

Reference: BP-f-012 Rev: V1.1 Issue: December 2021

Authorised: Ellis Ashton

Habitats Regulations: Test of Likely Significant Effects report for operations at Former Seiont Brickworks, Caernarfon

SEIONT QUARRY, CAERNARFON

Seiont Ltd November 2023



Reference: BP-f-012 Rev: V1.1 Issue: December 2021 Authorised: Ellis Ashton

Revisions Control Page

Date	Summary of Changes Made	Changes Made By (Name)
28.11.2023	V0.1 Draft for issue with PAC	SMB



Reference: BP-f-012 Rev: V1.1 Issue: December 2021 Authorised: Ellis Ashton

Contents

SEIONT BRICKWORKS, CAERNARFON			
1	INTRODUCTION		
1.1	Purpose of this report		
1.2	Regulations		
2	PROPOSED DEVELOPMENT		
2.1	Nature of development		
2.2	Location and scale of development		
2.3	Operation		
3	HABITAT REGULATIONS SCREENING		
3.1	European sites		
3.2	Potential effects		
3.3	Conclusion of HRA Screening		
APP	PENDICES		
Α	Draft TLSE form		
В	Location Plan with European sites		
C	Site Plan		

Reference: BP-f-012 Rev: V1.1 Issue: December 2021 Authorised: Ellis Ashton

HABITAT REGULATIONS: TEST OF LIKELY SIGNIFICANT EFFECTS REPORT FOR OPERATIONS AT FORMER SEIONT BRICKWORKS, CAERNARFON

1 INTRODUCTION

1.1 Purpose of this report

- 1.1.1 The operator is seeking a new planning permission for changes to the site access and for use of the land as general storage (B8 use class), concrete batching plant area, recycling area, plant maintenance, associated weigh bridge and the siting of portacabins to be used as offices with associated parking and retention of workshop building, all on a permanent basis.
- 1.1.2 The planning authority, as a competent authority, must carry out an assessment under the Habitats Regulations, known as a habitats regulations assessment (HRA), to test whether a plan or project proposal could significantly harm the designated features of a European site. A 'European site' is protected by the Conservation of Habitats and Species Regulations 2017 as amended (known as the Habitats Regulations).
- 1.1.3 This report presents a brief description of the proposed development sufficient that the assessment process ('screening') can be conducted in accordance with the Regulations.

1.2 Regulations

- 1.2.1 The following European sites are protected by the Habitats Regulations and any proposals that could affect them will require an HRA:
 - Special Areas of Conservation (SACs)
 - Special Protection Areas (SPAs)
- 1.2.2 Any proposals affecting the following sites would also require an HRA because these are protected by government policy:
 - proposed SACs
 - potential SPAs
 - Ramsar sites wetlands of international importance (both listed and proposed)
 - areas secured as sites compensating for damage to a European site
- 1.2.3 The first stage of a HRA is a Test of Likely Significant Effect (TLSE) which is a screening assessment of impacts, to determine whether an appropriate assessment is required.
- 1.2.4 The assessment is made in view of the conservation objectives for the European sites concerned, as set out in either NRW's extant advice under Regulation 35 of the Conservation of Habitats and Species Regulations 2010 (for a European marine site), or in the current Core Management Plan (for a terrestrial European site). A draft TLSE form prepared by the applicant and containing the relevant information is presented in Appendix A to this document.

2 PROPOSED DEVELOPMENT

2.1 Nature of development

2.1.1 The project consists of the construction of a new permanent vehicular access from Waunfawr Road and the use of the land as general storage (B8 use class), concrete batching plant area, recycling area,



Reference: BP-f-012 Rev: V1.1 Issue: December 2021 Authorised: Ellis Ashton

plant maintenance, associated weigh bridge and the siting of portable cabins to be used as offices with associated parking and retention of the workshop building.

2.1.2 The key parameters currently envisaged are set out in Table 1. The alignment and surface area of the proposed haul route and access onto Waunfawr Road would be as shown in Figures PN324 A and 5770-WSP-XX-SK001. To allow some flexibility in layout and the proportion of land uses, the position and area allocated to each of the activities A – E would not be fixed: the total shown in Table 2 would not be exceeded and the intensity of use would be limited to the quantities shown by means of conditions.

Table 1 Key parameters of the project

Activity	Approx area	Quantity
A: General Storage use (Class B8) including sorting and packing of glacial boulders for sale	5,350 m ²	
B: Concrete batching plant area	2,700 m ²	10,000 m³ annual output 18,000 t aggregate import/yr 3,000 t cement import/yr
C: Recycling area for soils, construction and demolition waste, including new shed to house crushing plant Product sold for use off site. Any residual waste disposed of off site.	5,800 m ²	100,000 t annual throughput (concrete, bricks, tiles and ceramics, soil, stones and mixtures of these)
D: Plant maintenance and storage area including retention of existing workshop/fitter shed	5,000 m ²	
E: Temporary offices and welfare cabins, with staff parking	2,700 m ²	
TOTAL AREA ALLOCATED TO ACTIVITIES A - E	21,550 m ²	
Haul route with footpath/verges 835m x 10m nominal width	8,350m²	
New access point to Waunfawr Road (additional area for turning splay, ghost island and footway)	850m²	

2.1.3 Elements of this development will be regulated by Natural Resources Wales (NRW) under the Environmental Permitting (England and Wales) Regulations as amended.



Reference: BP-f-012 Rev: V1.1 Issue: December 2021 Authorised: Ellis Ashton

2.1.4 Portable buildings would house office and welfare facilities for maintenance staff. Foul drainage would be connected to the main sewer system existing from the former brickworks. Surface water would infiltrate through the aggregate surface or flow laterally into existing ditches running along the southwestern boundary of the former brickworks site and flowing into the Afon Seiont.

2.2 Location and scale of development

- 2.2.1 The site is located within the former Seiont Brickworks, on the southeastern edge of the town of Caernarfon. The location is shown on the plan forming Appendix B to this report. The development will occupy an overall plot of approximately 2.15ha (with a further 0.91ha taken up by the access road). It will be served by this new access and by existing site infrastructure. The schematic layout is shown on the Site Plan (Appendix C).
- 2.2.2 The whole of the application site consists of previously developed and disturbed land. The former brickworks site was recently used for the crushing and screening of aggregates in connection with the construction of the Caernarfon Bontnewydd bypass, and before that formed part of the Seiont Brickworks. The proposed new access follows the route of an existing haul road through the former Seiont quarry. This haul road was also formed and used for the bypass construction.

2.3 Operation

- 2.3.1 The traffic generated by the development in operation would be limited to staff cars visiting the site via Seiont Mill Road and the private quarry access, and HGV traffic which would use the proposed new access from Waunfawr Road. The proposal would involve a total of 15,147 loads or 30,293 goods vehicle movements annually (worst case assumes no 'back-loads' occur). Wherever possible, vehicles would carry a load on their return trips to reduce the numbers shown here. If evenly distributed through the year the number would be:
 - 46 Weeks per year 630 movements per week
 - 5.5 Days per week 115 movements per day
 - 10 Hours per day 11.5 movements per hour.

3 HABITAT REGULATIONS SCREENING

3.1 European sites

- 3.1.1 Within a 5 km radius of the application site there are four European sites having features which could be affected by the project:
 - Glynllifon SAC UK0012661 (5km distant)
 - Menai Strait and Conwy Bay Special Area of Conservation (SAC) UK0030202 (1.5km distant)
 - Abermenai to Aberffraw Dunes SAC UK0020021 (4.5km distant)
 - Glannau Mon: Cors Heli SAC UK0020025 (4.5km distant)
- 3.1.2 Each site, or the nearest portion of the boundary, is shown in relation to the location of the proposed development in the location plan forming Appendix B.

3.2 Potential effects

3.2.1 None of the European sites considered is close enough to the proposed development for there to be any risk of direct habitat loss or damage.



Reference: BP-f-012 Rev: V1.1 Issue: December 2021 Authorised: Ellis Ashton

3.2.2 Two potential pathways for indirect effect have been identified: waterborne, via the Afon Seiont; and airborne, through dust emissions to the air. Each of these has been considered in relation to each European site, taking account of fundamental interruptions to those pathways and the distances involved, as set out in the draft TLSE matrix which forms Appendix A. In considering the dispersion of airborne dust, the Menai Strait and Conwy Bay SAC has been taken as proxy for the more distant Abermenai to Aberffraw Dunes SAC and Glannau Mon: Cors Heli SAC, as a 'worst case' value.

3.3 Conclusion of HRA Screening

3.3.1 The draft Test of Likely Significant Effect has determined that significant effects can be ruled out for the European sites and their listed features.

APPENDICES

- A Draft TLSE form
- B Location Plan with European sites
- C Site Plan

HABITATS DIRECTIVE: HABITATS REGULATIONS ASSESSMENT (HRA) FOR PLANNING PERMISSION

DRAFT ASSESSMENT BY APPLICANT

PART A		
Application reference number and date		
Applicant details	Jones Bros R	uthin Co Ltd
Type of activity proposed	Changes to the site access and for use of the land as general storage (B8 use class), concrete batching plant area, recycling area, plant maintenance, associated weigh bridge and the siting of portacabins to be used as offices with associated parking and retention of workshop building, all on a permanent basis.	
Relevant legislation	Town and Country Planning Acts	
Site location	Seiont Quarry, Caernarfon, Gwynedd	
Application documents		
Environmental Statement	YES	
Pre-application correspondence EIA Screening		g stage
Need for a Habitats Regulations Assessment		
Is the proposal directly connected with or necessary to the management of a European site for the purposes of conserving the habitats or species for which the European site is designated?		No
Is it necessary to carry out a HRA?		Yes
For the reasons given in section 2.1 or 2.2 above, this proposal is not considered to require HRA.		Signed:
		Date:

1. Test of Likelihood of a Significant Effect (TLSE)

The first stage of a HRA is a Test of Likely Significant Effect (TLSE) which is a screening assessment of impacts, to determine if an appropriate assessment is required.

Unless this screening assessment enables significant effects on any European site to be ruled out, the project will need to be subject to an appropriate assessment.

The legislation requires consideration of plans and projects "either alone or in combination with other plans and projects". The test of likely significant effect is initially carried out by considering the proposal on its own (i.e. rather than in-combination with other plans or projects). If it is decided that the proposal alone is likely to have a significant effect, it is subject to appropriate assessment alone. An assessment in combination with other plans projects is only required if the proposal would be insignificant on its own, but has effects which may be significant if combined with the effects of other plans/projects which are also insignificant on their own. This is dealt with further in section 3.

This screening assessment is based on the application as submitted.

1.1 Which European Sites might be affected by the proposal?

Based on the information provided in the application the assessment is that the following European sites have features which could be affected by the project:

- Menai Strait and Conwy Bay Special Area of Conservation (SAC) UK0030202
- Abermenai to Aberffraw Dunes SAC UK0020021
- Glannau Mon: Cors Heli SAC UK0020025
- Glynllifon SAC UK0012661

1.2. Screening assessment

The screening assessment indicates the possible pathways through which the proposal may impact upon the relevant European site features. Each designated feature (taken from the official Natural 2000 designation documents) is recorded in the left hand column below.

The assessment in the right hand column below is made in view of the conservation objectives for the European sites concerned, as set out in either NRW's extant advice under Regulation 35 of the Conservation of Habitats and Species Regulations 2010 (for a European marine site), or in the current Core Management Plan (for a terrestrial European site)

Colour coding is used as follows:

- = There is no impact pathway from the proposal to the designated feature
- = There is an impact pathway in principle, but significant effects from the proposal when considered alone can be ruled out
- = There is an impact pathway and significant effects cannot be ruled out

The following numbers are used to describe the type of impact pathway considered to be present:

- 1 = Direct capture, damage or harm to a designated species feature.
- 2 = Damage to a designated habitat feature (including through direct physical impact, pollution, changes in thermal regime, hydrodynamics, light etc.).
- 3 = Damage to the habitat of designated species features (including through direct physical impact, pollution, changes in thermal regime, hydrodynamics, light etc.)
- 4 = Damage to a designated habitat feature via removal of, or other detrimental impact on, typical species.
- 5 = Removal of prey species of a designated species feature
- 6 = Damage to habitat of prey species.

Note that several impact pathways may be relevant to the same designated feature

European site and	Assessment of likelihood of significant effect		
Designated Features	Relevant conservation objectives Potential impact pathway		
Insert relevant conservation objectives from NRW Reg 35		For each row assign appropriate number(s) (as above) and	
	advice document or Natura 2000 site Core Management Plan	n give short explanation as required	
	(as applicable)		
Glynllifon UK0012661			
1303 Lesser Horseshoe bat	Vision for feature 1	Pathway 3: Damage to the habitat of designated species	
		features (including through direct physical impact,	

The natural range of lesser horseshoe bats will not be
reduced, nor be likely to be reduced for the foreseeable
future.

- There is, and will continue to be, sufficient habitat to maintain the lesser horseshoe bat population on a long-term basis.
- The three maternity roosts will continue to be occupied annually by lesser horseshoe bats and their babies
 - o Glynllifon Mansion (Unit 16).
 - o Melin y Cim (Unit 32).
 - o Pen y Bont (Unit 36).
- There will be a sufficiently large area of suitable habitat surrounding these roosts to support the bat population, including continuous networks of sheltered, broadleaved and coniferous woodland, tree lines and hedgerows connecting the various types of roosts with areas of insect-rich grassland and open water.
- All factors affecting the achievement of these conditions are under control.

Performance indicators for Feature 1:

[all relate to roosts and habitat within the SAC

[all relate to roosts and habitat within the SAC boundary, so do not include the proposal site]

pollution, changes in thermal regime, hydrodynamics, light etc

The proposal site is 5km from the SAC. Habitat at the proposal site forms an insignificant portion of the habitat available to the designated feature.

Cement would be delivered, stored and used within a sealed system with dust filters, regulated under a Permit, to prevent emissions.

Fugitive dust emissions (soils, brick and concrete, cement) could lead to particulate deposition onto the woodland adjacent to the proposed plant, which is habitat likely used by foraging bats, but the rate of deposition would be minimal and likely lower than during the site's previous use as a large brickworks. The woodland has continued in good health during that period and so negative effects on its foraging value for bats are very unlikely.

Lighting for out of hours security can be controlled by condition so that it does not deter bats from using woodland edge foraging area.

Concluded that significant effects on this feature can be ruled out.

Menai Strait and Conwy Bay SAC UK0030202

1110 Sandbanks which are slightly covered by sea water all the time 1140 Mudflats and sandflats not covered by seawater at low tide 1170 Reefs

5.2.2 Range

The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing.

For the intertidal mudflats and sandflats feature these include:

Muddy gravel communities

No impact pathway.

The proposal site is 1.5km from the SAC.

Drainage water from the proposal site flows into the SAC via the Afon Seiont and so there is, in principle, a pathway between the two. Surface water drainage is filtered by infiltration through the porous ground surface, or runs off via drainage channels which offer settlement of

1160 Large shallow inlets and bays

8330 Submerged or partially submerged sea caves

- Dwarf eelgrass, Zostera noltei beds
- Sediment communities at Traeth Lafan For the reef feature these include;
- Reef communities in high energy wave-sheltered, tide-swept conditions
- Under-boulder, overhang and crevice communities
- Limestone reef communities
- Clay outcrop reef communities

For the large shallow bay feature these include;

• Organically enriched muddy sediment areas

5.2.3 Structure and function

The physical biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded. Important elements include;

- geology,
- sedimentology,
- geomorphology,
- hydrography and meteorology,
- water and sediment chemistry,
- biological interactions.

This includes a need for nutrient levels in the water column and sediments to be:

- at or below existing statutory guideline concentrations
- within ranges that are not potentially detrimental to the long term maintenance of the features species populations, their abundance and range.
- Mudflats and sandflats not covered by seawater at low tide
- Reefs
- Sandbanks which are slightly covered by seawater all the time
- Large shallow inlets and bays
- Submerged or partially submerged sea caves

suspended solids. The quantity of solids which could conceivably reach the SAC is a negligible fraction of the existing sediment regime. Plant repairs are conducted within a workshop building with a contained drainage system which would hold any catastrophic spillage of engine lubricating oils, breaking the pathway. Washout water from concrete vehicles would be recycled into concrete production, eliminating this pathway. The distance and direction from proposal site to the SAC is sufficient to ensure dispersal.

Concluded that significant effects on the designated features can be ruled out.

Contaminant levels in the water column and sediments derived from human activity to be:

- at or below existing statutory guideline concentrations
- below levels that would potentially result in increase in contaminant concentrations within sediments or biota
- below levels potentially detrimental to the long-term maintenance of the feature species populations, their abundance or range taking into account bioaccumulation and biomagnification.

Restoration and recovery

This includes the need for restoration of some reef features such as underboulder, overhang and crevice communities, and of some mudflat and sandflat features such as the muddy gravel habitats and sheltered muddy habitats. All of these habitats are also part of the large inlets and bays feature

5.2.4 Typical Species

The presence, abundance, condition and diversity of typical species is such that habitat quality is not degraded. Important elements include:

- species richness
- population structure and dynamics,
- physiological heath,
- reproductive capacity
- recruitment,
- mobility
- range

As part of this objective it should be noted that:

- populations of typical species subject to existing commercial fisheries need to be at an abundance equal to or greater than that required to achieve maximum sustainable yield and secure in the long term
- the management and control of activities or operations likely to adversely affect the habitat feature is appropriate for

	maintaining it in favourable condition and is secure in the long	
	term	
	Abermenai to Aberffraw Dunes SAC	CUK0020021
2110 Embryonic shifting dunes	Conservation Objective for Feature 1: Embryonic shifting dunes The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The distribution and extent of embryonic shifting dunes in late summer is determined by the availability of naturally accreting sand and strand line organic material. However, we would not expect all this potential embryonic dune habitat area to be vegetated in any one year and embryonic dunes may be absent in some years. Continuous absence over the six-year reporting cycle would cause the condition to be considered unfavourable. • The potential for the embryonic shifting dunes element of the typical zonation, from beach to fixed dune, is intact along	No impact pathway. The proposal site is 4.5km from the SAC. Drainage water from the proposal site flows into the SAC via the Afon Seiont and so there is, in principle, a pathway between the two. Surface water drainage is filtered by infiltration through the porous ground surface, or runs off via drainage channels which offer settlement of suspended solids. The quantity of solids which could conceivably reach the SAC is a negligible fraction of the existing sediment regime. Plant repairs are conducted within a workshop building with a contained drainage system which would hold any catastrophic spillage of engine lubricating oils, breaking the pathway. Washout
	the soft coastal frontage. This includes an unrestricted supply of sediment, opportunity for aeolian transport and naturally occurring organic strandline material. • The typical species of the strandline vegetation include Atriplex spp., Beta vulgaris, Cakile maritime, Honkenya peploides, Salsola kali. • The typical species of the embryonic dune vegetation include Elytrigia juncea and /or Leymus arenarius. • All factors affecting the achievement of these conditions are under control. Conservation Objectives for feature 7: Transition mires and quaking bogs	water from concrete vehicles would be recycled into concrete production, eliminating this pathway. The distance and direction from proposal site to the SAC is sufficient to ensure dispersal. Concluded that significant effects on the designated features can be ruled out.

	This is a minor SAC feature and no specific conservation objectives are required at this stage.
	asjectives are required at this stage.
2120 Shifting dunes along	Conservation Objective for Feature 2: Shifting dunes along
the shoreline with	the shoreline with Ammophila arenaria ("white dunes")
Ammophila arenaria	The vision for this feature is for it to be in a favourable
('white dunes')	conservation status, where all of the following conditions are satisfied:
	Shifting dunes with Ammophila arenaria are present along
	the dune front facing prevailing (southwest) winds where
	sediment supply is adequate.
	There should be no decrease in the total (aggregate) area of
	qualifying dune habitats for which this site was designated
	(i.e., the sum total of qualifying dune habitat should not
	diminish). The extent and location of individual dune habitat
	features may be subject to periodic and seasonal variation.
	The shifting dunes element of the typical zonation from
	beach to fixed dune is intact along the soft coastal frontage.
	Bare ground is present. The standard formula is a standard formula in the standard formula in th
	• The typical species of the shifting dune vegetation include
	Ammophila arenaria, Leymus arenarius, Elymus farctus,
	Eryngium maritimum, Euphorbia portlandica, Euphorbia paralias, and Calystegia soldanella.
	All factors affecting the achievement of these conditions are
	under control.
	and control.
2130 Fixed coastal dunes	Conservation Objective for Feature 3: Fixed dunes with
with herbaceous	herbaceous vegetation (`grey
vegetation ('grey dunes')	dunes`)* (Habitats Directive priority feature)
	The vision for this feature is for it to be in a favourable
	conservation status, where all of the following conditions are
	satisfied:

- The distribution of fixed dunes within the site may vary in response to natural dynamic processes and changes to other qualifying dune habitats for the site.
- There should be no decrease in the total area of fixed dunes with herbaceous vegetation.
- The fixed dunes element of the typical zonation from beach to fixed dune is intact along the soft coastal frontage.
- Bare ground is present
- The typical species of the fixed dune vegetation include Cerastium fontanum, Crepis capillaris, Cladonia spp., Peltigera spp., Erodium cicutarium, Geranium molle, Luzula campestris, Odontites verna, Pilosella officinarum, Plantago lanceolata, Prunella vulgaris, Festuca rubra, Galium verum, Anacamptis pyramidalis, Thymus polytrichus, Sedum acre, Veronica chamaedrys, Carex arenaria, C. flacca, Euphrasia officinalis, Hypnum cupressiforme, Hypochaeris radicata, Linum catharticum, Lotus corniculatus, Ononis repens, Rhinanthus minor, Rhytidiadelphus squarrosus, R triquetrus, Tortula muralis, Viola canina, V. riviniana and V. tricolor.
- All factors affecting the achievement of these conditions are under control.

2170 Dunes with Salix repens ssp. argentea (Salicion arenariae)

Conservation Objective for Feature 4: Dunes with Salix repens ssp. argentea (Salicion arenariae)

The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

• The distribution of dunes with Salix repens ssp argentea is consistent with the typical dune zonation and where topographic conditions are suitable. The location of dunes with Salix repens ssp argentea within the site may vary in response to natural dynamic processes and changes to other qualifying dune habitats for the site

• There should be no decrease in the total (aggregate) area of qualifying dune habitats for which this site was designated (i.e., the sum total of qualifying dune habitat should not diminish). The extent of individual dune habitat features may be subject to periodic and seasonal variation. • Salix repens is at least frequent and generally 5 - 30cm tall. • Opportunities for the initiation of embryonic dune slacks by wind erosion exist. • Bare ground is present. • The groundwater level is appropriate in winter and summer. • Groundwater quality is unaffected by pollution. • The typical species include Salix repens, Carex arenaria, C flacca, Euphrasia officinalis, Festuca rubra, Lotus corniculatus, Ononis repens, Equisetum variegatum, Epipactis palustris, Epipactis leptochila spp dunensis and Pilosella officinarum. • All factors affecting the achievement of these conditions are under control. 2190 Humid dune slacks **Conservation Objective for Feature 5: Humid dune slacks** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The distribution of humid dune slacks is consistent with the typical dune zonation and where topographical conditions are suitable. The location of humid dune slacks within the site may vary in response to natural dynamic processes and

changes to other qualifying dune habitats for the site.

• There should be no decrease in the total (aggregate) area of qualifying dune habitats for which this site was designated (i.e., the sum total of qualifying dune habitat should not diminish). The extent and location of individual dune habitat features may be subject to periodic and seasonal variation.

- All humid dune slack communities should be present, from embryonic dune slacks with a high % of bare ground to more closed vegetation with Salix repens.
- Opportunities for the initiation of embryonic dune slacks (by wind erosion) exist.
- Bare ground is present.
- The ground water level is appropriate in winter and summer.
- Ground water quality is unaffected by pollution.
- The typical species include Salix repens, Carex arenaria, C flacca, Equisetum variegatum, Lotus corniculatus, Ononis repens, Potentilla anserina, Galium palustre, Mentha aquatica, Hydrocotyle vulgaris, Campyllium stellatum, Prunella vulgaris, Ranunculus flammula, Calliergon cuspidatum, Anagallis tenella. Parnassia palustris, Selaginalla selaginoides, Dactylorhiza incarnata and Epipactis palustris.
- Petalwort occurs in humid dune slacks in which Equisetum variegatum is frequent at Aberffraw and Newborough compartments.
- All factors affecting the achievement of these conditions are under control

3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition – type vegetation

Conservation Objective for Feature 6: Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation

The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

- The distribution of the lakes reflects their physiographic status as dune-dammed lakes of shallow valleys.
- The extent (area) of the habitat is 30ha, except if reduced by natural succession to swamp or bog.

	 The catchment of the lakes continues to provide adequate quality and quantity of water. Appropriate water level is maintained throughout the year, (seasonal fluctuation +/- 30cm). Water quality is characteristic of maritime, high alkalinity shallow lakes, such as to maintain pH 7-9, alkalinity 1500-2500μeq/l, dissolved oxygen and peak annual Total Phosphorus <50μg/l. Chlorophyll α values are low, and sufficient to allow both lakes to be passed as 'Good' or better for a 'high alkalinity shallow lake' using Water Framework Directive classification methods. The typical species are submerged aquatic plants including Elatine hydropiper, Potamogeton trichoides, P pectinatus P. perfoliatus P. lucens, Ranunculus circinatus, Eleocharis acicularis, Myriophyllum spicatum, Callitriche hermaphroditica, , and Chara spp Emergent aquatic plants, typically Phragmites australis, Schoenoplectus lacustris, Sparganium erectum, Typha latifolia, Alisma plantago-aquatica, and Litorella uniflora should be present on the shoreline. Invasive or disruptive species such as Crassula helmsii or coarse fish should be absent. All factors affecting the achievement of these conditions are under control. 	
ansition mires and	_	
quaking bogs	This is a minor SAC feature and no specific conservation	
	objectives are required at this stage.	
1395 Petalwort	Conservation Objective for Feature 8: Petalwort	
Petalophyllum ralfsii	Petallophyllum ralfsii	

The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

- The population of petalwort is stable or increasing.
- Petalwort occurs in humid dune slacks in which Equisetum variegatum is frequent, across all sectors of the site where habitat conditions are suitable, i.e. Aberffraw and Newborough compartments.
- Humid dune slack with bare sand or humus crust and short vegetation characterised by Equisetum variegatum is present at Aberffraw and Newborough compartments where sediment and hydrological conditions permit. (see Objective for humid dune slacks).
- Competition (including shading) from other species is controlled.
- All factors affecting the achievement of these conditions are under control.

1441 Shore dock *Rumex* rupestris

Conservation Objective for Feature 9: Shore dock Rumex rupestris

The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

- The population of shore dock is stable or increasing.
- Shore dock occurs in at least 3 locations across the site.
- Opportunities occur for marine dispersal of seed.
- Open streamside, coastal soft cliff seepages or dune slack pool habitat is adequate for its survival.
- Adequate freshwater supply is maintained.
- Bare ground or disturbed areas are maintained (e.g. by grazing animals) to permit germination.
- Competition (including shading) from other species is controlled.

	All factors affecting the achievement of these conditions are under control.	
Great Crested Newt Triturus cristatus	Conservation objective for feature 10: Great Crested newt This is a minor SAC feature and no specific conservation objectives are required at this stage. In addition, each Conservation Objective has a number of performance indicators attached to it, for example the extent of a feature and the quality of the feature. The performance indicators are part of the conservation objective, not a substitute for it. The performance indicators can be found within the Core management Plan including Conservation Objectives for Y Twyni o Abermenai i Aberffraw/ Abermenai to Aberffraw Dunes SAC.	
	Glannau Mon: Cors Heli SAC UK	0020025
1130 Estuaries	Conservation Objective for Feature 11: Estuaries The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • the distribution and extent of the estuaries, and their encompassed habitats, are determined predominantly by natural structure and environmental processes • the natural habitat structures necessary for the long-term maintenance of the estuaries and their encompassed habitats and typical species are maintained; • the granulometry and structure of the estuaries' sediments, and their natural variation, distribution and extent, are determined predominantly by natural sediment supply and transport processes	No impact pathway. The proposal site is 4.5km from the nearest point of the SAC. Drainage water from the proposal site flows into the SAC via the Afon Seiont and so there is, in principle, a pathway between the two. Surface water drainage is filtered by infiltration through the porous ground surface, or runs off via drainage channels which offer settlement of suspended solids. The quantity of solids which could conceivably reach the SAC is a negligible fraction of the existing sediment regime. Plant repairs are conducted within a workshop building with a contained drainage sysem which would hold any catastrophic spillage of

- the quality of habitat structure is no more degraded as a consequence of human action or by materials of anthropogenic origin
- the natural environmental processes necessary for the longterm maintenance of the estuaries, their encompassed habitats and their typical species are maintained
- Water & sediment chemistry are determined predominantly by natural hydrodynamic, hydrological and meteorological processes
- the salinity regime and gradients within the estuaries are determined predominantly by natural hydrodynamic, hydrological and meteorological processes
- typical species are determined predominantly by inherent population dynamics and ecological processes
- the species richness, population dynamics, abundance, biomass, population structures, physiological health, reproductive capacity, recruitment, range and mobility are maintained
- the management of activities or operations likely to degrade the distribution, extent, structure, function or typical species populations of the feature, is appropriate for maintaining favourable conservation status and is secure in the long-term; and
- the management of existing commercial fisheries for typical species ensures that species exploitation is at or below maximum sustainable yield and is secure in the long-term.

 NB. Detailed requirements for the maintenance of favourable condition for the other estuarine habitat features and their typical species are provided under their respective conservation objectives.

engine lubricating oils, breaking the pathway. Washout water from concrete vehicles would be recycled into concrete production, eliminating this pathway. The distance and direction from proposal site to the SAC is sufficient to ensure dispersal.

Concluded that significant effects on the designated features can be ruled out.

1310 Salicornia and other
annuals colonising mud
and sand

Conservation Objective for Feature 12: Salicornia and other annuals colonising mud and sand

The vision for this feature is for it to be in a favourable conservation status, where, subject to natural processes1 all of the following conditions are satisfied:

- the distribution and extent of Salicornia and other annuals is determined predominantly by natural structure and environmental processes;
- the natural habitat structures necessary for the long-term maintenance of Salicornia and other annuals and their typical species are maintained;
- the granulometry and structure of Salicornia and other annuals' sediments, and their natural variation, distribution and extent, are determined predominantly by natural sediment supply and transport processes;
- the geomorphology of the Salicornia and other annuals feature, and its natural variation, distribution and extent, are determined predominantly by the underlying geology and natural environmental processes;
- the natural environmental processes necessary for the longterm maintenance of the Salicornia and other annuals feature and its typical species, are maintained;
- the hydrographic and meteorological processes necessary for the long-term maintenance of the Salicornia and other annuals feature and its typical species are determined predominantly by natural environmental processes;
- the salinity regime and gradients of the Salicornia and other annuals feature are determined predominantly by natural hydrodynamic, hydrological and meteorological processes;
- nutrients in the water column and sediments remain within ranges that are not potentially detrimental to the long-term maintenance of the Salicornia and other annuals' communities, their distribution and range;

• contaminants in the water column and sediments derived from human activity remain below levels potentially detrimental to the long-term maintenance of the Salicornia and other annuals' communities, their distribution and range; • dissolved oxygen levels in the water column and sediments are determined predominantly by natural environmental processes • communities of typical species are maintaining their conservation status on a long-term basis as viable components of the Salicornia and other annuals' habitats • the management of activities or operations likely to degrade the distribution, extent, structure, function or typical species communities of the feature, is appropriate for maintaining favourable conservation status and is secure in the long-term. 1140 Mudflats and Conservation Objective for Feature 13: Mudflats and sandflats not covered by seawater at low tide sandflats not covered by The vision for this feature is for it to be in a favourable seawater at low tide conservation status, where all of the following conditions are satisfied: • the distribution and extent of the mudflats and sandflats, and their encompassed habitat, are determined predominantly by natural structure and environmental processes • the natural habitat structures necessary for the long-term maintenance of the mudflats and sandflats, and their encompassed habitat and typical species are maintained • the granulometry and structure of the mudflats and

sandflats' sediments, and their natural variation, distribution

and extent, are determined predominantly by natural

sediment supply and transport processes

• the quality of habitat structure is no more degraded as a consequence of human action or by materials of anthropogenic origin • the natural environmental processes necessary for the longterm maintenance of the mudflats and sandflats, their encompassed habitats and their typical species are maintained • Water & sediment chemistry are determined predominantly by natural hydrodynamic, hydrological and meteorological processes • the salinity regime and gradients within the mudflats and sandflats are determined predominantly by natural hydrodynamic, hydrological and meteorological processes • typical species are determined predominantly by inherent population dynamics and ecological processes • the species richness, population dynamics, abundance, biomass, population structures, physiological health, reproductive capacity, recruitment, range and mobility are maintained • the management of activities or operations likely to degrade the distribution, extent, structure, function or typical species populations of the feature, is appropriate for maintaining favourable conservation status and is secure in the long-term; and • the management of existing commercial fisheries for typical species ensures that species exploitation is at or below maximum sustainable yield and is secure in the long-term. **Conservation Objective for Feature 14: Atlantic salt meadow** 1330 Atlantic salt meadows (Glauco-Puccinellietalia (ASM) maritimae) The vision for this feature is for it to be in a favourable conservation status, where, subject to natural processes all of

the following conditions are satisfied:

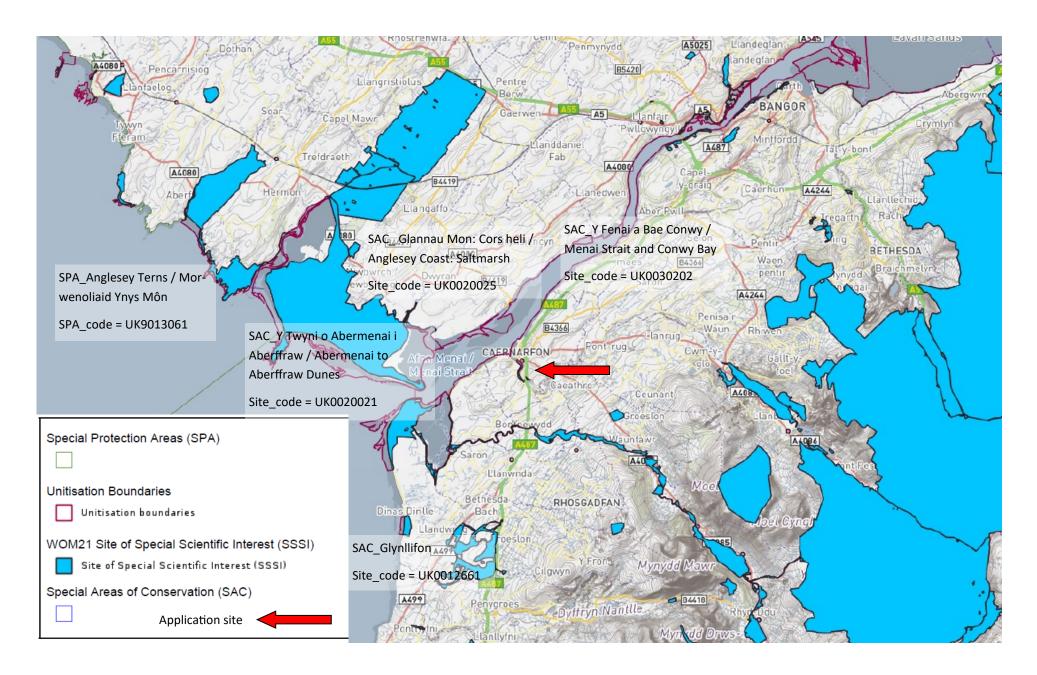
- the distribution and extent of the saltmeadows is determined predominantly by natural structure and environmental processes;
- the natural habitat structures necessary for the long-term maintenance of the saltmeadows and typical species are maintained;
- the granulometry and structure of the saltmeadows' sediments, and their natural variation, distribution and extent, are determined predominantly by natural sediment supply and transport processes;
- the geomorphology of the saltmeadows, and their natural variation, distribution and extent, are determined predominantly by the underlying geology and natural environmental processes;
- the hydrographic and meteorological processes necessary for the long-term maintenance of the saltmeadows and their typical species are determined predominantly by natural environmental processes;
- the salinity regime and gradients within the saltmeadows are determined predominantly by natural hydrodynamic, hydrological and meteorological processes;
- nutrients in the water column and sediments are within ranges that are not potentially detrimental to the long-term maintenance of the saltmeadows' communities, their distribution and range;
- contaminants in the water column and sediments derived from human activity remain below levels potentially detrimental to the long-term maintenance of the saltmeadows' communities, their distribution and range;
- dissolved oxygen levels in the water column and sediments are determined predominantly by natural environmental processes;

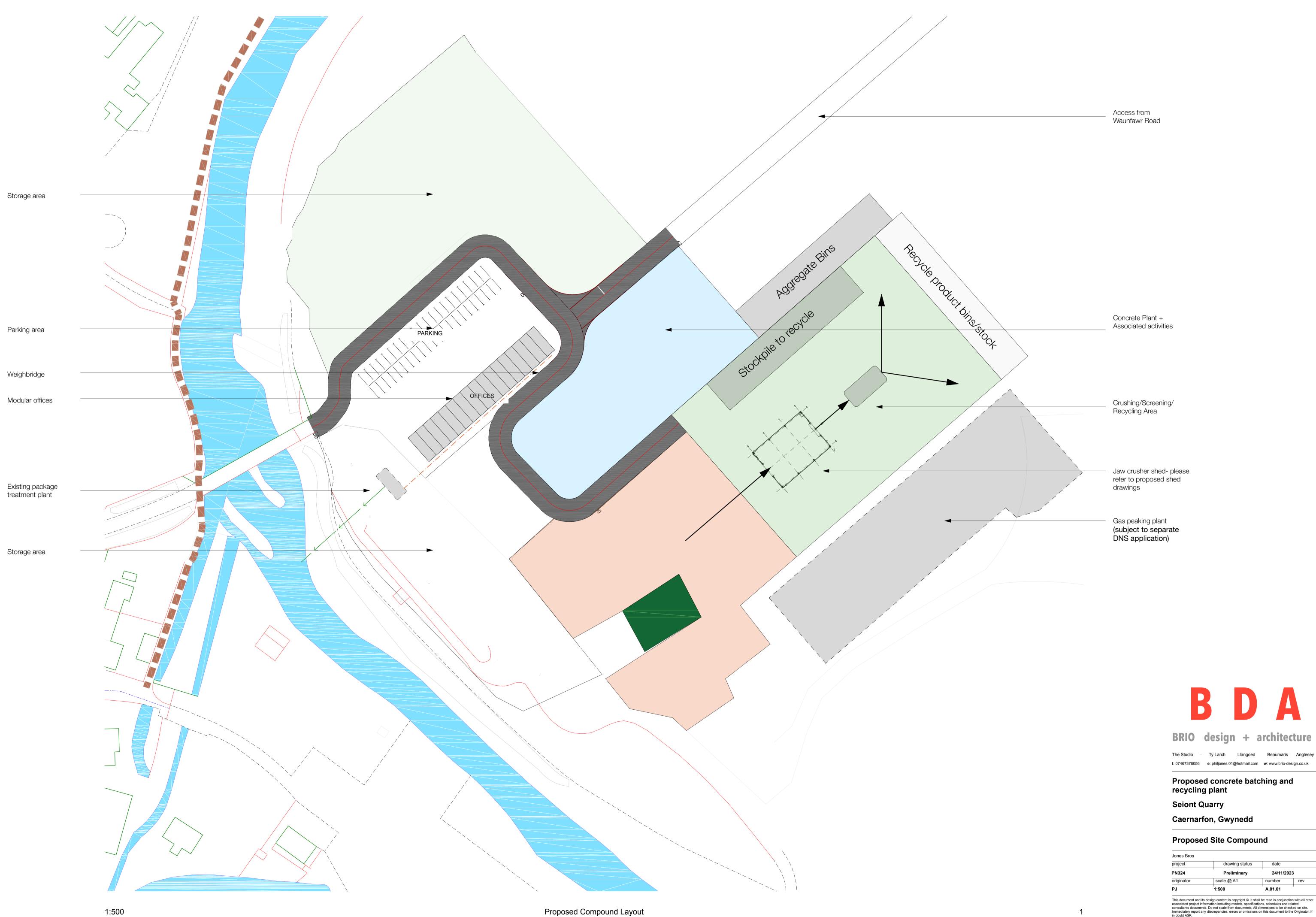
	the zonation of saltmarsh from pioneer, lower mid marsh
	and upper mid marsh and their transitions to fresh water and
	terrestrial vegetation are maintained;
	communities of typical species are maintaining their
	conservation status on a long-term basis as viable
	components of the saltmeadows' habitats,
	the species richness, community dynamics, abundance,
	biomass, community structures, physiological health,
	reproductive capacity, recruitment and range are maintained:
	the management of activities or operations likely to
	degrade the distribution, extent, structure, function or typical
	species communities of the feature, is appropriate for
	maintaining favourable conservation status and is secure in
	the long-term.
Spartina swards (Spartini	Conservation Objective for Feature 15: Spartina swards
maritimae)	(Spartinion maritimae)
	This is a minor SAC feature and no specific conservation
	objectives are required at this stage.
Vegetated sea cliffs of the	Conservation Objective for Feature 16: Vegetated sea cliffs
Atlantic and Baltic Coasts	of the Atlantic and Baltic coasts
	This is a minor SAC feature on this site and no specific
	conservation objectives are required at this stage.
	In addition, each Conservation Objective has a number of
	performance indicators attached to it for example the extent
	of a feature and the quality of the feature. The performance
	indicators are part of the conservation objective, not a
	substitute for it. The performance indicators can be found
	within the Core management Plan including Conservation
	Objectives for Glannau Môn: Cors Heli/ Anglesey Coast:
	Saltmarsh SAC.

If ALL rows in the right hand column of the table 3.2 have identified the proposal is not likely to have a significant effect on any European site, no furth	er
consideration under the Habitats Directive/Regulations is required in order to determine the application.	

Conclusion

The test of likely significant Effect has determined that significant effects can be ruled out for the European sites and their listed features		
This ends the Appropriate Assessment process.		
Signed	_Date	





This document and its design content is copyright ©. It shall be read in conjunction with all other associated project information including models, specifications, schedules and related consultants documents. Do not scale from documents. All dimensions to be checked on site. Immediately report any discrepancies, errors or omissions on this document to the Originator. If in doubt ASK.