

Land At Colliers Holdings, Nelson, CF46 6PR Flood Consequences Assessment



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1.0 Introduction

1.1 Site Location

The site is located in the North Western part of the Caerphilly County Borough and forms part of the settlement of Nelson. Grid Ref: ST 12308 95406, (X) 312308 (Y) 195406
Site location plan attached (Appendix A)

1.2 Site Description

The site measures 4.3ha in area and is situated adjacent to the A472 Caerphilly Road.
The site is enclosed by Caerphilly Road, and the National Cycle Route (47)
Agricultural land lies to the North and South of the site

1.3 Development Proposal

The site owner is seeking Planning Permission for the Change of Use from Agriculture to Tourism and Educational Land Based Facility

2.0 On Site Flooding

2.1 TAN 15 Zonation

The Welsh Assembly Government provides Flood Zone advice in Technical Advice Note 15. Development and Flood Risk (TAN15) (July 2004)

2.2 Development Advice Map

Natural Resources Wales Produces Development Advice Maps (DAM) to accompany TAN15. These maps show the degree of flood risk which is to be applied to development sites for the planning process and thus establish the suitability of the site for development.
Examination of the TAN 15 Development Advice Maps (DAM) indicates that a small section of the development site is situated in Zone C2.
TAN 15 indicates that areas classified as C2 are areas of floodplain without significant flood defence infrastructure
A copy of the Development Advice Map is attached. (Appendix B)

2.3 NRW Flood Maps

Examination of the NRW Flood maps indicate that a small area of the development site is located within Flood Zone 2 and Flood Zone 3.

Flood Zone 2 is defined as:

- *The extent of a flood from rivers or from the sea with up to a 0.1% (1 in 1000) chance of happening in any given year*

Flood Zone 3 is defined as:

- *The extent of a flood from rivers with a 1% (1 in 100) Chance or greater of happening an any given year.*

Examination of the NRW Flood maps indicate that a small area of the development site is affected by flooding from surface water and small watercourses.

NRW Flood maps attached (Appendix C)

2.4 Development within DAM zone C2

TAN 15 indicates that only less vulnerable development should be considered in zone C2 subject to the application of the justification test, including acceptability of consequences.

2.5 Development Category

TAN 15 indicates that less vulnerable developments are defined as:

General Industrial, Employment, Commercial and retail development, Transport and Utilities Infrastructure, Car Parks, Mineral Extraction site and associated processing facilities.(excluding waste disposal sites)

The proposed development falls within the less vulnerable category.

3.0 Development Design

3.1 Site Layout and Finished Levels

The development has been designed having regard to the maximum extent of flood levels as indicated on the NRW flood maps.

The maximum flood extent has been taken from the NRW flood maps and has been overlain to the site Topographical survey and the site layout and Landscaping plan

The final development layout produced been having regard to this information

A copy of the final site layout and landscaping plan is attached (Appendix D)

3.2 Flooding From Rivers

The maximum extent of river flooding affecting the site is shown as a solid red line on the final site Layout and Landscaping plan.

As this plan shows the proposed development does not encroach into the red line area.

The maximum river flood depth is 148.90mAOD

The lowest point on the site infrastructure is 149.50mAOD

The Finished Floor Level of the Farm Building is 155.60 mAOD

The level of the Car Parking is 155.00 mAOD

Having regard to the above information the lowest point on the new development is 600mm above the extent of the 1% (1 in 100) year Flood Level

3.3 Surface Water Flooding

The maximum extent of surface water flooding affecting the site is shown as a broken red line on the final site Layout and Landscaping plan.

As this plan shows the proposed development does extend into the broken red line area.

The maximum surface water flood depth within the broken red line area is 149.00mAOD

The lowest point on the site infrastructure within the zone affected by surface water flooding is 149.50mAOD

The Finished Floor Level of the isolation building is 151.00 mAOD

Having regard to the above information the lowest point on the new development is 500mm above the maximum surface water flooding level

3.4 On site Surface Water Discharge

Surface water from the impermeable areas of the development will be discharged within the curtilage of the development by a SuDS drainage scheme.

There will be increase in the surface water discharge from the development site

4.0 Summary

This flood Consequences Assessment is provide as support for a planning application for the Change of Use from Agriculture to Tourism and Educational Land Based Facility

Having regard to all available data the FCA demonstrates that:

The development is flood free for the 1% (1 in 100) year event.

The development is flood free from surface water.

The development is not located in a historic flood area.

There is no increase in the surface water run-off from the development site

The development will have no adverse effects on the neighbouring properties or surrounding area

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Appendix A
Site Location Plan

Appendix B

Development Advice Map

Appendix C
NRW Flood Maps

Appendix D

Site Layout and Landscaping Plan