

MEMORANDUM

To: Planning & Development Services
FAO: Laura Stewart
From: Flood Risk Management Team, Dingwall
Subject: Planning Advice
Date: 17/12/2018
Your Ref: 18/05427/S36
Please ask for: R Bryan **Tel:** 01349 868800

To construct and operate a pumped storage hydro scheme approximately 14km SW of Inverness | Land to South of Dores Inverness

The Flood Risk Management Team has the following comments to make in relation to flooding and drainage. Please note all comments are based upon requirements outlined in *Scottish Planning Policy (SPP)* and The Highland Council's *Supplementary Guidance: Flood Risk and Drainage Impact Assessment*.

The Flood Risk Management Team has reviewed the information provided by the Applicant and we **object** to the application until further information is provided for review.

FLOOD RISK

- i). We have reviewed the Environmental Impact Assessment (EIA) for the site (Red John Pumped Storage Hydro Scheme, EIA, AECOM. November 2018). In particular Volume 2: Chapters 9 and 10, Appendix 9.1: Flood Risk Assessment (FRA) and Appendix 10.5: Surface Water Management Plan (SWMP).
- ii). The FRA predicts that there will be an impact on downstream water levels/flows in the River Ness during a 10 year return period storm event. There would be a 50mm increase in stage at the Ness Weir if the scheme were in operation during such an event. The FRA has not demonstrated what the impact would be at locations further downstream in Inverness or during higher (less frequent) return period floods.
- iii). The analysis suggests that the scheme would have a detrimental impact on the risk of flooding downstream of the development. As stated in the report parts of Inverness upstream of the Flood Protection Scheme (FPS) are at risk in 1 in 10 to 1 in 25 year return period events.

PROJECT DESIGN UNIT

Offices at Golspie, Alness, Dingwall & Inverness

Director of Development & Infrastructure: J Stuart Black, MA (Hons), PhD
Project Design Unit, Flood Risk Management Team,
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- iv). We request that the FRA is extended to include the full extent of the River Ness downstream of the development including the section covered by the FPS. The impact of the scheme should be assessed for a range of return periods up to and including the 1 in 200 year plus climate change event and compared to the existing (baseline) scenario.
- v). Further clarification is needed on the proposed operating regime/criteria. The FRA includes information on the rules related to abstraction during low water levels/flows in the Loch. There is no information on the proposed operating rules during high flows/flood conditions.
- vi). We request a **condition** that all new watercourse crossing are designed to convey the 1 in 200 year plus climate change flow with an appropriate freeboard.

DRAINAGE

- vii). We are satisfied with drainage strategy as set out in the Flood Risk Assessment and the Outline Surface Water Management Plan. We request a **condition** that all surface water from all new hardstanding on the site is collected, treated and discharged at the pre-development greenfield rate in accordance with SUDS principles and The Highland Council's *Supplementary Guidance: Flood Risk and Drainage Impact Assessment*.

Please note that submission of further information does not guarantee that the Flood Risk Management Team will be able to support this application. We reserve the right to request additional information in the determination of the application.

MEMORANDUM

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FAO: Laura Stewart
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Please ask for: R Bryan **Tel:** 01349 868800

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The Flood Risk Management Team has the following comments to make in relation to flooding and drainage. Please note all comments are based upon requirements outlined in *Scottish Planning Policy (SPP)* and The Highland Council's *Supplementary Guidance: Flood Risk and Drainage Impact Assessment*.

The Flood Risk Management Team has reviewed the information provided by the Applicant and we **withdraw our objection** to the application subject to the following **conditions**.

FLOOD RISK

- i). It has been confirmed to us that the scheme will cease operation when flood levels in Loch Ness reach the current predicted 1 in 10 year flood level. This will ensure that the scheme will not have an impact on downstream water levels during high flow events. We are therefore in a position to **withdraw our previous objection**.
- ii). We request a **condition** that there is no discharge from the scheme when the water level in Loch Ness is at or above 17.6mAOD.
- iii). We request a **condition** that all new watercourse crossing are designed to convey the 1 in 200 year plus climate change flow with an appropriate freeboard.

DRAINAGE

- iv). We are satisfied with drainage strategy as set out in the Flood Risk Assessment and the Outline Surface Water Management Plan. We request a **condition** that all surface water from all new hardstanding on the site is collected, treated and

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