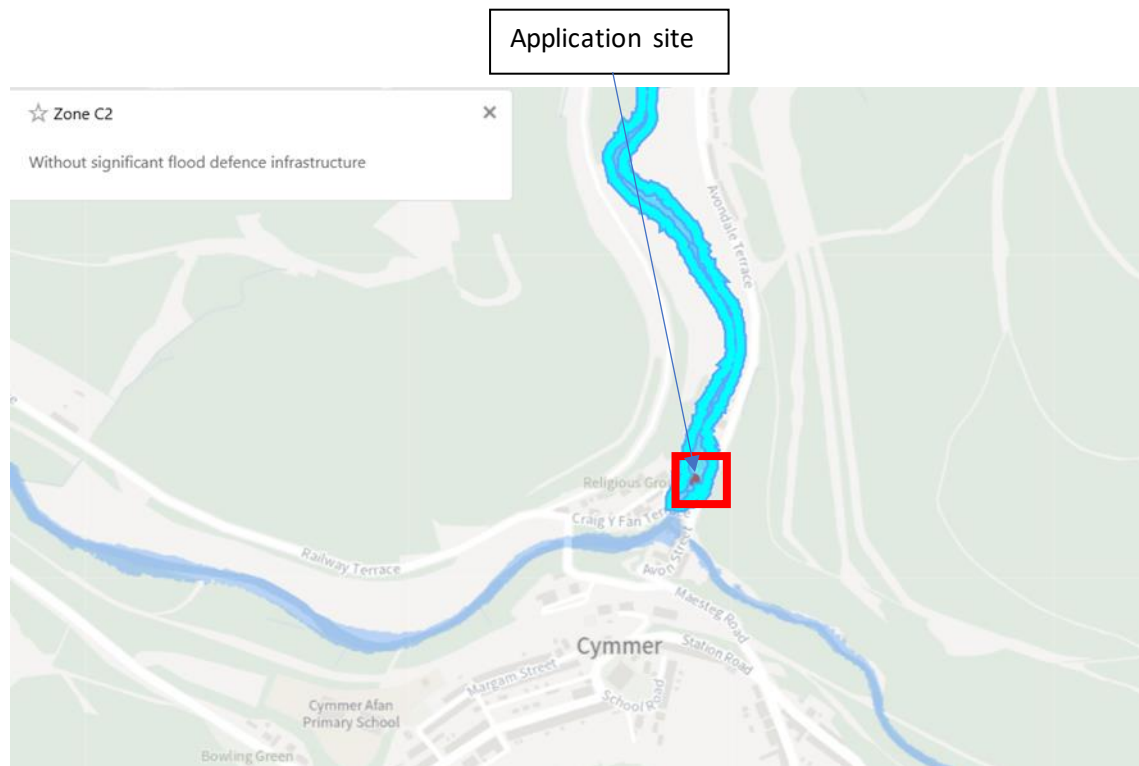


Flood Consequence Assessment

1.0 Background

- 1.1 Planning permission is sought for the change of use of the ground floor offices to a café. Only modest external alterations to the property are proposed as part of the scheme.
- 1.2 Having regard for the provisions of NRW Development flood risk map the site is located in a Flood C2 Zone:



- 1.3 The application property is located within a Flood C2 Zone. TAN 15 encourages less vulnerable development within Flood C Zone areas.
- 1.4 TAN 15 serves as a framework for planning decisions in areas at risk of flooding. Application of this framework is based on the use of flood zones within the DAM and on the vulnerability classification of particular types of development. The proposed development consists of modest leisure facilities to the rear of the public house. The application site is currently occupied by a large public house within a sustainable suburban location. The property is surrounded industrial uses and it is felt that given the proposal would be categorised as less vulnerable development, the scheme is not considered to be an unacceptable form of use in principle.
- 1.5 As discussed above, the proposal will involve the change of use of an existing ground floor commercial unit only.

2.0 Project Objective

- 2.1 The objective of the Flood Consequences Assessment is to assess whether this development would have an unacceptable impact on flooding.

3.0 Impact of Flooding on Proposed Development

- 3.1 Reference to the Assembly's TAN 15 Development Advice Map, indicates that the site lies within Flood Risk Zone C2, defined as an area where less vulnerable development such as this is acceptable. The land has historically been for residential use but in 2003 had planning permission to change its use to commercial.
- 3.2 It is clear that the principal flooding mechanism at the site is that of fluvial flooding and a Flooding Consequences Assessment (FCA) prepared in order to determine the potential risk of flooding
- 3.3 The proposal will result in a modest development. The slab will be raised above ground level with all electric points raised 0.5m above floor level.
- 3.4 TAN 15 states that an FCA should be proportionate to the development. I would reiterate that the scheme will result in a modest development and it is not considered the proposal would have an unacceptable impact on flooding.

4.0 Historical Flooding

- 4.1 Following correspondence with Natural Resources Wales, there are no known flooding on the site.

5.0 Likely Mechanisms and Sources of Flood Risk

5.1 Fluvial Flooding

The application is sited adjacent to the river Afan. The development is a change of use from one commercial use to another which is a use which is not considered a vulnerable form of use. All flood mitigation measures will be utilised during construction and as such it is felt that the proposed change of use will have no impact on flooding over and above the extant use of the site.

5.2 Tidal Flooding

The application site is not in close proximity to the coast and as such would not be susceptible to tidal flooding during extreme weather events.

5.3 Ground Water Flooding

Risk of Flooding from Groundwater The local Strategic Flood Consequences Assessment states that there are no specific areas of historical groundwater flooding incidents in this area, where the site is located and overall groundwater is not believed to be a major source of flooding.

5.4 Surface Water Flooding

Risk of Flooding from Surface Water Surface water flooding occurs following intense rainfall events, when water is unable to infiltrate into the ground or cannot discharge to a watercourse. The proposal will result in no external works and as such will not have an impact on surface water flooding. The site falls outside the defined area where there are surface water issues.

5.5 Risk of Flooding from Artificial Sources

The site is located within outside NRW's risk of flooding from reservoirs dataset.

6.0 **Policy Context**

6.1 Technical Advice Note 15 – Flood Risk

TAN 15 identifies commercial development as being 'less vulnerable' development in terms of flood risk. The proposed development site is located in an area that has been designated to be in category Zone B. The zone is an area where this form of commercial development is considered acceptable.

Previously developed land is defined in PPW as that which "is or was occupied by a permanent structure and associated fixed surface infrastructure." PPW also states a preference for the re-use of land and specifies that "many previously developed sites in built-up areas may be considered suitable for development because their re-use will promote sustainability objectives..",

7.0 **Potential Flooding Threats**

7.1 As discussed above, the principal risk of flooding to the site is likely to be posed by fluvial floodwater from the River Afon which is adjacent to the application site. A description of the flood risk posed to the existing site has been provided above.

7.2 The site is not considered to be at significant risk of flooding from groundwater or surface water flooding.

7.3 The property is surrounded by a mixture of commercial and residential properties and the proposal will involve in the change of use of the property only with no physical development.

7.4 Finished floor levels will be increased and electrical sockets raised to mitigate any potential flooding and a Flood Management Plan will be produced for the site. The existing site could be used in a highly intensive manner which would similar to the proposed use. It should also be noted that the risk of flooding will be that arising from an extreme fluvial event from the

adjacent river. Floodwaters will subsequently recede in a matter of hours, thus providing an opportunity for residents to enter/leave the property.

- 7.5 NRW provides a free Flood Warning Service to registered householders. The area is covered by the NRW Flood Warning serviced therefore it is recommended that future residents register with this service. The warning and evacuation of residents pre-flooding is considered the primary means of ensuring workers safety, which will give staff the opportunity to make their own preparations before the onset of flooding. This would allow for the safe and timely evacuation of personnel and preparation of the building for the potential onset of coastal flooding. However, it is considered that the best course of action in the event of an extreme flood event would be to remain within the building, as this will remain dry during an extreme event.

8.0 Conclusion

- 8.1 The proposed change of use will bring an important building back into a new viable beneficial use. It will also remove a far more intense commercial use from the flood risk area. The proposal will it is considered:
- The Finished Floor Level would be raised to ensure the units remain dry.
 - Electrical sockets will be raised to ensure they are above flood levels
 - The area of impermeable surfaces within the site will not be affected by the development proposal. Therefore the rate and volume of Surface Water run-off emanating from the proposed development will remain unchanged.
 - Registration to the NRW Flood Warning Service would provide sufficient lead time for occupants to evacuate the premises safely if necessary before the onset of flooding, however as the development will be set above the extreme tide level it will provide an appropriate point of containment for inhabitants if necessary. In addition, it is advised that an Emergency Flood Plan is prepared to define emergency response procedures during an extreme fluvial event.
 - The proposal will redevelop this brownfield site and bring back into beneficial use and help regenerate this brownfield site.
- 8.2 In summary, with the mitigation measures outlined above, the proposed industrial development is considered to be in compliance with TAN 15.
- 8.3 Having regard to the above there is no reason why the development proposals not be accepted by Natural Resources Wales and the Planning Authority on the basis of flood risk.