

The Planning Inspectorate
Room 3/19A
Temple Quay House (2 The Square)
Temple Quay
Bristol
Avon
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Our ref: NA/2020/115279/06-L02
Your ref: A1 in Morpeth
Date: 25 May 2021

Dear Sir/Madam

**A1 IN NORTHUMBERLAND: MORPETH TO ELLINGHAM: DEADLINE 8
SUBMISSIONS. MORPETH TO ELLINGHAM**

Please find enclosed our written representations for Deadline 8 and the
Examiners Written Questions (ExQ3) [Appendix A] for this Development Consent
Order (DCO) on behalf of the Environment Agency (EA).

If you have any questions or require any clarification on the points below, please
do not hesitate to contact me.

Yours faithfully

Lucy Mo
Planning Technical Specialist - Sustainable Places

[Redacted signature]

[Redacted email address]@environment-agency.gov.uk

**A1 IN Northumberland: Morpeth to Ellingham Development Consent Order
Application Planning Inspectorate Reference: TR010059**

**Summary of Written Representations - on behalf of the Environment
Agency (EA)**

EA Position

The EA and the Applicant have held a number of meetings to discuss the levels of compensation in relation to the impacts of the scheme, and are in agreement on a number of matters. However, the level of compensation provided to date by the Applicant for the localised loss of watercourse and riparian habitat due to the culverting of watercourses throughout the Scheme is insufficient. However, it is our understanding that the Applicant is prepared to make a contribution towards offsite works in order to compensate for the localised loss of watercourses, subject to a legal agreement. The details of the contribution and associated offsite works are currently under discussion with the Applicant.

**Deadline 7 Submission - 7.9.1.2 Flood Risk Assessment Addendum - River
Coquet - Rev 1 [REP7-015]**

The submitted Flood Risk Assessment Addendum addresses the points raised in our previous written representations. The Hydraulic Models which form the basis of this addendum are currently under review with our modelling team. We will submit our position on the hydraulic model following the completion of the review.

Deadline 7 Submission - 6.48 Borrow Pit Dewatering Assessment [REP7-004]

The report identifies a risk to groundwater resources and groundwater dependent features. The report also identifies a number of measures to collect more monitoring data and to identify additional mitigation measures at the detailed design stage. This is an acceptable assessment appropriate for this stage. We request that section 5 of the Updated Outline Construction Environmental Management Plan (Clean) - Rev 6 [REP7-008] is updated to include reference to the groundwater monitoring outlined in this report. It currently fails to make reference to groundwater monitoring.

**Deadline 7 Submission - 6.49 Options Appraisal of River Coquet Bridge
Foundation Stabilisation and Scour Protection System [REP7-005]**

The geomorphological dynamic assessments is robust and comprehensive, providing a greater level of detail and understanding. However, the classification used to show percentage change is not very user friendly. For example the 30-100% change covers a large range of possible outcomes, and therefore limits the level understanding.

It is estimated that the size of sediment entrained increases by 30-100% across most of the channel, with the gravel, cobble, boulder bar likely to be included within this area. We recognise that the entrained sediment is likely to remain

within the cobble range. However, there is a risk that it tips over into small boulder range and thus boulders are displaced and features of interest may be lost.

The modelled scenarios suggest there remains a risk to the bar. We therefore welcome the recommendation to undertake a further detailed topographic survey of the mid-channel bar and other prominent channel boulders.

The proposals outlined for the River Coquet crossing are unlikely to change the morphological behaviour or affect the form or function of the river as they are designed to reflect the current bank position and profile. However they will limit or prevent change from occurring in the future and will limit and restrict the rivers natural ability to change and adapt to changing external pressures such as climate change.

When taking into account the long term fixing of the riverbank, the impact is considered to be moderate adverse rather than the minor adverse, and this should be taken into account when developing the mitigation and compensation package.

Deadline 7 Submission - 7.3 Updated Outline Construction Environmental Management Plan (Clean) - Rev 6 [REP7-008]

A-B40

It is noted that no changes have been made to this section. We have previously provided comments in relation to A-B40 and the improvements to compensate for the direct loss of ~35m of the Longdike Burn due to the Bockenfields culvert. We have concerns that delivering improvements along this reach of Longdike Burn, to compensate for the culverted watercourse is unrealistic. It is suspected that deer grazing is suppressing natural regeneration along the burn. This was discussed at our last meeting with the Applicant on Tuesday 18 May 2021.

We request that the Applicant seeks to deliver or support a meaningful compensation package elsewhere on the effected watercourses which are locally more degraded, unlike the Longdike Burn in the DCO which is in a relatively good state in comparison to many other stretches within its catchment.

ExA SW100 & SW101

Riparian planting is not just stated as compensation for the loss of watercourses, it is also for the loss of existing riparian woodland. Compensating for the loss of watercourses by improving other watercourses through riparian planting is not direct like-for-like compensation. However given that additional watercourse lengths could not be gained through the scheme, then increasing the river biodiversity and value elsewhere is the next best solution. The compensation in this manner for the loss of river habitat through culverting, must be over and above the compensation for the loss of existing riparian habitat.

A-B2

This measure requires updating to reflect the EA's discovery of several otter spraints on the Shipperton Burn. Otter fencing has been suggested by the Applicant at several watercourse in Part B to which the EA are in agreement with.

SW-B4 / SAW-B2 / SAW-B3

Over time the rock armour will vegetate up. However it is unlikely to be as diverse as the lost natural bank. As such, it is considered that compensation is required and a commitment as such should be recorded within the outline CEMP once or if agreed. It is our understanding that the Applicant has concluded that the rock armour will cause an adverse impact on the River Coquet and compensation is being investigated.

SW-W5 / SAW-B7 / SAW-W5

Settlement lagoons require a substantial area to allow sediments to settle, and often due to the chemical composition of the soils, finer particles may remain suspended. As such, lamella tanks and chemical dosing are likely to be required and the relevant permits from the EA and Natural England must be sought.

**A1 IN Northumberland: Morpeth to Ellingham Development Consent Order
Application Planning Inspectorate Reference: TR010059**

EA Written Representations

EA Position

The EA and the Applicant have held a number of meetings to discuss the levels of compensation in relation to the impacts of the scheme, and are in agreement on a number of matters. However, the level of compensation provided to date by the Applicant for the localised loss of watercourse and riparian habitat due to the culverting of watercourses throughout the Scheme is insufficient. However, it is our understanding that the Applicant is prepared to make a contribution towards offsite works in order to compensate for the localised loss of watercourses, subject to a legal agreement. The details of the contribution and associated offsite works are currently under discussion with the Applicant.

Deadline 7 Submission - 7.9.1.2 Flood Risk Assessment Addendum - River Coquet - Rev 1 [REP7-015]

The submitted Flood Risk Assessment Addendum addresses the points raised in our previous written representations. The Hydraulic Models which form the basis of this addendum are currently under review with our modelling team. We will submit our position on the hydraulic model following the completion of the review.

Deadline 7 Submission - 6.48 Borrow Pit Dewatering Assessment [REP7-004]

The report identifies a risk to groundwater resources and groundwater dependent features such as Kitty Carter Burn and Charlton Mires, and that a water resources abstraction licence may be required for dewatering. The report also identifies a number of measures to collect more monitoring data and to identify additional mitigation measures at the detailed design stage.

It is noted that 7.3 Updated Outline Construction Environmental Management Plan (Clean) - Rev 6 [REP7-008] includes an action to apply to the EA for a dewatering licence once dewatering exceeds 20m³/day. This is an acceptable assessment appropriate for this stage. Any risks will be further assessed at the detail design stage and groundwater resources protected via the water resources abstraction licence and through the permit. However, we request that section 5 of the Outline Construction Environmental Management Plan is updated to include reference to the groundwater monitoring outlined in this report. It currently fails to make reference to groundwater monitoring.

Dewatering operations above 20 cubic metres a day will require a water abstraction licence from the EA prior to the commencement of dewatering activities at the site. In addition, if you intend to impound a watercourse, you will need an impounding licence from the EA. We recommend that the applicant submits a pre-application to the EA. The full application can take 3 to 4 months

from submission and so must be given sufficient time prior to the start of the works, if delays are to be prevented.

Deadline 7 Submission - 6.49 Options Appraisal of River Coquet Bridge Foundation Stabilisation and Scour Protection System [REP7-005]

This is a welcome addition to the documents submitted by the Applicant. It contains information, that to date had been missing from the previous documents including a detailed and appropriate assessment of the sediment on and around the mid channel bar, a field map of the reach and a recognition and description of the role the gorge sides play in supplying sediment and influencing channel dynamics.

The geomorphological dynamic assessments based on the 2-D hydraulic modelling presented in this document is robust and comprehensive, providing a greater level of detail and understanding. However, the classifications used to show percentage change is not very user friendly. For example the 30-100% change covers a large range of possible outcomes, and therefore limits the level understanding.

The report highlights that the magnitude of the increase in stream power and modelled sediment entrainment is greater than those anticipated in previous documents. During the construction phase, the document outlines a general increase in stream power and sediment entrainment within the construction works during all three flow scenarios. It is estimated that the size of sediment entrained increases by 30-100% across most of the channel, with the gravel, cobble, boulder bar likely to be included within this area. We recognise that the entrained sediment is likely to remain within the cobble range. However, there is a risk that it tips over into small boulder range and thus boulders are displaced and features of interest may be lost.

The modelled scenarios suggest there remains a risk to the bar and we therefore welcome the recommendation to undertake a further detailed topographic survey of the mid-channel bar and other prominent channel boulders to allow their reinstatement should they be required to be moved or be inadvertently moved during high flow events in which the pattern of flow is altered by the Temporary Works. This supports actions SW-W4 within 7.3 Updated Outline Construction Environmental Management Plan (Clean) - Rev 6 [REP7-008].

Rivers are complex systems that respond to many variable, ever changing forces, spatially and temporally. By fixing the riverbank through rock armour and grey/green measures, it is not simply the replacement of a complex and varied riparian habitat that took years to develop with a homogenous simplified version, it is also restricts how the river will respond and evolve, influencing the form and function of the river well past the lifetime of the bridge. The proposals outlined for the River Coquet crossing are unlikely to change the morphological behaviour or affect the form or function of the river as they are designed to reflect the current

bank position and profile. However they will limit or prevent change from occurring in the future. In so doing, they will limit and restrict the rivers natural ability to change and adapt to changing external pressures such as climate change.

When taking into account the long term fixing of the riverbank, the impact is considered to be moderate adverse rather than the minor adverse, and this should be taken into account when developing the mitigation and compensation package.

Deadline 7 Submission - 7.3 Updated Outline Construction Environmental Management Plan (Clean) - Rev 6 [REP7-008]

A-B40

It is noted that no changes have been made to this section. We have previously provided comments in relation to A-B40 and the improvements to compensate for the direct loss of ~35m of the Longdike Burn due to the Bockenfields culvert. We have concerns that delivering improvements along this reach of Longdike Burn, to compensate for the culverted watercourse is unrealistic. The reach is largely unmodified, surrounded by unmanaged pasture, and it is questionable whether marginal planting is necessary or appropriate. It is suspected that deer grazing is suppressing natural regeneration along the burn. This was discussed at our last meeting with the Applicant on Tuesday 18 May 2021. Please note that our comments to Deadline 6 Submission - 7.24.2 Applicant's Response to Deadline 5 and 5a Submissions - Appendix iii - Indicative Longdike Burn Proposals submitted 11 May 2011 (ref: NA/2020/115279/05-L01 are still applicable. These are outlined below.

We welcome the inclusion of Appendix iii Indicative Longdike Burn Proposals. This however confirms our concerns that delivering significant improvements along this reach of the Longdike Burn, to compensate for the culverted watercourses is unrealistic. Appendix iii does not provide plans for nutrient management measures or bankside stabilisation or the area of aquatic planting. This aquatic planting may not be suitable given the site already has potential marginal planting. However, this could not be confirmed due to the time of year and cold weather in spring 2021

During a recent walk over of the reach, it was noted that mature alder were semi-continuous along the whole reach. A number of these trees had fallen into the channel, adding greater complexity to an already diverse channel. The reach is largely unmodified, surrounded by unmanaged pasture, and it is questionable whether marginal planting is necessary or appropriate. Tree cover along the burn is dominated by mature and post mature alder, with limited younger trees available to replace these older trees.

Natural regeneration was noted within pockets of the site, and it is suspected that deer grazing is suppressing natural regeneration along the burn. We believe that although some planting is likely to assist the aging woodland present along the burn, deer management is likely to provide the greatest benefits. Without this management, the planted shrubs may fall prey to the browsing deer. Furthermore, the new alignment of the road may deter deer from browsing along the Longdike Burn, resulting in reduced pressures and lead to natural regeneration. As such, any planting may only speed the natural process up over a very short timescale, with the same result seen in the long term, rendering the proposals ineffective in achieving their initial aim, offsetting the impacts of culverting.

Compensating for the loss of watercourses by improving other watercourses through riparian planting is not direct like-for-like compensation. However, given that additional watercourse lengths could not be gained through the scheme, then increasing the river biodiversity and value elsewhere is the next best solution. Given the proposals seen within 7.24.2 Appendix iii Indicative Longdike Burn Proposals only provide a limited benefit to the Longdike Burn, we request that the Applicant seeks to deliver or support a meaningful compensation package elsewhere on the effected watercourses which are locally more degraded, unlike the Longdike Burn in the DCO which is in a relatively good state in comparison to many other stretches within its catchment.

ExA SW100 & SW101

Riparian planting is not just stated as compensation for the loss of watercourses, it is also for the loss of existing riparian woodland. Compensating for the loss of watercourses by improving other watercourses through riparian planting is not direct like-for-like compensation. However given that additional watercourse lengths could not be gained through the scheme, then increasing the river biodiversity and value elsewhere is the next best solution. The compensation in this manner for the loss of river habitat through culverting, must be over and above the compensation for the loss of existing riparian habitat.

A-B2

This measures require updating to reflects the Environment Agency's discovery of several otter spraints on the Shipperton Burn within 200m of the scheme, including spraints just upstream of the existing road boundary. Otter fencing has been suggested by the Applicant at several watercourse in Part B to which the EA are in agreement with.

SW-B4 / SAW-B2 / SAW-B3

The rock armouring of the riverbanks will permanently fix the riverbed and banks, restricting and influencing the form and function of the river well past 125 year lifetime of the bridge. The proposed scour protection using large rock armour cannot replicate the heterogeneous and dynamic nature of the existing bank. Rivers are rarely stable for extended period's time. Over time the rock armour will

vegetate up, however it is unlikely to be as diverse as the lost natural bank. As such, it is considered that compensation is required and a commitment should be recorded within the outline CEMP once or if agreed. It is our understanding that the Applicant has concluded that the rock armour will cause an adverse impact on the River Coquet and compensation is being investigated.

SW-W5 / SAW-B7 / SAW-W5

Chemical Dosing of silt laden water may be required due to the steep slopes, exposed soils and heavy construction traffic that will generate contaminated water during or after rainfall events. Settlement lagoons require a substantial area to allow sediments to settle, and often due to the chemical composition of the soils, finer particles may remain suspended. The area required for these ponds is unlikely to be available due to the minimal working area designed to reduce the ancient woodland loss. As such, lamella tanks and chemical dosing are likely to be required and the relevant permits and permissions from the EA and Natural England must be sought.

Appendix A: The Examining Authority's Written Questions and Requests for Information (ExQ3)

GEN.3.11	EA	<p>The revised outline CEMP [REP6-025] has introduced a new measure: ExA:S-WL101 which states that “riparian planting to compensate for the loss of channels will be undertaken with a mix of native tree species with an understorey along a range of channels as detailed within the Culvert Mitigation Strategy [REP5-022]”.</p> <p>The EA is asked for its views on this measure.</p>
<p><u>EA response:</u></p> <p>The level of compensation provided to date by the Applicant for the localised loss of watercourse and riparian habitat due to the culverting of watercourses throughout the Scheme is insufficient. Riparian planting is not considered to be like for like compensation.</p> <p>We recognise that the Applicant has explored opportunities to deliver compensation within the DCO boundary. However, opportunities within the DCO boundary are limited. We have proposed to the Applicant alternative options to deliver compensation for the localised impacts that the Scheme will have and for the loss of watercourses. It is our understanding that the Applicant is prepared to make a contribution towards offsite works in order to compensate for the localised loss of watercourses, subject to a legal agreement. The details of the contribution and associated offsite works are currently under discussion with the Applicant.</p>		
BIO.3.1	Applicant NCC EA	<p>In response to Hearing Action Point 7 [EV-054] the Applicant provided an Otter Position Statement [REP6-048] at D6, as did NCC [REP6-050] and the EA [REP6-053]. The Applicant has proposed potential mitigation and has indicated that the matter is under discussion between the three parties. It is noted that the Applicant's statement is exclusive to Part A and the position in relation to Part A is assumed to be agreed. However, this does not accord with NCC's statement.</p> <p>Parties are asked to provide a further update, either individually or jointly, at D8. Specifically, if NCC or the EA require changes to the DCO, CEMP or other mitigation measures to address their concerns any amendment should initially be discussed with the Applicant and submitted at D8.</p>
<p><u>Joint Response between the Applicant, NCC and the EA:</u></p> <p>The Applicant has discussed this matter with the EA and Northumberland County</p>		

Council and provides a joint update from all three parties. The below response has been agreed between the three parties, which is captured within the statements of common ground issued at Deadline 8.

Otter was recorded along watercourses for Part A and appropriate mitigation has been proposed and secured in measures A-B2, A-B8, A-B10 and A-B17 of the Outline CEMP [REP7-008 and 009] (and as updated at Deadline 8). Both the Environment Agency and Northumberland County Council are satisfied with the impact assessment and mitigation for otter for Part A.

It is Part B where the EA and Northumberland County Council disagreed with the conclusion of likely absence, as set out in the otter assessment presented in Chapter 9: Biodiversity Part B [APP-049], and requested that mitigation be considered. Following Issue Specific Hearing 3 (ISH3), the Applicant held discussions with the Environment Agency and, during a meeting on 30 April 2021, the Environment Agency provided recent evidence of otter within the study area for Part B at Shipperton Burn. The Applicant has re-evaluated the position in light of this new evidence and now accepts that otter are present within the Order limits of Part B.

Accordingly, the Applicant has now proposed otter fencing at four locations along Part B (Shipperton Burn, Western Tributary of Kitty Carter Burn, White House Burn and Denwick Burn) to direct otter passage through culverts beneath Part B that are of a sufficient size to offer safe passage. The Applicant has discussed and agreed the proposed location and length of fencing with the EA and Northumberland County Council. The proposed fencing is captured and secured by Commitment ExA: B-B100 of the Outline CEMP [REP7-008 and 009] updated at Deadline 8 and presented on an updated Landscape Mitigation Masterplan Part B [REP6-018] submitted at Deadline 8.

The Applicant has agreed with both the EA and Northumberland County Council that the post-construction otter monitoring for Part B (measure B-B30 of the Outline CEMP [REP7-008 and 009] (and as updated at Deadline 8)), which would have informed retrospective mitigation, can be removed from the Outline CEMP as mitigation has now been incorporated into Part B.

The Applicant has agreed with both the EA and Northumberland County Council that the proposed mitigation is sufficient to address their concerns regarding otter for Part B. As such, the assessment of, and proposed mitigation for, otter is agreed for the Scheme. **However, it should be noted that the EA are unable to formally sign off the measures until the agreed amendments have been reflected in the updated outline CEMP which is due to be submitted at Deadline 8 and any other relevant documents.**

LV.3.2	Applicant,	Item 1 of table 3-2 in the Statement of Common
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	<u>EA</u>	Ground with the Environment Agency [REP6-032] highlights that the appropriate levels of compensation/mitigations/off-setting in relation to the impacts of the proposal are still not agreed. Could the Applicant and the Environment Agency provide an update on the situation?
<p><u>EA response:</u></p> <p>The level of compensation provided to date by the Applicant for the localised loss of watercourse and riparian habitat due to the culverting of watercourses throughout the Scheme is insufficient. Riparian planting is not considered to be like for like compensation.</p> <p>We recognise that the Applicant has explored opportunities to deliver compensation within the DCO boundary. However, opportunities within the DCO boundary are limited. We have proposed to the Applicant alternative options to deliver compensation for the localised impacts that the Scheme will have and for the loss of watercourses. It is our understanding that the Applicant is prepared to make a contribution towards offsite works in order to compensate for the localised loss of watercourses, subject to a legal agreement. The details of the contribution and associated offsite works are currently under discussion with the Applicant.</p>		