Appendix I Strategic Flood Risk Assessment

1. Introduction

Section 4.28 of the Planning System and Flood Risk Management – Guidelines for Planning Authorities (2009) indicates that the preparation of a local area plan (LAP) needs to be supported by analysis of flood risk.

It is recommended that this analysis should follow a staged approach and methodology similar to that used in a development plan, but allowing the planning authority to use its discretion in addressing flood risk in an appropriate manner.

Consequently, the guidelines indicate that the assessment should be limited to what is needed for the purposes of decision-making.

Using the available information, this report outlines the flood potential of the lands that were zoned in the Ballymote LAP 2005-2011 and in the current plan 2012-2018.

The flood plain of the Ballymote River, which runs along the southern boundary of the town, has been mapped as "benefiting lands" by the Office of Public Works.

This assessment relates to undeveloped zoned lands in Ballymote, located within the area designated as "benefiting lands" by the Office of Public Works.

2. The Planning System and Flood Risk Management Guidelines for Planning Authorities

The Guidelines give direction in relation to zoning lands for development in areas at risk of flooding. Section 3 of the Guidelines outlines a Sequential Approach whereby new development is first and foremost directed towards land that is at low risk of flooding. The key principles of a risk-based sequential approach to managing flood risk in the planning system are as follows:

- 1. Avoid development in areas at risk of flooding;
- 2. If this is not possible, consider substituting (assigning) another land use, less vulnerable to flooding;
- 3. When neither avoidance nor substitution can be achieved, consideration should be given to mitigation and management of risks.

Inappropriate types of development that would create unacceptable risks from flooding should not be planned for or permitted.

Exceptions to the restriction of development due to potential flood risks are provided for through the use of a Justification Test. This test must demonstrate both the planning need and the sustainable management of flood risk to an acceptable level.

Section 3 also classifies flood zones (A, B and C) and identifies the vulnerability of different land uses, which are divided into "highly vulnerable", "less vulnerable" and "water-compatible".

Section 4 of the Guidelines relates to the Justification Test. The test has been designed to rigorously assess the appropriateness or otherwise of particular developments that, for certain reasons, are being considered in areas of moderate or high flood risk. The test sets out 3 main criteria which must all be met when zoning

lands that are at moderate or high risk of flooding, for uses or development vulnerable to flooding (Table 3.1 and Table 3.2 of the guidelines).

Section 5 of the Guidelines sets out a separate Justification test for assessing individual planning applications, through the development danagement process.

3. Available flood risk data for Ballymote

Most of the developed area of Ballymote is not within the flood plain of the Ballymote River.

Flooding in Ballymote primarily occurs on developed lands to the north-west of town centre, adjacent to the Carrigan's Upper watercourse, and on undeveloped lands to the south-west of the town adjacent to the Ballymote River.

Due in part to the lack of recurring flood events in the existing built-up area of Ballymote, no comprehensive flood risk appraisal has been carried out for the town. By 2015, the OPW will complete a Catchment Flood Risk Assessment and Management Study (CFRAM), which will cover the Ballymote area. Flood maps prepared as part of this study will be available by 2013.

It is likely that Ballymote will be targeted for more detailed examination as part of the CFRAM.

Despite the lack of a comprehensive flood study, there are other sources of information available regarding flooding in the town these include OPW's "benefiting lands" maps and information provided by the OPW-maintained website www.floodmaps.ie.

3.1 Sources of flooding in Ballymote

The available information indicates that the main possible sources of flooding in Ballymote are Carrigan's Upper watercourse and Ballymote River.

Carrigan's Upper watercourse is a small drain to the north-west of town, running along the R293. The adjacent lands have been developed. During periods of prolonged heavy rainfall, the drain floods. During an extreme event, properties on the left bank could be affected by flooding. Downstream there are a number of raised walls along the front of properties on the left bank of the watercourse, which may divert water onto the R293.

In relation to Ballymote River, there are recurring flood events on undeveloped lands on the south-western periphery of the town. The culvert in that area is not capable of taking the flow during periods of prolonged heavy rainfall and this leads to the flooding of the lands adjoining the river.

3.2 OPW - Benefiting Lands

The Office of Public Works has provided a map of lands that have benefited or would benefit from a flood relief scheme or drainage works (see Fig. 1). The designation of "benefiting lands" does not necessarily indicates that the respective sites are liable to flooding.

Fig A.2 on the opposite page shows the benefiting lands overlain on the Zoning Map for Ballymote.

Fig. A.1 Lands in Ballymote that have benefited or would benefit from a flood relief scheme or drainage works



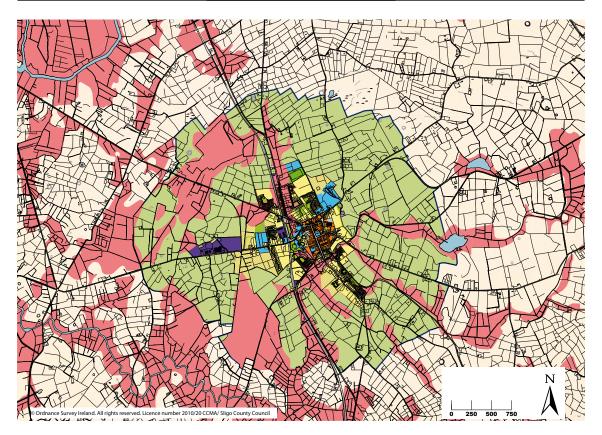
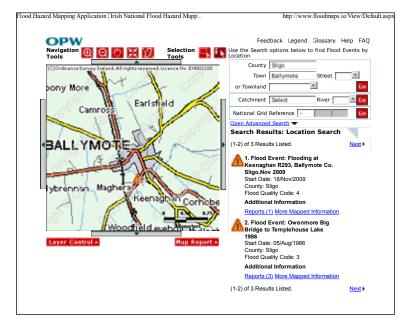


Fig. A.2 Zoning map and benefiting lands in and around Ballymote

3.3 OPW Floodmaps.ie



The mapping provided on the OPW-maintained website shows the locations of recent and historic flood events in and around the town

As evident on the map, there is a recurring event to the southwest of the town centre.

Fig. A.3 Reccurring flood event in Ballymote

3.4 Photographic evidence

In November 2011, the Area Engineer took a series of photographs of the lands to the south-west of Ballymote after a period of prolonged rainfall. The photographs clearly show that the lands are vulnerable to flooding during periods of heavy rainfall. Below - photo taken in November 2011



Strategic Flood Risk Assessment for the Sligo County Development Plan 2011–2017

The report prepared by consultants CAAS presents and analyses available flood-related data at appropriate scales to identify flood risk management priorities for the County.

The preliminary scoring arrived at in Table 2.1 of the report indicates prioritisation of towns targeted for significant population growth. Ballymote's prioritisation score is 6: of the total number of points, 4 points were given for the town's designation as a Key Support Town and 2 points were given for the presence of one flood risk factor.

Precautionary approach

Having regard to the relatively limited sources of information available when compiling this Flood Risk Assessment, a precautionary approach will be taken where it is considered that land may be at risk of flooding. This approach is recommended in Section 1.5 of the Technical Appendices of the Flood Risk Management Guidelines 2009.

5. Justification Test

Table 3.2 of the Flood Risk Management Guidelines (see the illustration below) outlines when a Justification Test must be carried out.

	Flood Zone A	Flood Zone B	Flood Zone C
Highly vulnerable development (including essential infrastructure)	Justification Test	Justification Test	Appropriate
Less vulnerable development	Justification Test	Appropriate	Appropriate
Water-compatible development	Appropriate	Appropriate	Appropriate

The Justification Test involves three main criteria that must be fulfilled for vulnerable development on lands that are at moderate or high risk of flooding.

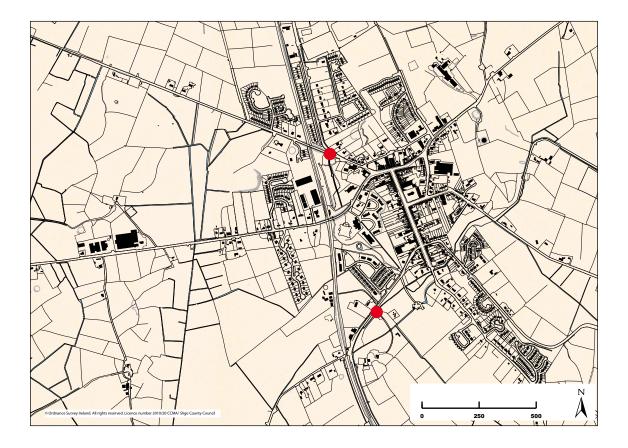
Point 1 of the Justification Test relates to urban settlements targeted for growth under the National Spatial Strategy, Regional Planning Guidelines or other statutory plans or guidelines. Ballymote is identified as a Key Support Town in the Sligo County Development Plan 2011-2017, with a view to promoting, sustaining and diversifying the rural economy. On of the main goals of the CDP is to promote economic development through industry/enterprise in the Key Support Towns such as Ballymote. Consequently, in order to satisfy Point 1 of the Justification Test, development within areas that may be at risk of flooding should relate only to uses that are designated for economic growth.

Point 2 of the Justification Test requires that lands at risk of flooding should only be zoned where the zoning or designation of lands for a particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement.

Point 3 of the Justification Test requires the undertaking of a flood risk assessment to an appropriate level of detail, as well as demonstration that the use or development of the lands will not cause unacceptable adverse impacts elsewhere.

6. Assessment

Using the information that is available about flooding in Ballymote, it is possible to ascertain the risk of flood within the town. Where flooding does occur, the principle of the sequential approach will be applied. The general location of the lands mentioned in the following subsections is marked on the map below.



6.1 Lands to the north-west of the town, adjacent to the Carrigan's Upper watercourse

This refers to lands that are currently developed and are zoned for residential and industrial uses. A significant portion of the lands is designated as benefiting lands by the OPW. There is a small drain to the north-west of town, running along the R293. The adjacent lands have been developed. During periods of prolonged heavy rainfall, the drain floods and, in case of an extreme event, properties on the left bank could be flooded. Downstream there are a number of raised walls along the front of properties on the left bank of the watercourse; these walls may divert water onto the R293.

Recommendation 1: Seeking to apply the key principles of the risk-based sequential approach to managing flood risk for the aforementioned lands, it is noted that the principles of avoidance and substitution cannot be applied because the area is already developed. The next principle of the sequential approach is mitigation. Therefore, the following mitigation measures are recommended to ensure flood risk is reduced to an acceptable level:

- cleaning and maintenance of the Carrigan's Upper watercourse;
- upgrading of the culvert which crosses the R293 to ensure that the culvert is capable of accommodating the flow of water.

6.2 Lands to the south-west of the town, adjacent to the Ballymote River



This refers to 2.19 ha of land that are zoned residential in the Ballymote Local Area Plan and are designated as "benefiting lands" by the OPW.

The Ballymote River runs along the northern section of the subject lands.

There are recurring flood events at this location, as the culvert is not capable of accommodating the flow of water during periods of prolonged heavy rainfall.

This leads to the flooding of the lands adjacent to the river.

If the subject lands were included in the Buffer zone as part of the Ballymote Local Area Plan 2012-2018, the predominant land use would remain agricultural, which is a "Less Vulnerable Development" as classified in Table 3.1 of the Flood Risk Management Guidelines.

Recommendation 2: Seeking to apply the key principles of the risk-based sequential approach to managing flood risk for the aforementioned lands, it is noted that the principle of avoidance can be applied here, as the lands are undeveloped and are not required to be zoned for any specific use.

The subject lands shall be included in the Buffer zone in the Draft Ballymote Local Area Plan 2012-2018. As a result, the predominant use of the subject lands will remain agricultural, which is a "Less Vulnerable Development" as classified in Table 3.1 of the Flood Risk Management Guidelines.

7. Conclusion

The mitigation measures and zoning objectives recommended for the sites assessed above will serve to avoid flood risk where appropriate, thereby mitigating flood impact on the further development of the town.

These recommendations have been incorporated into the preparation of the Ballymote LAP 2011-2018

Appendix II.

Protected Structures in Ballymote

The information given in this Appendix for each of the protected structures comprises an extract of County Sligo's Record of Protected Structures 2011-2017 and an brief description and assessment provided on the website of the National Inventory of Architectural Heritage (NIAH) at www.buildingsofireland.ie, which is also the source of most of the photographs.

RPS No. 43 – Emlaghfad Parish Church

43	Emlaghfad Parish Church (Col) 1810-1830	Lord Edward Street, Ballymote	E-166344 N-315638	
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This a free standing, gothic revival limestone church, c.1800. The Emlaghfad Church of Ireland is a fine early 19th Century building strategically located in the heart of Ballymote with its own grounds. In addition to its architectural detailing it is also recognised that the church has significant historical importance.

RPS No. 44 – Former Garda Station

44	Former Garda Station 1920-1940	Lord Edward Street, Ballymote	E-166259 N-315658	
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This is a three-bay, two-storey rendered former bank, built in c. 1930 and formerly used as a Garda Station. Features include a hipped slate roof set behind parapet, clay ridge tiles and a smooth-rendered corbelled chimneystack. This highly individualistic building combines Art Deco elements in an eclectic and uninhibited fashion. It contributes significantly to the character of streetscape.

RPS No. 45 – F	Former Market	House
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45	Former market house 1860-1880	Lord Edward Street, Ballymote	E-166259 N-315658	
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A detached three-bay, two-storey rendered former market house, built in c. 1870 and now used as a dwelling house. Features include a pitched artificial slate roof (c. 1980), ashlar limestone corbelled chimneystack, ground-floor arches (infilled) and substantial gate piers. Despite renovations, it remains a building of distinction and one which makes a positive contribution to the streetscape.

RPS No. 46 – Ulster Bank

46	Ulster Bank 1850-1890	Lord Edward Street, Ballymote	E-166280 N-315602	
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A detached five-bay, two-storey rendered bank premises, built c. 1890. Features include a pitched slate roof, clay ridge tiles, corbelled chimneystacks, square-headed window and door openings and wroughtiron railings with embellishments. The building is an excellent example of the consummate skill and confidence with which commercial premises were designed in Victorian and Edwardian times. There is an abundance of rendered detail.

RPS No. 47 – Bank of Ireland

1910-1940 Edward Street, Ballymote	
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An attached six-bay, two-storey rendered building from c. 1925 – formerly Hibernian Bank. Features include a pitched slate roof, red brick corbelled chimneystacks, flat-roofed porch, red brick walling at first floor, round-headed entrance door with fanlight and an elliptical carriage arch. This building departs from local traditions in its use of red brick and classical motifs. The wrought-iron grille to the carriage arch is significant for its artistic flourish and old HB logo.



48	Ballymote Post Office 1880-1900	Market Street, Ballymote	E-166277 N-315615	

A detached, four-bay, two-storey rendered commercial premises, built c. 1890. Features include a pitched slate roof, red brick corbelled chimneystacks, elliptical and square headed windows and metal railings. This robust building utilises quality brick detailing to enhance its plain facade. It forms part of a group of distinctive buildings on the street.

RPS No. 49 – House/Shop (D's Barber Shop)

49	House/Shop – D's Barber Shop 1860-1900	O'Connell Street, Ballymote	E-166298 N-315579	
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This is a terraced, four-bay, two-storey rendered former house, built c. 1880 and now used as a barber's shop. Features include an integral carriage arch, pitched slate roof and rendered corbelled chimneystacks. This building makes a colourful contribution to the streetscape and is in-keeping with the rest of the terrace.

RPS No. 50 – House/Shop (Dwyer's)

50	House/Shop – Dwyer's 1860-1880	O'Connell Street, Ballymote	E-166302 N-315568	

This is a terraced, three-bay, two-storey rendered house, built c. 1870 and formerly used as a butcher's shop. Features include an integral segmental-headed carriage arch, pitched slate roof, rendered corbelled chimneystacks, square-headed windows with moulded surrounds and painted timber shopfront with original signage. This handsome, well-proportioned building is typical of early 20th century cement-based rendering. It makes a significant positive contribution to the streetscape due to its retention of early fabric.

51	House/Shop – Tighe's (formerly Cawley's) 1860-1880	O'Connell Street, Ballymote	E-166288 N-315586	
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RPS No. 51 – House/Shop (Tighe's, formerly Cawley's)

A terraced, three-bay, two-storey rendered house, built in c. 1870. Features include a pitched slate roof, rendered corbelled chimneystacks, cast-iron gutters, painted timber shop front and a deeply recessed doorway. This well-proportioned building fits comfortably in the streetscape. It boasts a fine and well-preserved shop front and well-executed moulded detail around doors and windows.

RPS No.	52 – House	with shopfront
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52	House with shopfront 1860-1880	O'Connell Street, Ballymote	E-166305 N-315548	
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A terraced, four-bay, two-storey rendered former house, now in use as a shop, built in c. 1870. Features include an integral carriage arch, a recessed shop doorway with stepped surround, a pitched slate roof, rendered corbelled chimneystacks and a timber gate entrance. The later addition of an unusual shop front adds diversity to the streetscape and echoes art deco style of the old Garda Station.



A terraced, two-bay, three-storey public house built in c. 1870. Features include a pitched artificial slate roof, rendered corbelled chimneystacks with clay pots and square-headed door and window openings with raised surrounds. This brightly-painted public house dominates the streetscape with its high roofline and busy facade. The roadside petrol pumps are a rapidly disappearing feature of Irish towns.

54	House 1850-1870	Teeling Street, Ballymote	E-166314 N-315788	
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RPS No. 54 – House

A terraced, two-bay, two-storey rendered house built in c. 1860. Features include a pitched artificial slate roof, rendered corbelled chimneystack and square-headed windows and door. This modest house makes a significant positive contribution to the streetscape, being one of the few to retain sash windows and straight quoins. It is a rapidly disappearing type of building in Irish towns.

RPS No. 55 – Wall-mounted post box

55	Post box 1910-1920	Teeling Street, Ballymote	E-166371 N-315805	
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A cast-iron post box installed in c. 1915. It has a vertical, oblong shape with a moulded edge and protruding flap with the embossed GR and crown insignia. This is of significant historic and social interest.

RPS No. 56 – Stone House

56	Stone House 1810-1850	Teeling Street, Ballymote	E-166372 N-315802	

This is a detached three-bay, two-storey stone house built in c. 1830. Features include a hipped slate roof, rock-faced coursed ashlar walling, square headed window and door openings with tooled dressing, front steps and a curved rubble stone boundary to the east. This handsome, slightly asymmetric house is enhanced by the retention of the original sash windows and entrance door. It is one of only a few ashlar stone buildings in the village and therefore adds variety and texture to the streetscape.

57	L. Hayden's pub and town house 1830-1870	Ballymote	E-166305 N-315735	

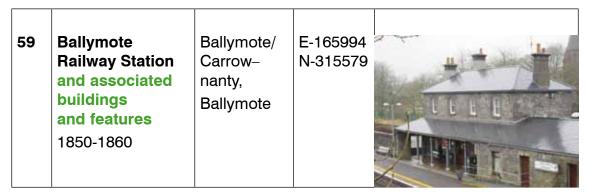
This attractive premises (1830 - 1870) situated in the heart of Ballymote derives much of its charm through the early shopfront to the bar. The shopfront retains much of its original features including its carved timber corbels and its double flat paneled timber door. Other features of note include the decorative frieze over the first floor windows and the natural slate roof.

RPS No. 58 – Ballymote Courthouse and attached west wing

58 Ballymote Courthouse/ Library and attached west wing 1820-1860	Ballymote	E-166363 N-315789	
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This building (1820 – 1860) commands a prominent position in this very intact town and also retains its exterior features, adding to the character of Ballymote.

RPS No. 59 – Ballymote Railway Station



This railway station (1860 – 1862) is in very good condition externally and is a better example of a typical nineteenth century railway station, with fine detailing and many original features still remaining. The station is set in a low-lying site at the very historic southern end of Ballymote located between the Castle, Roman Catholic Church and graveyard.

104	Earlsfield House (Sisters of Mercy Convent), 1750-1760	Carrow- nanty/ Earlsfield, Ballymote	E-166440 N-316198	
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Earlsfield House (1750 – 1760) is a very attractive Georgian House, now used as a convent. The building is of architectural significance due to its pleasing design and retention of many features, including its limestone door case and timber sash windows. It is also of historic significance due to its association with the Gore Booth family.

RPS No.	117 –	Castleview	House
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117	Castleview House 1820-1860	Carrow- nanty, Ballymote	E-165937 N-315523	
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A detached, three-bay, two-storey rendered house built in c. 1890. Features include a hipped slate roof, yellow-brick corbelled chimneystacks, chamfered plinth, segmental-headed doorway with fanlight, moulded surrounds, wrought-iron gates, stone piers and a two-storey hipped roof outbuilding. This fine house retains many of its original features. It relates well to its contemporary outbuilding and is well sited.

RPS No.	118 –	Road-over-railway	bridge
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118	Road over railway bridge 1860-1890	Carrow- nanty, Ballymote	E-165968 N-315534	

A single-span bridge built c. 1875. It runs on a north-south axis with flanking steps to either side of the track. The walling is made of squared-and-snecked rubble limestone. The arch is elliptical with rock-faced limestone ashlar voussoirs. The bridge is substantially unaltered and is a pleasing symmetrical composition utilising natural stone, which relates well to the contemporaneous railway station.

RPS No.	119 –	Road-over-railway b	oridge
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119	Road over railway bridge 1860-1890	Carrow- nanty, Ballymote	E-165881 N-315860	
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A single span bridge built c. 1875. The walling is made of squared-and-snecked rubble limestone. The arch is elliptical and is rock-faced with ashlar limestone voussoirs. It spans in splay south-east to south-west. This fine bridge is unusual for its splayed spanning. The good quality stonework is a notable feature.

RPS No. 229 – Former Corn Mill

229	Former corn mill 1780-1860	Keenaghan, Ballymote	E-166357 N-315165	

Industrial Heritage forms a significant part of architectural heritage with its retention considered essential in order to preserve our link with the past. This former corn mill complex (1780 – 1860) is worth preserving for its social and historical importance.

RPS No. 360 – Church of the Blessed Virgin and Her Immaculate Conception

360	Church of the Blessed Virgin and Her Immaculate Conception (RC) 1857-1861	Stoneparks, Ballymote	E-166056 N-315649	
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This church (1857 – 1861) is one of the finest examples of Gothic Revival style church architecture in the west of Ireland due to its elaborate detailing, quality materials and superb state of preservation, along with the important social role it plays in the town.