

Consultation Reply

ENVIRONMENT AND INFRASTRUCTURE

To: HEAD OF PLANNING AND REGULATORY SERVICE

FAO: Stuart Herkes

Your Ref: 17/00479/FUL

From: HEAD OF ENGINEERING & INFRASTRUCTURE

Date: 19th February 2018

Contact: Lauren Addis

Ext: 6517

Our Ref: B48/2313

Nature of Proposal: Erection of dwellinghouse

Site: J Rutherford Workshop and land north east of J Rutherford Workshop
Rhymers Mill, Earlston, Scottish Borders

Further to the Local Review Hearing for application 17/00479/FUL further flood risk information for the Leader Water from Earlston Flood Study has been provided to the applicant.

As required by actions identified in the Tweed Local Flood Risk Management Plan Scottish Borders Council commissioned Earlston Flood Study in December 2016. The study has been undertaken by JBA Consulting to consider the risk of flooding to Earlston from the Leader Water and the Turfford Burn and to recommend options to manage and reduce flood risk in the village. SEPA have reviewed and agreed the hydrology used within the study. 1D/2D modelling of the Leader Water and Turfford Burn has been undertaken using best available data including the use of LiDAR and a full topographic survey. The study outputs were received by SBC in December 2017 and not previously available to share with respect to this application. Please also note that the study remains ongoing with the options appraisal stage regarding the identification of flood risk measures for Earlston yet to be delivered.

The following data from the Earlston Flood Study was provided to the applicant on 23rd January 2018 following a Local Review Hearing.

- Hydrology Report (extract)
- Flood Modelling Report
- Survey Data
 - Leader Water- AutoCAD drawings
 - PDF drawings – Cross section locations and PDF cross section drawings
 - Property Threshold Survey
- Model Data
 - Flood Modeller Data
 - Hec-RAS Data
 - Mike 11 Data
- LiDAR (flown June 2017 for SBC)

Following receipt of the above datasets a further Flood Risk Assessment Update has been provided by Terrenus Land and Water in the form of a letter, dated 6th February 2018.

The letter states that the findings of Earlston Flood Study are generally in agreement with the findings of the earlier FRA submissions for this application by Terrenus Land and Water. I would strongly disagree with this statement. Earlston Flood Study shows that at the 1:200 year flood (0.5% annual probability event) the proposed site to be inundated from the Leader Water up to a depth of 0.743m. As noted in my previous responses to this application, previous versions of the Terrenus FRA concluded that 'Leader Water remains within its banks during the 1 in 200 year storm event' and at 'the 1 in 200 year event.....does not pose a flood risk to the site'.

Notwithstanding, application of the data from the Earlston Flood Study has enabled revised assessment of this site to be undertaken. The flood maps from the study and flooding animation do show that the site is at direct risk of flooding from the Leader Water as well from overland flow route described in the FRA update letter. Outputs from the Earlston Flood Study show that at the 1:200 year flood the maximum water level from the Leader Water at cross section LEAD_1354 to be 102.043mAOD. The ground level at the proposed site is 101.3mAOD resulting in a flood depth of 0.743m at the proposed site. The FRA update letter acknowledges the level at which the site is anticipated to be inundated at the 1:200 year flood and with the inclusion of freeboard, recommends a finished floor level for this site of 102.64m. I agree with this and recommend that a finished floor level of 102.64mAOD, or above, is taken forward.

I would recommend that ground levels surrounding the dwelling should be designed to convey overland flow away from the development and drainage measures are considered to intercept overland flow.

I would also recommend that the applicant adopts water resilient materials and construction methods as appropriate in the development and that the applicant review the Online Planning Advice on Flood Risk. The applicant may also wish to consider Property Level Protection measures, details of which can be provided by SBC Emergency Planning Department.

To receive flood warnings from SEPA for Earlston the applicant should sign up to FLOODLINE at www.sepa.org.uk or by telephone on 0845 988 1188. It would also be advisable for the applicant to develop an evacuation plan for the building during times of flood warning.

Please note that this information must be taken in the context of material that this Council holds in fulfilling its duties under the Flood Risk Management (Scotland) Act 2009.

Lauren Addis
Technician
Flood Risk & Coastal Management