

Our ref: PCS 130261  
Your ref: 2013/0024/DET

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If telephoning ask for:  
Simon Watt

29 November 2013

By email only to: [planning@lochlomond-trossachs.org](mailto:planning@lochlomond-trossachs.org)

Dear Sir

**Town and Country Planning (Scotland) Acts**  
**Planning application: 2013/0024/DET**  
**Erection of 6 No. dwelling houses**  
**Land At Site Of The Former Marie Stuart Hotel, Auchraw Terrace, Lochearnhead**

Thank you for your consultation letter which SEPA received on 20 November 2013. We ask that the planning **condition** in Section 1.1 be attached to the consent. If any of these will not be applied, then please consider this representation as an **objection**. Please also note the advice provided below.

In the event that the planning authority proposes to grant planning permission contrary to this advice on flood risk, the Town and Country Planning (Notification of Applications) (Scotland) Direction 2009 provides criteria for the referral to the Scottish Ministers of such cases. You may therefore wish to consider if this proposal falls within the scope of this Direction.

Notwithstanding the removal of our objection subject to the above conditions, we would expect Loch Lomond & The Trossachs National Park to consult the relevant council to undertake their responsibilities as the Flood Prevention Authority.

**Advice for the planning authority**

**1. Flood Risk**

1.1 We are now in a position to remove our objection to the proposed development on flood risk grounds provided that, should the Planning Authority be minded to approve this application, the following planning condition is imposed:

- No built development or land-raising shall take place within the 1:200 year flood extent (for Loch Earn) as detailed within the Flood Risk Assessment (FRA) by Allen, Gordon & co dated May 2013.



Chairman  
David Sigsworth  
  
Chief Executive  
James Curran

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- 1.2 We previously objected to the proposal to erect six dwellings on the brownfield plot in Lochearnhead as not enough information was provided on the different sources of flood risk. It is worth highlighting that the planning application still mentions six dwellings but the Flood Risk Assessment supplied by Allen Gordon only mentions three dwellings. We would suggest the council seek clarification on the number of houses proposed.
- 1.3 The FRA mentions that given the brownfield status, the proposed development is considered to have an equivalent flood risk to the former site. We would argue that the change of use from a hotel to a dwelling is a change from temporary residence to permanent residence and could increase the overall flood risk, especially in relation to human health and financial impacts.
- 1.4 Peak 1:200 year water levels have been supplied by Scottish and Southern Energy ranging between 98.85-98.95mAOD. As shown in the Site Plan within the FRA, the three dwellings are located outwith this flood extent. We have no further information on how these levels were derived.
- 1.5 The flood risk from the culvert still remains a concern. Due to the number of nearby small watercourses and the general topography upstream of the site, the derivation of the catchment size is difficult hence there are uncertainties attached to the flow estimate and it could therefore be potentially underestimated. It is unclear what is meant in Section 8.01; we would stress that we do not support the reduction in flows reaching the culvert based on upstream susceptibility of culverts to silting/ sediment deposition as this is not precautionary or best practice. Our understanding of the report is that the existing culvert is to be replaced with a larger culvert (700mm) which is similar to those upstream. This should offer some improvement to the current situation. However, the Site Plan drawing indicates that the culvert will be re-routed to enable the siting of Plot 2. This will require a number of bends to be incorporated, and a small increase in length which will decrease the current slope of the culvert. As sediment issues are noted upstream, any angles introduced or reduction in slope of the culvert will affect velocities and increase the likelihood of sediment deposition. It will also increase the likelihood of debris becoming trapped and blockage occurring.
- 1.6 Due to the pluvial risk and potential risk from culvert conveyance capacity being exceeded or blockage occurring, we would strongly recommend that a suitable freeboard allowance is incorporated into the design of the dwellings. We would highlight that the 150mm freeboard mentioned in the FRA is not precautionary and we would recommend a higher freeboard to mitigate the potential risk of flooding to the dwellings. The site should also be designed to direct water away from the dwellings and an overland flow path should be maintained in perpetuity should the culvert capacity be exceeded. Due to the risk of blockage, the culvert should be designed for easy access and a maintenance regime should be incorporated into the design. We would draw attention to Section 9.2 of CIRIA C689 Culvert Design and Operation Guide which outline the design fundamentals of a culvert.
- 1.7 It is mentioned that safe access and egress could be obtained from Auchraw Terrace. The council should be satisfied that access from Auchraw Terrace is possible during high water levels as it is reliant on the A85 bridge also being passable.
- 1.8 We support Section 15.07 which mentions the avoidance of constructing buildings over an existing culvert and a minimum of 3m clearance.

- 1.9 The advice contained in this letter is supplied to you by SEPA in terms of Section 72 (1) of the Flood Risk Management (Scotland) Act 2009 on the basis of information held by SEPA as at the date hereof. It is intended as advice solely to Loch Lomond & The Trossachs National Park as Planning Authority in terms of the said Section 72 (1). Our briefing note entitled: "Flood Risk Management (Scotland) Act 2009: Flood risk advice to planning authorities" outlines the transitional changes to the basis of our advice in line with the phases of this legislation and can be downloaded from [www.sepa.org.uk/planning/flood\\_risk.aspx](http://www.sepa.org.uk/planning/flood_risk.aspx).

## **Detailed advice for the applicant**

### **2. Flood Risk**

- 2.1 The Indicative River & Coastal Flood Map (Scotland) has been produced following a consistent, nationally-applied methodology for catchment areas equal to or greater than 3km<sup>2</sup> using a Digital Terrain Model (DTM) to define river cross-sections and low-lying coastal land. The outlines do not account for flooding arising from sources such as surface water runoff, surcharged culverts or drainage systems. The methodology was not designed to quantify the impacts of factors such as flood alleviation measures, buildings and transport infrastructure on flood conveyance & storage. The Indicative River & Coastal Flood Map (Scotland) is designed to be used as a national strategic assessment of flood risk to support planning policy in Scotland. For further information please visit [www.sepa.org.uk/flooding/flood\\_extent\\_maps.aspx](http://www.sepa.org.uk/flooding/flood_extent_maps.aspx).
- 2.2 Please note that we are reliant on the accuracy and completeness of any information supplied by the applicant in undertaking our review, and can take no responsibility for incorrect data or interpretation made by the authors.

## **Regulatory advice for the applicant**

### **3. Regulatory requirements**

- 3.1 Details of regulatory requirements and good practice advice for the applicant can be found on our website at [www.sepa.org.uk/planning.aspx](http://www.sepa.org.uk/planning.aspx). If you are unable to find the advice you need for a specific regulatory matter, please contact a member of the Perth operations team in your local SEPA office at:

Strathearn House  
Broxden Business Park  
Lamberkine Drive  
Perth  
PH1 1RX

Tel: 01738 627 989

If you have any queries relating to this letter, please contact me by telephone on 01698 839000 or e-mail at [planning.sw@sepa.org.uk](mailto:planning.sw@sepa.org.uk).

Yours faithfully

Simon Watt  
Planning Officer  
Planning Service

Copy to: [admin@james-denholm.co.uk](mailto:admin@james-denholm.co.uk) and [Toni.Coppola@allengordon.co.uk](mailto:Toni.Coppola@allengordon.co.uk)

*Disclaimer*

*This advice is given without prejudice to any decision made on elements of the proposal regulated by us, as such a decision may take into account factors not considered at the planning stage. We prefer all the technical information required for any SEPA consents to be submitted at the same time as the planning application. However, we consider it to be at the applicant's commercial risk if any significant changes required during the regulatory stage necessitate a further planning application and/or neighbour notification or advertising. We have relied on the accuracy and completeness of the information supplied to us in providing the above advice and can take no responsibility for incorrect data or interpretation, or omissions, in such information. If we have not referred to a particular issue in our response, it should not be assumed that there is no impact associated with that issue. If you did not specifically request advice on flood risk, then advice will not have been provided on this issue. Further information on our consultation arrangements generally can be found in [How and when to consult SEPA](#), and on flood risk specifically in the [SEPA-Planning Authority Protocol](#).*