

McCloy Consulting

Flood Risk Assessment

**Development Management
Justification Test**

**Residential Development
at
Ballinahinch Park, Ashford, Co. Wicklow**

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Executive Summary

- This Development Management Justification Test is prepared in accordance with the requirements of the Planning System and Flood Risk Management Guidelines ('The Guidelines') to accompany a Site-Specific Flood Risk Assessment ('FRA') being undertaken for a proposed residential development of nineteen houses at Ballinahinch Park, Ashford, Co. Wicklow.
- The site of the Proposed Development is within an area at risk of flooding. A large part of the development area has been found to be within Flood Zone B according to hydraulic modelling undertaken as part of the FRA.
- As a 'highly vulnerable' development in an area at risk of flooding, the planning authority must be satisfied that the requirements of the Development Management Justification Test are met before it may consider a grant of planning permission.
- All requirements of the Justification Test are met by the Proposed Development, namely:
 1. The subject lands have been zoned for residential development in the operative development plan, which was adopted taking account of the Guidelines.
 2. The Proposed Development has been subject to an appropriate FRA that demonstrates:
 - That it will not increase the risk of flooding elsewhere;
 - That it includes measures to minimise the risk of flooding to people, property, the economy and the environment as far as reasonably possible;
 - That it includes measures to ensure that residual risks to the area and/or development can be managed to an acceptable level; and
 - That it addresses the above in a manner that is compatible with the achievement of wider planning objectives in relation to the development of good urban design and vibrant and active streetscapes.

1.0 Introduction

- 1.1 This Development Management Justification Test is prepared on behalf of Wicklow County Council to form part of a Site-Specific Flood Risk Assessment ('FRA') being undertaken for a proposed residential development of nineteen houses at Ballinahinch Park, Ashford, Co. Wicklow ('the Proposed Development'). It is undertaken in accordance with the requirements of the 'Planning System and Flood Risk Management Guidelines' ('the Guidelines').
- 1.2 The Proposed Development will comprise a mix of 1, 2 and 3 bed houses together with an access road, car parking, landscaping, site works and services on two plots of land (a 'western plot' and an 'eastern plot') measuring 0.9 hectares in total. It is located at the edge of Ashford town centre, c. 450m to the west of Ashford's main street.
- 1.3 The site adjoins an existing residential development, Ballinahinch Park, and is zoned 'New Residential (RN)' under the CDP.
- 1.4 The proposed residential density, at c. 21 units per ha., is in keeping with the recommended density standards of the Wicklow County Development Plan 2022 – 2028¹ ('the CDP') and the Proposed Development has been designed in accordance with the requirements of the CDP and relevant Government guidelines for planning authorities².
- 1.5 The Vartry River, which has been known to flood in the past, flows to the south of the site. CFRAM³ mapping prepared on behalf of the Office of Public Works ('OPW') indicates that parts of the southern boundary of the site may be at risk of flooding.
- 1.6 Hydraulic modelling undertaken as part of the FRA confirms that the site includes areas within Flood Zone A⁴ and Flood Zone B⁵.
- 1.7 In the present-day scenario, without the Proposed Development, only very small parts of the site, along the western-most boundary, are affected by Flood Zone A. These do not impact on the Proposed Development. Flood Zone B however, affects a large part of the western plot⁶.
- 1.8 The Guidelines require that 'highly vulnerable' development, including residential, falling within either Flood Zone A or Flood Zone B is subject to a 'Justification Test' as part of the Development Management process.

¹ Refer to Table 6.1 of same.

² Notably the 'Quality Housing for Sustainable Communities' Design Guidelines.

³ Catchment Flood Risk Assessment and Management programme

⁴ Where the probability of flooding from rivers is highest, i.e. greater than 1%.

⁵ Where the probability of flooding from rivers is considered moderate, i.e. between 0.1% and 1%.

⁶ Refer to Fig. 4.2 of the FRA.

- 1.9 They set out a series of criteria to be considered under the Justification Test, to *“rigorously assess the appropriateness, or otherwise, of particular developments that...are being considered in areas of moderate or high flood risk”*⁷.
- 1.10 As a highly vulnerable development that is being proposed on a site at risk of flooding, with a large part of the development area falling within Flood Zone B, the planning authority must be satisfied that the Justification Test has been passed before it can consider granting planning permission.
- 1.11 The Justification Test for the Proposed Development, in accordance with the criteria established by the Guidelines, is set out in Section 4 of this Statement. We consider that the Proposed Development satisfies the Justification Test and that a grant of planning permission may be considered accordingly.
- 1.12 This Statement, which should be read in conjunction with the FRA and the full suite of submitted application documents, is set out as follows:
- Section 1 - Introduction
 - Section 2 - Proposed Development
 - Section 3 - Requirement for Justification Test
 - Section 4 - Justification Test
 - Section 5 - Conclusion

2.0 Proposed Development

Description of Development

- 2.1 The Proposed Development will comprise 19 houses, in a mix of 1, 2 and 3 bed units (2no. 1 bed units, 15no. 2 bed units and 2no. 3 bed units), together with an access road, car parking, footpaths, landscaping, site works and services, and all associated ancillary development.
- 2.2 The development will include 28no. car parking spaces, which is in excess of the minimum standards required by the CDP⁸. As part of this, three disabled spaces will be provided along with three on-street EV charging points. All off-street parking will be provided with ducting to enable the installation of EV charging points in future⁹.
- 2.3 All units within the Proposed Development are designed in accordance with the requirements of the CDP and the ‘Quality Housing for Sustainable Communities’ Guidelines, and have been laid out to minimise the risk of overlooking.

⁷ Planning System and Flood Risk Management Guidelines, Section 3.7.

⁸ Refer to Section 2.1.7 of CDP Appendix 1

⁹ In accordance with CDP requirements – refer to Table 2.2 of CDP Appendix 1

- 2.4 Generous private gardens are provided throughout and public open space provision is well in excess of CDP requirements.
- 2.5 Landscaping is central to the Proposed Development and a large Flood Compensatory Storage (FCS) area is included as part of the landscaping and reprofiling of the western part of the site. This will be at a lower level than the rest of the development and will provide sufficient floodwater storage capacity to ensure that the proposal will not increase the risk of flooding outside of the site.
- 2.6 The full description of development is contained in the statutory notices for the planning application.

Site Details

- 2.7 The site is made up of two separate plots which, combined, measure 0.9 ha. It is located at Ballinahinch Park in Ashford, Co. Wicklow, c. 450m to the west of the main street. Ashford is a relatively small but fast-growing settlement which provides a range of services and public transport connectivity to points including Wicklow, Bray and Dublin.
- 2.8 It is zoned for 'New Residential' development under the Ashford Town Plan, which forms part of the Wicklow CDP 2022 – 2028.
- 2.8 The site is accessed from the R763 road to the north, with footpath connectivity leading to the town centre.
- 2.9 The Vartry River flows to the immediate south of the site, through dense woodland, and has been known to flood in the past.
- 2.10 To the east of the site there is established residential development leading to the town centre, with a significant area of more recent residential development to the north of the R763.
- 2.11 The site is made up of an eastern plot and a western plot. To the north of the western plot there is a Protected Structure, 'Ballinahinch Dawn Cottage' (RPS Ref. 19-01), which is comprehensively screened from view by mature tree coverage. Its setting will not be impacted negatively by the Proposed Development.
- 2.12 Situated between the two plots is the existing 'Ballinahinch Park' residential development. This Wicklow County Council social housing development was approved in 2006 under planning reg. ref. 06/5731. A larger development was initially proposed under 06/5731, for 56 units, however permission was only granted for 16 units, as existing, with any further development required to be subject to a separate consenting process and informed by an appropriate flood study.
- 2.13 The existing units at Ballinahinch Park are not affected by any modelled flood zones.

3.0 Requirement for Justification Test

- 3.1 The Proposed Development is a type that is classified by the Guidelines as being 'Highly Vulnerable' to flooding.
- 3.2 The site of the Proposed Development is at risk of flooding, with much of the western area falling within Flood Zone B according to the modelling undertaken as part of the FRA.
- 3.3 Section 3.5 of the Guidelines notes that highly vulnerable development within Flood Zone B, which includes dwelling houses, "*would generally be considered inappropriate...unless the requirements of the Justification Test can be met*".
- 3.4 A Justification Test in line with the Guidelines has been undertaken accordingly and is set out in Section 4.

4.0 Justification Test

4.1 Introduction

- 4.1.1 The Justification Test that is required under the Guidelines is made up of two parts, as set out below (Refer also to Box 5.1 of the Guidelines).

4.2 Part 1

The subject lands have been zoned or otherwise designated for the particular use or form of development in an operative development plan, which has been adopted or varied taking account of these Guidelines

- 4.2.1 The subject lands, in their entirety, are zoned for 'New Residential' (RN) development under the Wicklow CDP (2022 – 2028).
- 4.2.2 The Wicklow CDP was prepared and adopted taking account of the Guidelines.
- 4.2.3 The RN zoning for the site was considered appropriate in the Strategic Flood Risk Assessment ('SFRA') of the CDP undertaken by JBA Consulting¹⁰.
- 4.2.4 The SFRA notes that any development within the RN zoning that is affected by Flood Zone A and/or Flood Zone B will require a Justification Test.

¹⁰ Appendix 8 of the CDP.

4.3 Part 2

The proposal has been subject to an appropriate flood risk assessment that demonstrates:

Part 2 (i)

The development proposed will not increase flood risk elsewhere and, if practicable, will reduce overall flood risk;

- 4.3.1 The Proposed Development has been subject to an appropriate, site-specific FRA undertaken by McCloy Consulting in accordance with the Guidelines.
- 4.3.2 The FRA demonstrates, at Section 4.3, that the Proposed Development, including an extensive Flood Compensatory Storage Area in the western parcel, will not increase the risk of flooding elsewhere.
- 4.3.3 Modelled flood levels, at nodes located upstream of, adjacent to, and downstream of the subject site show no change post-development compared to the existing scenario.
- 4.3.4 As noted in Section 4.3.1 of the FRA therefore, *“the Proposed Development cannot and does not have any impact on flood risk elsewhere”*.

Part 2 (ii)

The development proposal includes measures to minimise flood risk to people, property, the economy and the environment as far as reasonably practicable;

- 4.3.5 The Proposed Development includes a number of measures to minimise flood risk to people, property, the economy and the environment.
- 4.3.6 All of the residential units are positioned outside of the modelled flood zones and Finished Floor Levels (FFLs) are set at a minimum of 24.25mOD for those units proximate to Flood Zone B in the western part of the site¹¹, in order to protect against the effect of climate change.
- 4.3.7 Similarly, ground levels within the western part of the site, including access roads, footpaths, etc. (which are classified as ‘less vulnerable development’ by the Guidelines) are set at a minimum of 23.73mOD¹² in order to protect against the effect of climate change.
- 4.3.8 Hydraulic modelling undertaken as part of the FRA confirms that the levels referred to above will also prevent any impact on people and property in the event of culvert blockage.
- 4.3.9 In accordance with the Guidelines, all access roads for the Proposed Development are located within Flood Zone C (i.e. Outside of the 0.1% flood risk area). This ensures that safe access to and egress from the Proposed Development will be possible during an extreme flood event.
- 4.3.10 A large Flood Compensatory Storage area (0.19 ha.) is incorporated into the landscaping and reprofiling (i.e. lowering of existing ground level) proposals for the western part of the site in order to compensate for floodwater that may be displaced

¹¹ i.e. Well in excess of the recommended 500mm above the existing Flood Zone B level.

¹² i.e. Well in excess of the recommended 500mm above the existing Flood Zone A level.

by the Proposed Development. This ensures that there will be no increase in flood levels that may be experienced outside of the site as a result of the Proposed Development.

4.3.11 In addition, Sustainable Drainage Systems ('SuDS') are incorporated throughout the Proposed Development in order to reduce the risk of flooding by ensuring that there is no direct discharge of surface water to the Vartry River.

4.3.12 The following measures are proposed to allow surface water drain to ground:

- Soakpits in individual gardens, draining the roofs of the dwellings
- Permeable paving and/or grasscrete at driveways and parking spaces, draining roads, footpaths and driveways
- Swales and infiltration trenches, draining roads and footpaths

Part 2 (iii)

The development proposed includes measures to ensure that residual risks to the area and/or development can be managed to an acceptable level as regards the adequacy of existing flood protection measures or the design, implementation and funding of any future flood risk management measures and provisions for emergency services access;

4.3.12 The level of residual risk to the area is considered to be minimal in light of the design of the Proposed Development, in particular the ground levels and Finished Floor Levels and the Flood Compensatory Storage area.

4.3.13 Notwithstanding this, it should be noted that the site owner, Wicklow County Council, will maintain an ongoing programme of watercourse maintenance which will reduce the risk of blockage of downstream culverts and maintain the capacity of the channels. The on-site drainage infrastructure will also be subject to ongoing maintenance to ensure that optimal performance is maintained.

4.3.14 Emergency services access to the Proposed Development will be maintained at all times, beyond the site areas at risk of flooding.

Part 2 (iv)

The development proposed addresses the above in a manner that is also compatible with the achievement of wider planning objectives in relation to the development of good urban design and vibrant and active streetscapes.

4.3.15 The Proposed Development has been designed in accordance with the requirements of the Wicklow CDP, national and regional policy and relevant Government guidelines for planning authorities¹³.

4.3.16 It will deliver much-needed residential development on a centrally located, zoned and serviced development site. In so doing, it will contribute to the health and vibrancy of Ashford in line with national and regional policy objectives and the development strategy for the settlement under the CDP, in particular the commitment to "plan for

¹³ For example, 'Quality Housing for Sustainable Communities'

*and encourage the provision of high-quality housing, concentrated principally around Ashford town centre and lands within 500m of the town centre*¹⁴.

- 4.3.17 The proposal integrates effectively with the existing Ballinahinch Park residential development, creating a coherent, unified design language and a significantly enhanced area of public open space with a natural-surfaced walkway and greater levels of passive surveillance.
- 4.3.18 It is considered to achieve a good standard of urban design and to contribute to a more vibrant and active streetscape within Ballinahinch Park, in keeping with the requirements of the Guidelines.

5.0 Conclusion

- 5.1 We conclude that the Proposed Development satisfies the requirements of the Development Management Justification Test and that the planning authority may proceed to consider a grant of planning permission accordingly.

¹⁴ CDP, Ashford Town Plan Section 2.2