

The EMMP covers the following mitigation measures:

- Mitigation relating to reptiles;
- Habitat creation suitable for a range of nesting and foraging birds;
- Protection of bird breeding habitats;
- Habitat creation of Open Mosaic Habitat on Previously Developed Land (UK BAP Habitat)/habitat for invertebrates; and
- Mitigation for the Nationally Scarce Annual Beard-grass *Polypogon monspeliensis*.

Additional off-site reedbed habitat creation/management is not included in this document as being taken forward through a separate management arrangement.

1 INTRODUCTION

1.1 The development of the new Sustainable Energy Plant (SEP) at Kemsley, Kent, adjacent to the current D S Smith Kemsley Paper Mill was granted planning permission in May 2011, subject to the satisfactory agreement of a Section 106. Part of this agreement related to the production of an Ecological Mitigation and Management Plan (EMMP) to address ecological impacts identified during the planning process.

1.2 The purpose of this report is therefore to fulfil this requirement of the Section 106 agreement. It builds upon the Environmental Statement prepared for the development by RPS on behalf of EEW/DS Smith in 2010 (E.on 2010).

1.3 The recommendations made in the Environmental Statement and a subsequent Supplementary Biodiversity Information (SBI) document (RPS 2010) include enhancement of ecological features on the site and the principals by which other features will be protected. A summary of these ecological recommendations, together with an action plan on how they will be fulfilled, are provided in this EMMP,

1.4 This EMMP has been prepared for the SEP consortium, who will be responsible for its implementation on site.

1.5 This plan covers the first five years following the start of construction on site, after which time the EMMP should be reviewed.

Extent of site and description

1.6 The extent of site that this plan covers is shown in Figure 1.1. Broadly, it covers approximately 5 ha of previously developed land between the current DS Smith Kemsley Paper Mill and the Swale on the north Kent coast, north of Sittingbourne.

1.7 Prior to development the site comprised a mixture of dense scrub, tall ruderal, bare ground, long grassland and spoil heap habitats. The former landfill to the immediate south of the development site comprised short-mown grassland.

1.8 A large reedbed was located 200 m to the north of the development site within DS Smith land ownership.

1.9 The Swale Special Protection Area (SPA) / Site of Special Scientific Interest (SSSI) / Ramsar site was located beyond a sea wall directly adjacent to the east of the site.

Outline of development proposals

1.10 The works would proceed in phases and would briefly include:

- Habitat creation
- Ecological mitigation implementation;
- Site mobilisation;
- Construction of new SEP;

- Construction of balancing ponds; and
- Instatement of soft landscaping and adoption of appropriate site management.

Existing features of relevant conservation interest on site

1.11 The following features were identified in the Environmental Statement as habitat or species of conservation interest on or near the site that require consideration within this EMMP:

- A large population of reptiles;
- Habitat suitable for a range of nesting and foraging birds;
- Open Mosaic Habitat on Previously Developed Land (UK BAP Habitat) capable of supporting a range of invertebrates;
- Nationally Scarce Annual Beard-grass;
- The Swale SPA/SSSI/Ramsar site; and
- Habitat adjacent to the site which supports nesting Marsh Harrier.

Recommendations for ecological mitigation and enhancement

1.12 This EMMP has been developed to inform the S106 agreement in relation to the site. As required, this plan includes provisions based on the recommendations in the Environmental Statement as well as those presented in the subsequent SBI. These recommendations relate both to the development site and adjacent former landfill site. A summary of the recommendations are set out below:

- Construction of new reptile habitat on-site and on the former landfill;
- Construction of reptile hibernacula to increase carrying capacity of area;
- Creation of areas of bare ground and dense scrub habitat adjacent to former landfill site;
- Installation of reptile proof fencing around the development site and a suitable translocation programme into a pre-prepared reptile receptor site to the east of the site ;
- Translocation of Annual Beard-grass into new bare ground habitat;
- Site clearance under a watching brief of a suitably qualified and experienced Ecological Clerk of Works (ECoW);
- Limitations to the timing of certain noise-generating works; and
- Adoption of appropriate management to maintain habitats and species on site for the operational life of the SEP.

1.13 In addition, new off-site habitat will be created to provide alternative breeding opportunities for Marsh Harrier within their core breeding area on the Isle of Sheppey. This is to provide alternative breeding habitat for Marsh Harrier during the construction phase of the development even though the reedbed to the north of the site will not be directly affected. The creation and management of this off-site reedbed is not covered by this report as it is subject to a separate agreement.

2 MANAGEMENT OBJECTIVES

2.1 Table 2.1 sets out specific management objectives for the SEP site. The ecological features that are to be incorporated within the final development are shown on Figure 2.1.

Table 2.1. Management objectives for the SEP site

Habitat Type	Management type	Management objective
Grassland	Habitat Creation	To provide foraging habitat and nesting material for a range of wildlife species, particularly reptiles and birds but also invertebrates, through the planting of a species-rich grass area. To maintain the open mosaic habitat, particularly in relation to invertebrates.
Open / bare ground	Habitat Creation	To provide open basking areas for reptiles and areas for use by birds for dust baths To maintain the open mosaic habitat, particularly in relation to invertebrates.
Scrub	Habitat Creation	To provide nesting and foraging habitat for birds, and shelter for a range of wildlife, including reptiles. To maintain the mosaic of habitats on site.
Reptile hibernacula	Habitat Creation	To provide cover for reptiles, particularly for use during hibernation.

3 HABITAT CREATION AND MANAGEMENT

Introduction

3.1 The following section provides an overview of how it is planned that the habitats required on site will be created and managed.

3.2 All of the following habitat creation works should be undertaken at least the season before any reptile translocation is due to occur.

3.3 All of the listed works will be carried out under a watching brief of a suitably qualified and experienced ECoW.

Grassed areas

3.4 This includes habitat creation within the reptile receptor site to the east of the site and on the former landfill site to the south of the site.

Habitat creation

3.5 Selected areas will be cleared of scrub in a mosaic pattern, with some scrub islands retained to increase the diversity of the final habitat.

3.6 Scrub areas to be cleared will be cut by hand with a brush cutter. All cut vegetation should be removed from site to avoid re-seeding and allow grass to grow. An approved herbicide may be selectively used under the guidance of an ECoW. The ground should be lightly cultivated. The area should then be seeded with a suitable tussock-forming species-rich grass mix.

3.7 These works should be carried out as soon as possible to allow the grass to grow and the area to be established before the reptiles are translocated into this area.

3.8 Nesting birds are protected under the Wildlife and Countryside Act (1981), as amended. Under this act, it is an offence to:

- Kill, injure or take any wild bird;
- Take, damage or destroy the nest of any wild bird while that nest is in use or being built;
- Take or destroy an egg of any wild bird.

3.9 Due to the suitability of scrub to support nesting birds, all scrub removal on site will be carried out outside of the bird nesting season (generally accepted to be March – August inclusive). If this is not possible, the scrub will be checked before clearance by a suitably qualified ecologist. Any nests found will be protected with a 5 m buffer around them until the chicks have fledged.

3.10 The former landfill site already consists of some grassland, although this is currently species-poor. Therefore, in order to create a more diverse sward, the existing short grassland will be strimmed by hand to ground level to encourage any small animals present to move out of the area with any arisings removed. Any grass longer than 15 cm will be strimmed in two stages – the first cut to 15 cm and the second, 24 hours later, to ground level. This is to encourage any small mammals to move out of the area. Both cuts should be towards surrounding existing vegetation.

Management of habitat

3.11 Management may be necessary to prevent infestation by weed species and prevent re-growth of scrub (both on the development site and the landfill site). This will principally be done by mowing.

3.12 Grass areas will not normally be cut between April and the end of July, allowing plants to flower and set seed and maintaining species diversity. The grassland will therefore be mown between the end of July and before March each year. Only 20-25% of the grass area should be cut at any one time, leaving an area of long grass to provide cover for reptiles and small mammals while the cut area re-grows. All mown vegetation should be removed from site.

3.13 If cut when reptiles are still active (i.e. between the end of July and end of October), then the grassland will be cut first to a height of 15 cm and then subject to a second cut to the desired height.

3.14 Alternatively, grazing by sheep at a suitably low stocking rate could be allowed in early spring/late summer in place of mowing. If this were to be undertaken, a suitable management plan for the grazing should be produced and implemented to ensure it complements the current site management plan.

3.15 Any areas of weed or scrub species may be removed mechanically: (1) cut at ground level before the flowers open or (2) hand-pulling.

Open / bare ground

Habitat creation

3.16 Several areas of bare ground (approximately 0.5 ha – see figure 2.1), should be cleared of vegetation to leave open areas of substrate/soil. The intention is to create a mosaic of habitats within the reptile refuge and landfill habitat enhancement areas.

3.17 Existing vegetation, in particular the currently species-impoverished grassland, should first be strimmed to a height of 15 cm in order to encourage any animals present (reptiles and small mammals) to move out of this area. After 24 hours, a second cut should be undertaken to ground level.

3.18 The newly cleared ground should be sprayed with herbicide to discourage new vegetation growth.

3.19 Rubble/stone debris from on site will be added to some bare ground areas to create variation in substrate texture.

Management of habitat

3.20 In order to maintain the desired range of habitats on site, these bare areas will be regularly monitored (at least twice a year). Regrowth will be removed by hand or cut at ground level before the flowers open to ensure at least 50% bare ground is maintained in these areas.

Scrub

Habitat creation

3.21 Areas to the east and north of the landfill site (as shown on figure 2.1) will have additional scrub planting completed to increase the density of existing scrub areas.

3.22 Scrub to be planted will include native hedgerow-type species including Hawthorn *Crataegus monogyna*, Blackthorn *Prunus spinosa* and Dog Rose *Rosa canina*.

3.23 If appropriate, Bramble *Rubus fruiticosus* rhizome will also be transplanted from the main development site. Plants to be translocated should be cut to within 20 cm of the ground and then removed using an excavator (being careful to remove the roots/rhizome) and transplanted into the required relocation areas.

Management of habitat

3.24 These areas should be regularly monitored. Any areas that are transplanted that do not survive the first year will be replaced. These areas may be allowed to grow slightly but must not be allowed to significantly over grow the grass area. Any significant areas of growth will be controlled by cutting back.

3.25 While growth of the scrub is beneficial in the long term, it should not be allowed to grow onto the clay cap of the former landfill site. Any scrub vegetation that is found to be growing onto the cap will be removed by either cutting or application of a suitable contact herbicide.

Reptile Hibernacula

Habitat creation

3.26 At least two hibernacula will be constructed, as directed by the ECoW.

3.27 Several pits 1 m wide, 2 m long and 0.5 m deep will be excavated in suitably-open areas within the reptile receptor site.

3.28 Stone debris (preferably 150 – 300 mm) from elsewhere on site will be mixed with the excavated soil and used to fill the pits to 1 m above surface level.

3.29 Each mound will be partially covered with soil, leaving gaps around the edges to allow reptiles access.

3.30 If required, the mounds may be seeded using the same grass seed mix as used for the grassland. However, it is anticipated that these will naturally become vegetated over time.

Management of habitat

3.31 The hibernacula will be inspected for maintenance annually. If they become degraded (soil is eroded or grass does not grow) they will be maintained to replace any stones or soil, and re-seed if necessary.

3.32 The hibernacula will be kept clear of scrub so as not to become shaded.

4 MITIGATION ACTIONS

Marsh Harrier Protection

4.1 Marsh Harriers nest in the reedbeds of Kemsley Marsh, 200 m to the north of the site. In order to minimise disturbance during the breeding season 2.4 m high plywood faced timber framed boundary hoarding will be erected along the northern side of the proposed development site. The Marsh Harrier breeding season starts between mid-March and early May. Therefore, the fence will be in place before March during the first year of construction. The purpose is to shield the movement of machinery and people.

4.2 There will be no direct entry of the Kemsley reedbed by people or machinery as a result the proposed SEP. The need to mitigate any indirect affects arising from disturbance from activities during both construction and operation of the proposed SEP will be dependent upon whether Marsh Harrier nest in the reedbed, the stage of breeding that the Marsh Harrier has reached (nest building, sitting on eggs or feeding chicks) and the nature of the activity. The following activities will not occur within the distances listed of the nest site in the event that Marsh Harrier is found breeding in the Kemsley reedbed during construction:

4.3 Activities that only involve the movement of vehicles:

- Nest building 100 m
- Eggs 100 m
- Chicks 50 m

4.4 Activities that involve people outside of vehicles and construction activities such as excavation, concrete pouring and assembly:

- Nest building 200 m
- Eggs 200 m
- Chicks 100 m

4.5 Given that the hoarding to be erected should screen such activities within the main development site, this is aimed at preventing the any development activities occurring within the buffer zone between the development redline boundary and the edge of the reedbed.

Annual Beard-grass translocation

Introduction

4.6 Botanical surveys on the development site have identified the presence of Annual Beard-grass. This is a Nationally Scarce species, therefore mitigation must be carried out to ensure the continued occurrence of this species in the area. As the majority of the development site is due to be cleared, this species will need to be translocated from the development area to either the newly created grassland, described in section 3.1, or the landfill site.

Method

4.7 The site will be re-surveyed for the presence of Annual Beard-grass at a suitable time of year (between May and July) when it is most visible. The location of each plant or clump will be mapped and allowed to complete flowering.

4.8 As an annual species, translocation of individual plants is not possible, so the soil around each plant (which will contain the seeds) will be moved to a suitable location within the newly created grassland or the landfill. This will be achieved through carefully lifting the selected areas of soil using an excavator, under the watching brief of an ECoW.

4.9 It is suggested that the survey is completed in 2011 and that translocation of soil to a suitable location occur during late autumn 2011.

Reptile translocation

Introduction

4.10 All species of British reptile are protected under Schedule 5, section 9, of the Wildlife and Countryside Act (1981) as amended. This makes it an offence to:

- Intentionally kill, injure or take; and
- Sell, offer for sale, possess or transport for the purpose of sale or publish adverts to buy or sell a protected species.

Population estimate

4.11 The original survey completed by RPS in 2009 consisted of a standard seven visit presence/absence study. In order to properly quantify the population of reptiles within the development site, a further 13 visits were completed to bring the total to 20, as per Froglife (1999) guidance, using the standard reptile survey methodology.

4.12 A total of 65 artificial refugia (0.5 m x 0.5 m roofing felt) were placed across the site within suitable reptile habitat.

4.13 The full results are provided below for both surveys completed in 2009 and 2010.

Table 4.1 Reptile population estimate survey results from 2009/2010

Trapping Visit	Date	Conditions				Results											
						Viviparous Lizard				Slow-Worm				Grass Snake			
		Average Trapping Temperature (°C)	Wind	Rain	Cloud Cover (%)	Male	Female	Juvenile	Unknown sex	M	F	J	?	M	F	J	?
1	07/04/09	15	None	No	100				4				12				
2	09/04/09	13	None	No	85				2				22				
3	15/04/10	12	Slight breeze	No					2				10			1	

4	24/04/09	15	Slight breeze	No					4				33			1	
5	10/06/09	13	Breezy	No	100				1				6				
6	11/06/09	17	None	No					3				11			2	
7	12/06/09	15	Light	No	70				2				25				
8	17/09/10	14	Light	No	40				1								
9	21/09/10	18	Light	No	80				6								
10	22/09/10	16	Light	No	10			2	3		1						
11	23/09/10	15	Light	No	100			1	5								
12	24/09/10	14	Light	No	100		1	1	5								
13	27/09/10	16	None	No	75				11								
14	28/09/10	16	None	No	100			6	18		2	1					
15	04/10/10	17	None	No	100			1	5		1	1					
16	06/10/10	17	Light	No	100			2	6								
17	07/10/10	17	Light	No	100			1	20	1	2						
18	13/10/10	14	Light	No	50			5	6		1						
19	15/10/10	12	Light	No	100			2	4								
20	19/10/10	19	Moderate	No	100			9	1								
Peak Adult Count						**20**				**33**				**2**			

4.14 A peak count of 20 Common Lizards, 33 Slow-worm and 2 Grass Snakes over a site with around 2 ha of suitable reptile habitat (from measurements made during the completion of the original ES, (E.on 2010) represents low populations of the various species (HGBI 1998).

Mitigation principals

4.15 This development has the ability to conserve the reptile population on site, rather than moving it to a new site, which has been shown in research to have a higher chance of producing a self-sustaining population in the long-term. Therefore, a suitable receptor site has been identified within the SEP redline boundary. Additional reptile habitat will be provided on and around the former landfill site as well as within soft landscaping to be established around the SEP once construction has been completed.

4.16 All reptiles within the development site will be translocated to a pre-determined release area (the newly created receptor site shown on Figure 2.1), to ensure their long-term survival. This area will be enclosed with reptile proof fencing throughout the construction period to prevent reptiles returning to the development area. When development is complete the fencing will be removed, allowing reptiles to disperse into the wider area, particularly the landfill enhancement area which is being enhanced to increase its ability to support reptiles. The receptor site will be established at least the season before translocation starts.

4.17 Given the size of the reptile population on site, a minimum of 60 suitable trapping days would be undertaken to clear the site as per HGBI (1998). This is scheduled for spring and summer 2011.

4.18 Trapping will only finish once five clear suitable days have been achieved with no reptiles caught. The trapping period will then be followed by a destructive search across the site.

Fencing Method

4.19 Reptile proof fencing will be installed by an appropriately experienced contractor, around the perimeter of the release area, under the watching brief of an ECoW.

4.20 The fences will be made of UV proof polythene sheet to prevent degradation, supported by soft wood timber stakes at approximately 2 metre intervals. The polythene used will be no less than 30 cm high and buried to a depth of 10 cm to discourage any reptiles burrowing under it and gaining access to the development area. This is the specification of exclusion fence as recommended by English Nature (1998), now Natural England.

4.21 High visibility netlon-type fencing will be erected around the reptile fencing to prevent accidental damage by construction activity. Clear signage will accompany the high visibility fencing to make clear why these areas should not be disturbed e.g. 'Reptile Area – Keep Out'. The ecological mitigation will also form part of the induction programme for personnel on site.

4.22 In addition to the fencing around the release area, the same standard of fencing will be installed around the edge of the development area. Fencing will also be installed within this area to divide it into separate sections to aid trapping.

Capture and Release Method

4.23 Following the erection of the temporary exclusion fencing the capture and relocation phase will be initiated. The methods of capture will essentially be the same as those used for the initial reptile survey, however, in addition to recording numbers/sex of reptiles found, the individuals would be humanely caught and removed into the receptor area after data collection is completed.

4.24 In order for the scheme to relocate the maximum number of reptiles as possible, the capture phase will commence as early after reptiles emerge from hibernation as possible - usually in March in southern England (Beebee & Griffiths, 2000). This would allow the capture phase of 60 suitable days to include the peak time for reptile numbers (May-June).

4.25 Natural England also recommend that the majority of trapping visits should be targeted between April and July in order to trap females prior to giving birth. This is important, as if trapping starts later in the season, it will result in many more reptiles needing to be moved. Additionally juveniles are far harder to catch due to their small size.

4.26 Reptile activity is primarily controlled by weather conditions, and therefore trapping activity should be concentrated to periods of appropriate weather. Warm days with intermittent but regular sunshine and perhaps a little light rain provide good conditions for capture. Hot dry weather usually results in the disappearance of reptiles from surface refugia (Beebee & Griffiths, 2000).

4.27 The low population of reptiles present on the site would involve using a high density of refugia ($0.5m^2$ roofing felt) and a large number of trapping days. Current advice states that a minimum of 60 trapping visits on separate days which allow time for the refugia to be used should be carried out in suitable weather, between March and September, using 100 traps per ha. The best months for carrying out this work are April, May and September. Traps need to be sufficiently close together to give the reptiles that often only travel a few meters away from their preferred areas, a chance to find them. Trapping should continue until five consecutive trapping days are carried out where no reptiles are seen or caught. These can be the final five days of the sixty minimum.

4.28 A ‘destructive search’ should then be carried out, under the watching brief of an ECoW. This is a means of collecting any remaining animals. The destructive search may involve cutting vegetation, dismantling features such as piles of rubble and excavating earth to find animals sheltering below.

4.29 Given the requirement to start on site in 2013 and the potential for clearance of the site of reptiles to go on beyond the 60 days, it is recommended that this is started as soon as possible or as soon as weather permits in 2012.

4.30 During the relocation and construction phases the temporary fences will be monitored weekly by a designated on-site representative, and a record kept of the checks ensuring their effectiveness and that construction operatives are not accessing the areas. Any noted failed or damaged fences will be replaced immediately. Construction staff should be made aware of the reptile issue on the site and understand the importance of the fences.

Future Monitoring

4.31 In order to confirm the success of the translocations, the reptile population and Annual Beard-grass will be monitored bi-annually for six years following completion of works.

5 LANDFILL MANAGEMENT

5.1 The former landfill site is currently being formally closed and may be subject to a range of management procedures to ensure the integrity of the clay cap that protects the landfill. These procedures have the potential to damage habitat created on the site since they may involve repairs to the clay cap, replacement of soil following land slippage or installation of further monitoring structures (such as bore holes).

5.2 With the exception of emergency procedures to the landfill to protect human health and safety, it is anticipated that all works to the landfill would be undertaken during spring/summer when the ground is drier and easier to work on. Therefore, all such works will be undertaken according to the following guidelines:

- The grassland to be created on the former landfill may be used by for nesting by bird species such as Sky Lark *Alauda arvensis*. Therefore, prior to any works starting the grassland will be checked for the presence of nests before any vegetation clearance. Any nests found will be protected with a 5 m buffer around them until the chicks have fledged.
- It is also intended that the grassland be used by reptiles. Therefore, vegetation clearance will be undertaken in two cuts by hand during weather when reptiles are likely to be active. The first strimming should be to a height of 15 cm in order to encourage any animals present (reptiles and small mammals) to move out of the area. The vegetation should be strimmed starting in the centre of the area to be cleared and completed in the direction of surrounding, retained vegetation. All arisings should be removed from the area to ensure no cover for animals remains within the desired work area. After 24 hours, a second cut should be undertaken to ground level.
- Any tracking by plant across the grassland during the breeding bird or active reptile period to be accompanied by a banksman walking ahead to check for breeding birds and encourage reptiles to move out of the way.

5.3 Once works are complete, the grassland should be re-instated according to the protocol detailed above using the appropriate seed mix.

6 REFERENCES

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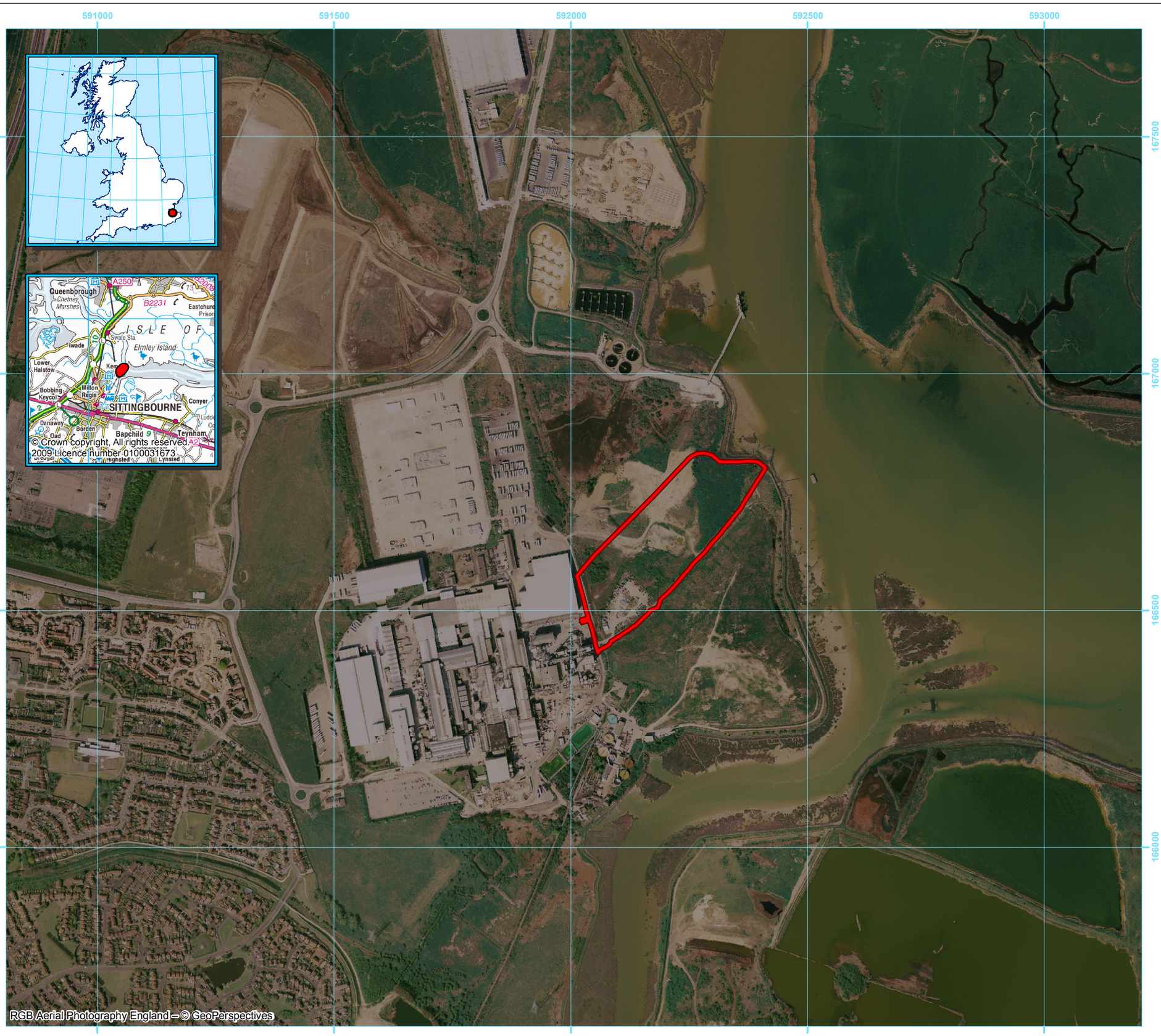
APPENDIX 1 – TUSSOCK-FORMING GRASSLAND SEED MIX

Scientific name	Common name
Achillea millefolium	Yarrow
Agrimonia eupatoria	Agrimony
Centaurea nigra	Common Knapweed
Centaurea scabiosa	Greater Knapweed
Daucus carota	Wild Carrot
Dipsacus fullonum	Wild Teasel
Galium album - (Galium mollugo)	Hedge Bedstraw
Geranium pratense	Meadow Cranesbill
Leucanthemum vulgare	Oxeye Daisy
Plantago lanceolata	Ribwort Plantain
Silene dioica	Red Campion
Silene vulgaris	Bladder Campion
Torilis japonica	Upright Hedge-parsley
Verbascum thapsus	Great Mullein
Vicia cracca	Tufted Vetch
Vicia sativa ssp. segetalis	Common Vetch
Alopecurus pratensis	Meadow Foxtail
Cynosurus cristatus	Crested Dogstail
Dactylis glomerata	Cocksfoot
Deschampsia cespitosa	Tufted Hair-grass
Festuca rubra	Strong-creeping Red-fescue
Holcus lanatus	Yorkshire Fog
Schedonorus arundinacea - (Festuca arundinacea)	Tall Fescue
Schedonorus pratensis - (Festuca pratensis)	Meadow Fescue
Trisetum flavescens	Yellow Oat-grass

FIGURES



Legend

Proposal site

Rev:	Date:	Amendment:	Name:	Checked:

Data Source: RPS 2009

Status: **FINAL**

RPS
Willow Mere House Compass Point Business Park Stocks Bridge Way
St. Ives Cambridgeshire PE27 5JL
T 01480 302751 F 01480 466911 E rpscm@rpsgroup.com

Client: DS Smith/E.on

Project: Kemsley Mill ES

Title: Proposal site and survey boundary

Scale: 1:8,000@A3

0 50 100 150 200 400m

Projection: British National Grid Datum: OSGB36

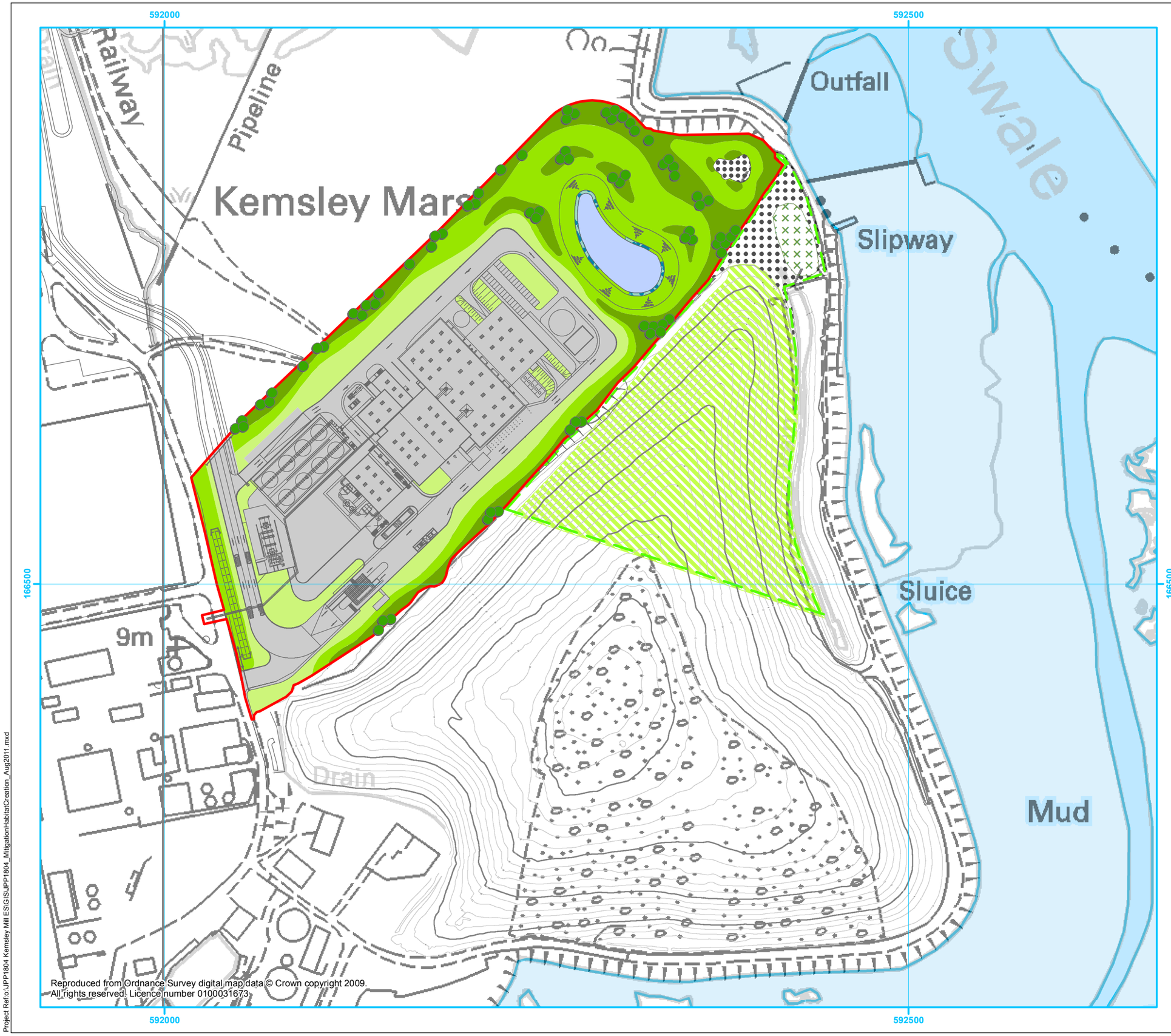
Date: 30/08/2011 Drawn: BF Checked: SS

Job Ref: **JPP1804** Figure No: **1.1** Revision: **B**

www.rpsgroup.com

Project Ref:o:\JPP1804 Kemsley Mill ES\GIS\JPP1804_ES_Site Location.mxd

Figure 2.1 Mitigation Habitat



Legend

- JPP1804_SiteBoundary_2013

Landscape Masterplan Habitat

- Mown grass
- Meadow grass
- Scrub mix
- Balancing pond
- Reed bed/Marginal plants
- Bare ground for reptiles
- Hard standing
- Habitat to be created outside redline

Mitigation habitat

- Grassland
- Scrub
- Bare ground

Rev:	Date:	Amendment:	Name:	Checked:

Data Source: RPS 2013

Status: **FINAL**

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Client: DS Smith/EEW

Project: Kemsley Mill ES

Title: Mitigation Habitat Creation

Scale: 1:2,500@A3

0 10 20 40 60 80 m

Projection: British National Grid Datum: OSGB36

Date: 08/07/2013 Drawn: BF Checked: NB

Job Ref: **JPP1804** Figure No: **2.1** Revision: **A**

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Project Ref:o:\JPP1804 Kemsley Mill ES\GIS\JPP1804_MitigationHabitatCreation_Aug2011.mxd