

Shared Environmental Service
Silverwood Business Park
190 Raceview Road
Ballymena
Co. Antrim
BT42 4HZ

14/10/2021

Planning Reference: LA10/2019/1386/F

Location: LA10/2019/1386/F: 737m NW of 56 Mullydoo Road Greencastle, through townlands of Crockanboy, Teebane West, Casorna, Rousky, Drumlea, Garvagh, Meenadoo, Trinamadan and Culvacullion ending at 785m NW of 24 Meenadoo Road Culvacullion Gortin.

Proposal: 33kV power line involving both construction of above ground 33kV overhead line supported by wooden poles and underground 33kV cable laid below ground level in ducts, to serve Curraghinalt mine (currently under consideration planning application LA10/2017/1249/F). 33kV connection is c37.9 km in length, comprising of c26.9 km of overhead line supported by single and double wooden pole sets and c11 km of underground cabling. c 15.1 km of the powerline is within the Fermanagh & Omagh District Council area comprising of c 8.2 km of overhead line supported by single and double wooden pole sets and c 6.9 km of underground cabling.

Consultation: This planning application was considered in light of the assessment requirements of Regulation 43 (1) of the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) by Shared Environmental Service on behalf of DfI Strategic Planning Directorate which is the competent authority responsible for authorising the project. The assessment which informed this response is attached at Annex A.

Advice for planner:

It is noted that DfI Strategic Planning Directorate wrote to the Planning Appeals Commission on 22/09/21, advising that the Department requires that a public local inquiry shall be held for the purpose of considering representations made in respect of applications LA10/2019/1386/F & LA11/2019/1000/F, which are the subject of the Habitats Regulations Assessment (HRA) at Annex A, and LA10/2017/1249/F (Dalradian Gold Ltd., Underground valuable minerals mining and exploration, surface level development including processing plant and other associated development and ancillary works, Greencastle, County Tyrone). In light of this the HRA at Annex A is in draft. It will be finalised following the public inquiry and will take account of relevant representations.

Outcome: Following an appropriate assessment in accordance with the Regulations and having considered the nature, scale, timing, duration and location of the project, the draft conclusion is that the project would not have an adverse effect on the integrity of any European site either alone or in combination with other plans or projects.

In reaching this conclusion, SES has assessed the manner in which the project is to be carried out including any mitigation. This conclusion is subject to the following mitigation measures being conditioned in any approval:

1. A Construction Environmental Management Plan (CEMP), agreed with the appointed contractor, must be submitted to and approved by the Planning Authority in advance of intrusive ground investigations. This should reflect all the mitigation and avoidance measures, monitoring and contingency plans as detailed in the Outline CEMP and the additional requirements in the DAERA response of 2/9/21. Additional information must also be specified as follows. Further detail on the prevention of sediment release from haul

roads is required. Monitoring of silt fencing and settlement features must be specified to ensure ongoing effective functioning. A separation distance of 20m between refuelling and any watercourse must be specified. A minimum setback distance of 20m between the launch and reception pits, stockpiled material and any watercourse must be specified in Appendix D. Reference to River Foyle and Tributaries SAC must be added at 6.2.1. Details of how fish will be translocated, should they be present at open trench crossings, must be included or referenced in Appendix D. Details of action to be taken in response to encountering contamination during intrusive ground investigation or construction must be added. The approved CEMP shall be adhered to and implemented throughout the intrusive ground investigations, construction and operational maintenance in accordance with the approved details, unless otherwise agreed in writing by the planning authority.

2. A site specific Construction Method Statement, agreed with the appointed contractor, must be submitted to and approved by the Planning Authority in advance of commencement of any underground water crossings. This must identify all potential risks to the watercourse and appropriate mitigation to eliminate these risks. Details of the drilling muds / fluids to be used for horizontal directional drilling and the relevant Material Safety Data Sheets must be included. The works layout and mitigation to include appropriate areas for the storage of construction machinery, fuels/oils, refuelling areas, must be identified on a drawing included in the Construction Method Statement. The approved Construction Method Statement shall be adhered to and implemented throughout the construction period in accordance with the approved details, unless otherwise agreed in writing by the planning authority.

Reason: To ensure the project will not have an adverse effect on the integrity of any European site.

ses@midandeastantrim.gov.uk

ANNEX A

Habitats Regulations Assessment

Carried out by Shared Environmental Service, adopted by DfI Strategic Planning Directorate.

Date Completed: 14/10/2021

Planning Reference: LA10/2019/1386/F & LA11/2019/1000/F

Location: LA10/2019/1386/F: 737m NW of 56 Mullydoo Road Greencastle, through townlands of Crockanboy, Teebane West, Casorna, Rousky, Drumlea, Garvagh, Meenadoo, Trinamadan and Culvacullion ending at 785m NW of 24 Meenadoo Road Culvacullion Gortin. LA11/2019/1000/F: Adjoining 89 Woodend Road Ballymagorry, through townlands of Ballymagorry, Woodend, Milltown, Ballee, Holly-hill, Kennaghan, Owenreagh, Knockanbrack, Lagvittal, Knocknarvoer, Craignagapple, Lagavadder, Ballykeery, Craigatuke, Meendamph, Balix Upper, Letterbrat, Glencoppogagh (Main Portion), Aghalane and Lisnacraught ending at 681m NW of 24 Meenadoo Road Culvacullion Gortin

Proposal: 33kV power line involving both construction of above ground 33kV overhead line supported by wooden poles and underground 33kV cable laid below ground level in ducts, to serve Curraghinalt mine (currently under consideration planning application LA10/2017/1249/F). 33kV connection is c37.9 km in length, comprising of c26.9 km of overhead line supported by single and double wooden pole sets and c11 km of underground cabling. c 15.1 km of the powerline is within the Fermanagh & Omagh District Council area comprising of c 8.2 km of overhead line supported by single and double wooden pole sets and c 6.9 km of underground cabling. c 22.8 km of the powerline is within the Derry City & Strabane District Council area comprising of c 18.7km of overhead line supported by single and double wooden pole sets and c 4.1 km of underground cabling.

Assessment stage completed

- 1. Assessment resulting in exemption
- 2. Assessment resulting in elimination
- 3. Assessment demonstrating no likely significant effect
- 4. Interim Assessment to inform e.g. EIA determination, PAD
- 5. Further information requested
- 6. Draft appropriate assessment referred to SNCB
- 7. Appropriate assessment complete, no adverse effect on site integrity without conditions
- 8. Appropriate assessment complete, no adverse effect on site integrity with conditions to mitigate
- 9. Appropriate assessment complete, adverse effect on site integrity

Summary of findings

Appropriate Assessment Outcome: The assessment demonstrates beyond reasonable scientific doubt that, subject to conditioning the required mitigation, there will be no adverse effects on the site integrity of any European site in light of the conservation objectives.

Table of Contents

STAGE ONE ASSESSMENT	3
A. Description and potential effects of the proposal	3
B. Overview of sites potentially affected	11
C. Outcome Stage One	12
STAGE TWO APPROPRIATE ASSESSMENT	13
D. Scoping Appropriate Assessment	13
E. Assessment of Mitigation Measures.....	14
F. Assessment of Sites and Features.....	20
G. Assessment of In Combination Effects.....	32
H. Outcome of Appropriate Assessment.....	32
I. Evidence Used to Inform Assessment.....	33

Abbreviations/Glossary

AESI	Adverse effect on site integrity	OCEMP	Outline Construction Environmental Management Plan
Dfi	Department of Infrastructure	OHL	Overhead line
EIA	Environmental Impact Assessment	OHP	Overhead Power Line
ES	Environmental Statement	PAD	Pre-application discussion
HDD	Horizontal Directional Drilling	RLB	Red line boundary
HRA	Habitats Regulations Assessment	SAC	Special Area of Conservation
LSE	Likely significant effect	SES	Shared Environmental Service
NA	Not applicable	SPA	Special Protection Area
NIEA	Northern Ireland Environment Agency	SNCB	Statutory Nature Conservation Body
NIW	Northern Ireland Water	UGC	Underground cabling

Mitigation For the purposes of this report 'mitigation' includes measures to avoid, cancel or reduce effects

STAGE ONE ASSESSMENT

Note, in light of the April 2018 ruling of the European Court of Justice Case C323/17 (People over Wind and Sweetman), a cautious approach has been taken. Stage One Assessment does consider essential features and characteristics of the project but does not consider measures envisaged to avoid or prevent what might otherwise have been significant adverse effects on the integrity of European Sites. Assessment will therefore progress to Stage Two Appropriate Assessment unless there is certainty that it can be exempted, eliminated or screened out at Stage One. Incorporated and additional measures to avoid or reduce significant adverse effects will be assessed at Stage Two Appropriate Assessment.

A. Description and potential effects of the proposal

Description		
Heading	Short description	Comment
Proposal	<p>33kV power line involving both construction of above ground 33kV overhead line supported by wooden poles and underground 33kV cable laid below ground level in ducts, to serve Curraghinalt mine (currently under consideration planning application LA10/2017/1249/F). 33kV connection is c37.9 km in length, comprising of c26.9 km of overhead line supported by single and double wooden pole sets and c11 km of underground cabling. c 15.1 km of the powerline is within the Fermanagh & Omagh District Council area comprising of c 8.2 km of overhead line supported by single and double wooden pole sets and c 6.9 km of underground cabling. c 22.8 km of the powerline is within the Derry City & Strabane District Council area comprising of c 18.7km of overhead line supported by single and double wooden pole sets and c 4.1 km of underground cabling.</p>	<p>The proposed 33kV connection is c37.9 km in length, comprising of c26.9 km of overhead line (OHP) supported by single and double wooden pole sets and c11 km of underground cabling (UGC). LA10/2017/1249/F is also subject to appropriate assessment.</p> <p>Note OHP and OHL are both referred to in the supporting documentation and refer to the same aspect of the work i.e. the overhead line.</p>

Location	<p>LA10/2019/1386/F: 737m NW of 56 Mullydoo Road Greencastle, through townlands of Crockanboy, Teebane West, Casorna, Rousky, Drumlea, Garvagh, Meenadoo, Trinamadan and Culvacullion ending at 785m NW of 24 Meenadoo Road Culvacullion Gortin.</p> <p>LA11/2019/1000/F: Adjoining 89 Woodend Road Ballymagorry, through townlands of Ballymagorry, Woodend, Milltown, Ballee, Holly-hill, Kennaghan, Owenreagh, Knockanbrack, Lagvittal, Knocklnarvoer, Craignagapple, Lagavadder, Ballykeery, Craigatuke, Meendamph, Balix Upper, Letterbrat, Glencoppogagh (Main Portion), Aghalane and Lisnacraeght ending at 681m NW of 24 Meenadoo Road Culvacullion Gortin</p>	<p>c 15.1 km of the power line is within the Fermanagh & Omagh District Council area comprising of c 8.2 km of OHP supported by single and double wooden pole sets and c 6.9 km of UGC.</p> <p>c 22.8 km of the power line is within the Derry City & Strabane District Council area comprising of c 18.7km of OHP supported by single and double wooden pole sets and c 4.1 km of UGC.</p>
Type of Development	Energy Other	
Size and Scale	37.9 km	
Land-take	None in any European Site	
Resource requirements (water etc.)	The source of water for drilling muds will be from either water mains or provided by the contractor therefore there will be no requirement for abstraction.	
Emission (disposal to land, water or air)	Sediment release during construction. Potential egress of fuels and chemicals from construction machinery or materials	Also risk of unintended release of drilling mud from horizontal directional drilling (HDD).
Excavation requirements	<p>For installation of poles</p> <p>For undergrounding cables</p> <p>For launch and receive pits for HDD</p> <p>For open trench river crossings</p>	
Transportation requirements	Distribution of materials and machinery to work sites	
Duration	Up to 15 days per active work section for OHL.	

	UGC will progress at between 1 and 2 km per month working progressively on approx. 100 m active work locations which will be typically constructed in one day. Total duration for UGC estimated as 12-18 months allowing for suitable weather conditions.	
Frequency	Not specified	
Timing	Not specified In-stream works will be conducted between 1st May and 30th September.	Will avoid the more sensitive salmonid spawning season and egg incubation phases.
Other	Invasive species Risk to groundwater Works on peatland causing erosion leading to runoff of peat-laden water.	Himalayan balsam and Japanese knotweed present at five work locations. Potential for spread to designated sites downstream leading to habitat deterioration. DAERA Regulation Unit refers to dewatering and potential risks to groundwater. While this could have a localised effect there could not be a conceivable effect on site selection features via groundwater pathways due to nature of the pathway and the scale and duration of the works. Two poles will be installed on blanket bog and 13 on wet modified bog. Neither the ES nor statutory consultees have identified any risk to peat stability that could impact on watercourses. This will however be considered further.
Considerations for Assessment		
Are sea defences proposed/required?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Will there be in river/sea works?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	HDD under the bed of watercourses, open cut proposed at three crossings.
Is piling required?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not applicable	
Is site within a flood plain?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	None of the pole structures will be located within the strategic flood plain (Shadow HRA June 2021). The watercourse crossings will be within the floodplain.
Is site within 30m of Otter SAC river bank?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Surveys to date have not shown evidence of any otter resting site however suitable otter habitat is present.
Could there be contaminated land?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	NIEA Historical Landuse Database shows some potential sources of contamination within or close to the redline boundary. Construction of the overhead line is highly unlikely to create preferential pathways

		<p>in the event that contaminants are present. The underground cable will be in road carriageways, agricultural land or semi natural habitat with a very low likelihood of encountering contaminated lands.</p> <p>DAERA 2/9/21 'RU are content that the likelihood of encountering contamination is low given the stated depth (1000 mm) and width (500 mm) of the cable track excavation. In the event that contamination is encountered during intrusive site investigation or construction stage, Planning Conditions to mitigate land contamination risks to receptors using current guidance are provided ...'</p> <p>This is considered further at Stage Two.</p>
Has NIW confirmed capacity for stormwater/sewage to mains?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not applicable	Temporary mobile welfare facilities will be provided and any sewage / foul water generated by these will be removed by a licensed waste carrier to a licensed waste treatment facility for disposal.
Potential Effects		
<i>Development Phase</i>	<i>Type</i>	<i>Comment</i>
Pre-construction	Not applicable	Intrusive ground investigation to take place a number of months prior to excavation and installation works commencing are considered as part of the construction phase.
Construction	<p>Hydrological Link - Direct</p> <p>Wholly/partly in European Site</p> <p>Invasive species</p> <p>Noise and vibration</p>	<p>Overview</p> <p>The powerline will cross the Owenkillew River SAC as well as numerous tributaries of that SAC and the River Foyle and Tributaries SAC. It is proposed to use OHP where possible to minimise risk to aquatic habitats. UGC will be necessary however at 14 watercourse crossings. The preferred method for watercourse crossing is standard installation within the road/verge. Where that is not possible HDD will be employed unless ground conditions make this risky in which case open cut trenching will be used.</p> <p>Ground investigations</p> <p>OCEMP 4.6.1 'Intrusive ground investigation will take place a number of months prior to excavation and installation works commencing in order to identify the most appropriate construction ... where a watercourse is required to be crossed). Intrusive ground investigation works will consist of approximately 2m² trial holes ...There will be</p>

		<p>approximately 1 trial hole per 100m of underground cable (c85 total) and the duration of investigation works will be approximately 15 ... working days.'</p> <p>Underground cable UGC OCEMP 4.6.1 'A cable track of 1000mm deep by 500mm wide will be excavated along the proposed route.'</p> <p>HDD drilling noise and vibration ES 08 8.4.3 'This potential impact is specific to HDD crossings where vibration and noise is caused by drilling machinery or the pumping of drilling fluid. Vibration and noise is likely to disrupt migratory behaviour and cause injury at test sites with sensitive fish species such as salmon, trout, lamprey and eels. Vibration is likely to cause damage to incubating eggs in salmonids. Mechanical shock is a well-known causative factor for mortality during the egg incubation stage following fertilisation, when sensitivity is extremely high (Crisp, 1993; Jensen, 2003). Streams where HDD is proposed had no local fish present or habitat of poor fisheries potential and so no local impact is likely (Table 8.18).'</p> <p>OHL noise and vibration Rock breaking may be required to install some OHL poles.</p> <p>Temporary compound A temporary compound at the proposed Curraghinalt mine site will be used as a site office to allow for briefing, health and safety, welfare and secure vehicle storage.</p> <p>Summary of Potential impacts Degradation of water quality and aquatic environment from contaminated runoff resulting from construction works.</p> <p>Mortality of salmon due to vibration/noise, release of sediment, contaminated runoff resulting in smothering of gills or infilling of</p>
--	--	--

		<p>interstitial spaces used and reduced oxygen flow across spawning beds.</p> <p>Sediment, including all soils, mud, clay, silt, sand etc will be generated from excavations and construction work and can be washed into watercourse by surface water runoff.</p> <p>Direct/indirect impact through destruction of otter holts or resting places or disturbance during construction works.</p> <p>Spread of invasive species leading to deterioration of habitats.</p>
Operation	Wholly/partly in European Site	<p>Bird collision risk NIEA 2/9/21 confirms that there is no evidence that the route is crossed by any important migratory or commuting flyways for wintering whooper swan or other migratory wildfowl and it is unlikely that the project would present a significant collision risk to these species as selection features of other sites. It also notes that a single Hen Harrier (Amber-listed) was observed in Craignagapple during the early season visit in 2018, but not subsequently. This is therefore excluded as a likely significant effect.</p> <p>Monitoring and maintenance ES 02 2.2.5 'Once the circuit is commissioned it will be subject to inspections from the ground every three years. This will involve a single person travelling to a suitable car parking location near the overhead line and then walking along the route to visually inspect the overhead line. Vegetation management will also be carried out periodically as required (when vegetation encroaches on specified safety clearances, NIE Networks vegetation management cycle is once every three years). Wood pole replacement occurs every 30-40 years. These works will have the same impact as, or lesser impact, than that of construction of the overhead line.'</p> <p>The inspection and vegetation management will not generate waterborne pollutants. The only potential impact from this aspect of maintenance is therefore where the OHL crosses the Owenkillev</p>

		<p>River SAC. Wooden pole replacement could have an impact where it occurs in proximity to watercourses.</p> <p>OCEMP 1.3.4 'Repair of UGC faults will involve excavation at the location of the fault, cutting out the faulted piece of cable, inserting a new piece of cable into the duct, jointing the new cable into the existing cable network and then reinstating as per the Underground Cable construction methods set out in this document ...' The mitigation in the OCEMP will therefore also apply to the maintenance phase.</p>
Decommissioning	Not applicable	Once operational, the power line will become a network asset and form part of the wider network. Decommissioning is not envisaged.
Restoration and aftercare	Not applicable	
Unintended events	Not applicable	

Assumptions		
<i>Assumption/s</i>	<i>Impact on potential effects</i>	<i>Comment</i>
The discharge of water from any dewatering operation will require consent to discharge, under the Water (Northern Ireland) Order 1999 unless discharging using grassland overflow.	Would ensure discharge regulated appropriately to the receiving waters.	Not proposed to discharge to watercourse however should it prove necessary ensures it is regulated to control sediment levels appropriate to the receiving waters and in compliance with the Habitats Regulations.
The OCEMP will be implemented throughout the proposed development including site investigations and maintenance.	Ensures that potential effects during all phases of development are avoided.	Defines construction methods that will be employed by the applicant, NIE Networks (and their contractor as applicable) throughout the duration of the Proposed Development.
Construction work within 30 m of an otter holt or couch and/or 150 m of an otter natal den will require a derogation licence from NIEA.	Should any otter resting site of this type be found during pre-construction surveys will ensure fully assessed and regulated by NIEA.	Surveys to date have not shown evidence of any otter resting site of this type.
Under the terms of Schedule 6 of the Drainage (Northern Ireland) Order 1973 the applicant must submit to DfI Rivers, for its consent for any proposal to carry out works which might affect a watercourse such as culverting, bridging, diversion, building adjacent to or discharge of storm water etc.	Will ensure works approved by the relevant statutory authority.	Failure to obtain such consent prior to carrying out such proposals is an offence under the aforementioned Order which may lead to prosecution or statutory action as provided for.
Any proposed works that necessitate the removal or disturbance of watercourse substrate in the Loughs Agency Area, will require consent from Loughs Agency under Section 46 of the Foyle Fisheries Act 1952 (NI) as amended.	Will ensure that works are approved by Loughs Agency.	Loughs Agency will be required to carry out a HRA on Section 46 applications where this links to European sites.
Information gaps		
<i>Information gap</i>	<i>Pathway/Receptor</i>	<i>Comment</i>
None that affect this assessment		

B. Overview of sites potentially affected

Site Selection			
Proposal type			Site/s potentially affected
Ammonia emitting project?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes is development within 7.5km of European site?	<input type="checkbox"/> Yes <input type="checkbox"/> No Select Site Select Site Select Site
Wind turbine/s	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes is it within NIEA consultation zone for a European site?	<input type="checkbox"/> Yes <input type="checkbox"/> No Select Site Select Site Select Site
All developments – is it hydrologically connected to a European site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes could it have a conceivable impact on any European site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Owenkilow River SAC River Foyle and Tributaries SAC River Finn (Ire) SAC
All developments – is it hydrologically connected to a European site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes could it have a conceivable impact on any European site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Lough Foyle SPA Lough Foyle Ramsar Site Lough Foyle (Ire) SPA
Could project increase disturbance to site selection features?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes detail: Potential disturbance to otter	Owenkilow River SAC Select Site Select Site
Any other potential impacts on European sites?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes detail: spread of invasive species	Select Site Select Site Select Site

Site name	Relative Location of proposal	Pathway	Comment
Owenkilow River SAC	OHL crosses SAC. OHL and UGC cross tributaries of the SAC.	Hydrological, disturbance, physical damage to habitat	OHL between Pole 2263 and 2263A crosses the SAC and will require some cutting of vegetation in the SAC. Invasive species could impact on habitat.
River Foyle and Tributaries SAC	OHL and UGC cross tributaries of the SAC.	Hydrological	
River Finn (ROI)	Upstream of the SAC	Hydrological	Potential for impacts on water quality to affect mobile aquatic features of this SAC.
Sites considered but excluded from further assessment			
Site name	Reason excluded		
Lough Foyle SPA			

Lough Foyle Ramsar Site	While there is a theoretical pathway, and the shadow HRA screened these sites in for appropriate assessment, any effect would be de minimis in light of the separation distance and dilution. This is consistent with the NIEA response of 2/9/21 which did not identify a pathway to these sites.
Lough Foyle (ROI) SPA	

C. Outcome Stage One

Proposal exempt	
Is the entire project directly connected with or necessary to the management of all the European site(s) potentially affected and listed above?	<input type="checkbox"/> Yes – project exempt <input checked="" type="checkbox"/> No – further consideration
If 'Yes' justify	Click here to enter text.
Proposal eliminated	
Can any conceivable effect on any European site be objectively ruled out?	<input type="checkbox"/> Yes – project eliminated <input checked="" type="checkbox"/> No – further consideration
If 'Yes' justify why eliminated	Click here to enter text.
Likely Significant Effect	
Considering the project as proposed, and in the absence of any incorporated or additional measures to avoid, cancel or reduce the effects on a European site, could there be a likely significant effect (LSE) on one or more site selection features of any site?	<input type="checkbox"/> No – assessment completed <input checked="" type="checkbox"/> Yes – Progress to Stage Two Appropriate Assessment
If 'No' justify why no LSE	Click here to enter text.

STAGE TWO APPROPRIATE ASSESSMENT

This appropriate assessment further assesses effects on European sites and features and takes account of the evidence listed in the final section 'Evidence Used to Inform Assessment'.

D. Scoping Appropriate Assessment

Sites and Features which will be further assessed			
Site	Feature/s	Development Phases	Potential Impacts
Owenkillew River SAC	All features except bog woodland	Construction and operation	Degradation of water quality and aquatic environment from contaminated runoff resulting from construction or maintenance works. Mortality of salmon due to vibration/noise, release of sediment, contaminated runoff. Spread of invasive species leading to deterioration of habitats.
River Foyle and Tributaries SAC	All features	Construction	Degradation of water quality and aquatic environment from contaminated runoff resulting from construction works or maintenance works.
River Finn (ROI)	Otter and Atlantic salmon	Construction	Mortality of salmon due to vibration/noise, release of sediment, contaminated runoff.

Further information required	To be sourced from	Requested	Date
None required for this assessment			Click here to enter a date.

E. Assessment of Mitigation Measures

Detail of mitigation measures included in proposal	
Measure and Impact on potential effects	Comment
<p>A. Measures to avoid impacts on rivers and streams</p> <p>OCEMP 5.2.3 Oils and Chemicals</p> <p>Refuelling will be at publicly accessible fuel stations or at the temporary site compound at the Curraghinalt Mine site and will not occur on site.</p> <p>Fuel and chemical storage will only occur in the temporary site compound at the Curraghinalt Mine site.</p> <p>The regulatory and best practice guidance for storage is detailed.</p> <p>This states refuelling on the active working area will be undertaken well away from any drains, watercourses or sensitive habitat.</p> <p>OCEMP Table 6.1</p> <ul style="list-style-type: none"> • ‘Pole sets will be at least 10 metres set back from watercourses. Silt fencing will be installed between the active working area and watercourses where a 10 m buffer is not possible (with the exception of dedicated watercourse crossing points).’ • All construction works at watercourse crossings of NIPH will be supervised by an ECOW. • The 80 m Working Area will be reduced to a 10 m Working Area where the OHL traverses watercourse and reduced to a 5 m Working Area where the UGC traverses watercourse. All vegetation will be cut to 1.5 m in height unless complete removal is required due to tree roots directly below a proposed structure. • All felling will be carried out using handoperated equipment. • All works will be carried out in accordance with the ES, outline CEMP and final CEMP which sets out specific construction methods at watercourse crossing, pollution prevention and sediment control measures, contingency planning and good practices measures aimed at protection of water quality. • Construction works will adhere to CIRIA Reports C532 ‘Control of Water Pollution from Construction Sites: Guidance for Consultants and Contractors’ and C648 ‘Control of Water Pollution from Linear Construction Sites’ and all relevant Pollution Prevention Guidelines and subsequent Guidelines for Pollution Prevention.’ <p>5.2.1 Specifically details sediment management measures.</p> <ul style="list-style-type: none"> • ‘Excess material stockpiles will be managed to prevent siltation of water bodies through run-off and overland flow during rainfall events with the use of interception ditches or silt fencing where necessary to protect watercourses. • Vegetation removal will be avoided within the riparian zone of watercourses hydrologically connected to designated sites in order to protect rivers from bank destabilisation and the release of sediments; vegetation clearance required 5m either side of the proposed OHL route will be carried out using hand operated equipment and to a height of 1.5 m thereby maintaining ground level vegetated buffer. 	<p>The proposed mitigation is all tried and tested best practice for construction.</p> <p>Further detail on the prevention of sediment release from haul roads is required.</p> <p>Monitoring of silt fencing and settlement features must be specified to ensure ongoing effective functioning.</p> <p>There is an apparent contradiction in OCEMP 5.2.3. It is assumed that refuelling of plant will be necessary on site. The separation distance of 20m between refuelling and any watercourse should be specified in the final CEMP.</p> <p>Subject to the above being incorporated in the final CEMP then its implementation will avoid pollution or release of sediment that may impact on aquatic selection features of any European site during all phases of the project. It will also ensure that in-stream works are not carried out during the most critical times where salmonids are present.</p>

- Where dewatering of cable trenches or launch and receiver pits from the HDD is required it will be directed to a suitable treatment area within the site boundary. Where there is no risk of preferential flows to a water course and infiltration permits, these discharges will occur to grassland. If infiltration is not adequate and preferential flows occur the dewatering will discharge to a silt sock or small bunded settlement area. This will ensure adequate treatment of the silt laden water, and there will be no direct discharge from any excavations to surface water. Discharges to surface water from these treatment systems, if required, will be consented under the Water (Northern Ireland) Order 1999, or if appropriate, and with the agreement of the land owner, to land provided there is no potential from preferential flow paths and overland flow to the aquatic environment;
- All water bodies that occur in areas proposed for site compounds will be protected by a combination of vegetated buffers and silt fencing to ensure silt laden surface runoff from the compound does not discharge directly to a water body;
- Movement of vehicles on-site will be suspended during and immediately after heavy rainfall when ground conditions would be likely to deteriorate to ensure that ground disturbance is minimised and to prevent a source of sediment and its mobilisation to the aquatic environment via overland pathways (saturated flow) or preferential pathways;
- Movement of vehicles in close proximity to watercourses will be carefully monitored by the ECoW to ensure the integrity of bank structure in order to avoid collapse and the release of sediments into the channel;'

OCEMP Table 6.1 also specifies measures on peatland

- 'The 80 m Working Area will be reduced to a 10 m Working Area, extended to 15 m at single pole structures and 20 m at double pole structures in all areas of blanket bog, upland heathland and upland fens, flushes & swamps.
- All construction works within these habitats will be supervised by an ECoW.
- A wide tracked excavator together with flotation boards/mats will be used within these habitats to minimize ground disturbance and reduce soil compression from construction activities.'

OCEMP 7.0 details fisheries and aquatic ecology mitigation which overlaps other mitigation detailed above.

OCEMP 7.1.1 'For sites where sensitive fish are present (ST11; trout) construction at open cut crossings will not be undertaken during key migration periods (e.g. adult salmonids/ lamprey, elvers; downstream migrations of silver eels, salmonid smolts) or when sensitive life-stages are present (incubating eggs/ fry). Overlap across life-stage and species migration periods precludes a period when there is a zero risk. The Loughs Agency require that in-stream works are conducted between 1st May and 30th September to avoid the more critical salmonid spawning season and egg incubation phases, 1st October – 30th April; works during this sensitive period will be avoided.'

B. Horizontal directional drilling controls

OCEMP 7.3.1

'An appropriate geo-technical assessment will be undertaken to determine the porosity of the stream bed (or structure e.g. culvert) underlying the proposed directional drilling crossing, so that the risk of drilling mud break out can be ascertained.'

OCEMP Appendix D Alternate Methodology B: Directional Drilling

- 'Detailed construction drawing will be produced and agreed following intrusive ground investigation (a typical directional drilling arrangement design has been provided in Appendix E).'
- 'The following measures shall be implemented in order to avoid the impacts of the release of suspended sediment and associated nutrients during earthworks and removal of vegetation cover:
 - Protection of the riparian zone of watercourses by implementing a constraints zone around stream crossings, in which construction activity shall be limited to the minimum.
 - No stock-piling of construction materials shall take place within the constraints zone. No refuelling of machinery or overnight parking of machinery is permitted in this area.
 - Works shall not take place at periods of high rainfall, and shall be scaled back or suspended if heavy rain is forecast;
 - Plant shall travel slowly across bare ground at a maximum of 5km/hr. Bog mats will be employed to protect tracked areas as necessary. Machinery deliveries shall be arranged using existing structures along the public road. All machinery operations shall take place away from watercourses;
 - Any excess construction material shall be immediately removed from the area and disposed of in a fully licenced landfill. No stockpiling of materials should be permitted in the constraint zones.
 - Spill kits shall be available in each item of plant required to complete the watercourse crossing;
 - Silt fencing shall be erected at a setback distance of 5m from the reception and launch pits used for directional drilling.'

OCEMP 5.2.1.1 'Where dewatering of cable trenches or launch and receiver pits from the HDD is required then bunded collection areas and treatment swales will be used to settle silt so that clean water is discharged to vegetation. Should discharge of treated water be necessary it will be consented under the Water (Northern Ireland) Order 1999.'

This section also details how the drilling will be monitored for risk of break-out of drilling muds, both by monitoring pressure and by visual inspection, and the actions that will be taken in the event of break-out.

OCEMP 7.3.3 Removal and Disposal of Drilling Slurry

'The safe removal (e.g. use of a vacuum lorry) and disposal of drilling slurry (drilling fluids and cuttings) will mean that there is a low likelihood of sediment run-off to watercourses.'

The SHRA states a minimum setback distance of 20m between the launch and reception pits, stockpiled material and any watercourse. This is indicated in Drawing 1 in Appendix E of the OCEMP but not specified in the OCEMP. This should be specified in the final CEMP.

WMU identifies additional detail to be provided for underground water crossings. This can be included in site specific method statements.

NIEA WMU 2/9/21 'Details of the drilling muds / fluids to be used including the relevant Material Safety Data Sheets for same must be included in site specific construction method statements.'

Subject to the above, and to submission and approval of site specific construction method statements, these measures provide assurance that risks from HDD will be minimised and controlled.

<p>C. Open channel cutting controls</p> <p>Appendix D details the methodology for the open cut cable crossings.</p> <p>OCEMP 7.1.1 Specifies the timing of works where sensitive fish are present (ST11, trout) to avoid the most critical periods.</p> <p>7.1.2 explains how the use of coffer dams and over-pumping will allow the trenching to be carried out in non-flowing condition and the over-pumped water will be settled and filtered to ensure it is silt-free.</p> <p>The sediment management measures detailed in OCEMP 5.2.1.1 will also apply to the open cut channel works.</p> <p>5.2.2 details measures to stabilise the riparian zone following laying the cable and reduces the risk of bank erosion and sediment input to the channel.</p> <p>ES08 8.5.1 states 'If HDD is not deemed suitable for UGC installation, prior to the excavation of an open trench at site ST11, fish will be collected by electrofishing immediately upstream, within, and downstream of the proposed works area, and translocated much further downstream.'</p>	<p>WMU identifies additional detail to be provided for underground water crossings. This can be included in site specific method statements.</p> <p>The details of how fish will be translocated are in ES08 however are not reflected in Appendix D. They should be either added to or referenced.</p> <p>Subject to the above, and to submission and approval of site specific construction method statements, these measures provide assurance that risks from HDD will be minimised and controlled.</p>
<p>D. Preventing spread of invasive species</p> <p>OCEMP 6.5.8 identifies the locations where invasive species were recorded and refers to Appendix G Invasive Species Method Statement which provides site specific description of the invasive species and the working and disposal methodology to be supervised by the ECoW.</p>	<p>This will ensure that invasive species are not mobilised such that they can be carried to and impact on downstream selection features.</p>
<p>E. Identification of European sites</p> <p>OCEMP 6.2.1 for Owenkillev River SAC and ASSI states 'An ECoW will be present at all sensitive sites where OHL and UGC infrastructure is installed within close proximity to the Owenkillev River or its tributaries to undertake pre-construction ecology surveys and to ensure that all mitigation measures are implemented during construction.'</p>	<p>There is no reference in the OCEMP to River Foyle and Tributaries SAC. This measure should also be implemented for similar situations in the catchment of that SAC. The supervision of works by an ECoW provides assurance that the mitigation detailed in the CEMP will be fully implemented.</p>
<p>F. Protection of Otter</p> <p>OCEMP 6.5.2 states that a Pre-Construction Protected Species Survey will be carried out by the ECoW to provide the most up to date information and to confirm the continued absence of otter within the site. Construction work within 30 m of an otter holt or couch and/or 150 m of an otter natal den will require a derogation licence from NIEA to permit otherwise illegal activities that could result in disturbance to an otter and/or damage or destruction of an otter holt. The licence will be issued to the ECoW who will supervise all licensed activities.</p> <p>OCEMP Table 6.1 Constraints on tree cutting 'All vegetation will be cut to 1.5 m in height, unless complete removal is required due to the presence of tree roots directly below a proposed structure.'</p> <p>OCEMP 9.0 states that construction works will only take place between the hours of 07.00 - 19.00 hours.</p>	<p>The constraints on tree cutting ensure that disturbance of vegetation at ground level will not occur within any designated site or on a river bank thus avoiding risk of damage to otter resting places. Should otter prove to be present during pre-construction surveys then any activity will be regulated by NIEA, which is also a competent authority.</p> <p>The timing of works reduces the risk of disturbance to active otter.</p>

<p>G. Oversight and Auditing</p> <p>OCEMP 4.6.2 'Only the construction methodologies contained within the ES will be employed and the impacts of these methodologies have been fully assessed within the ES.'</p> <p>The OCEMP 3.0 details who is responsible for implementation of the OCEMP and how its requirements will be disseminated. 4.1.3 details Work Team Awareness and Monitoring and Control to include compliance audits by the NIE Networks Environmental Officer and the ECoW at a minimum, every two working days during tree cutting and pole erection.</p> <p>OCEMP 4.5.3 UGC 'During the initial site induction, all staff will be briefed by the appointed NIE Networks Site Manager and Environmental Officer on the required measures at each site to ensure integrity of existing habitats and species during the construction phase.' Also daily Tool Box Talks by the appointed Contractor Environmental Manager.</p> <p>OCEMP 5.0 details roles and responsibilities including for NIE Networks Environmental Officer and the contractor's Environmental Manager, Ecological Clerk of Works (ECoW) and River Quality Observers. It also details all the industry standard best practice guidance that has informed the OCEMP.</p> <p>OCEMP 6.1 further specifies the role of the ECoW. 'An Ecological Clerk of Works (ECoW) will provide direction during both pre-construction and construction in relation to relevant international and national legislation relating to the protection of ecology. The ECoW will also provide direction on the timing of works and the implementation of mitigation and compensation measures as set out in the OCEMP and final CEMP. The ECoW will advise on applications for relevant derogation licences and on the location of site offices, material storage areas and site access locations. The ECoW will monitor identified works; and will produce site inspection reports.'</p>	<p>The specification of how the mitigation in the CEMP will be disseminated and monitored and the supervision of works by an ECoW provides assurance that the mitigation detailed in the CEMP will be fully implemented.</p>
<p>H. Contaminated land</p> <p>There is no reference in the OCEMP to encountering contamination. As detailed in section A the risk of contamination being found is low.</p>	<p>DAERA Regulatory Unit has recommended precautionary conditions in the event that contamination is encountered during the intrusive ground investigation or construction works. These are not considered appropriate to the nature of this development. The CEMP should however include details of action to be taken in response to encountering contamination.</p>

Assessment of mitigation measures						
List measures to avoid or reduce adverse effects on site integrity.	Type of measure	Explain how the measures will avoid or reduce the adverse effects on site integrity.	Provide evidence of how they will be implemented and by whom.	Provide evidence of the degree of confidence in their likely success	Provide time-scale, relative to the project when they will be implemented	Explain the proposed monitoring scheme and how any mitigation failure will be addressed
1. Submission of final CEMP	<input checked="" type="checkbox"/> Incorporated <input type="checkbox"/> Additional <input checked="" type="checkbox"/> Condition	The way in which the CEMP will avoid or reduce adverse effects on site integrity is discussed in the comments above.	The contractor will prepare a CEMP which is in accordance with the OCEMP, and additional requirements identified in this assessment, to ensure that construction delivers the mitigation measures set out within the ES and required for this HRA. The OCEMP 3.0 details how the requirements of the OCEMP will be disseminated to all construction staff. NIE Networks will have ultimate responsibility for the implementation of the CEMP and will work to ensure that the activities of its contractors are conducted in accordance with the mitigation measures set out in the ES and the conditions in the planning permission. NIE Networks is also a competent authority in its own right with responsibility for compliance with the Habitats Regulations throughout construction and maintenance.	The proposed mitigation is tried and tested best practice for construction. An Ecological Clerk of Works (ECow) will be responsible for ensuring compliance with all mitigation measures as outlined within the OCEMP. Adherence to any required procedures and site rules will be monitored via regular audits carried out by the NIE Networks Environmental Officer and the ECoW.	To be approved in advance of pre-commencement intrusive ground investigation. To be implemented through construction and maintenance.	Enforced by current planning legislation. The contractor will be required to comply with mitigation measures outlined in the CEMP, which will be contractually enforced.
2. Construction method statements for all underground river crossings	<input type="checkbox"/> Incorporated <input checked="" type="checkbox"/> Additional <input checked="" type="checkbox"/> Condition	This will provide site specific detail, informed by the pre-commencement intrusive site investigation, on the methodology. Inclusion of drawings will provide certainty about measures such as buffers and silt fencing.	To be prepared and implemented by the contractor.	The proposed mitigation is tried and tested best practice for construction. Inclusion of drawings will provide certainty about measures such as buffers and silt fencing for operational staff.	To be submitted and approved in advance of commencement of underground river crossings.	Enforced by current planning legislation. The contractor will be required to comply with mitigation measures outlined in the CEMP, which will be contractually enforced.

F. Assessment of Sites and Features

Owenkillew River SAC		Pathway/s: Hydrological, disturbance, physical damage to habitat			
Overall Objective		<p>The Conservation Objective for this site is:</p> <p>To maintain (or restore where appropriate) the</p> <ul style="list-style-type: none"> • Fresh Water Pearl Mussel <i>Margaritifera margaritifera</i> • Water courses of plain to montane levels with the <i>Ranunculus fluitans</i> and <i>Callitricho-Batrachion</i> vegetation • Old Sessile Oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles • Bog Woodland • Otter <i>Lutra lutra</i> • Atlantic Salmon <i>Salmo salar</i> <p>to favourable condition.</p>			
Feature	Grade	Feature Objective	Construction	Operation	Other
Qualifying Feature	B	<p>Maintain and if feasible enhance extent and composition of community. Improve water quality</p> <p>Improve channel substrate quality by reducing siltation.</p> <p>Maintain and if feasible enhance the river morphology.</p>	Potential impacts		
Water courses of plain to montane levels with the <i>Ranunculus fluitans</i> and <i>Callitricho-Batrachion</i> vegetation			Likely Significant Effect	Likely Significant Effect	NA
			Degradation of water quality and this habitat from contaminated or sediment laden runoff resulting from construction works.	Degradation of water quality and this habitat from contaminated or sediment laden runoff resulting from maintenance works.	
			Impact of mitigation on potential effects		
			The measures detailed in Section E, specifically A-C, G & H, will avoid or minimise release of contaminants or sediment so that no effects that could undermine the conservation objective will remain.	The measures detailed in Section E, specifically A-C, G & H, will avoid or minimise release of contaminants or sediment so that no effects that could undermine the conservation objective will remain.	NA
Condition Assessment			Residual Impacts		
Unfavourable: Un-classified			No Adverse Effect on Site Integrity (AESI)	No AESI	NA

Qualifying Feature	B	<p>Maintain and expand the extent of existing oak woodland. (There is an area of degraded bog, wetland and damp grassland which have the potential to develop into oak woodland.</p> <p>Maintain and enhance Oak woodland species diversity and structural diversity.</p> <p>Maintain the diversity and quality of habitats associated with the Oak woodland, e.g. fen, swamp, grasslands, scrub, especially where these exhibit natural transition to Oak woodland.</p> <p>Seek nature conservation management over adjacent forested areas outside the ASSI where there may be potential for woodland rehabilitation.</p> <p>Seek nature conservation management over suitable areas immediately outside the ASSI where there may be potential for woodland expansion.</p>	Potential impacts			
Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles			Likely Significant Effect	Likely Significant Effect	NA	
			Japanese knotweed is present at the SAC river crossing. There is a risk that this could be mobilised and dispersed via the adjacent river to impact on this habitat in the Owenkillew and Glenelly Woods component 7.5 km downstream during construction works.	Japanese knotweed is present at the SAC river crossing. There is a slight risk that this could be mobilised and dispersed via the adjacent river to impact on this habitat in the Owenkillew and Glenelly Woods component 7.5 km downstream during maintenance works.		
			Impact of mitigation on potential effects			
			Measure D detailed in Section E will ensure that invasive species are not mobilised such that they can be carried to and impact on this selection feature.	Measure D detailed in Section E will ensure that invasive species are not mobilised such that they can be carried to and impact on this selection feature.	NA	
Condition Assessment		Residual Impacts				
Unfavourable: Un-classified		No AESI	No AESI	NA		
ASSI062Owenkillew and Glenelly Woods						
Unfavourable: Recovering						
ASSI056Drumlea and Mullan Woods						
Qualifying Feature	C	<p>Maintain and expand the extent of existing bog woodland. (There is an area of degraded bog, wetland and damp grassland that have the potential to develop into bog woodland.</p> <p>Maintain and enhance bog woodland</p>	Potential impacts			
Bog woodland			No Likely Significant Effect	No Likely Significant Effect	NA	
		The conservation objectives indicate that this feature only occurs in the Drumlea and Mullan ASSI component	The conservation objectives indicate that this feature only occurs in the Drumlea and Mullan ASSI component			

		species diversity and structural diversity. Maintain the diversity and quality of habitats associated with the bog woodland, e.g. fen, swamp, especially where these exhibit natural transition to swamp woodland. Seek nature conservation management over adjacent forested areas outside the ASSI where there may be potential for woodland rehabilitation. Seek nature conservation management over suitable areas immediately outside the ASSI where there may be potential for woodland expansion.	upstream of the location from which Japanese knotweed could be dispersed.	upstream of the location from which Japanese knotweed could be dispersed.	
Condition Assessment			Impact of mitigation on potential effects		
None available			NA	NA	NA
			Residual Impacts		
			No AESI	No AESI	NA
Qualifying Feature	B	Maintain and if feasible enhance population numbers through natural recruitment. Improve age structure of population. Improve water quality. Improve channel substrate quality by reducing siltation. Ensure host fish population is adequate for recruitment. Increase the amount of shading through marginal tree cover along those sections of river currently supporting this species.	Potential impacts		
Fresh Water Pearl Mussel <i>Margaritifera margaritifera</i>			Likely Significant Effect Degradation of water quality due to suspended solids or contaminants resulting from construction works. Mortality of salmon as host species due to vibration/noise, release of sediment, contaminated runoff during construction resulting in smothering of gills or infilling of interstitial spaces used and reduced oxygen flow across spawning beds.	Likely Significant Effect Degradation of water quality due to suspended solids or contaminants resulting from maintenance works. Mortality of salmon as host species due to release of sediment, contaminated runoff during maintenance resulting in smothering of gills or infilling of interstitial spaces used and reduced oxygen flow across spawning beds.	NA
			Impact of mitigation on potential effects		
			The measures detailed in Section E, specifically A-C, G & H, will avoid or minimise release of contaminants or sediment so that no effects that could	The measures detailed in Section E, specifically A-C, G & H, will avoid or minimise release of contaminants or sediment so that no effects that could	NA

			undermine the conservation objective will remain.	undermine the conservation objective will remain.	
Condition Assessment			Residual Impacts		
Unfavourable: Un-classified			No AESI ES 08 Table 8.16 reports that, for all under watercourse crossings other than ST11, habitat is of poor local fisheries value or fish were absent. The proposed method at ST11 is open cut to be timed to minimise effects. In this event fish will be collected by electrofishing immediately upstream, within, and downstream of the proposed works area, and translocated much further downstream. The watercourse is 0.55m wide at this point therefore the works will be of small scale and short duration. It is therefore concluded that, subject to mitigation, there will be no adverse effect on site integrity.	No AESI ES 08 Table 8.16 reports that, for all under watercourse crossings other than ST11, habitat is of poor local fisheries value or fish were absent. The proposed method at ST11 is open cut to be timed to minimise effects. In this event fish will be collected by electrofishing immediately upstream, within, and downstream of the proposed works area, and translocated much further downstream. The watercourse is 0.55m wide at this point therefore the works will be of small scale and short duration. It is therefore concluded that, subject to mitigation, there will be no adverse effect on site integrity.	NA
Qualifying Feature	C	Maintain and if possible, expand existing population numbers and distribution.	Potential impacts		
Atlantic Salmon <i>Salmo salar</i>		Maintain and where possible, enhance the extent and quality of suitable Salmon habitat, in particular the chemical and biological quality of the water	Likely Significant Effect Mortality of salmon due to vibration/noise, release of sediment, contaminated runoff during construction resulting in smothering of gills or infilling of interstitial spaces used and reduced oxygen flow across spawning beds.	Likely Significant Effect Mortality of salmon due to release of sediment or contaminated runoff during maintenance resulting in smothering of gills or infilling of interstitial spaces used and reduced oxygen flow across spawning beds.	NA
			Impact of mitigation on potential effects		

			The measures detailed in Section E, specifically A-C, G & H, will avoid or minimise release of contaminants or sediment so that no effects that could undermine the conservation objective will remain.	The measures detailed in Section E, specifically A-C, G & H, will avoid or minimise release of contaminants or sediment so that no effects that could undermine the conservation objective will remain.	NA
Condition Assessment			Residual Impacts		
Unfavourable: Unclassified			No AESI ES 08 Table 8.16 reports that, for all under watercourse crossings other than ST11, habitat is of poor local fisheries value or fish were absent. The proposed method at ST11 is open cut to be timed to minimise effects. In this event fish will be collected by electrofishing immediately upstream, within, and downstream of the proposed works area, and translocated much further downstream. The watercourse is 0.55m wide at this point therefore the works will be of small scale and short duration. It is therefore concluded that, subject to mitigation, there will be no adverse effect on site integrity.	No AESI ES 08 Table 8.16 reports that, for all under watercourse crossings other than ST11, habitat is of poor local fisheries value or fish were absent. The proposed method at ST11 is open cut to be timed to minimise effects. In this event fish will be collected by electrofishing immediately upstream, within, and downstream of the proposed works area, and translocated much further downstream. The watercourse is 0.55m wide at this point therefore the works will be of small scale and short duration. It is therefore concluded that, subject to mitigation, there will be no adverse effect on site integrity.	NA
Qualifying Feature	C	Population numbers and distribution to be maintained and if possible, expanded.	Potential impacts		
Otter <i>Lutra lutra</i>		Maintain the extent and quality of suitable Otter habitat, in particular the chemical and biological quality of the	Likely Significant Effect <u>Disturbance and habitat alteration</u> There were no otter holts, couches or evidence of otter identified along the within the 80 m Working Area of the Proposed Development. Otter is	No Likely Significant Effect <u>Disturbance and habitat alteration</u> There were no otter holts, couches or evidence of otter identified along the within the 80 m Working Area of the Proposed Development. Otter is	NA

		<p>water, and all associated wetland habitats</p>	<p>however present within the catchment of the River Foyle and tributaries.</p> <p>Tree cutting activities will be required to facilitate construction of the OHL between Pole 2263 and 2263a within the boundary of the SAC. There is potential for damage to otter resting places if the tree cutting removes vegetation at ground level.</p> <p>There is potential for temporary disturbance to transient individuals or a small number of otters that may forage or commute along this section of river.</p> <p>Elsewhere, during daylight hours, the species is likely to avoid construction activity. Under darkness, there will be no construction activity and otters may pass undisturbed. Any such disruption is therefore unlikely to be of a level to prevent an otter from foraging or accessing its usual breeding or resting places.</p> <p><u>Deterioration of water quality</u></p> <p>Significant water quality deterioration has a slight potential to negatively affect otter food sources.</p>	<p>however present within the catchment of the River Foyle and tributaries.</p> <p>Tree cutting activities will be required to facilitate operational maintenance of the OHL between Pole 2263 and 2263a within the boundary of the SAC. Tree cutting will only be for maintaining clearance for the OHP therefore there will not be alteration of otter habitat at ground level.</p> <p>During daylight hours, the species is likely to avoid maintenance activity. Under darkness, there will be no maintenance activity and otters may pass undisturbed. Any such disruption is therefore unlikely to be of a level to prevent an otter from foraging or accessing its usual breeding or resting places.</p> <p>Likely Significant Effect</p> <p><u>Deterioration of water quality</u></p> <p>Significant water quality deterioration has a slight potential to negatively affect otter food sources.</p>	
Impact of mitigation on potential effects					
<p>The measures detailed in Section E, specifically A-C, & F-H, will avoid or minimise release of contaminants or sediment so that no effects that could undermine the conservation objective will remain.</p>	<p>The measures detailed in Section E, specifically A-C, & F-H, will avoid or minimise release of contaminants or sediment so that no effects that could undermine the conservation objective will remain.</p>	<p>NA</p>			

Condition Assessment			Residual Impacts		
Favourable: Un-classified			No AESI	No AESI	NA

River Foyle and Tributaries		Pathway/s: Hydrological				
Overall Objective		To maintain (or restore where appropriate) the <ul style="list-style-type: none"> ▪ Atlantic Salmon <i>Salmo salar</i> ▪ Water courses of plain to montane levels with the <i>Ranunculus fluitans</i> and <i>Callitriche-Batrachion</i> vegetation ▪ Otter <i>Lutra lutra</i> to favourable condition. 				
Feature	Grade	Feature Objective	Construction	Operation	Other	
Qualifying Feature	B	Maintain and if possible expand existing population numbers and distribution (preferably through natural recruitment), and improve age structure of population. Maintain and if possible enhance the extent and quality of suitable Salmon habitat - particularly the chemical and biological quality of the water and the condition of the river channel and substrate.	Potential impacts			
Atlantic Salmon <i>Salmo salar</i>			Likely Significant Effect Mortality of salmon due to vibration/noise, release of sediment, contaminated runoff during construction resulting in smothering of gills or infilling of interstitial spaces used and reduced oxygen flow across spawning beds.	Likely Significant Effect Mortality of salmon due to release of sediment or contaminated runoff during maintenance resulting in smothering of gills or infilling of interstitial spaces used and reduced oxygen flow across spawning beds.	NA	
			Impact of mitigation on potential effects			
			The measures detailed in Section E, specifically A-C, G & H, will avoid or minimise release of contaminants or sediment so that no effects that could undermine the conservation objective will remain.	The measures detailed in Section E, specifically A-C, G & H, will avoid or minimise release of contaminants or sediment so that no effects that could undermine the conservation objective will remain.	NA	
Condition Assessment			Residual Impacts			
Favourable: Un-classified			No AESI	No AESI	NA	

			ES 08 Table 8.16 reports that, for all under watercourse crossings other than ST11, habitat is of poor local fisheries value or fish were absent. The proposed method at ST11 is open cut to be timed to minimise effects. In this event fish will be collected by electrofishing immediately upstream, within, and downstream of the proposed works area, and translocated much further downstream. The watercourse is 0.55m wide at this point therefore the works will be of small scale and short duration. It is therefore concluded that, subject to mitigation, there will be no adverse effect on site integrity.	ES 08 Table 8.16 reports that, for all under watercourse crossings other than ST11, habitat is of poor local fisheries value or fish were absent. The proposed method at ST11 is open cut to be timed to minimise effects. In this event fish will be collected by electrofishing immediately upstream, within, and downstream of the proposed works area, and translocated much further downstream. The watercourse is 0.55m wide at this point therefore the works will be of small scale and short duration. It is therefore concluded that, subject to mitigation, there will be no adverse effect on site integrity.		
Qualifying Feature	B	Maintain and if possible enhance extent and composition of community.	Potential impacts			
Water courses of plain to montane levels with the <i>Ranunculus fluitans</i> and <i>Callitricho-Batrachion</i> vegetation			Likely Significant Effect Degradation of water quality and this habitat from contaminated or sediment laden runoff resulting from construction works.	Likely Significant Effect Degradation of water quality and this habitat from contaminated or sediment laden runoff resulting from maintenance works.	NA	
			Impact of mitigation on potential effects			
			The measures detailed in Section E, specifically A-C, G & H, will avoid or minimise release of contaminants or sediment so that no effects that could undermine the conservation objective will remain.	The measures detailed in Section E, specifically A-C, G & H, will avoid or minimise release of contaminants or sediment so that no effects that could undermine the conservation objective will remain.	NA	
Condition Assessment			Residual Impacts			
Unfavourable: Un-classified	No AESI	No AESI	NA			

Qualifying Feature	C	Maintain and if possible increase population numbers and distribution. Maintain the extent and quality of suitable Otter habitat, in particular the chemical and biological quality of the water and all associated wetland habitats.	Potential impacts		
Otter <i>Lutra lutra</i>			<p>No Likely Significant Effect</p> <p><u>Disturbance</u></p> <p>There were no otter holts, couches or evidence of otter identified along the within the 80 m Working Area of the Proposed Development. Otter is however present within the catchment of the River Foyle and tributaries.</p> <p>During daylight hours, the species is likely to avoid construction activity. Under darkness, there will be no construction activity and otters may pass undisturbed. Any such disruption is therefore unlikely to be of a level to prevent an otter from foraging or accessing its usual breeding or resting places.</p> <p>Likely Significant Effect</p> <p><u>Deterioration of water quality</u></p> <p>Significant water quality deterioration has a slight potential to negatively affect otter food sources.</p>	<p>No Likely Significant Effect</p> <p><u>Disturbance</u></p> <p>There were no otter holts, couches or evidence of otter identified along the within the 80 m Working Area of the Proposed Development. Otter is however present within the catchment of the River Foyle and tributaries.</p> <p>During daylight hours, the species is likely to avoid maintenance activity. Under darkness, there will be no maintenance activity and otters may pass undisturbed. Any such disruption is therefore unlikely to be of a level to prevent an otter from foraging or accessing its usual breeding or resting places.</p> <p>Likely Significant Effect</p> <p><u>Deterioration of water quality</u></p> <p>Significant water quality deterioration has a slight potential to negatively affect otter food sources.</p>	NA
			Impact of mitigation on potential effects		
			<p>The measures detailed in Section E, specifically A-C, & F-H, will avoid or minimise release of contaminants or sediment so that no effects that could undermine the conservation objective will remain.</p>	<p>The measures detailed in Section E, specifically A-C, & F-H, will avoid or minimise release of contaminants or sediment so that no effects that could undermine the conservation objective will remain.</p>	NA

Condition Assessment			Residual Impacts		
Favourable: Un-classified			No AESI	No AESI	NA

River Finn SAC		Pathway/s: Hydrological				
Overall Objective		To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.				
Feature	Grade	Feature Objective	Construction	Operation	Other	
Qualifying Feature	B	To restore the favourable conservation condition of Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) in River Finn SAC which is defined by a list of attributes and targets found in NPWS (2017) Conservation Objectives: River Finn SAC 002301. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	Potential impacts			
3110 Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>)			No Likely Significant Effect No pathway for any effects as this feature occurs upstream of the confluence with the River Foyle.	NA	NA	
Condition Assessment			Impact of mitigation on potential effects			
Not available			NA	NA	NA	
			Residual Impacts			
			No AESI	No AESI	NA	
Qualifying Feature	A	To restore the favourable conservation condition of Northern Atlantic wet heaths with <i>Erica tetralix</i> in River Finn SAC, which is defined by a list of attributes and targets found in NPWS (2017) Conservation Objectives: River Finn SAC 002301. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	Potential impacts			
4010 Northern Atlantic wet heaths with <i>Erica tetralix</i>			No Likely Significant Effect No pathway for any effects as this feature is terrestrial.	NA	NA	
Condition Assessment			Impact of mitigation on potential effects			
Not available			NA	NA	NA	
			Residual Impacts			
			No AESI	No AESI	NA	

Qualifying Feature	C	To restore the favourable conservation condition of Blanket bogs (*if active bog) in River Finn SAC, which is defined by a list of attributes and targets found in NPWS (2017) Conservation Objectives: River Finn SAC 002301. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	Potential impacts		
7130 Blanket bogs (* if active bog)			No Likely Significant Effect No pathway for any effects as this feature is terrestrial.	NA	NA
Condition Assessment			Impact of mitigation on potential effects		
Not available			NA	NA	NA
			Residual Impacts		
		No AESI	No AESI	NA	
Qualifying Feature	C	To restore the favourable conservation condition of Transition mires and quaking bogs in River Finn SAC, which is defined by a list of attributes and targets found in NPWS (2017) Conservation Objectives: River Finn SAC 002301. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	Potential impacts		
7140 Transition mires and quaking bogs			No Likely Significant Effect No pathway for any effects as this feature is terrestrial.	NA	NA
Condition Assessment			Impact of mitigation on potential effects		
Not available			NA	NA	NA
			Residual Impacts		
		No AESI	No AESI	NA	
Qualifying Feature	C	To maintain the favourable conservation condition of Atlantic Salmon in River Finn SAC, which is defined by a list of attributes and targets found in NPWS (2017)	Potential impacts		
Salmon <i>Salmo salar</i>			Likely Significant Effect It is possible that some of the population of salmon for which the River Finn is designated may be	Likely Significant Effect It is possible that some of the population of salmon for which the River Finn is designated may be present	NA

		Conservation Objectives: River Finn SAC 002301. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	present in the vicinity or downstream of the construction works. Mortality of salmon due to release of sediment, contaminated runoff or effluent resulting in smothering of gills or infilling of interstitial spaces used and reduced oxygen flow across spawning beds.	in the vicinity of or downstream of operational maintenance works. Mortality of salmon due to release of sediment, contaminated runoff or effluent resulting in smothering of gills or infilling of interstitial spaces used and reduced oxygen flow across spawning beds.	
			Impact of mitigation on potential effects		
			The measures detailed in Section E, specifically A-C, G & H, will avoid or minimise release of contaminants or sediment so that no effects that could undermine the conservation objective will remain.	The measures detailed in Section E, specifically A-C, G & H, will avoid or minimise release of contaminants or sediment so that no effects that could undermine the conservation objective will remain.	NA
Condition Assessment			Residual Impacts		
Not available			No AESI	No AESI	NA
Qualifying Feature	C	To maintain the favourable conservation condition of Otter in River Finn SAC, which is defined by a list of attributes and targets found in NPWS (2017) Conservation Objectives: River Finn SAC 002301. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	Potential impacts		
Otter <i>Lutra lutra</i>			No likely significant effect The only works that may directly affect otter will occur approx. 38 km upstream of this SAC. The proposal cannot have a likely significant effect on the otter population of this SAC.	No likely significant effect The only works that may directly affect otter will occur approx. 38 km upstream of this SAC. The proposal cannot have a likely significant effect on the otter population of this SAC.	NA
			Impact of mitigation on potential effects		
			NA	NA	NA
Condition Assessment				Residual Impacts	
Not available			No AESI	No AESI	NA

G. Assessment of In Combination Effects

Are there any residual insignificant effects on site integrity?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Comment: The assessment demonstrates beyond reasonable scientific doubt that there will be no residual insignificant adverse effects on site integrity in light of the conservation objectives therefore there cannot be any in-combination effects.
---	--	---

H. Outcome of Appropriate Assessment

Site	Residual effect following application of mitigation measures?	Comment
Owenkillew River SAC River Foyle and Tributaries SAC River Finn (ROI) SAC	<input checked="" type="checkbox"/> No adverse effect on site integrity	The assessment demonstrates beyond reasonable scientific doubt that, subject to conditioning the required mitigation, there will be no adverse effects on site integrity in light of the conservation objectives.

Taking account of the assessment above, including any incorporated and additional mitigation measures, could there be an adverse effect on site integrity for any site from the proposal alone or in combination with other projects or plans?		<input checked="" type="checkbox"/> No AESI – summarise outcome and record any conditions required to ensure mitigation is implemented <input type="checkbox"/> Yes AESI – detail here.
Recommendation	The assessment demonstrates beyond reasonable scientific doubt that, subject to conditioning the required mitigation, there will be no adverse effects on the site integrity of any European site in light of the conservation objectives.	
Conditions to ensure mitigation is implemented		
Are any conditions required to ensure that the proposal and mitigation measures are adhered to?		<input checked="" type="checkbox"/> Yes – complete next section and add condition/s <input type="checkbox"/> No – assessment complete
Condition Number	Detailed Conditions	
1.	A Construction Environmental Management Plan (CEMP), agreed with the appointed contractor, must be submitted to and approved by the Planning Authority in advance of intrusive ground investigations. This should reflect all the mitigation and avoidance measures, monitoring and contingency plans as detailed in the Outline CEMP and the additional requirements in the DAERA response of 2/9/21. Additional information must also be specified is as follows. Further detail on the prevention of sediment release from haul roads is required. Monitoring of silt fencing and settlement features must be specified to ensure ongoing effective functioning. A separation distance of 20m between refuelling and any watercourse must be specified. A minimum setback distance of 20m between the launch and reception pits, stockpiled material and any watercourse must be specified in Appendix D. Reference to River Foyle and Tributaries SAC must be added at 6.2.1. Details of how fish will be translocated, should they be present at open trench crossings, must be included or referenced in Appendix D. Details of action to be taken in response to encountering contamination during intrusive ground investigation or construction	

	must be added. The approved CEMP shall be adhered to and implemented throughout the intrusive ground investigations, construction and operational maintenance in accordance with the approved details, unless otherwise agreed in writing by the planning authority.
2.	A site specific Construction Method Statement, agreed with the appointed contractor, must be submitted to and approved by the Planning Authority in advance of commencement of any underground water crossings. This must identify all potential risks to the watercourse and appropriate mitigation to eliminate these risks. Details of the drilling muds / fluids to be used for horizontal directional drilling and the relevant Material Safety Data Sheets must be included. The works layout and mitigation to include appropriate areas for the storage of construction machinery, fuels/oils, refuelling areas, must be identified on a drawing included in the Construction Method Statement. The approved Construction Method Statement shall be adhered to and implemented throughout the construction period in accordance with the approved details, unless otherwise agreed in writing by the planning authority.

I. Evidence Used to Inform Assessment

Title	Date	Source	Comment
Application Documents	14/10/2021	NI Planning Portal	Includes responses from Loughs Agency 9/7/21. 'Loughs Agency has reviewed the Fisheries Chapter and associated drawings of the accompanying Environmental Statement. Loughs Agency is content with the proposals provided the mitigation as detailed is adhered to. Loughs Agency welcomes the consideration of the downstream sensitivities of the watercourses intersecting the UGC route (including highly sensitive watercourse intersecting the OHL route). Mitigation measures proposed seem appropriate to the nature and scale of the development.'
Conservation Objectives	14/10/2021	NIEA Website	
ArcView Spatial Information	14/10/2021	Spatial NI and NIEA	
Representations	14/10/2021	NI Planning Portal	205 at 11/10/21. Considered where relevant to the HRA.
Information gap/s		What is the impact of these?	
None			
Uncertainties		What is the impact of these?	
The method for some underground watercourse crossings is unknown at this stage.		Full details can be specified and approved in advance of these works.	

Consultation with Statutory Nature Conservation Body (SNCB)

Was the SNCB consulted?	<input checked="" type="checkbox"/> Yes – provide date and advice below <input type="checkbox"/> Not necessary as Stage One found appropriate assessment not required
Date	Advice
15/07/2020	Coastal Development

'Marine and Fisheries Division has considered the impacts of the proposal on the marine environment and on the basis of the information provided refers to standing advice.'

Explanatory note

'Provided appropriate pollution prevention measures are implemented on site during construction, the proposal is unlikely to have a significant impact on the marine environment.'

Section 47 of the Fisheries Act (NI) 1966 covers the applicant's responsibilities relating to penalties for pollution and the consequences of causing or permitting the release of any deleterious material into any waters.'

Drainage and water

'The Drinking Water Inspectorate has considered the application and notes the information contained in:

The Water Quality Screening Assessment (WQSA), (RPS, IBE 1625, December 2019) and; Outline Construction Environmental Management Plan (OCEMP) (RPS); and provides advice.'

'Water Management Unit has assessed the information presented in this proposal within the context of Water Management Unit's remit of surface water quality issues. Water Management Unit are of the opinion that, based on the information presented, impacts on the surface water environment generated by this proposal are unlikely to be significant subject to best practice and appropriate mitigation being applied during the construction, operation and decommissioning phases.'

'Water Management Unit's comments are subject to:

- The applicant complying with all the environmental authorisations granted.
- The proposal necessitates the crossing of a waterway and the applicant will be required to liaise with Water Management Unit Pollution Prevention Team to agree a method of works.
- The applicant noting and acting on the advice contained in this response under further guidance'

Further guidance is provided that is either the same as or updated from that in the DAERA response of 26/02/2021.

Land, Soil and Air

This proposed development is not regulated by Industrial Pollution and Radiochemical Inspectorate.

Regulation Unit (Land and Groundwater Team) have no comment to make on the need or otherwise for an EIA and would have no objections to the proposal provided Conditions and Informatives are placed on any planning decision notice, as recommended.

Natural Heritage and Conservation Areas

	<p>Natural Environment Division has considered the impacts of the proposal on the natural environment and on the basis of the information provides advice to the planning authority.</p>
<p>26/02/2021</p>	<p><u>Marine and Fisheries Division</u></p> <p>Marine and Fisheries Division refers to previous advice on this application and has no further comment to make.</p> <p><u>Water Management Unit and Inland Fisheries</u></p> <p>‘Water Management Unit notes the Planning Case Officers reason for consultation and would provide the following advice.’</p> <p>Details considerations including</p> <p>‘Consideration should be given to the provision of an Outline Construction Method Statement / Method of Works Statements, for works in, near or liable to affect any waterway as defined by the Water (Northern Ireland) Order 1999. (See Further Proposal Specific Guidance below).’ Recommends scope and content of CMSs.</p> <p>‘Further guidance</p> <p>Water Management Unit notes the Outline construction Environment Management Plan (OCEMP) and would make the following comments.</p> <p>Water Management Unit notes this an outline CEMP and welcomes the commitment that a final CEMP will be required and will need to be agreed with NIEA.</p> <p>River crossing methods both overhead and underground needs to be fully detailed including method statements for both HDD and the use of open cut employing coffer dams.</p> <p>Stockpiles – best practice management must be applied and stockpiles should be at least 10 meters from any watercourse. (Any mitigation methods used to prevent pollution from suspended solids from surface water runoff must be maintained after drilling until such times as there is no longer a threat to the aquatic environment (e.g. re-vegetation has taken place).</p> <p>Vegetative buffer zones mentioned as a measure for pollution of prevention of the watercourses on site need to be a min of 10 meters. The applicant will need to take into account conditions on the ground including typography and ensure that any buffer zone is suitable for the task in hand.</p> <p>Contingency plan/mitigation – States that a method statement outlining a procedure for conducting any emergency “clean-up” operation in Appendix G however there is only a flow chart for Environmental Incident Reporting Process is present. Water Management Unit are not clear if this Appendix is incomplete. Mitigation should be detailed in a contingency plan.</p> <p>All environmental incidents regardless of time of day must be reported to the NIEA Water Pollution Hotline (0800 80 70 60) within 30 minutes of the incident occurring unless it is not safe to do so. The water pollution hotline is a 24hour 365 day service</p> <p>Water Management Unit notes the Water Quality Screening Assessment and would make the following comments.</p>

The applicant has identified the five waterbodies in which this proposal is to be located along with their associated Water Framework Directive (WFD) status. The status quoted is the 2015 status. The applicant should note that the most up to date status is 2018 (and the status for two waterbodies has changed) this can be viewed at

<https://gis.daerani.gov.uk/arcgis/apps/webappviewer/index.html?id=7e234827aa7a405d990359aa92c7c287>

Water Management Unit would request that any future consultation clearly has demonstrated / considered the following:

- How surface water will be dealt with at the site during the construction phase. The destination of all site drainage must clearly identified. (It should be noted that any mitigation methods used to prevent pollution from suspended solids from surface water runoff must be maintained after all works until such times as there is no longer a threat to the aquatic environment (e.g. re-vegetation has taken place)).
- Clear details of all proposed works in, near or liable to affect a watercourse*

*The applicant should note the definition of a 'waterway' as defined under the NI Water Order:

"Waterway" includes any river, stream, watercourse, inland water (whether natural or artificial) or tidal waters and any channel or passage of whatever kind (whether natural or artificial) through which water flows

In this Order any reference to a waterway includes a reference to the channel or bed of a waterway which is for the time being dry.

- Table 2.1: Location of Specific Underground Cable Construction Methodologies in the Water Screening Assessment gives details of watercourses that are to be crossed underground using various locations. Water Management Unit requests that six figure Irish Grid References are given for each of 14 proposed locations. It would also be helpful if drawings could be supplied with the waterways to be crossed shown in colour. Water Management Unit would request that similar details are also supplied for the proposed crossings over the Owenkillew River and Glennelly that are to be completed by drone.
- Has demonstrated compliance with all the relevant precepts contained in Standing Advice Pollution Prevention Guidance, and that best practice and appropriate mitigation is to be applied during the construction, operation and decommissioning phases.
- Has considered if any of the works particularly excavations will require dewatering and how any resultant waters will be disposed of.
- If available at this stage, the type of any drilling muds / fluids to be used and disposed of including the relevant Material Safety Data Sheets for same. The applicant must ensure that all drill operatives are aware of, and that they adhere to, all the relevant precepts contained in GPP 26: Safe storage of Drums and Intermediate Bulk Containers (IBCs)
- Clarification of the source of any water used in the preparation of the drilling muds / fluids.

- Details of the mud recycling system to be used. (Water Management Unit would encourage the use of a closed loop system for drilling fluids. The operator will need to ensure sufficient mitigation measures are in place to ensure there are no unregulated discharges to the aquatic environment. The applicant must ensure that all aspects of the close loop system are subject to a regular inspection and maintenance regime. All containers/equipment etc. must be stored in an area that allows regular inspection and the early detection of any leaks or spills).
- Full details of all the mitigation methodologies to be used to prevent the escape of muds / fluids at the drilling sites.
- Drawing showing approximate dimensions and the relative position to each other of all structures / equipment to be used during the HDD including tunnel entry and exit points, launch and receiver pits etc.
- An outline method statement for HDD activities
- An outline method statement to include details of the coffer dams including construction and details of how and to where any waters will be removed.
- Consideration should also be given to
 1. The direct removal from site of any spoil from the formation of any pits or other excavations that would be in excess of that needed for any restoration.
 2. Transmission and reception pits to be located more than 10m from the river banks.
 3. Transmission and reception pits to be of sufficient size to hold excess amount of water/drilling fluids to prevent run off during drilling, if necessary these may be bunded or sand bagged.
 4. Sump holes in each pit for the dewatering of pits, water to be pumped to vegetated area opposed to hard standing ground. Liaison with landowner for confirmation on location of land drains – avoid pumping directly into drainage which will carried directly to water course without being filtered through the ground.
 5. Should a breakthrough occur and any evidence of “bubbling up”, excavator on standby to create a channel in the bank to divert any pollutant and minimise the impact downstream.

The applicant should be informed that it is an offence under the Water (Northern Ireland) Order 1999 to discharge or deposit, whether knowingly or otherwise, any poisonous, noxious or polluting matter so that it enters a waterway or water in any underground strata. Conviction of such an offence may incur a fine of up to £20,000 and / or three months imprisonment.

The applicant should ensure that measures are in place to prevent pollution of surface or groundwater as a result of the activities on site, both during construction and thereafter.’

Provision of the Outline Construction Method Statement / Method of Works Statements, for works in, near or liable to affect any waterway, must demonstrate that best practice and appropriate mitigation will be applied during the construction,

deconstruction and operational phases of the application. This should include pollution prevention measures to protect groundwater and other waterways.

Drinking Water Inspectorate

Previous response remains valid.

Regulation Unit

A request for information has been received to inform an Environmental Statement to be prepared in support of this application. Regulation Unit (RU) Land and Groundwater Team note that the planned works may encounter areas of contaminated land. A Contaminated Land Risk Assessment should be completed for this application to inform necessary mitigating measures.

'3. Regulation Unit (RU) Land and Groundwater Team note that the proposal is for the construction of an above and below ground power cable and most of the below ground cable will be located within existing public roadways.

4. RU note that there is potential for planned works to encounter areas of contaminated land. A Contaminated Land Risk Assessment should be completed for this application to inform measures necessary to mitigate potential environmental impact.

5. A Preliminary Contaminated Land Risk Assessment (PRA) should be provided, as a minimum, as part of the Environmental Statement to further identify land contamination issues for the application site. RU advise that all required information, including intrusive investigation and remedial measures if necessary, is submitted in writing for agreement as part of the Environmental Statement.

6. An Outline Construction Environmental Management Plan (OCEMP) provided by RPS in support of the application includes a section on intrusive ground investigation that will take place prior to excavation and installation works commencing. It is recommended that all risk assessment and risk management work follows the technical framework as described in the Land Contamination: Risk Management (LCRM) guidance available at: <https://www.gov.uk/guidance/land-contamination-how-to-manage-the-risks>.

7. Site investigation should proceed according to BS10175:2011+A2:2017 – Investigation of Potentially Contaminated Sites. Code of Practice.

8. In the event that fluid filled cables are used, the applicant should be aware that these can be a source of land and groundwater contamination if leakage occurs.'

Industrial Pollution & Radiochemical Inspectorate

This is not a development that is regulated by IPRI.

Natural Environment Division

NED provides the following information to assist NIE Networks in preparing an Environmental Statement for the two Dalradian connection powerline sections which are located within the Derry City & Strabane District Council and Fermanagh & Omagh District Council areas.

Potential Impacts

‘Degradation of adjacent aquatic environment and consequently the designated site from contaminated runoff resulting from construction, works.

Mortality of salmon due to vibration/noise, release of sediment, contaminated runoff or effluent resulting in smothering of gills or infilling of interstitial spaces used and reduced oxygen flow across spawning beds.

Direct/indirect impact through destruction of otter holt or disturbance during construction works or reduction in fish prey species.

Potential damage to otter holts/resting places or otter foraging/commuting disturbance during the construction phase of the development.’

Designated site considerations

The proposed powerline spans from Strabane main substation to the proposed Curraghinalt mine and comprises c. 18.7km of overhead line (OHL) and c. 4.1km of underground cabling (UGC).

Various RPS maps supplied as part of this scheme, such as the Strategic Flood Extent map (date received 11/03/2020), pose installation of the UGC predominantly within public carriageway, or in land adjacent to the public carriageway, and with the final c. 2km of UGC tracking up Crockanboy Hill away from any road network. NED note that the proposal is positioned outwith the Owenreagh River and Broughderg Burn Margaritifera River Basins. Therefore, NED are content that provided the proposal does not interfere with the host fish population, required during the parasitic stage of freshwater pearl mussel’s lifecycle, that impacts to this designated site selection feature are unlikely to be significant.

NED, however, would highlight Loughs Agency concerns with the Fisheries and Aquatic Screening Assessment (date received 11/03/2020), particularly the representation of wild brown trout habitat within the stream crossing points. Freshwater pearl mussels were judged to be in unfavourable condition in the most recent Owenreagh River ASSI and Owenkillew River ASSI/SAC condition assessment reports. As brown trout act as a host species for the freshwater pearl mussel and as lack of recruitment of mussel (possibly as a result of lack of host fish available during the glochida stage) has been partially attributed to the continuous decline of the site selection feature, NED consider the proposal may be capable of having significant impact on the populations within the designated sites.

Before the UGC joins Crockanboy Road, the proposed route passes under an unnamed watercourse which discharges into Owenreagh River c. 1.5km downstream. The Owenreagh River is hydrologically connected to the Owenkillew River which subsequently becomes the River Foyle and Tributaries ASSI/SAC at the confluence of the Strule and Owenkillew Rivers. These watercourses all contain sensitive salmonid habitat which supports the Atlantic Salmon selection feature of the Owenkillew River

ASSI/SAC and River Foyle and Tributaries SAC/ASSI. Several other watercourse crossings are required within the carriageway routes proposed which are hydrologically connected to the designated sites.

NED acknowledge receipt of the Outline Construction Environmental Management Plan (date received 11/03/2020) which states that works will be carried out between 1st May and 30th September to avoid the more critical salmonid spawning season. NED note that both open cut and horizontal direction drilling (HDD) methodologies have been discussed for use in river crossings.

Due to the sensitivities of the hydrologically connected designated sites, both in terms of Atlantic salmon populations along with host species to the freshwater pearl mussels, NED recommend that HDD be used in preference to open cut techniques for installation of UGC at watercourse crossings. However, NED recognise that open-cut approaches will be taken when on-site management is deemed to pose a risk of rupture or drilling mud run-off, as detailed in the Fisheries and Aquatic Screening Assessment.

Spatial buffers and sediment traps have been proposed to protect sensitive waterways where HDD is undertaken. Drilling fluid leakage and bankside disturbance shall be prevented by ensuring that the drill launch and receiver pits are sufficiently distant from the banks and removal and disposal of the drilling slurry shall be managed through safe methods such as a vacuum lorry. Particular care and attention should be sustained to ensure there is no direct discharge of untreated surface run-off into any hydrologically connected watercourses/drains and watercourse spatial buffer strips should be maintained, except at the identified water crossing points.

NED acknowledge that the OHL portion of the scheme traverses several watercourses which are within or hydrologically connected to Owenkillew River SAC/ASSI, Owenreagh River ASSI and River Foyle and Tributaries ASSI/SAC. Most pole placement shall be carried out at least 10m from any of these watercourses/hydrologically connected watercourses but there are 10 locations where the pole shall be fixed within this 10m buffer strip. NED note that for these locations silt fencing will be installed between the active working area and watercourse.

A clear fell strip of 10m will also be required for the purposes of construction, with all vegetation clear felled to ground level, cut to 1.5m or completely removed. Vegetation removal should be avoided within the riparian zone of watercourses hydrologically connected to designated sites in order to protect rivers from bank destabilisation and the release of sediments. NED acknowledge that, as stated in the Ecological Impact Assessment (date received 11/03/2020), vegetation clearance required 5m either side of the proposed OHL route shall be carried out using hand-operated equipment. The OCEMP then details that OHL pole installation will incorporate the excavation of the works area followed by positioning and backfilling the pole. No imported backfill or concrete will be required for OHL pole placement.

NED note that water bodies within the vicinity of the proposed site compounds shall be protected by a combination of vegetated buffers and silt fencing to ensure silt laden surface runoff from the compound does not discharge directly to a watercourse. All of the above pollution prevention measures should be designed/approved and regularly inspected by the appointed ECoW to ensure full functionality at all stages of the construction process.

	<p>The Ecological Impact Assessment determined that no otter underground holts or above ground couches were present within the 100m survey corridor along the route of the proposed development. The survey did, however, identify otter activity within close proximity to various pole installation locations. The ECoW must implement precommencement surveys and ensure construction practices are designed to allow free passage of foraging/commuting otters outside of working hours, NED consider the potential adverse impacts encountered during the construction phase preventable.'</p>
02/09/2021	<p>Considerations:</p> <p>Water Management Unit has considered the impacts of the proposal on the surface water environment and on the basis of the information provided are content subject to</p> <ul style="list-style-type: none"> • Conditions • Any relevant statutory permissions are obtained • The applicant referring and adhering to standing advice • The applicant noting the advice contained in the explanatory note. <p>Conditions:</p> <p>Should this application be given approval Water Management Unit recommend the following conditions are included in the decision document.</p> <p>Condition: Once a contractor has been appointed, a Construction Environmental Management Plan (CEMP) should be submitted to NIEA Water Management Unit, at least 8 weeks prior to the commencement of construction to ensure effective avoidance and mitigation methodologies have been planned for the protection of the water environment.</p> <p>Reason: To ensure effective avoidance and mitigation measures have been planned for the protection of the water environment.</p> <p>Condition: Once a contractor has been appointed, details of the type of any drilling muds / fluids to be used including the relevant Material Safety Data Sheets for same should be submitted to NIEA Water Management Unit, at least 2 weeks prior to use of these materials.</p> <p>Reason: To ensure effective avoidance and mitigation measures have been planned for the protection of the water environment.</p> <p>Condition: Once a contractor has been appointed, a schedule of works for all underground watercourse crossings to include timings, locations (grid references) and methods to be used for those crossings identified should be submitted to NIEA Water Management Unit, at least 2 weeks prior to those works. (Note Water Management are content for this to be submitted in phases if appropriate).</p> <p>Reason: To ensure effective avoidance and mitigation measures have been planned for the protection of the water environment.</p> <p>The response goes on to comment on some inaccuracies in ES Volume 1 Chapter 9 Water Quality.</p>

'ES Volume 3 Appendix 2.2 OCEMP

Water Management Unit has considered the Outline Construction Environmental Management Plan or those areas that fall within our remit and our generally content. However the applicant should consider the following.

Section 5.2.1.1 Reflects the requirement to remove vegetation 5m either side of the OHL route and reflects desire to avoid remove vegetation within riparian zone. Water Management Unit would like assurances of 10m veg buffer to waterway. If this is not possible in certain areas then additional mitigation measures must be reflected. • Discharges to grassland from treatment areas must be monitored to ensure suspended solids are not picked up or mobilised post treatment.

Treatment systems for suspended solids must be designed and managed in accordance with CIRIA specifications.

Silt socks must be managed to prevent release or escape of suspended solids.

Haul roads sediment control - there is reference to suspension of movement of vehicles to mitigate against suspended solids from haul road. This will assist but further consideration of the collection, control and treatment of haul road 'slurry' is required.

Water Management Unit previously raised the following points for HDD and many have been reflected. However Water Management Unit would reinforce this as this can be a high risk activity.

Transmission and reception pits to be located more than 10m from the river banks – the OCEMP does not reflect this distance at present.

Transmission and reception pits to be of sufficient size to hold excess amount of water/drilling fluids to prevent run off during drilling, if necessary these may be bunded or sand bagged.

Spoil from pits to be loaded directly to lorry for removal from site. Stockpiling can be considered if in line with PPG/GPP/CIRIA best practice to prevent pollution risk of waterways by suspended solids

Sump hole in each pit for the dewatering of pits, water to be pumped to vegetated area opposed to hard standing ground. Liaise with landowner for confirmation on location of land drains – avoid pumping directly into drainage which will carried directly to water course without being filtered through the ground. Silt sock is referenced in paragraph 5 – this must be used in line with manufactures guidelines and monitored.

The buffer zone should remain vegetated. If stripped or disturbed, then additional mitigation measures will need to be considered.

The need for monitoring for evidence of frac-out during the crossing. It is essential the identified measures are implemented. Firstly, by the locator operator through observation of the river and secondly by the drilling rig driver who will see pressures at the drill head significantly reducing. Thirdly a spotter to be in place up and downstream of drill location to alert drill operator of a break through.

Should a breakthrough occur and any evidence of “bubbling up”, an excavator should be on standby to create a channel in the bank to divert any pollutant and minimise the impact downstream.

Silt fencing and/or straw bales on site to minimise or isolate any potential contaminant.

Section 7.1.2 – more detail will be required to demonstrate mitigation measures to prevent pollution during installation and decommissioning of cofferdams e.g. integrity of sandbags, placement and removal issues. The diagram in appendix F is helpful and acceptable in principle but would caveat this with that ongoing monitoring is required to ensure action is taken to mitigate against risk as/if they present themselves. – Appendix D – in OCEMP part 3 – goes some way to achieving this but would need to be developed to reflect these issues including the sequence of removal e.g. downstream first would be the preference to prevent a flush

Section 7.1.3 – size of buffer strip to be 10m and previous comment is applicable where this is not possible.

The use of straw bales is referenced. These are difficult to manage and wrapping in geotextile is important.’

Further generic advice on the CEMP content is provided.

‘Underground Watercourse Crossings

Water Management Unit acknowledges it is not possible to fully identify the method to be utilised at this stage. Water Management Unit requests a schedule of works for all underground watercourse crossings to include timings, locations (grid references) and methods to be used for those crossings identified should be submitted to NIEA Water Management Unit prior to those works taking place.

With regard to HDD, drilling should be carried out using a “closed loop” system with no intentional discharge to the aquatic environment. Any “sumps” or containers to be utilised to hold drilling fluids must be watertight and where appropriate the use of a level warning system should be considered.

All mitigation measures must be fully applied if undertaking HDD activities.

Water Management Unit acknowledges it is not possible to identify the type of drilling fluids / muds to be utilised at this stage. Water Management Unit requests details of the type of any drilling muds / fluids to be used including the relevant Material Safety Data Sheets for same should be submitted to NIEA Water Management Unit prior to these works commencing.

Water Management Unit notes and welcomes the intention to recycle these fluids. Should any of these fluids or drilling fines need to be disposed of these should be removed by a licensed waste carrier to a licensed waste treatment facility.’

Regulation Unit

‘Considerations

An Environmental Impact Statement (ES) has been provided by RPS in support of this application. Based on the environmental information provided, Regulation Unit (RU) Land and Groundwater Team have no objection subject to Planning Conditions with regard to potential land contamination issues and risk to the groundwater environment.

Conditions

Wording for proposed Conditions concerning the management of land contamination are provided below and should you wish to discuss or have further clarity then do not hesitate to get in touch with the Land and Groundwater Team in Regulation Unit. In addition to imposing planning Conditions to address contamination and its risks, it is essential to ensure that these planning Conditions are complied with and discharged.

1. If during the site investigation or development works, new contamination or risks are encountered which have not previously been identified, works should cease and the Planning Authority shall be notified immediately. This new contamination shall be fully investigated in accordance with the Land Contamination: Risk Management (LCRM) guidance available at: <https://www.gov.uk/guidance/land-contamination-how-to-manage-the-risks>. In the event of unacceptable risks being identified, a remediation strategy shall be agreed with the Planning Authority in writing, and subsequently implemented and verified to its satisfaction.

Reason: Protection of environmental receptors to ensure the site is suitable for use.

2. After completing the remediation works under Condition 1; and prior to occupation of the development, a verification report needs to be submitted in writing and agreed with Planning Authority. This report should be completed by competent persons in accordance with the Land Contamination: Risk Management (LCRM) guidance available at: <https://www.gov.uk/guidance/landcontamination-how-to-manage-the-risks>.

The verification report should present all the remediation, waste management and monitoring works undertaken and demonstrate the effectiveness of the works in managing all the risks and wastes in achieving the remedial objectives.

Reason: Protection of environmental receptors to ensure the site is suitable for use.

3. The development hereby permitted shall not commence until a field/walkover survey of water features (including unregistered private water supplies) has been provided. If any additional water features (not discussed in the Environmental Statement) are identified a risk assessment and potential mitigations should be submitted to the Planning Department for consideration prior to works commencing in the vicinity of the water feature.

Reason: Protection of environmental receptors

Explanatory note

The comments below are not exhaustive but serve to capture key points in support of the Regulation Unit (RU) Land and Groundwater Team position outlined above. These comments are made on consideration of:

- RPS Environmental Statement – Curraghinahilt 33KV Connection Project. Dated May 2021.

1. The priority of RU in considering this request for information is to consider the potential for contamination to be present at the site that could impact on environmentally sensitive receptors including groundwater and surface water. It should be noted that Fermanagh and Omagh District Council is the authoritative body with respect to environmental health matters and we would ask that you ensure they have an opportunity to comment on all relevant information.
 2. RU note that the Construction Environmental Management Plan (CEMP) provided as part of the ES confirms that non-intrusive site investigation has been completed and intrusive site investigation involving progression of trial holes, at a rate of one hole per 100 m of underground cable, will take place prior to excavation and installation works commencing.
 3. RU further note that there is potential for planned site investigation or construction stage works to encounter areas of contaminated land, particularly during underground cable excavation / drilling works in off-road areas. RU are content that the likelihood of encountering contamination is low given the stated depth (1000 mm) and width (500 mm) of the cable track excavation. In the event that contamination is encountered during intrusive site investigation or construction stage, Planning Conditions to mitigate land contamination risks to receptors using current guidance are provided below.
 4. RU are content that full implementation of the advised Planning Conditions for any contamination encountered during site investigation and construction stage will ensure no unacceptable land contamination risks to the water environment will arise as a result of the proposed development. Further information is available at: Development on Land Potentially Affected by Contamination | Department of Agriculture, Environment and Rural Affairs (daera-ni.gov.uk)
 5. RU note that the applicant has stated “there are no known private wells in the vicinity of the proposed development” (Section 9.8.1.3 Hydromorphology of Chapter 9). Although the applicant has consulted the NIEA Water Information Request Viewer and Spatial NI Web portal there is no evidence that all potential private groundwater abstractions have been considered. The Land and Groundwater Team recommend prior to works commencing that a field survey/ walkover to confirm the presence of any water additional receptors is completed as per the proposed Condition 3. If any additional water features (not discussed in the Environmental Statement) are identified a risk assessment and potential mitigations should be submitted to the Planning Department for consideration prior to works commencing in the vicinity of the water feature.
- This proposed condition and response should be considered alongside the DAERA Drinking Water Inspectorate Consultation response
- The Land and Groundwater Team recommend the following guidance regarding water feature surveys is considered:
- <https://www.daerani.gov.uk/sites/default/files/publications/daera/Water%20Features%20Survey%20-%20August%202018.pdf>
6. The applicant has stated that dewatering of cable trenches or launch and received pits may be required (Section 5.2.1.1 Sediment Management Measures of Appendix 2.2 Outline Construction Environmental Management Plan). The potential requirement for dewatering further supports the need for a sufficient water feature survey to identify groundwater receptors and the potential risk associated.

<p>7. It is recommended that all risk assessment and risk management work follows the UK technical framework as described in the Land Contamination: Risk Management (LCRM) guidance available at https://www.gov.uk/guidance/land-contamination-how-to-managethe-risks.</p> <p>Natural Environment Division</p> <p><u>‘Designated Sites</u></p> <p>The application site is hydrologically linked and/or within/adjacent to the following national, European and international designated sites:</p> <p>Owenkillew River SAC and River Foyle and Tributaries SAC, which are designated under the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended);</p> <p>Owenkillew River ASSI, Owenreagh River ASSI and River Foyle and Tributaries ASSI, which are declared under the Environment Order (Northern Ireland) 2002</p> <p>In accordance with the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended), the Competent Authority should ensure an assessment is carried out to determine if the proposal, either alone or in combination, is likely to have a significant effect on a European site and the qualifying features, in line with the site conservation objectives.</p> <p>NED has considered the proposal and highlights the following as potential impacts on the designated sites;</p>	
<p>Potential Impacts</p>	<p>Designated site considerations</p>
<p>Degradation of adjacent aquatic environment and consequently the designated site from contaminated runoff resulting from construction, works.</p> <p>Mortality of salmon due to vibration/noise, release of sediment, contaminated runoff or effluent resulting in smothering of gills or infilling of interstitial spaces used and reduced oxygen flow across spawning beds.</p>	<p>The proposed powerline spans from Strabane main substation to the proposed Curraghinalt mine and comprises c. 18.7km of overhead line (OHL) and c. 4.1km of underground cabling (UGC).</p> <p>NED have considered the potential likely significant impacts to fisheries and aquatic ecology, as presented within Chapter 8 of the Environmental Statement (date received 01/06/2021). The species in this Chapter either form a feature component of the designated sites (Atlantic salmon) or are inextricably linked to features of the designated sites, through their role as host species during the glochida stage of freshwater pearl mussel, or as prey to the Atlantic salmon and otter populations of the designated sites.</p> <p>The Chapter states that drilling and noise vibration impacts are unlikely to result in disruption of the migratory behaviour of salmon, given that no local fish were present within the streams where horizontal directional drilling (HDD) has been proposed, or that the habitat consisted of poor fisheries potential. Regarding the removal of sensitive benthic macroinvertebrates during open-cut crossings, the report considers impacts to be very localised, and of negligible magnitude, because of the restricted area of excavation, coupled with the likelihood of rapid recolonization of invertebrates from upstream. NED note that temporary damming and channel</p>

blocking required for open-cut crossings could affect migratory movement of salmonids but that, as per the ES, apart from ST11, none of the stream crossings were found to have fish present locally. At this site, fish will be collected by electrofishing immediately upstream, within and downstream of the proposed works areas and translocated much further downstream. NED note that open cut crossings will not be undertaken during key migratory periods (1st October to 30th April).

NED acknowledge receipt of Appendix 2.2: the Outline Construction Environmental Management Plan (OCEMP) and Chapter 9 of the ES: Water Quality (both date received 01/06/2021) which propose a series of mitigation measures to prevent degradation of the adjacent aquatic environment during UGC and OHL installation works.

Spatial buffers and sediment traps have been proposed to protect sensitive waterways where HDD is undertaken. Drill pits shall be located a minimum of 20m from a watercourse. Drilling fluid leakage and bankside disturbance shall be prevented by ensuring that the drill launch and receiver pits are sufficiently distant from the banks and removal and disposal of the drilling slurry shall be managed through safe methods such as a vacuum lorry. As detailed in Chapter 9 of the ES, particular care and attention should be sustained to ensure there is no direct discharge of untreated surface run-off into any hydrologically connected watercourses/drains. Watercourse spatial buffer strips should be maintained, except at the identified water crossing points. NED note that there will be no requirement for surface water abstractions.

Due to the sensitivities of the hydrologically connected designated sites, both in terms of Atlantic salmon populations along with host species to the freshwater pearl mussels, NED recommend that HDD be used in preference to open cut techniques for installation of UGC at watercourse crossings. However, NED recognise that open-cut approaches will be taken when on-site management is deemed to pose a risk of drilling mud break out through fissures or weakness in the underground strata.

Should ground investigations determine that the nature of strata is not suitable in a certain location for HDD and open-cut technique will be required, NED should be reconsulted in order to undertake a full assessment of potential impacts to the designated site selection features.

NED note that open cut crossings will be undertaken in dry conditions, by damming the reach across and pumping of water behind an upstream cofferdam into a river reach downstream of a secondary cofferdam, resulting in a very low likelihood of sediment entrainment and associated negative impacts to the aquatic species of the sites.

Sediment release, throughout the proposed works, shall also be prevented through the following mitigation; limit movement of vehicles after heavy rainfall, avoid vehicle use within close

		<p>proximity to a watercourse, silt fencing, swales, drone overhead line stringing, and biodegradable membranes to stabilise and reinstate the bank in riparian zones, along with visual inspections and planned emergency response procedures. Pollution prevention resulting from refuelling, the storage of oils and fuels and disposal of site work sewage have been considered and appropriately mitigated in the OCEMP.</p> <p>NED acknowledge receipt of the shadow Habitats Regulations Assessment (sHRA) (date stamped 08/06/2021) which concludes that, subject to adherence to the mitigation measures prescribed within the above documents, construction and operation of the proposed development will not adversely affect the conservation objectives for River Finn SAC, River Foyle and Tributaries SAC, Owenkillev River SAC or Lough Foyle SPA/Ramsar.</p>
	<p>Direct/indirect impact through destruction of otter holt or disturbance during construction works.</p>	<p>Chapter 7 of the ES briefly covers designated site features including Otter and Atlantic Salmon which have the potential to be impacted by the development. Although no otter holts, couches or signs were recorded within 80m of the working area they are known to transverse the watercourse, with NIEA holding several records of otter nearby. The chapter states that Otters have the potential to be disturbed by works adjacent to the watercourse due to the construction and maintenance of poles 2263 and 2263a. Potential disturbance will be reduced by keeping tree cutting works to one day, with as much tree and vegetation cover being retained as possible for the OHL to function. NED advise that monitoring of the watercourse by an ecological clerk of works take place when construction works occur adjacent to the Owenkillev watercourse. If otters are sighted then construction works must cease immediately and further advice sought from NIEA. Water quality impacts that may indirectly impact otter such as suspended solids and construction run-off are covered within Chapter 9 of the ES and within the OCEMP.</p>
	<p>Invasive species</p>	<p>The proposed works at the Glenelly river section have the potential to enable the spread of invasive species downstream to Owenkillev River and Tributaries SAC, with 'Old sessile oak woods with Ilex and Blechnum in the British Isles' feature 6.5km downstream. An Invasive Non-Native Species Method Statement has been included with the OCEMP to prevent this. Ecological Exclusion Zones (EEZ) will be set up around stands of invasive species to prevent ground disturbance or plant disturbance which could result in plant spread. No contractors or vehicles etc. will be allowed into the EEZ. At all locations staff will be briefed and made aware of the non-native species present and the purpose of the exclusion zones</p>
	<p>Recommendations NED would advise the following are considered:</p> <ul style="list-style-type: none"> NED are content with the details and mitigation provided in the Outline Construction Environmental Management Plan, the Environmental Statement (both date received 01/06/2021) and shadow Habitats Regulations Assessment (date 	

	<p>stamped 08/06/2021) and unless there is a substantial change to these documents, are content if the measures are implemented they will mitigate against any potential impacts on the protected sites.</p> <ul style="list-style-type: none"> • Should ground investigations determine that the nature of strata is not suitable in a certain location for HDD, and open-cut technique will be required, NED should be reconsulted prior to commencement of the open-cut UGC installation works. <p><u>Otters</u></p> <p>‘NED notes from the ES that a survey for otters was carried out and that whilst no otter holts or couches were recorded within the survey area, otter activity was recorded at several locations along the Legnahone Burn, Letterbrat Burn and Glenelly River. Otters are a European protected species under the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended). However, NED is content that provided the mitigation measures detailed in the ES, OCEMP and those recommended by NED in the designated sites section above are implemented in full there are unlikely to be any significant impacts on the local otter population.’</p> <p><u>Ornithology</u></p> <p>‘A single Hen Harrier (Amber-listed) was observed in Craignagapple during the early season visit in 2018, but not subsequently.’</p> <p>‘NED is not aware of any areas used regularly by wintering Whooper Swans (EU Birds Directive: Annex 1) or other migratory waterfowl for foraging or roosting within 5km of the proposed powerline. There is also no evidence that the route is crossed by any important migratory or commuting flyways for the above species. It is therefore considered unlikely that the project would present a significant collision risk to these species.’</p>
To be consulted	National Parks and Wildlife Service will be invited to make representations on the draft HRA and its comments will be incorporated before the HRA is finalised.
Does the HRA outcome fully reflect this advice?	<p>Yes.</p> <p>The low risk of encountering contamination has been fully considered. The mitigation recommended as conditions 1 & 2 by DAERA Regulation Unit is not appropriate to this type of development. In the event of contaminants being identified during investigations or construction then alternative solutions, to be detailed in the final CEMP, should be implemented.</p> <p>The NED requirement that it should be reconsulted prior to commencement of the open-cut UGC installation works is addressed by Condition 2. This HRA concludes that suitable mitigation is set out in the OCEMP and that the Construction Method Statement, which will be subject to approval, will provide evidence that it is appropriately applied to the site specific conditions.</p>
If no provide justification for why it was not followed.	NA