

**VARIATION NO. 2(i)
TO THE WICKLOW COUNTY
DEVELOPMENT PLAN 2010-2016
KILMACANOGUE SETTLEMENT PLAN
FLOOD RISK ASSESSMENT**



Date Adopted & in Effect: 9th January 2012

**Forward Planning Section
Wicklow County Council
County Buildings
Wicklow**



To comply with the EU Floods Directive introduced in November 2007 and in line with the Guidelines for Planning Authorities 'The Planning System and Flood Risk Management', an assessment of flood risks has been formally taken into account in the preparation of this plan.

'Section 12.6 Flooding' of the County Development Plan sets out objectives for the management of flood risk. Objective FL2 states 'Land will not be zoned for development in an area identified as being at high or moderate flood risk (as set out in the guidelines), unless where it is fully justified (through the Justification Test set out in the guidelines) that there are wider sustainability grounds for appropriate development and unless the flood risk can be managed to an acceptable level without increasing flood risk elsewhere and where possible, reduce flood risk overall'.

This Flood Risk Assessment for the designation of lands is prepared in accordance with this objective.

In this plan, the approach is to avoid development in areas at risk of flooding, and where development in floodplains cannot be avoided, to take a sequential approach to flood risk management based on avoidance, reduction and mitigation of risk.

The information about flood risks that has been used in the preparation of this plan has been collated from a number of sources including:

- 'Floodmaps.ie' – The national flood hazard mapping website operated by the Office of Public Works, where information about past flood events is recorded and made available to the public. 'Flood point' information is available on this site and has been noted.
- Alluvial deposits maps of the Geological Survey of Ireland – indicating areas that have flooded in the past (the source of alluvium)
- Examination of the old '6 Inch' maps
- Walk over survey to assess potential sources of flooding
- Written submissions received from members of the public, on the non-statutory public consultation process on the preparation of the plan.
- Interviews with local people
- Consultation with the engineering section of Wicklow County Council
- An examination of contours
- Aerial photographs

No CFRAMS studies are currently available and no modelling reports on flood risk assessment have been undertaken for the plan area.

The information from the above sources has been amalgamated to form a single 'Draft Indicative Flood Extent Map' for the plan area. This map provides information on two main areas of flood risk: Zone A where there is a high probability of flooding, and Zone B where there is a moderate probability of flooding.

- Flood Zone A includes lands where the probability of flooding from rivers is highest (greater than 1% or 1 in 100 for river flooding or 0.5%).
- Flood Zone B includes lands where the probability of flooding from rivers is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding).

The Kilmacanogue Plan includes three land use designation areas:

- (i) 'Primary Lands' – the vision for these lands is to create a consolidated and vibrant mixed use settlement centre that is the focal point for the delivery of the retail, commercial, social service and activity needs of the local population and its hinterland, and to promote this

area for tourist uses and for supervisory residential use, with an animated and high quality streetscape, whilst ensuring the protection of the special character and heritage of this area.

- (ii) 'Secondary Lands' – the vision for these lands is to provide for the sustainable development of a mix of uses including residential, employment, community and recreational uses that provide for the needs of the existing settlement and that allows for the future growth of the settlement.
- (iii) 'Tertiary Lands'- the vision for these lands is to protect and provide for agriculture and amenity in a manner that protects the physical and visual amenity of the area and demarcates the urban and rural boundary.

The following assessments of flood risk are undertaken for the plan area:

Assessment of Flood Risk on Primary Lands

The primary lands include lands that are at high and moderate risk of flooding. The overall land use objective for these lands allows for a broad mix of uses including retail, commercial, social and some limited housing that provides for the needs of the existing settlement and that allows for the future growth of the settlement. It is clear therefore that these lands are being promoted for uses that are vulnerable to flooding that would generally be inappropriate as set out in Table 3.2 of the Guidelines. As such, the justification test is required to be applied. Having considered the criteria of the test, it is considered that the justification test is satisfied, as these lands are fully developed.

Assessment of Flood Risk on Secondary Lands

The secondary lands include lands that are at high and moderate risk of flooding. The overall land use objective for these lands allows for a broad mix of uses including residential, employment, community and recreational that provides for the needs of the existing settlement and that allows for the future growth of the settlement. It is clear therefore that these lands are being promoted for uses that are vulnerable to flooding that would generally be inappropriate as set out in Table 3.2 of the Guidelines. As such, the justification test is required to be applied. Having considered the criteria of the test, it is considered that the justification test would for the most part be satisfied, as nearly all the lands concerned are currently developed. However those lands currently undeveloped would not be suitable for any vulnerable use, including housing unless a detailed flood risk assessment is prepared at the development management stage indicating that mitigation measures could suitably overcome flood issues.

Assessment of Flood Risk on Tertiary Lands

The 'tertiary lands' include lands that are at a high and moderate risk of flooding. The overall land use objective for these lands allows for broad mix of uses including limited residential development, community and recreational uses that provide for the needs of the existing settlement and that allows for the future growth of the settlement.

It is clear therefore that these lands are being promoted for uses that are vulnerable to flooding that would generally be inappropriate as set out in Table 3.2 of the Guidelines. As such, the justification test is required to be applied. Having considered the criteria of the test, it is considered that the justification test would not be satisfied. It is therefore considered appropriate to ensure that the type of development proposed on flood risk lands within the tertiary lands is not especially vulnerable to the adverse impacts of flooding.

In regard to the assessment of the three land use type designations, the following objectives are included in the Kilmacanogue Settlement Plan will apply:

Objectives of Kilmacanogue Settlement Plan

- KM 11** It is an objective of the Council to restrict the types of development permitted in Flood Zone A and Flood Zone B to the uses that are 'appropriate' to each flood zone, as set out in Table 3.2 of the Guidelines for Flood Risk Management (DoEHLG, 2009). The planning authority may consider proposals for development that may be vulnerable to flooding, and that would generally be inappropriate as set out in Table 3.2 of the Guidelines, subject to all of the following criteria being satisfied:
- The planning authority is satisfied that all of the criteria set out in the justification test as it applies to development management (Box 5.1 of the Guidelines) are complied with.
 - The development of lands for the particular use is required to achieve the proper planning and sustainable development of the settlement, and complies with at least one of the following:
 - i. The development is located within the 'primary lands' and is essential for the achievement of the 'vision' or for the achievement of a specific objective for these lands.
 - ii. The development comprises previously developed and/or under-utilised lands/sites,
 - iii. There are no suitable alternative lands for the particular use, in areas at lower risk of flooding.

Note: The objectives and policies of 'Section 12.6: Flooding' of the Wicklow County Development Plan 2010-2016 shall also apply:

- FL1** To prepare flood zone maps for all zoned lands within the County as part of future Local Area Plans.
- FL2** Land will not be zoned for development in an area identified as being at high or moderate flood risk (as set out in the Guidelines), unless where it is fully justified (through the Justification Test set out in the Guidelines) that there are wider sustainability grounds for appropriate development and unless the flood risk can be managed to an acceptable level without increasing flood risk elsewhere and where possible, reducing flood risk overall.
- FL3** Applications for significant new developments or developments in high or moderate flood risk areas shall follow the sequential approach as set out above.
- FL4** To prohibit development in river flood plains or other areas known to provide natural attenuation for floodwaters except where the development can clearly be justified with the guidelines 'Justification Test'.
- FL5** To limit or break up large areas of hard surfacing in new developments and to require all surface car parks to integrate permeability measures such as permeable paving.
- FL6** Excessive hard surfacing shall not be permitted for new, or extensions to, residential or commercial developments and all applications will be required to show that sustainable drainage techniques have been employed in the design of the development.

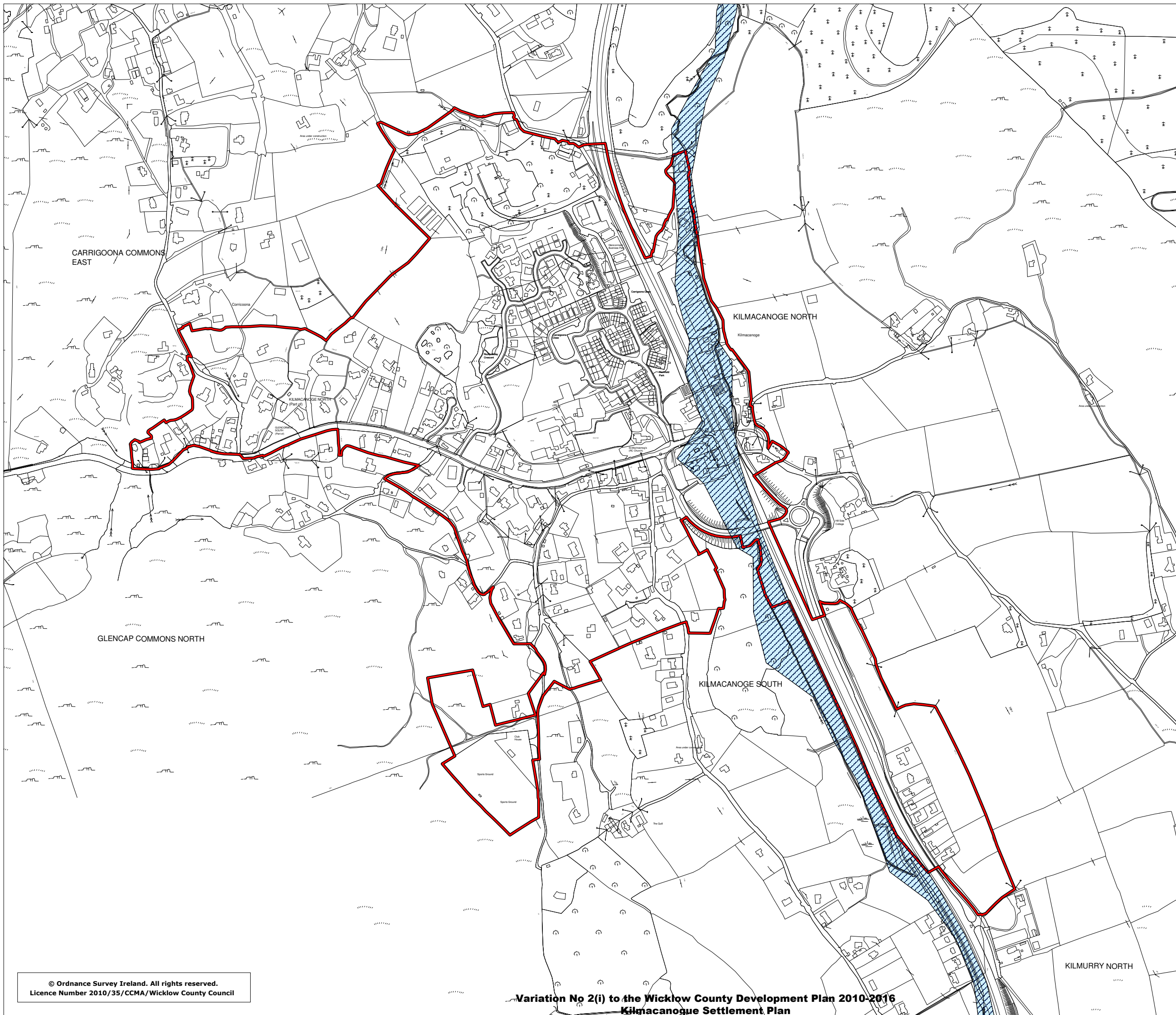
- FL7** To require all new developments to include proposals to deal with rain and surface water collected on site and where deemed necessary, to integrate attenuation and SUDS measures.
- FL8** Flood assessments will be required with all planning applications proposed in flood risk areas to ensure that the development itself is not at risk of flooding and the development does not increase the flood risk in the relevant catchment (both up and down stream of the application site). Generally a Flood Impact Assessment will be required with all significant developments and a certificate (from a competent person stating that the development will not contribute to flooding within the relevant catchment) will be required with all small developments of areas of 1 hectare or less.
- FL9** For developments adjacent to all watercourses of a significant conveyance capacity or where it is necessary to maintain the ecological or environmental quality of the watercourse, any structures (including hard landscaping) must be set back from the edge of the watercourse to allow access for channel clearing/ maintenance/ vegetation. A minimum setback of up to 10-15m will be required either side depending on the width of the watercourse.



WICKLOW COUNTY COUNCIL






12/01/2012



INDICATIVE KILMACANOUGE FLOODING MAP
KILMACANOUGE SETTLEMENT PLAN 2012 - 2016
VARIATION TO WICKLOW COUNTY DEVELOPMENT PLAN 2010 - 2016

LEGEND

-  FLOOD ZONE A
-  FLOOD ZONE B
-  SETTLEMENT BOUNDARY

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