

# FLOOD RISK STATEMENT

---

FOR THE

## COLBERT QUARTER SPATIAL FRAMEWORK 2022-2042

**for: Land Development Agency**

2<sup>nd</sup> Floor Ashford House  
Tara Street  
Dublin 2



**by: CAAS Ltd.**

1<sup>st</sup> Floor  
24-26 Ormond Quay Upper  
Dublin 7



**NOVEMBER 2022**

# Table of Contents

<b>Section 1</b>	<b>Introduction and Policy Background .....</b>	<b>1</b>
1.1	Introduction .....	1
1.2	Framework .....	1
1.3	Flood Risk Management Policy .....	1
<b>Section 2</b>	<b>Relevance of Flood Risk to the Framework .....</b>	<b>5</b>
2.1	Effects that can occur as a result of flooding .....	5
2.2	Flood Risk at the Colbert Quarter .....	5
<b>Section 3</b>	<b>Flood Risk Management Related Measures .....</b>	<b>6</b>
<b>Section 4</b>	<b>Conclusion .....</b>	<b>8</b>

# Section 1 Introduction and Policy Background

## 1.1 Introduction

The Land Development Agency has prepared a Colbert Quarter Spatial Framework (hereafter referred to as 'the Framework'). This Flood Risk Statement is intended to identify measures related to flood risk management that should be complied with by proposals for development within the Quarter as relevant.

Flooding is the overflowing of water onto land that is normally dry. It can arise from rivers, the sea and estuaries, heavy rain, groundwater and the failure/overwhelming of infrastructure. It is an environmental phenomenon which, as well as causing economic and social impacts, could, in certain circumstances, pose a risk to human health.

## 1.2 Framework

The Framework is a non-statutory document intended to inform and guide the future development of lands within the Colbert Quarter in Limerick City, in accordance with Objective LDA 01 of the Limerick Development Plan 2022-2028, which provides for the planning, co-ordination and development of this large landbank.

The Framework is a vision for the study area exploring possible opportunities informed by in-depth analysis, engagement and feedback. Colbert Quarter is set to become a sustainable and flourishing new urban quarter for Limerick. It is expected to offer vibrant compact neighbourhoods with a focus on delivering affordable housing in a well-connected and walkable environment.

The Framework currently exists separate to the hierarchy of statutory documents setting out public policy for, among other things, land use development, housing, infrastructure, sustainable development, energy, environmental protection and environmental management. These other existing policies, plans etc. have been subject to their own environmental assessment processes, as relevant, and form the decision-making and consent-granting framework. This Framework includes the Limerick Development Plan, which provide for the development of the area and have been subject to environmental assessment. These Plans provide both land use zoning and flood risk management requirements with which the Framework is consistent.

In order to be realised, projects mentioned in the Framework (in a similar way to other projects from any other sector) will have to demonstrate compliance with, as relevant, with various legislation, policies, plans and programmes (including requirements for lower-tier Appropriate Assessment, Environmental Impact Assessment and other licencing requirements as appropriate) that form the statutory decision-making and consent-granting framework, of which the Framework currently is not part but which is intended to guide future development (as outlined in the Limerick Development Plan 2022-2028).

## 1.3 Flood Risk Management Policy

### 1.3.1 EU Floods Directive

The European Directive 2007/60/EC on the assessment and management of flood risk aims to reduce and manage the risks that floods pose to human health, the environment, cultural heritage and economic activity. The Directive applies to inland waters as well as all coastal waters across the whole territory of the EU. The Directive requires Member States to:

- Carry out a preliminary assessment by 2011 in order to identify the river basins and associated coastal areas where potential significant flood risk exists (preliminary mapping was prepared and a list of Areas for Further Assessment finalised in 2012).

- Prepare flood extent maps for the identified areas (finalised in 2016 for inclusion in Flood Risk Management Plans – see below).
- Prepare flood risk management plans focused on prevention, protection and preparedness. These plans are to include measures to reduce the probability of flooding and its potential consequences. These Plans were adopted in 2018.

Implementation of the EU Floods Directive is required to be coordinated with the requirements of the EU Water Framework Directive and the current National River Basin Management Plan.

### **1.3.2 National Flood Policy**

Historically, flood risk management focused on land drainage for the benefit of agricultural improvement. With increasing urbanisation, the Arterial Drainage Act, 1945, was amended in 1995 to permit the Office of Public Works (OPW) to implement localised flood relief schemes to provide flood protection for cities, towns and villages.

In line with changing national and international paradigms on how to manage flood risk most effectively and efficiently, a review of national flood policy was undertaken in 2003-2004. The review resulted in the preparation of a report that was approved by Government and published in September 2004 (Report of the Flood Policy Review Group, OPW, 2004). The adopted policy was accompanied by recommendations, including the following:

- Focus on managing flood risk, rather than relying only on flood protection measures aimed at reducing flooding;
- Take a catchment-based approach to assess and manage risks within the whole-catchment context; and
- Be proactive in assessing and managing flood risks, including the preparation of flood maps and flood risk management plans.

### **1.3.3 National CFRAM Programme**

The national Catchment Flood Risk Assessment and Management (CFRAM) programme commenced in Ireland in 2011. The CFRAM Programme is intended to deliver on core components of the National Flood Policy, adopted in 2004, and on the requirements of the EU Floods Directive. The Programme is being implemented through CFRAM studies that have been undertaken for each of the river basin districts in Ireland.

The CFRAM Programme comprises three phases as follows:

- The Preliminary Flood Risk Assessment<sup>1</sup> (PFRA) mapping exercise, which was completed in 2012;
- The CFRAM Studies and parallel activities, with Flood Risk Management Plans finalised in 2018; and
- Implementation and Review.

The Programme provides for three main consultative stages as follows:

- Consultation for the PFRA mapping that was adopted in 2012;
- Consultation for Flood Extent mapping, that was finalised in 2016 for inclusion in Flood Risk Management Plans; and
- Consultation for Flood Risk Management Plans, that were adopted in 2018.

The OPW is the lead agency for flood risk management in Ireland. The coordination and implementation of Government policy on the management of flood risk in Ireland is part of its responsibility. The European Communities (Assessment and Management of Flood Risks) Regulations 2010 (S.I. No. 122) identifies the Commissioners of Public Works as the 'competent authority' with overall responsibility for implementation of the Floods Directive 2007/60/EC. The OPW is the principal agency involved in the preparation of CFRAM Studies.

---

<sup>1</sup> The PFRAs identified areas at risk of significant flooding and includes maps showing areas deemed to be at risk. The areas deemed to be most significant risk, where the flood risk that is of particular concern nationally, are identified as Areas for Further Assessment (AFAs). Limerick City and Suburbs is identified as an AFA.

## 1.3.4 Flood Risk Management Guidelines

### 1.3.4.1 Introduction

In 2009, the OPW and the then Department of the Environment and Local Government (DEHLG) published Guidelines on flood risk management for planning authorities entitled *The Planning System and Flood Risk Management - Guidelines for Planning Authorities*. The Guidelines introduce mechanisms for the incorporation of flood risk identification, assessment and management into the planning process. Implementation of the Guidelines is intended to be achieved through actions at the national, regional, local authority and site-specific levels. Planning authorities and An Bord Pleanála are required to have regard to the Guidelines in carrying out their functions under the Planning Acts.

The core objectives of the Guidelines are to:

- Avoid inappropriate development in areas at risk of flooding;
- Avoid new developments increasing flood risk elsewhere, including that which may arise from surface water run-off;
- Ensure effective management of residual risks for development permitted in floodplains;
- Avoid unnecessary restriction of national, regional or local economic and social growth;
- Improve the understanding of flood risk among relevant stakeholders; and
- Ensure that the requirements of EU and national law in relation to the natural environment and nature conservation are complied with at all stages of flood risk management.

### 1.3.4.2 Principles of Flood Risk Management

The key principles of flood risk management set out in the flood Guidelines are to:

- Avoid development that will be at risk of flooding or that will increase the flooding risk elsewhere, where possible;
- Substitute less vulnerable uses, where avoidance is not possible; and
- Mitigate and manage the risk, where avoidance and substitution are not possible.

The Guidelines follow the principle that development should not be permitted in flood risk areas, particularly floodplains, except where there are no alternative and appropriate sites available in lower risk areas that are consistent with the objectives of proper planning and sustainable development.

Development in areas that have the highest flood risk should be avoided and/or only considered in exceptional circumstances (through a prescribed *Justification Test*) if adequate land or sites are not available in areas that have lower flood risk. Most types of development would be considered inappropriate in areas that have the highest flood risk. Only water-compatible development such as docks and marinas, dockside activities that require a waterside location, amenity open space, outdoor sports and recreation and essential transport infrastructure that cannot be located elsewhere would be considered appropriate in these areas.

### 1.3.4.3 Stages of SFRA

The Flood Risk Management Guidelines recommend a staged approach to flood risk assessment that covers both the likelihood of flooding and the potential consequences. The stages of appraisal and assessment are:

**Stage 1 Flood risk identification** – to identify whether there may be any flooding or surface water management issues related to either the area of Regional Spatial and Economic Strategies, Development Plans and LAP's or a proposed development site that may warrant further investigation at the appropriate lower-level plan or planning application levels.

**Stage 2 Initial flood risk assessment** – to confirm sources of flooding that may affect a Plan area or proposed development site, to appraise the adequacy of existing information and to scope the extent of the risk of flooding which may involve preparing flood zone maps. Where hydraulic models exist the potential impact of a development on flooding elsewhere and of the scope of possible mitigation measures can be assessed. In addition, the requirements of the detailed assessment are scoped.

**Stage 3 Detailed flood risk assessment** – to assess flood risk issues in sufficient detail and to provide a quantitative appraisal of potential flood risk to a proposed or existing development or land to be zoned, of its potential impact on flood risk elsewhere and of the effectiveness of any proposed mitigation measures.

#### 1.3.4.4 Flood Zones

Flood risk is an expression of the combination of the flood probability or likelihood and the magnitude of the potential consequences of the flood event. It is normally expressed in terms of the following relationship:

$$\text{Flood risk} = \text{Likelihood of flooding} \times \text{Consequences of flooding}$$

Likelihood of flooding is normally defined as the percentage probability of a flood of a given magnitude or severity occurring or being exceeded in any given year. For example, a 1% Annual Exceedance Probability (AEP) indicates the severity of a flood that is expected to be exceeded on average once in 100 years, i.e. it has a 1 in 100 (1%) chance of occurring in any one year.

Consequences of flooding depend on the hazards associated with the flooding (e.g. depth of water, speed of flow, rate of onset, duration, wave-action effects, water quality) and the vulnerability of people, property and the environment potentially affected by a flood (e.g. the age profile of the population, the type of development and the presence and reliability of mitigation measures).

Flood zones are geographical areas within which the likelihood of flooding is in a particular range and they are a key tool in flood risk management within the planning process as well as in flood warning and emergency planning.

There are three types of flood zones defined for the purposes of the Flood Guidelines:

- **Flood Zone A** – where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding);
- **Flood Zone B** – where the probability of flooding from rivers and the sea is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding and between 0.1% or 1 in 1000 year and 0.5% or 1 in 200 for coastal flooding); and
- **Flood Zone C** – where the probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 1000 for both river and coastal flooding). Flood Zone C covers all other areas that are not in zones A or B.

## Section 2 Relevance of Flood Risk to the Framework

### 2.1 Effects that can occur as a result of flooding

Some of the effects of flooding are identified in Table 1.

**Table 1 Potential effects that may occur as a result of flooding**

Tangible Effects	Intangible Human and Other Effects
Damage to buildings (houses)	Loss of life
Damage to contents of buildings	Physical injury
Damage to new infrastructure e.g. roads	Increased stress
Loss of income	Physical and psychological trauma
Disruption of flow of employees to work causing knock on effects	Increase in flood related suicide
Enhanced rate of property deterioration and decay	Increase in ill health
Long term rot and damp	Homelessness
	Loss of uninsured possessions

Consequences of flooding depend on the hazards associated with the flooding (e.g. depth of water, speed of flow, rate of onset, duration, wave-action effects, water quality), and the vulnerability of people, property and the environment potentially affected by a flood (e.g. the age profile of the population, the type of development, presence and reliability of mitigation measures etc.).

### 2.2 Flood Risk at the Colbert Quarter

Strategic Flood Risk Assessment (SFRA) has informed land use planning within Limerick City, including with respect to the Limerick Development Plan. Taking into account historical and predictive indicators of fluvial flood risk, the SFRA for that Plan has identified Colbert Quarter as being located within the Flood Zone of least flood risk; Flood Zone C. Additionally, predictive indicators of flood risk available from the OPW CFRAM Study do not identify any elevated risk for the Quarter under different climate change scenarios.

Notwithstanding this relative low level of risk, there are other potential issues relating to flood risk that may present as a result of developing the Quarter, such as those related to pluvial<sup>2</sup> or sewer flooding. Furthermore, the identification of the Quarter within Flood Zone C is based on emerging and best available data. As a result, prospective developers should, at the time an application for development is being prepared and made, consider all available data and assess the vulnerability to flooding of lands and buildings.

It will be important for proposals for development within the Quarter to demonstrate compliance with flood risk management related measures contained within the planning framework – these are detailed under Section 3.

<sup>2</sup> A result of rainfall-generated overland flows which arise before run-off enters any watercourse or sewer. The intensity of rainfall and capacity of the local drainage network can be such that the run-off totally overwhelms surface water and underground drainage systems.

## Section 3 Flood Risk Management Related Measures

In order to be realised, projects mentioned in the Framework (in a similar way to other projects from any other sector) will have to demonstrate compliance with, as relevant, with various legislation, policies, plans and programmes (including requirements for lower-tier Appropriate Assessment, Environmental Impact Assessment and other licencing requirements as appropriate) that form the statutory decision-making and consent-granting framework, of which the Framework currently is not part but which is intended to guide future development as outlined in the Limerick Development Plan 2022-2028. This framework includes *The Planning System and Flood Risk Management - Guidelines for Planning Authorities* (Department of the Environment, Heritage and Local Government and Office of Public Works, 2009) and associated *Circular PL 2/2014* (Department of the Environment, Community and Local Government).

Compliance with these requirements, including various measures that are related to flood risk management and are specified on the table below, have been integrated into one of the Framework's Appendices and will likely require further environmental studies, including hydrologist and/or engineering input at design stage.

**Table 2 Measures related to Flood Risk Management that Development of the Quarter will need to comply with**

<b>Provisions from the Limerick Development Plan 2022 that will need to be complied with, including:</b>
<p><i>Objective EH O17 Water Quality</i> It is an objective of the Council to support commitments to achieve and maintain 'At Least Good' status, except where more stringent obligations are required. There shall be no deterioration of status for all water bodies under the Marine Strategy Framework Directive and its programme of measures, the Water Framework Directive and the River Basin Management Plan. Key challenges include, inter alia, the need to address significant deficits in urban waste-water treatment and water supply, addressing flooding and increased flood risks from extreme weather events and increased intense rainfall because of climate change.</p> <p><i>Objective IN O10 Surface Water and SuDS</i> It is an objective of the Council to:</p> <ul style="list-style-type: none"> <li>a) Ensure the separation of foul and surface water discharges in new developments through the provision of separate networks within application site boundaries.</li> <li>b) Work in conjunction with other public bodies towards a sustainable programme of improvement for riverbanks, back drains, etc.</li> <li>c) Maintain, improve and enhance the environmental and ecological quality of surface waters and groundwater, including reducing the discharges of pollutants or contaminants to waters, in accordance with the National River Basin Management Plan for Ireland 2018-2021 (DHPLG) and the associated Programme of Measures and any subsequent River Basin Management Plan.</li> <li>d) Ensure adequate storm water infrastructure to accommodate the planned levels of growth within the Plan area and to ensure that appropriate flood management measures are implemented to protect property and infrastructure.</li> <li>e) Cater for the future developments through public and private driven initiatives where discharge capacity permits.</li> <li>f) Address the issue of disposal of surface water generated by existing development in the area, through improvements to surface water infrastructure, including for example attenuation ponds, the application of sustainable urban drainage techniques, or by minimising the amount of hard surfaced areas, or providing porous surfaces as the opportunity arises.</li> <li>g) Protect the surface water resources of the Plan area and in individual planning applications request the provision of sediment and grease traps and pollution control measures where deemed necessary.</li> <li>h) Require all planning applications to include surface-water design calculations to establish the suitability of drainage between the site and the outfall point and require all new developments to include SuDS, to control surface water outfall and protect water quality in accordance with the requirements of Chapter 11: Development Management Standards of the Plan.</li> <li>i) Promote SuDS and grey water recycling in developments and responsible use of water by the wider community, to reduce the demand for water supply.</li> <li>j) Require SuDS schemes to be designed to incorporate the four pillars of water quality, water quantity, biodiversity and amenity to the greatest extent possible within the constraints of a given site.</li> <li>k) Allow sufficient land take for SuDS when planning the site and consider the region as a whole, in association with adjoining lands and their requirements in designing SuDS. Developers may be required to set aside lands to cater for not only their own SuDS but also regional SuDS.</li> <li>l) Promote the provision of suitable Blue/Green Infrastructure (BGI) and Nature Based Solutions to the surface water disposal in new development, as a means to provide urban flood resilience. This approach capitalises on the potential of urban green spaces and natural water flows, subject to the other planning considerations such as amenity, maintenance, traffic safety, proper planning and sustainable development and environmental requirements.</li> <li>m) To prohibit the discharge of additional surface water to combined (foul and surface water) sewers in order to maximise the capacity of existing collection systems for foul water.</li> <li>n) Encourage green roofs for the following types of development: <ul style="list-style-type: none"> <li>-Apartment developments;</li> <li>-Employment developments;</li> <li>-Retail developments;</li> <li>-Leisure facilities;</li> <li>-Education facilities.</li> </ul> </li> </ul> <p><i>Objective CAF O11 Nature Based Solutions</i> It is an objective of the Council to promote integration and delivery of nature based solutions and infrastructure in new developments, including surface water management, public realm and community projects as a means of managing flood risk and enhancing the natural environment.</p> <p><i>Policy CAF P5 Managing Flood Risk</i> It is a policy of the Council to protect Flood Zone A and Flood Zone B from inappropriate development and direct developments/land uses into the appropriate lands, in accordance with The Planning System and Flood Risk Management Guidelines for Planning Authorities 2009 (or any superseding document) and the guidance contained in Development Management Standards. Where a development/land use is proposed that is inappropriate within the Flood Zone, then the development proposal will need to be accompanied by a Development Management Justification Test and site specific Flood Risk Assessment in accordance with the criteria set out under The Planning System and Flood Risk Management Guidelines for Planning Authorities 2009 and Circular PL2/2014 (as updated/superseded). In Flood Zone C, the developer should satisfy themselves that the probability of flooding is appropriate to the development being proposed and should consider the implications of climate change.</p> <p><i>Objective CAF O20 Flood Risk Assessments</i> It is an objective of the Council to require a Site-specific Flood Risk Assessment (FRA) for all planning applications in areas at risk of flooding (coastal/tidal, fluvial, pluvial or groundwater), where deemed necessary. The detail of these Site-specific FRAs (or commensurate assessments of flood risk for minor developments) will</p>



**Provisions from the Limerick Development Plan 2022 that will need to be complied with, including:**

depend on the level of risk and scale of development.

A detailed Site-specific FRA should quantify the risks, the effects of selected mitigation and the management of any residual risks. The assessments shall consider and provide information on the implications of climate change with regard to flood risk in relevant locations.

*Objective CAF O21 Identified Flood Risk*

It is an objective of the Council to:

- a) Ensure that no development shall commence on the lands identified as being at flood risk adjacent to the Raheen Business Park in the townlands of Ballycummin/Rootiagh, zoned for High Tech/ Manufacturing, until a Site-specific Flood Risk Assessment, including hydraulic model has been prepared for the lands, which demonstrates that the flood risk for the lands can be mitigated or that a less vulnerable use can be accommodated on site.
- b) Ensure that on the Enterprise and Employment lands located to the northwest of the M20/M7/N18 junction, that no encroachment onto, or loss of the flood plain occurs at this location and that only water compatible development should be permitted for the lands that are identified as being at risk of flooding.
- c) Ensure any planning application, including proposals for water compatible uses, on the lands in Flood Zones A and B adjacent to the Coonagh TUS campus, zoned for Education and Community, shall include a comprehensive Site-Specific Flood Risk Assessment, incorporating a drainage assessment for the lands, which demonstrates that the flood risk can be mitigated and that water compatible uses can be accommodated without adversely impacting on the flood risk of neighbouring residential properties.
- d) No works including the undertaking of ground level changes shall commence on the lands in the National Technology Park subject to flood risk, until all flood mitigation measures proposed on the site to facilitate future development of the IDA lands have been put in place. These measures shall form part of a project-specific flood risk assessment being completed as part of any planning application.
- e) Any planning application on the lands zoned Data Centre at Rosbrien shall include a comprehensive Site-Specific Flood Risk Assessment, which demonstrates that the flood risk can be mitigated and that access/egress, roads and water compatible uses can be accommodated without adversely impacting on the flood risk off site.

*Objective CAF O23 Flood Relief Schemes*

It is an objective of the Council to support and facilitate the development of Flood Relief Schemes as identified in the CFRAM 10 Year Investment Programme and ensure development proposals do not impede or prevent the progression of these measures.

*Objective CAF O24 Minor Flood and Mitigation Works and Coastal Protections Schemes*

It is an objective of the Council to support and facilitate the Office of Public Works Minor Flood and Mitigation Works and Coastal Protections Schemes and ensure development proposals do not impede or prevent the progression of these measures.

*Objective CAF O25 Strategic Flood Risk Assessment*

It is an objective of the Council to have regard to the recommendations set out in the Strategic Flood Risk Assessment prepared to support the Plan.

*Development Management Standards*, including under 11.3.8 "Landscaping", 11.3.11 SuDS (Sustainable Drainage Systems)

*Objective IN O1 Climate Action in Infrastructure Planning*

It is an objective of the Council to:

- a) Require all infrastructure development, whether above ground or subterranean, to avoid flood risk areas and areas at risk of coastal erosion.
- b) Require site selection, location, design and materials to have regard to and be resilient to the changing climate (high winds, temperature fluctuations, increased storm intensity and changes in rainfall).
- c) Collaborate with utility and service providers to ensure their networks are resilient to the impacts of climate change, both in terms of design and ongoing maintenance.

*Policy EH P3 Climate Action and the Natural Environment*

It is a policy of the Council to take into account the contents of the National Biodiversity Action Plan and the Biodiversity Climate Adaptation Plan and any forthcoming guidance or legislation on climate action, whether adaptation or mitigation that will emerge during the course of the Plan.

*Objective CAF O1 Compliance with Higher Tier Climate Legislation and Guidance*

It is an objective of the Council to support the National Adaptation Framework 2018 and the National Climate Change Strategy, including the transition to a low carbon future, taking account of flood risk, the promotion of sustainable transport, soil conservation, the importance of green infrastructure, improved air quality, the use of renewable resources and the re-use of existing resources. Support the implementation of the Limerick Climate Change Adaptation Strategy (2019) and any revised or forthcoming adaptation, mitigation or climate action strategies or plans at local, regional and national level in the formulation of any plans or policies.

*Objective CAF O22 Cooperation with Other Agencies*

It is an objective of the Council to work with other bodies and organisations, as appropriate, to help protect critical infrastructure, including water and wastewater, within Limerick, from risk of flooding. Any subsequent plans shall consider, as appropriate any new and/or emerging data, including, when available, any relevant information contained in the CFRAM Flood Risk Management Plans and as recommended in the SFRA for the Plan.

*Policy CAF P6 Renewable Energy*

It is a policy of the Council to support renewable energy commitments outlined in national and regional policy, by facilitating the development and exploitation of a range of renewable energy sources at suitable locations throughout Limerick, where such development does not have a negative impact on the surrounding environment landscape, biodiversity, water quality or local amenities, to ensure the long term sustainable growth of Limerick.

*Objective IN O8 Public Waste Water*

It is an objective of the Council to:

- a) Ensure adequate and appropriate wastewater infrastructure is available to cater for existing and proposed development, in collaboration with Irish Water, to avoid any deterioration in the quality of receiving waters and to ensure that discharge meets the requirements of the Water Framework Directive.
- b) Require all new developments to connect to public wastewater infrastructure, where available and to encourage existing developments that are in close proximity to a public sewer to connect to that sewer.

These will be subject to a connection agreement with Irish Water and evidence of this agreement will be required as part of any planning application.

- c) Require all new development to provide separate foul and surface water drainage systems, to maximise the capacity of existing collection systems for foul water.
- d) Apply a presumption against any development that requires the provision of private wastewater treatment facilities (i.e. Developer Provided Infrastructure) other than single house systems and in very exceptional circumstances.

## Section 4 Conclusion

The Land Development Agency has prepared the Colbert Quarter Spatial Framework. The Framework is a non-statutory document intended to inform and guide the future development of lands within the Colbert Quarter.

The Framework currently exists separate to the Limerick Development Plan, which provide for the development of the area and have been subject to environmental assessment. These Plans provide both land use zoning and flood risk management requirements with which the Framework is consistent.

Strategic Flood Risk Assessment (SFRA) has informed land use planning within Limerick City, including with respect to the Limerick Development Plan. Taking into account historical and predictive indicators of fluvial flood risk, the SFRA for that Plan has identified Colbert Quarter as being located within the Flood Zone of least flood risk; Flood Zone C.

Notwithstanding this relative low level of risk, there are other potential issues relating to flood risk that may present as a result of developing the Quarter, such as those related to pluvial or sewer flooding. Furthermore, the identification of the Quarter within Flood Zone C is based on emerging and best available data. As a result, prospective developers should, at the time an application for development is being prepared and made, consider all available data and assess the vulnerability to flooding of lands and buildings.

It will be important for proposals for development within the Quarter to demonstrate compliance with flood risk management related measures contained within the planning framework – these are detailed under Section 3 of this Statement.