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

DRAFT ASSESSMENT BY RML

Part A	
Application reference number and date	3043/05
Applicant details	Mr K MacMaster representing Trustees of the Estate of the late K J G MacMaster c/o Richards, Moorehead & Laing Ltd, 55 Well Street, Ruthin, Denbighshire, LL15 1AF
Type of activity proposed	*Planning application for engineering works connected with slope stability measures.*
Relevant legislation	Town and Country Planning Act 1990 (as amended) **A Marine License by NRW** CML1320 (Marine and Coastal Access Act 2009) only if it is necessary to extend the temporary working area below MHWS
Site location	Slope to the east of Pentir, to the south east of Llanbedrog on the Llŷn Peninsula, Pwlheli, North Wales.
Application documents	The application was accompanied by • Planning application statement with relevant drawings and forms (RML) • Ecology report (RML)
Environmental statement	Non-EIA development. See accompanying development statement.
Pre-application correspondence	Yes, see accompanying planning application statement.

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: • **Pen Llŷn a'r Sarnau SAC UK0013117**

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 (marine) site and Designated Features	**Assessment of likelihood of significant effect**	
	Relevant conservation objectives *Insert relevant conservation objectives from NRW Reg 35 advice document or Natura 2000 site Core Management Plan (as applicable)*	**Potential impact pathway** *For each row assign appropriate number(s) (as above) and give short explanation as required*

Pen Llyn a'r Sarnau SAC		
Reefs	**RANGE** The overall distribution and extent of the habitat features within the site, and each of their main component parts is **stable or increasing.** <u>For the **reef** feature these include</u>: - Rocky intertidal reefs - Rocky subtidal reefs - Extensive boulder and cobble reefs – the Sarnau - Biogenic reefs (horse mussel *Modiolus modiolus* reef / green crenella *Musculus discors* reef and Honeycomb worm *Sabellaria alveolata* reef) - Carbonate reef formed by methane gas leaking from the seabed. <u>For the **large shallow inlets and bays** these include:</u> - Subtidal sediment communities - Subtidal rocky communities - Intertidal communities <u>For the **intertidal mudflat and sandflat** feature these include:</u> -*Mya arenaria* and polychaetes in muddy gravel -Eel grass *Zostera marina* beds. -Muddy gullies in the Mawddach estuary. <u>For the ***Salicornia*** feature this includes:</u> -Communities characterised by the species *Sarcocornia perennis.* For the **intertidal mudflats and sandflats** and **sandbanks** features this requires an overall stability or increase in the amount of the feature, taking into account the areas of long term stability and localised losses and additions arising from environmental processes. For **estuaries** this includes the stability of sandy sediments in proportion to the muddy sediments. Restoration and recovery	2, 4 Potential damage to littoral biogenic and rocky intertidal reefs approximately 400 m north of the proposed development, with potential reef locations in between, degradation of reef structure and function, and loss and degradation of typical species
Large shallow inlets and bays		2, 4 Potential damage to bay habitat within the footprint of the proposed development, degradation of bay structure and function, and loss and degradation of typical species
Sandbanks which are slightly covered by seawater all the time		Feature is distant from proposed works and nature and from the scale of the indirect effects the development is unlikely to have an impact
Estuaries		Feature is distant from proposed works and nature and from the scale of the indirect effects the development is unlikely to have an impact
Coastal Lagoons		Feature is distant from proposed works and nature and from the scale of the indirect effects the development is unlikely to have an impact
Mudflats and sandflats not covered by seawater at low tide		Feature is distant from proposed works and nature and from the scale of the indirect effects the development is unlikely to have an impact
Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)		Feature is distant from proposed works and nature and from the scale of the indirect effects the development is unlikely to have an impact
***Salicornia* and other annuals**		Feature is distant from proposed works and nature and from the scale of the indirect effects the development is

colonising mud and sand	As part of this objective it should be noted that; for the **estuaries** feature additional land which should form an integral part of the estuarine ecosystem should be restored **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. 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 features species populations, their abundance or range. For **Atlantic salt meadows** this includes the morphology of the saltmarsh creeks and pans RESTORATION AND RECOVERY As part of this objective it should be noted that; for the **estuaries** feature the structure and functions of the estuaries that have been damaged/degraded by the constraints of artificial structures such as flood banks, are restored. TYPICAL SPECIES The presence, abundance, condition and diversity of typical species	unlikely to have an impact
Submerged or partially submerged sea caves		Feature is distant from proposed works and nature and from the scale of the indirect effects the development is unlikely to have an impact

	are 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. Restoration and recovery As part of this objective it should be noted that; for the **reefs** feature the potential for expansion of the horse mussel *Modiolus modiolus* community off the north Llŷn coast is not inhibited.	
Grey seal *Halichoerus grypus*	**POPULATIONS** The population is maintaining itself on a long-term basis as a viable component of its natural habitat. Important elements are population size, structure, production, and condition of the species within the site. As part of this objective it should be noted that: -for **bottlenose dolphin, otter and grey seal**; contaminant burdens derived from human activity are below levels that may cause physiological damage, or immune or reproductive suppression -**grey seal** populations should not be reduced as a consequence of human activity **RANGE OF POPULATIONS** The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future. As part of this objective it should be noted that for **bottlenose dolphin, otter and grey seal** -Their range within the SAC and adjacent inter-connected areas is not	3, 6 Possible impact on habitat used by grey seals and their prey through indirect effects on water quality, and potential release of contaminants and contractor waste.
Bottlenose dolphin *Tursiops truncatus*		3, 6 Possible impact on habitat used by bottlenose dolphins and their prey through indirect effects on water quality, and potential release of contaminants and contractor waste.
Otter *Lutra lutra*		1, 3, 6 Potential disturbance to otters in the SAC e.g. due to noise and other disturbance. Possible impact on habitat used by otters and their prey through indirect effects on water quality, and potential release of contaminants and contractor waste.

	constrained or hindered -There are appropriate and sufficient food resources within the SAC and beyond The sites and amount of supporting habitat used by these species are accessible and their extent and quality is stable or increasing **SUPPORTING HABITATS AND SPECIES** The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing. Important considerations include; -distribution, -extent, -structure, -function and quality of habitat, -prey availability and quality. As part of this objective it should be noted that; -The abundance of prey species subject to existing commercial fisheries needs to be 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 species feature, is appropriate for maintaining it in favourable condition and is secure in the long term. -Contamination of potential prey species should be below concentrations potentially harmful to their physiological health.	

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 further 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 cannot be ruled out for the following European sites and their listed features

Pen Llyn a'r Sarnau SAC:

- Reefs
- Large shallow inlets and bays

- Grey seal *Halichoerus grypus*
- Bottlenose dolphin *Tursiops truncatus*
- Otter *Lutra lutra*

These impacts will now be assessed in the Appropriate Assessment stage

Signed _____ Date_____

2. Appropriate Assessment

Table 2.1 contains the appropriate assessment for the proposal. The two left hand columns list the designated features and the impact pathways identified from the TLSE where likely significant effects are anticipated or cannot be ruled out.

The table considers the potential impact in the absence of any additional conditions or restrictions intended to mitigate adverse effects. Table 2.2 then considers additional conditions or restrictions to mitigate any adverse effects.

2.1 Assessment of proposal as submitted in application

Feature (from Table 1.2)	Description of impacts	Assessment in view of conservation objectives	Can adverse effect on site integrity be ruled out? (Y or N)
Pen Llyn a'r Sarnau SAC			
Reefs	**CONSTRUCTION PHASE – Excavation of landslide debris, import and placement of material and associated work to strengthen and stabilise the slope**		
	Degradation of habitat quality, structure and function, and typical species due to sediment accretion.	Potential alteration of beach structure due to construction works and heavy plant could result in increased likelihood of sediment accretion and potential smothering of reef communities 400 m north of the proposed development. This will be addressed by: - Working above the high tide line only - Marking out stream course north of the proposed development site and works area. - Implementing effective management of the works site and operations and provision of effective sediment contingency measures. There is a small potential for sediment accretion in the marine environment as a result of the construction works but the stabilisation works will avoid progressive loss of slope material into the intertidal zone where it will become	Y

	mobile sediment.	
Degradation of habitat quality, structure and function, and typical species due release of contaminants and contractor waste	Construction works and heavy plant activity on the beach could result in increased likelihood of contamination of reef communities from hydrocarbon pollution from fuel and oils, and construction materials 400 m north of the proposed development. This will be addressed by: - Working above the high tide line only - Marking out stream course north of the proposed development site and works area, and minimising machine tracking through the beach where the stream discharges - Implementing effective management of the works site and operations, and provision of effective pollution prevention and contingency measures including: a designated refuelling point away from the beach; use of 'plant nappy' and spill kits during refuelling; use of biodegradable lubricants. There is a small potential for release of contaminants in to the marine environment as a result of the construction works (see construction management plan for detailed mitigation measures).	Y
OPERATIONAL PHASE		
Degradation of habitat quality, structure and function, and typical species due to sediment accretion	Potential alteration of beach structure due to the new slope stability structure could result in increased likelihood of sediment accretion and potential smothering of reef communities 400 m north of the proposed development. It has been assessed that in the long term the new slope stability structure will prevent further sediment accretion caused by terrestrial material collapsing on to the beach. There is a benefit of decreasing sediment accretion in the	Y

		marine environment as a result of the construction works.	
Large shallow inlets and bays	**CONSTRUCTION PHASE**		
	Degradation of habitat quality, structure and function, and typical species due to compression of habitat under heavy machinery and subsequent alteration of the sedimentation regime	Potential alteration of beach structure due to construction works and heavy plant could result in increased likelihood of compression under heavy machinery and subsequent alteration of the sedimentation regime in the intertidal marine habitat and communities below and to east of the proposed development. This will be addressed by: - Working above the high tide line only - Marking out stream course north of the proposed development site and works area. - Implementing effective management of the works site and operations and provision of effective sediment contingency measures. There is a small potential for compression of habitat and alteration of sedimentation in the marine environment as a result of the construction works.	Y
	Degradation of habitat quality, structure and function, and typical species due release of contaminants and contractor waste	Construction works and heavy plant activity on the beach could result in increased likelihood of contamination from hydrocarbon pollution from fuel and oils, and construction materials of the intertidal marine habitat and communities below and to east of the proposed development. This will be addressed by: - Working above the high tide line only - Marking out stream course north of the proposed development site and works area, and minimising machine tracking through the beach where the stream discharges - Implementing effective management of the works site and operations, and provision of effective	Y

		pollution prevention and contingency measures including: a designated refuelling point away from the beach; use of 'plant nappy' and spill kits during refuelling; use of biodegradable lubricants. There is a small potential for release of contaminants in to the marine environment as a result of the construction works (see construction management plan for detailed mitigation measures).	
	OPERATIONAL PHASE		
	Degradation of habitat quality, structure and function, and typical species due to the alteration of sedimentation regime	Potential alteration of beach structure due to the new slope stability structure could result in alteration of the sedimentation regime in the intertidal marine habitat below and to east of the proposed development. It has been assessed that in the long term the new slope stability structure will prevent further sediment accretion caused by terrestrial material collapsing on to the beach. There is a benefit of decreasing sediment accretion in the marine environment as a result of the construction works.	Y
Grey seal *Halichoerus grypus*	**CONSTRUCTION PHASE**		
	Potential impact on the quality of supporting habitats used by grey seals and their prey, and the quality of prey species, through indirect effects on water quality and potential release of contaminants and contractor waste	Construction works and heavy plant activity on the beach could result in increased likelihood of contamination from hydrocarbon pollution from fuels and oils, and construction materials in the marine environment. This will be addressed by: - Working above the high tide line only - Marking out stream course north of the proposed development site and works area, and minimising machine tracking through the beach where the stream discharges - Implementing effective management of the works	Y

		site and operations, and provision of effective pollution prevention and contingency measures including: a designated refuelling point away from the beach; use of 'plant nappy' and spill kits during refuelling; use of biodegradable lubricants. There is a small potential for release of contaminants in to the marine environment as a result of the construction works. Grey seals are mobile and will find alternative feeding areas should local conditions deteriorate. This effect will be temporary and will have no long term adverse impact on them or their population provided any mitigation measures are adhered to.	
	OPERATIONAL PHASE		
	No impacts predicted in operational phase		
Bottlenose dolphin *Tursiops truncatus*	**CONSTRUCTION PHASE**		
	Potential impact on the quality of supporting habitats used by bottlenose dolphins and their prey, and the quality of prey species, through indirect effects on water quality and potential release of contaminants and contractor waste	Construction works and heavy plant activity on the beach could result in increased likelihood of contamination from hydrocarbon pollution from fuels and oils, and construction materials in the marine environment. This will be addressed by: - Working above the high tide line only - Marking out stream course north of the proposed development site and works area, and minimising machine tracking through the beach where the stream discharges - Implementing effective management of the works site and operations, and provision of effective pollution prevention and contingency measures including: a designated refuelling point away from	Y

		the beach; use of 'plant nappy' and spill kits during refuelling; use of biodegradable lubricants. There is a small potential for release of contaminants in to the marine environment as a result of the construction works. Bottlenose dolphins are mobile and will find alternative feeding areas should local conditions deteriorate. This effect will be temporary and will have no long term adverse impact on them or their population provided any mitigation measures are adhered to.	
	OPERATIONAL PHASE		
	No impacts predicted in operational phase		
Otter *Lutra lutra*	**CONSTRUCTION PHASE**		
	Potential impact on range of otters within the SAC due to noise disturbance from proposed works during the construction phase	Disturbance during construction phase could prevent otters from gaining access to sea and stream north of proposed development needed to reach food sources. This could lead to use of poorer feeding areas and an increase in otter mortality as increased stresses are place on them, leading to negative impact on the otter population. Otters are mobile and will avoid the area if disturbed by temporary construction noises. The beach is public and well used, and includes beach huts operated by the National Trust and café adjacent to the stream, therefore there is existing human disturbance in the season where works are planned.	Y
	Potential impact on the quality of habitat used by otters and their prey, and the quality of prey species, through indirect effects on	Construction works and heavy plant activity on the beach could result in increased likelihood of contamination from hydrocarbon pollution from fuels and oils, and construction materials in the marine environment.	Y

	water quality and potential release of contaminants and contractor waste.	This will be addressed by: - Working above the high tide line only - Marking out stream course north of the proposed development site and works area, and minimising machine tracking through the beach where the stream discharges - Implementing effective management of the works site and operations, and provision of effective pollution prevention and contingency measures including: a designated refuelling point away from the beach; use of 'plant nappy' and spill kits during refuelling; use of biodegradable lubricants. There is a small potential for release of contaminants in to the marine environment as a result of the construction works. Otters are mobile and will find alternative feeding areas should local conditions deteriorate. This effect will be temporary and will have no long term adverse impact on them or their population provided any mitigation measures are adhered to.	
	OPERATIONAL PHASE		
	No impacts predicted in operational phase		

If all adverse effects can be ruled out (i.e. the right hand column is 'Y' for all features), no further consideration under the Habitats Directive/Regulations is required in order to determine the application.

Signed_____ Date_____

If adverse effect cannot be ruled out for any features (i.e. any row in the right hand column is 'N', the assessment must go on to consider whether additional conditions or restrictions could enable adverse effects on the integrity of the European site(s) to be ruled out.

If the right hand column is ‘N’’ for any feature, it has not been ascertained that the proposal, when considered alone, will not adversely affect the integrity of the European site(s) concerned. Unless the proposal is to be considered under Article 6(4) of the Habitats Directive (i.e. proceeding on grounds of imperative reasons of over-riding public interest, which is a matter for Welsh Ministers to consider), the HRA is completed at this point.

If the right column is ‘Y’ for all features, it has been ascertained that the proposal, when considered alone, will not adversely affect the integrity of the European site(s) concerned. The next stage is to consider whether any residual effects (net of any mitigation measures) are likely to be significant when considered in combination with the effects of other plans or projects. By definition such residual effects are not significant on their own.

3. In-combination assessment

Nature of residual effect of the proposal	**European site feature(s) concerned European site feature(s) subject to residual effect (from Table 2.1 or2.2)**	**Other plans/projects* with effects that could render the effect of the proposal significant**	**Nature of the in-combination effect**	**Is the in-combination effect significant? Y or N**
Degradation of habitat quality, structure and function, and typical species due to compression of habitat under heavy machinery and subsequent alteration of the sedimentation regime, and release of contaminants and contractor waste	**Large shallow inlets and bays**	Planning permission for house extension for ‘The Boathouse’ granted but construction has not yet commenced	Potential damage to bay habitat within the footprint of the proposed developments, degradation of bay structure and function, and loss and degradation of typical species. No in combination effects are expected to occur.	**N**

*The other plans or projects which should be considered for potential in-combination effects with the proposal under consideration are those that fall into ALL of the following 3 categories:

(1) they have been subject to HRA and the HRA has either concluded no LSE or no adverse effect on site integrity, but residual effects remain
(2) their residual effects (net of any mitigation measures) could interact with the residual effects of the proposal under consideration, for example by magnifying the effects of the proposal, or making a habitat or species feature more sensitive to the effects of the proposal.
(3) they are one of the following:

- project started but not yet completed
- projects consented but not started
- ongoing projects subject to repeated authorisations (e.g. annual licences)
- applications lodged but not yet determined
- refusals subject to appeals procedures not yet determined
- projects not requiring consent but which have been approved by the competent authority concerned
- proposals in adopted plans
- proposals in draft plans published for consultation
- allocations or other forms of proposals in adopted development plans
- allocations or other forms of proposals in draft development plans published for consultation

Conclusion of HRA	It is considered that the proposed development will not have an adverse effect on the European sites: Pen Llyn a'r Sarnau SAC
Officer: **Date:**	
Comment by NRW	
Name and Job Title of NRW Officer	

date	