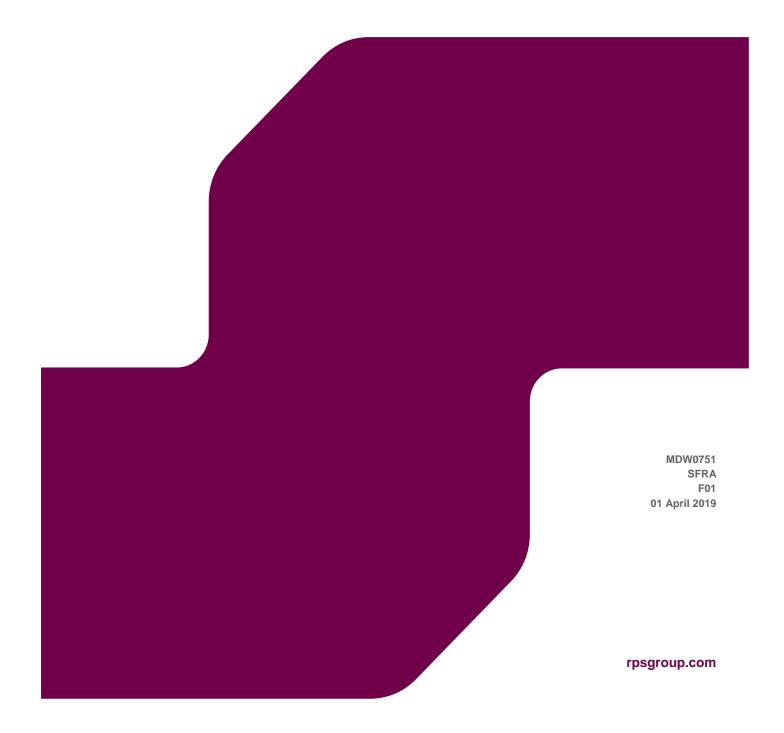


STRATEGIC FLOOD RISK ASSESSMENT

Naas Draft Local Area Plan 2019-2023





SFRA - NAAS DRAFT LOCAL AREA PLAN 2019-2023

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1 INTRODUCTION

1.1 Background

Kildare County Council (KCC) has prepared a Draft Naas Local Area Plan (LAP) 2019 - 2023 in accordance with the requirements and provisions of the Planning and Development Act 2000, (as amended) (the 'Act'). It sets out an overall strategy for the proper planning and sustainable development of Naas in the context of the Project Ireland 2040 – the National Planning Framework, Eastern & Midland Regional Spatial and Economic Strategy (RSES), the Regional Planning Guidelines for the Greater Dublin Area 2010-2022 and the Kildare County Development Plan 2017 – 2023. It is informed by Ministerial Guidelines issued pursuant to Section 28 of the Act together with EU requirements regarding Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA). The LAP replaces the Naas Town Development Plan 2011-2017 and includes the Naas Environs as detailed in the Kildare County Development Plan 2011-2017.

KCC commissioned RPS to carry out a Strategic Flood Risk Assessment (SFRA) to support the preparation of the LAP. The SFRA is prepared in accordance with the requirements of The Planning System and Flood Risk Assessment Guidelines for Planning Authorities (2009) and Circular PL02/2014 (August 2014) referred to hereafter as 'The Guidelines'. The SFRA therefore informs policy regarding inappropriate development in areas at risk of flooding and identifies areas where Site Specific Flood Risk Assessments (SSFRAs) should be undertaken for development.

1.2 Report Objectives

The objective of this report is to prepare a SFRA for the Naas Draft LAP in accordance with The Guidelines. The SFRA provides an assessment of all types of flood risk within the LAP boundary and has enabled KCC to make informed strategic land-use planning decisions and to formulate flood risk policies.

A review of available flood risk information was undertaken to identify any flooding or surface water management issues related to the town that may warrant further investigation. The best available data at the time of preparation was acquired from the Office of Public Works (OPW) Eastern Catchment Flood Risk Assessment Management (CFRAM) Studies. The CFRAM Studies have generated flood zone mapping that have enabled KCC to apply The Guidelines sequential approach, and where necessary the Justification Test, to appraise sites for suitable land zonings and identify how flood risk can be managed as part of the development / local area plan.

1.3 Disclaimer

The SFRA has been prepared in compliance with The Guidelines. It should be noted that the SFRA remains a live document and is based on the best available data at the time of preparation. It is subject to change based on more up to date and relevant flood risk information becoming available during the lifetime of the Local Area Plan.

All information in relation to flood risk is provided for general policy guidance only. All landowners and developers are instructed that Kildare County Council and their consultants can accept no responsibility for losses or damages arising due to assessments of the vulnerability to flooding of lands, uses and developments. Furthermore owners, users and developers are advised to take all reasonable measures



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to assess the vulnerability to flooding of lands in which they have an interest prior to making planning or development decisions.

It should be noted that the CFRAM mapping used to define the flood zones for this SFRA are bound by the disclaimer and other terms and conditions set out by the OPW on the website https://www.floodinfo.ie/map/floodplans/. The website www.floodinfo.ie provides access to the published Flood Plans along with the Flood Maps developed by the OPW as part of the CFRAM studies and information about flood risk management in Ireland. Further information on the CFRAM studies is available at Eastern CFRAM. The flood maps are 'predictive' flood maps, as they provide predicted flood extent and other information for a flood event that has an estimated probability of occurrence (the 1% Annual Exceedance Probability (AEP) and 0.1% AEP events – refer to Section 3.2.3), rather than information on floods that have occurred in the past.

Kildare County Council makes no representations, warranties or undertakings about any of the information provided on these maps including, without limitation, their accuracy, their completeness or their quality or fitness for any particular purpose. To the fullest extent permitted by applicable law, Kildare County Council nor any of its members, officers, associates, consultants, employees, affiliates, servants, agents or other representatives shall be liable for loss or damage arising out of, or in connection with, the use of, or the inability to use, the information provided on the flood maps including, but not limited to, indirect or consequential loss or damages, loss of data, income, profit, or opportunity, loss of, or damage to, property and claims of third parties, even if Kildare County Council has been advised of the possibility of such loss or damages, or such loss or damages were reasonably foreseeable.

Kildare County Council reserves the right to change the content and / or presentation of any of the information provided on the flood maps at its sole discretion, including these notes and disclaimer. This disclaimer, guidance notes and conditions of use shall be governed by, and construed in accordance with, the laws of the Republic of Ireland. If any provision of these disclaimer, guidance notes and conditions of use shall be unlawful, void or for any reason unenforceable, that provision shall be deemed severable and shall not affect the validity and enforceability of the remaining provisions.

1.4 Report Structure

The Naas LAP area and its primary watercourses are identified in **Section 2**.

A summary of the Planning System and Flood Risk Management Guidelines for Planning Authorities (2009) and the procedure for undertaking a SFRA is presented in **Section 3**.

Section 4 outlines a broad overview of the requirements of Flood Risk Assessments (FRA) which should accompany planning applications.

The available flood risk information used to identify the flood risk zones is discussed in **Section 5**. Potential zoning areas at risk from flooding are examined and recommendations for Flood Risk Assessments are made in **Section 6**.

Section 7 details the flood risk management policies and objectives being brought forward to the LAP and lastly **Section 8** provides a summary.



2 STUDY AREA

2.1 Introduction

The extents for the Naas LAP area are shown in **Figure 2-1**. Naas is in County Kildare and it is approximately 36km west from Dublin City Centre, south of the M7 motorway. The population of the town in the 2011 census was 20,713 with results for the 2016 census showing a slight increase to 21,597.

2.2 Watercourses

The town is situated on the banks of the Naas/Corbally branch of the Grand Canal. The Naas catchment consists of a network of tributaries into the River Liffey. These tributaries include the Naas River, Bluebell, Broadfield, Oldtown and Ploopluck watercourses. Each of these catchments is connected to and traverses the Grand Canal at various locations. The Naas River is largest of the catchments (25km²) and emanates in the foothills of the Wicklow Mountains to the south of the town. The Naas River then flows to the north and discharges into the Naas/Corbally branch of the Grand Canal.



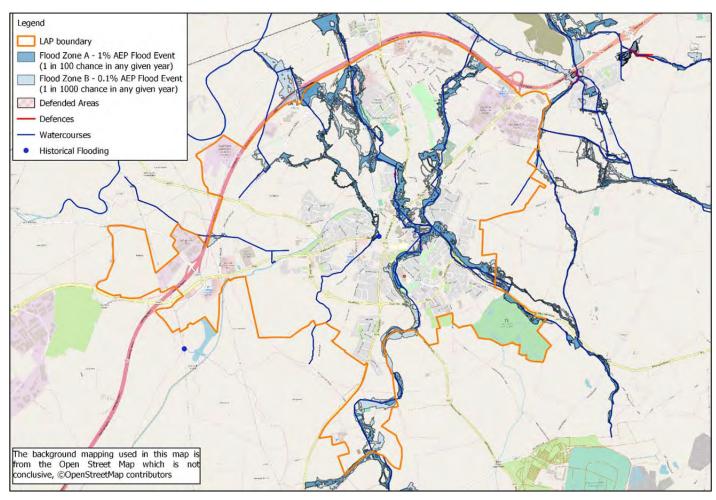


Figure 2-1 Naas LAP Boundary, Watercourses and Flood Risk Information

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3 THE PLANNING SYSTEM AND FLOOD RISK MANAGEMENT GUIDELINES FOR PLANNING AUTHORITIES

3.1 Introduction

In 2009 the Department of Environment, Heritage and Local Government in conjunction with the Office of Public Works published The Planning System and Flood Risk Management: Guidelines for Planning Authorities ('The Guidelines'). The purpose of The Guidelines is to ensure that flood risk is considered by all levels of government when preparing development plans and planning guidelines. They should also be used by developers when addressing flood risk in development proposals. The Guidelines should be implemented in conjunction with the relevant flooding and water quality EU Directives including the Water Framework Directive (River Basin Management Plans (RBMPs)) and the Floods Directive (Catchment Flood Risk Assessment and Management (CFRAM) Studies).

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.

The Guidelines recommend that Flood Risk Assessments (FRA) be carried out to identify the risk of flooding to land, property and people. FRAs should be carried out at different scales by government organisations, local authorities and for proposed developments appropriate to the level of information required to implement the core objectives of The Guidelines. The FRA scales are Regional Flood Risk Appraisal (RFRA), Strategic Flood Risk Assessment (SFRA) and Site Specific Flood Risk Assessment (SSFRA).

This section presents a brief summary of The Guidelines, for more detail refer to The Guidelines and the accompanying Technical Appendices at www.opw.ie.

3.2 Flood Risk Assessment

3.2.1 Flood Risk Assessment Approach

The Guidelines recommend that Flood Risk Assessments (FRA) be carried out to identify the risk of flooding to land, property and people. FRAs should use the Source-Pathway-Receptor (S-P-R) Model to



identify the sources of flooding, the flow paths of the floodwaters and the people and assets impacted by the flooding. **Figure 3-1** shows the SPR model that should be adopted in FRAs.

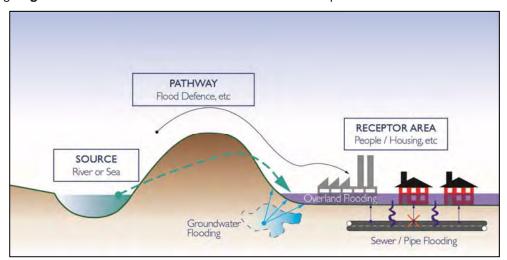


Figure 3-1 Flood Risk Assessment Source – Pathway – Receptor Model

FRAs should be carried out using the following staged approach:

- 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 planning guidelines, 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 indicative 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 should be scoped, and
- 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.

3.2.2 Types of Flooding

There are two main sources of flooding: inland and coastal. Inland flooding is caused by prolonged and/or intense rainfall. This results in fluvial, pluvial or ground water flooding acting independently or in combination. Coastal flooding is not a concern for the Naas area as the watercourses within Kildare County do not experience any tidal influence from the Irish Sea.

 Fluvial flooding occurs when a river overtops its banks due to a blockage in the channel or the channel capacity is exceeded.



- Pluvial flooding occurs when overland flow cannot infiltrate into the ground, when drainage systems
 exceed their capacity or are blocked and when the water cannot discharge due to a high water level
 in the receiving watercourse.
- Groundwater flooding occurs when the level of water stored in the ground rises as a result of prolonged rainfall to meet the ground surface and flows out over it.

3.2.3 'Flood Risk

The Guidelines state flood risk is a combination of the likelihood of flooding and the potential consequences arising. Flood risk is expressed as:

Flood risk = Likelihood of flooding x Consequences of flooding

The Guidelines define the likelihood of flooding as the percentage probability of a flood of a given magnitude as occurring or being exceeded in any given year. A 1% probability 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. **Table 3-1** shows flood event probabilities used in flood risk management.

Table 3-1 Flood Event Probabilities

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Annual Exceedance Probability (%)	Return Period (Years)
50	2
10	10
1	100
0.1	1000

The 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.).



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3.3 Flood Zones

The Guidelines recommend identifying flood zones which show the extent of flooding for a range of flood event probabilities. The Guidelines identify three levels of flood zones:

- 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 areas of the plan which are not in zones A or B.

The flood zones are generated without the inclusion of climate change factors. The flood zones only account for inland and coastal flooding. They should not be used to suggest that any areas are free from flood risk as they do not account for potential flooding from pluvial and groundwater flooding. Similarly flood defences should be ignored in determining flood zones as defended areas still carry a residual risk of flooding from overtopping, failure of the defences and deterioration due to lack of maintenance. Appendix A shows the Flood Zone Map for the Naas LAP.

3.4 Climate Change

Climate Change is expected to increase flood risk. It could lead to more frequent flooding and increase the depth and extent of flooding. Due to the uncertainty surrounding the potential effects of climate change a precautionary approach is recommended in The Guidelines:

- Recognise that significant changes in the flood extent may result from an increase in rainfall or tide
 events and accordingly adopt a cautious approach to zoning land in these potential transitional
 areas.
- Ensure that the levels of structures designed to protect against flooding, such as flood defences, land-raising or raised floor levels are sufficient to cope with the effects of climate change over the lifetime of the development they are designed to protect, and
- Ensure that structures to protect against flooding and the development protected are capable of
 adaptation to the effects of climate change when there is more certainty about the effects and still
 time for such adaptation to be effective.

3.5 Strategic Flood Risk Assessment

The purpose of this report is to carry out a SFRA at town scale for the Naas LAP. The Guidelines recommend a series of outputs for a SFRA. These outputs in broad terms include:

- Identify principal rivers, sources of flooding and produce flood zone maps for across the local authority area and in key development areas,
- An appraisal of the availability and adequacy of the existing information,
- Assess potential impacts of climate change to demonstrate the sensitivity of an area to increased flows or sea levels. Where mathematical models are not available climate change flood extents can



be assessed by using the Flood Zone B outline as a surrogate for Flood Zone A with allowance for the possible impacts of climate change,

- Identify the location of any flood risk management infrastructure and the areas protected by it and the coverage of flood-warning systems,
- Consider, where additional development in Flood Zone A and B is planned within or adjacent to an
 existing community at risk, the implications of flood risk on critical infrastructure and services across
 a wider community-based area and how the emergency planning needs of existing and new
 development will be managed,
- Identify areas of natural floodplain, which could merit protection to maintain their flood risk management function as well as for reasons of amenity and biodiversity,
- Assess the current condition of flood-defence infrastructure and of likely future policy with regard to its maintenance and upgrade,
- Assess the probability and consequences of overtopping or failure of flood risk management infrastructure, including an appropriate allowance for climate change,
- Assess, in broad terms, the potential impact of additional development on flood risk elsewhere and how any loss of floodplain could be compensated for,
- Assess the risks to the proposed development and its occupants using a range of extreme flood or tidal events,
- Identify areas where a SSFRA will be required for new development or redevelopment,
- Identify drainage catchments where surface water or pluvial flooding could be exacerbated by new development and develop strategies for its management in areas of significant change,
- Identify where integrated and area based provision of SuDS and green infrastructure are appropriate in order to avoid reliance on individual site by site solutions, and
- Provide guidance on appropriate development management criteria for zones and sites.

3.6 Sequential Approach And Justification Test

The Guidelines recommend using a sequential approach to planning to ensure the core objectives (as described in **Section 3.1**) are implemented. Development should be avoided in areas at risk of flooding, where this is not possible, a land use that is less vulnerable to flooding should be considered. If the proposed land use cannot be avoided or substituted a Justification Test must be applied and appropriate sustainable flood risk management proposals should be incorporated into the development proposal. **Figure 3-2** shows the sequential approach principles in flood risk management. **Table 3-2** and **Table 3-3** outline recommendations from The Guidelines for the types of development that would be appropriate to each flood zone and those that would be required to meet the Justification Test.



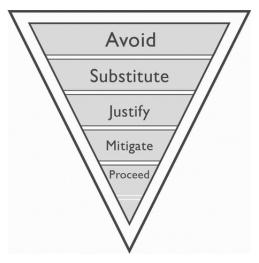


Figure 3-2 Sequential approach principles in Flood Risk Management

Table 3-2 Matrix of vulnerability versus flood zone to illustrate appropriate development and that required to meet the Justification Test

	Flood Zone A	Flood Zone B	Flood Zone C
Highly vulnerable development	Justification Test	Justification Test	Appropriate
Less vulnerable development	Justification Test	Appropriate	Appropriate
Water compatible development	Appropriate	Appropriate	Appropriate

The Justification Test is used to assess the appropriateness of developments in flood risk areas. The test is comprised of two processes. The first is the Plan-making Justification Test and is used at the plan preparation and adoption stage where it is intended to zone or otherwise designate land which is at moderate or high risk of flooding. The second is the Development Management Justification Test and is used at the planning application stage where it is intended to develop land at moderate or high risk of flooding for uses or development vulnerable to flooding that would generally be inappropriate for that land.

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Table 3-3 Classification of vulnerability of different types of development

Vulnerability Class	Land uses and types of development which include*:
Highly vulnerable development (including essential infrastructure)	 Garda, ambulance and fire stations and command centres required to be operational during flooding, Hospitals, Emergency access and egress points, Schools, Dwelling houses, student halls of residence and hostels, Residential institutions such as residential care homes, children's homes and social services homes, Caravans and mobile home parks, Dwelling houses designed, constructed or adapted for the elderly or, other people with impaired mobility, and Essential infrastructure, such as primary transport and utilities distribution, including electricity generating power stations and sub-stations, water and sewage treatment, and potential significant sources of pollution (SEVESO sites, IPPC sites, etc.) in the event of flooding.
Less vulnerable development	 Buildings used for: retail, leisure, warehousing, commercial, industrial and non-residential institutions, Land and buildings used for holiday or short-let caravans and camping, subject to specific warning and evacuation plans, Land and buildings used for agriculture and forestry Waste treatment (except landfill and hazardous waste), Mineral working and processing, and Local transport infrastructure.
Water-compatible development	 Flood control infrastructure, Docks, marinas and wharves, Navigation facilities, Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location, Water-based recreation and tourism (excluding sleeping accommodation), Lifeguard and coastguard stations, Amenity open space, outdoor sports and recreation and essential facilities such as changing rooms, and Essential ancillary sleeping or residential accommodation for staff required by uses in this category (subject to a specific warning and evacuation plan).

^{*}Uses not listed here should be considered on their own merit



3.7 Development Plan Justification Test

The Development Plan Justification Test (or Plan—making Justification Test) should be carried out as part of the SFRA using mapped flood zones. It applies where land zonings have been reviewed with respect to the need for development of areas at a high or moderate risk of flooding for uses which are vulnerable to flooding and which would generally be inappropriate and where avoidance or substitution is not appropriate. Where land use zoning objectives are being retained, they must satisfy all of the following criteria as per **Table 3-4**.

Table 3-4 Justification Test for Development Plans

Justification Test for Development Plans

- The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act, 2000, as amended.
- 2. The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and, in particular:
 - i. Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement,
 - ii. Comprises significant previously developed and/or under-utilised lands,
 - iii. Is within or adjoining the core3 of an established or designated urban settlement,
 - iv. Will be essential in achieving compact and sustainable urban growth, and
 - v. There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.
- 3. A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere. N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment

In cases where existing zoned lands are discovered to be within flood zones, the Development Plan Justification Test has been applied, and it is demonstrated that it cannot meet the specified requirements it is recommend that planning authorities reconsider the zoning by implementing the following:

- Remove the existing zoning for all types of development on the basis of the unacceptable high level
 of flood risk,
- Reduce the zoned area and change or add zoning categories to reflect the flood risk, and/or
- Replace the existing zoning with a zoning or a specific objective for less vulnerable uses, and
- If the criteria of the Justification Test have been met, design of structural or non-structural flood risk management measures as prerequisites to development in specific areas, ensuring that flood hazard



and risk to other locations will not be increased or, if practicable, will be reduced. The mitigation measures are required prior to development taking place.



4 DEVELOPMENT MANAGEMENT AND FLOOD RISK

4.1 Overview

At the discretion of KCC regardless of which flood zone a proposed development is located within, KCC may request that a planning application should be supported by an appropriately detailed Flood Risk Assessment (FRA). The level of detail within the FRA will depend on the risks identified and the proposed land use. Applications should demonstrate the use of the sequential approach in terms of the site layout and design and, in satisfying the Justification Test (where required), the proposal must demonstrate that appropriate mitigation and management measures are put in place. For any development in flood risk areas that meet the Development Plan Justification Test, a Development Management Justification Test must then be applied. Development must satisfy all of the criteria of the Development Management Justification Test as per **Table 4-1** below. This chapter provides a broad overview of the requirements of Flood Risk Assessments which should accompany planning applications.

Table 4-1 Justification Test for Development Management

Justification Test for Development Management

- 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.
- 2. The proposal has been subject to an appropriate flood risk assessment that demonstrates:
 - i. The development proposed will not increase flood risk elsewhere and, if practicable, will reduce overall flood risk,
 - ii. The development proposal includes measures to minimise flood risk to people, property, the economy and the environment as far as reasonably possible,
 - 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, and
 - iv. The development proposed addresses the above in a manner that is also compatible with the achievement of wider planning objectives in relation to development of good urban design and vibrant and active streetscapes.

The acceptability or otherwise of levels of residual risk should be made with consideration of the type and foreseen use of the development and the local development context.

4.2 Surface Water And Drainage

There is an obligation on KCC to ensure that permissions granted under the Planning Acts are consistent with the policies and objectives set out in their Development Plans. The Naas LAP outlines specifies policies and objectives of the Council with regard to developing Naas. The overarching policies and objectives of the Kildare County Development Plan (CDP) also apply, specifically the Development Management Standards as set out in Chapter 17. Where conflict exists between the LAP and the CDP, the CDP will take precedence. Chapter 17 of the CDP chapter focuses on the general planning standards



and design criteria that will be applied by the council to ensure that future development is in accordance with these policies and objectives.

Chapter 17 of the CDP outlines the following to be considered for the management of surface water runoff and flood risk in the assessment of planning applications:

- All applications for development shall include proposals for restricting the rate of surface water runoff in accordance with the recommendations of the Greater Dublin Strategic Drainage Study (GDSDS),
- Developments shall incorporate Sustainable urban Drainage Systems (SuDS) as appropriate in accordance with the recommendations of the Greater Dublin Strategic Drainage Study (GDSDS).
- Proposals for development shall be subject to site specific flood risk assessment in accordance with Chapter 7 of the County Development Plan,
- Applicants shall have regard to the strategies, objectives and policies contained within Chapter 7 of the County Development Plan at all stages of their development proposals, as well as the requirements of The Planning System and Flood Risk Management – Guidelines for Planning Authorities, DEHLG (2009),
- Proposals for surface water attenuation systems should include maintenance proposals and procedures,
- Proposals to construct new and replacement culverts and bridges on watercourses shall be subject
 to the approval of the Office of Public Works, in accordance with Section 50 of the Arterial Drainage
 Act 1945 and the Planning System and Flood Risk Management Guidelines, DEHLG, (2009). These
 applications will be made to the Office of Public Works by the developer post receipt of planning
 permission. Approval shall be obtained prior to commencement of the works. The minimum
 permissible diameter of any culvert shall be 900mm with access to be provided for maintenance as
 appropriate,
- Peak flood flows used in the design of culvert sizes, channel sizes and flood alleviation works to be undertaken as part of a development shall be calculated in accordance with a method approved by the Office of Public Works,
- Applicants are required to conduct a flood impact assessment in accordance with The Planning System and Flood Risk Management – Guidelines for Planning Authorities (2009) in all applications where a potential flood risk exists,
- All new developments shall be designed and constructed to meet the following minimum flood design standards:
 - For urban areas the 1% AEP storm event + a 20% allowance for climate change
 - For rural areas the 1% AEP storm event + a 20% allowance for climate change
- Where streams, open drains or other watercourses are being culverted, the minimum permissible culvert diameter is 900mm. Access should be provided for maintenance as appropriate, and
- The appropriate Office of Public Works approved method for assessing flood flows, which will
 depend on catchment size, shall be used in all designs. These flood flows will be used to generate
 channel sizes, culvert sizes and any required flood alleviation works, which will be undertaken by the
 developer prior to the commencement of any development



All development proposals shall carry out a surface water and drainage assessment and shall be compliant with the Greater Dublin Strategic Drainage Study (GDSDS) (2005) and the Greater Dublin Regional Code of Practice for Drainage Works (2012) to ensure that drainage from the site is managed sustainably.

4.3 Residual Risk

As well as assessing the surface water management risk for a site, all development including that in Flood Zone C, should consider residual risk factors such as culvert / bridge blockages and the effects of climate change which may expand the extents of Flood Zones A and B. These residual risk factors should influence the potential mitigation measures for a site which could include setting the finished floor levels.

4.4 Development Proposals In Flood Zones

4.4.1 Overview

It is recommended that any planning applications in flood risk areas are accompanied by a supporting appropriately detailed flood risk assessment. This is to ensure a conservative approach and that consideration is given to new development within Flood Zones where mitigation measures may still be required to ensure an appropriate level of flood protection and/or resilience. The detailed assessment should include at a minimum Stage 1 - Identification of Flood Risk. Where flood risk is identified a Stage 2 - Initial FRA will be required, and depending on the scale and nature of the risk a Stage 3 - Detailed FRA may be required.

Detailed FRAs should be carried out in accordance with The Guidelines and should present in sufficient detail the potential flood risk to a proposed development, the potential increase in flood risk elsewhere, any proposed mitigation measures and proposals for sustainable surface water management. The surface water drainage must be compliant with the GDSDS and the Code of Practice. The FRA should also consider the impacts of climate change, residual risk associated with culvert blockages and freeboard in setting the finished floor levels (FFLs) of new development.

4.4.2 Assessment of Proposals for Minor Development

The Justification Test does not apply to applications for minor development to existing buildings in areas of flood risk such as small extensions and most changes of use. However, a flood risk assessment of appropriate detail should accompany such applications to demonstrate that they would not have adverse flood risk impacts. These proposals should follow best practice in the management of health and safety for users and residents of the proposal. FRAs should consider placing bedrooms upstairs, sockets above the 1% AEP water level and other individual property protection measures e.g. flood doors, non-return valves. They must also ensure that modifications do not block significant flow paths or cause flood risk impacts to the surrounding areas.

4.4.3 Assessment of Proposals for Highly Vulnerable Development

Highly vulnerable development proposals should not be considered in flood risk areas unless supplemented by an appropriately detailed FRA and meet the criteria of the Development Management Justification Test. The following considerations should be addressed in applications for highly vulnerable development in flood risk areas:

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- The minimum finished floor level for highly vulnerable development should be above the Flood Zone B (0.1% AEP) level plus suitable freeboard. The recommended level of freeboard is 500 mm for fluvial flood levels,
- Applications should outline the emergency procedures that will be applied in the event of a flood.
 Evacuation routes should be identified but if this is not possible then containment may be considered if it is considered safe and practical to do so. If either safe evacuation or containment is not possible, then the development proposal should be refused,
- The site layout should follow the sequential approach to allocate land within a development based on the vulnerability class of the development i.e. more vulnerable development should be placed on higher ground while water compatible development e.g. car parking, greenfield space can be placed in the flood zones, and
- Compensatory storage for development that results in a loss of floodplain within Flood Zone A must be provided on a level for level basis, the lands should be in close proximity to the area that storage is being lost from, the land must be within the ownership of the developer and the land given to storage must be land which does not flood in the 1% AEP event. Also the compensatory storage area should be constructed before land is raised to facilitate development.

4.4.4 Assessment of Proposals for Less Vulnerable Development

Less vulnerable development proposals should not be considered in Flood Zone A area unless supplemented by an appropriately detailed FRA and meets the criteria of the Development Management Justification Test. The minimum finished floor level for less vulnerable development should be above the Flood Zone A (1% AEP) level plus suitable freeboard. The recommended level of freeboard is 500 mm for fluvial flood levels.

4.4.5 Extension of Duration in Flood Risk Areas

In areas where recent and more up to date flood risk information subsequently finds that a site has a flood risk, applications for extension of duration or new applications within the zoning will require appropriately detailed FRA at development management stage. If the permitted development is found not to conform to The Guidelines then the application should be refused on flood risk grounds and a new application submitted, allowing for appropriate design and FRA.

4.4.6 Potential Flood Mitigation Measures

To address flood risk for a new development or regeneration of an existing development, a sequential approach should be taken to minimise potential impact of flooding to more vulnerable land use. However, if necessary due to site constraints, potential flood mitigation measures could be incorporated into a site layout. Examples of potential measures are listed below:

- Compensatory storage,
- Raised defences, and
- Ground floor & basement protection.



Compensatory Storage

Compensatory Storage can be implemented by modifying existing ground levels within the site in order to relocate the flood extents to accommodate a proposed development. However, if not managed appropriately, this measure could have an adverse effect on flood risk for the surrounding areas. There are a number of steps to be taken before this measure can be considered as a viable option:

- An FRA to establish the extents of the existing flood risk, and also a hydraulic model to demonstrate
 the potential impacts of compensatory storage on site and also for the surrounding areas,
- Compensatory Storage to be implemented on a level for level basis to manage the flood volume reduced by infilling where the floodplain provides storage,
- Compensatory Storage is required to be provided at close proximity to the existing floodplain,
- The lands proposed for compensatory storage are required to be in control of the owner of the proposed development,
- The lands proposed for compensatory storage are required to be outside the existing Flood Zones A and B,
- Compensatory storage area should be constructed prior to the land being raised for the proposed development, and
- Any potential loss of storage for the 0.1% AEP year return period within urban areas as a result of compensatory storage should be compensated through additional storage.

Raised Defences

Raised defences such as flood walls or embankments are a traditional response to managing flood risk. However, if this measure were to be considered, a SSFRA should be required to establish the extent of the existing flood risk and the potential implications of raised defences on flood risk for a proposed development site and the surrounding areas.

Ground Floor and Basement Protection

The following flood protection measures are recommended for basements and ground level access:

- Raised doorway and access threshold levels can be incorporated into areas susceptible to
 floodwaters pooling. Temporary door-guards can be implemented where it is not practical to have a
 permanent raised threshold. However, these will require advance warning for installation,
- Shallow ramping can be considered for doorway or vehicular access at ground level if it can be facilitated,
- Particular care should be taken at closed spaces where it proposed to restrict the movement of floodwaters as the rapid inundation could pose a threat to life as well as causing major disruption or damage, and
- Alarm systems are strongly recommended for properties with basements or semi-basements.
 Training of residents and building personnel in alarms and escape routes and escorting all visitors out of basement areas should be a requirement.

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5 FLOOD RISK INFORMATION

5.1 Introduction

There are several sources of relevant flood risk information available for County Kildare and the Naas area. **Figure 5-1** below shows an overview of the CFRAM flood zones and historical flooding areas for the town extents. Fluvial flood zone mapping and Justification Tests where applicable are shown in Appendix A and Appendix B respectively.

5.2 Historical Flooding

A review of historical flood data was carried out for the Eastern CFRAM Studies using information provided on www.floodmaps.ie and in consultation with KCC. Consultation with KCC engineering staff was also carried out as part of the SFRA to confirm sources of flooding. The main sources of flooding in the town are fluvial and pluvial flooding. **Figure 5-1** and **Table 5-1** show the locations of the predicted and historical flood events within Naas.

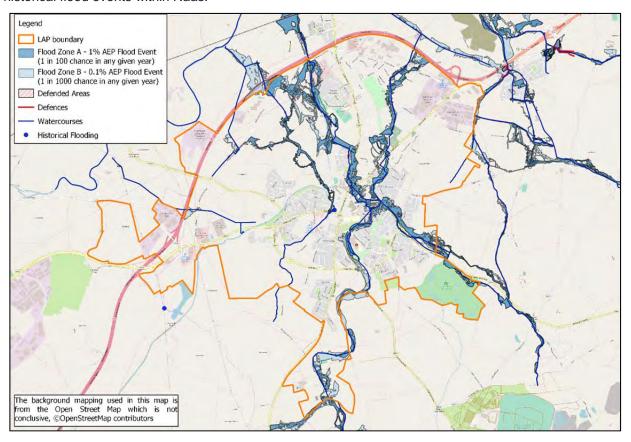


Figure 5-1 Overview of the CFRAM flood zones and historical flood events in Naas



Table 5-1 Previously recorded flooding within in Naas

Flood Location and Date	
Flood event June 1993 – Homes flooded in Rose lawn, Millbrook and Mountain View Estates	
Occasional Flood Event – Limited Capacity Culvert causes flooding on the Newbridge Road	

5.3 CFRAM Studies

5.3.1 Background

The OPW led the development of Catchment Flood Risk Assessment and Management (CFRAM) Studies. The aim of these studies was to assess flood risk, through the identification of flood hazard areas and the associated impacts of flooding. The flood hazard areas have been identified as being potentially at risk from significant flooding, including areas that have experienced significant flooding in the past. They also take account of issues such as climate change, land use practices and future development. These studies have been developed to meet the requirements of the EU Directive on the assessment and management of flood risks (the Floods Directive). The CFRAM Studies have produced Flood Risk Management Plans (FRMP) to manage flood risk within river catchments. Flood maps are one of the main outputs of the studies. The maps indicate modelled flood extents for flood events of a range of annual exceedance probabilities (AEP). Naas has been identified as an Area for Further Assessment (AFA) within the Eastern CFRAM Study.

The Eastern CFRAM FRMP was published in February 2018 and outlined a series of proposed flood risk policy measures. These include regional policy measures, but also identified specific measures for Naas. The list of measures applicable to Naas is outlined in **Table 5-2** below. A Disclaimer and Conditions of Use for flood maps and flood risk management plans are available at the following website https://www.floodinfo.ie/. KCC have committed to implementing any recommendations from the FRMPs and will work in conjunction with the OPW to deliver any proposed flood alleviation schemes that are deemed appropriate and viable.

Table 5-2 Eastern CFRAM FRMP proposed Flood Risk Management measures

CFRAM Recommendation Code	Regional & Policy Measures
IE09-UoM-9011-M22	Application of the Guidelines on the Planning System and Flood Risk Management (DECLG/OPW, 2009)
IE09-UoM-9012-M34	Implementation of Sustainable Urban Drainage Systems (SuDS)
IE09-UoM-9013-M24	Consideration of Flood Risk in local adaptation planning.



CFRAM Recommendation Code	Regional & Policy Measures
IE09-UoM-9023-M33	Ongoing Maintenance of Drainage Districts
IE09-UoM-9031-M41	Establishment of a National Flood Forecasting and Warning Service
IE09-UoM-9032-M42	Ongoing Appraisal of Flood Event Emergency Response Plans and Management Activities
IE09-UoM-9033-M51	Individual Action to Build Resilience
IE09-UoM-9041-M61	Flood-Related Data Collection
IE09-UoM-9051-M61	Minor Works Scheme
	Naas AFA Measures
IE09-090094-0909-M61	Progression of the Naas Flood Relief Scheme, comprising hard defences (flood walls and embankments) formalisation of an existing flow path to create a flow diversion channel and improvement of channel conveyance to project-level development and assessment for refinement and preparation for planning/ Exhibition and, as appropriate, implementation.
E09-090094-1009-M61	To carry out a detailed assessment, including data collection and an assessment of potential non-fluvial sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

5.3.2 Naas Flood Risk Management Options

It should be noted that as acknowledged in the FRMP there is high uncertainty regarding the flood risk in relation to Naas due to poor availability of model calibration events and possible interconnection between fluvial and surface water drainage and canal systems. In light of this, it is considered that the detailed design development of any flood risk management option could potentially benefit significantly from:

- Collection of additional flood related data, particularly hydrometric data on the ungauged watercourses that flow into Naas from the higher ground to the south, and
- Further analysis of the interactions with other potential flood mechanisms and drainage
 infrastructure. This is particularly the case for the underground drainage network which may play a
 significant role in reducing fluvial flooding throughout the urbanised areas of Naas and Johnstown.



Understanding of the combined fluvial / pluvial / drainage system flood risk would benefit from the development of an integrated drainage network / watercourse model. Detailed inclusion of the canal within this model would inform the understanding of flood risk in the areas located to the north west of the AFA, between the Liffey and the canal.

Despite the uncertainty it was still considered appropriate that the outline of a potential option (IE09-090094-0909-M61) was developed and should be progressed in conjunction with the further data collection and analysis (E09-090094-1009-M61). The FRMP recommended that the data collection and further analysis could be progressed either as the first phase of a Flood Relief Scheme for Naas, or as an initial study in advance of a Flood Relief Scheme.

5.3.3 CFRAM Fluvial Flood Zone Mapping

It should be noted that the CFRAM mapping used to define the flood zones for this SFRA are bound by the disclaimer and other terms and conditions set out by the OPW on the website https://www.floodinfo.ie/map/floodmaps/. The website www.floodinfo.ie provides access to the published Flood Plans along with the Flood Maps developed by the OPW as part of the CFRAM studies and information about flood risk management in Ireland. Further information on the CFRAM studies is available at Eastern CFRAM. The flood maps are 'predictive' flood maps, as they provide predicted flood extent and other information for a flood event that has an estimated probability of occurrence (the 1% Annual Exceedance Probability (AEP) and 0.1% AEP events – refer to Section 3.2.3), rather than information on floods that have occurred in the past.

5.4 Flood Defence Works

5.4.1 Flood Defence Schemes

There is no existing flood scheme in place for Naas.

5.4.2 Proposed Flood Relief Works

As noted in **Table 5-2** the Eastern CFRAM Flood Risk Management Plan (FRMP) identified a flood relief scheme for Naas. The proposed scheme comprises of hard defences (flood walls and embankments), formalisation of an existing flow path to create a flow diversion channel, improvement of channel conveyance and potential storage options. KCC have committed to implementing any recommendations from the FRMPs and will work in conjunction with the OPW to deliver any proposed flood alleviation schemes that are deemed appropriate and viable. This scheme will also be subject to further hydraulic analysis as discussed in **section 5.3.2**.

5.5 Fluvial Flood Zone Mapping Review

As noted in **Section 5.3.3** there is high uncertainty regarding the flood risk in relation to Naas due to poor availability of model calibration events and possible interconnection between fluvial and surface water drainage and canal systems. However as the CFRAM maps are the most comprehensive flood maps produced for Kildare since the introduction of The Guidelines and the Floods Directive they are the best available source of flooding information to inform the SFRA. This allows the SFRA to be conservative in nature. The flood zones only account for inland flooding. The flood zone maps are shown in Appendix A. As described in **Section 5.3.3** the that the CFRAM mapping used to define the flood zones for this SFRA

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are bound by the disclaimer and other terms and conditions set out by the OPW on the website https://www.floodinfo.ie/map/floodmaps/.

As discussed in **section 5.3.2** the Eastern CFRAM FRMP identified an additional hydraulic modelling exercise to assess the potential non-fluvial flooding sources, to achieve increased confidence in the CFRAM modelling and to identify an integrated option to manage the existing risk in Naas. Due to the complexity of the modelling exercise KCC are committed to implementing this proposal in conjunction with the OPW to ensure that this measure is undertaken within the next 6-year CFRAM cycle. This modelling exercise and flood extent mapping will inform future SFRAs for the town and if it is completed prior to the next iteration of the development plan a variation of this current SFRA will be produced.

5.6 Other Sources of Flooding

5.6.1 Overview

The flood zones only account for inland flooding. However, they should not be used to suggest that any areas are free from flood risk as they do not account for potential flooding from other sources. Hence a review of other sources of flooding was carried out to identify potential areas of risk.

5.6.2 Groundwater Flooding

The OPW PFRA carried out a national scale a Groundwater Flooding Report which concludes that ground water flooding is largely confined to the West Coast of Ireland due to the hydrogeology of the area. Therefore ground water flooding is not a significant risk for County Kildare but should still be examined at detailed FRA level particularly if the development includes proposals for basements.

5.6.3 Pluvial Flooding

The OPW PFRA study provides a national level screening of areas that are at potential risk of pluvial flooding. For a thorough assessment of pluvial risk in Kildare a more detailed assessment at a countywide scale (taking into consideration of local factors and parameters) would need to be carried out. Nonetheless, the national PFRA maps can be used to identify areas that may be at risk and that may require a pluvial flooding assessment to be carried out for planning applications. **Table 5-3** below highlights areas where a more detailed FRA maybe required addressing pluvial flood risk. Recommendations and guidelines from the GDSDS should be implemented in these areas to reduce the risk of pluvial flooding.

Table 5-3 Locations with an indication of Pluvial Risk

Townland / Estate	Indicative Pluvial Risk Assessment
Dun Na Riogh	Pluvial Extents shown in areas East of Monread District Park.
Naas Town Centre	Pluvial Extents shown scattered in areas within Naas Town Centre
Caragh Court	Pluvial Extents shown in areas in Caragh Court Residential Development adjacent to Caragh Road

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Townland / Estate	Indicative Pluvial Risk Assessment
Arconagh	Pluvial Extents shown in areas at the rear of Arconagh Residential Development

5.7 Climate Change Sensitive Areas

5.7.1 CFRAM Flood Extents

The CFRAM current scenario and mid-range future scenario flood extents were compared as part of the SFRA to establish an indication of future risk in areas using the difference between the flood extents with/without climate change. **Table 5-4** outlines areas that are potentially sensitive to climate change impacts. SSFRAs should address climate change scenarios in relation to FFLs and potential mitigation measures in these areas.

Table 5-4 Areas sensitive to climate change flood risk

Townland / Estate	Indicative Pluvial Risk Assessment
Sallins Road / Mill Lane	There is an increase in predicted flood extents for Flood Zone A along the Naas River. It affects the surrounding lands which are mostly residential.
Naas Town Centre	There is an increase in predicted flood extents for Flood Zone A along the Naas River. It affects the surrounding lands which are both residential and business.
Blessington Road	There is an increase in predicted flood extents for Flood Zone A along the Naas River. It affects the surrounding lands which are predominantly residential.
Blessington Road/ Dublin Road	There is an increase in predicted flood extents for Flood Zone A along the Naas River. It affects the surrounding lands which are predominantly residential and also lands zoned for future development.
Monread Avenue	There is an increase in predicted flood extents for Flood Zone A along the Naas River. It affects the surrounding lands which are mostly residential.
Monread Road & Monread Avenue Junction	There is an increase in predicted flood extents for Flood Zone A along the Naas River. It affects the surrounding lands which consist of residential developments and green fields.
Ballymore Eustace Road	There is an increase in predicted flood extents for Flood Zone A along the Naas River. It affects the surrounding lands which are mostly residential.
Ballymore Road	There is an increase in predicted flood extents for Flood Zone A along the Naas River. It affects the surrounding lands which consist of residential areas and lands zoned for future development.

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Townland / Estate	Indicative Pluvial Risk Assessment	
Canal Bank & Millennium Link Road	There is an increase in predicted flood extents for Flood Zone A along the Naas River. It affects the surrounding lands which are predominantly greenfield and commercial areas.	



6 DEVELOPMENT PLAN ZONING

6.1 Introduction

The zonings in the following areas have been reviewed against the available flood zone mapping, the indicative pluvial risk, the sensitivity of flood extents to climate change and previous SFRA reports. A summary of the zonings (other zoning categories not listed here should be considered on their own merit) and an assessment of their vulnerability and the requirements of application of the Justification Test are shown in **Table 6-1**.

KCC reviewed the flood zones during the LAP process and followed the sequential approach to zone land appropriate to their flood risk vulnerability. Open Space and Amenity areas have been zoned to coincide with flood risk areas in so far as possible. Where less vulnerable and highly vulnerable zonings coincide with flood zones Justification Tests have been carried out as applicable and are shown in Appendix B. As noted in **Section 5.3.3** there is high uncertainty regarding the flood risk mapping in relation to Naas due to poor availability of model calibration events and possible interconnection between fluvial and surface water drainage and canal systems. However, as the CFRAM maps are the most comprehensive flood maps produced for Kildare since the introduction of The Guidelines and the Floods Directive they are the best available source of flooding information to inform the SFRA.

The flood zones for Naas will be revaluated as part of an output from the updated hydraulic study that is required to progress a proposed flood scheme for Naas as outlined in the Eastern CFRAM FRMP. Following this exercise, the SFRA will be reviewed and the sequential approach will be revisited to assess the land zonings. In the interim the existing CFRAM flood maps are being utilised as a conservative measure to assess land zonings.

Table 6-1 Land Use Zoning and Vulnerabilities

Objective	Vulnerability	Justification Test Required	
A - Town Centre	High / Less	For highly vulnerable development in Flood Zone A or B For less vulnerable development in Flood Zone A	
B - Existing Residential & Infill	High	For Development in Flood Zone A or B	
C – New Residential	High	For Development in Flood Zone A or B	
E - Community & Educational	High / Less	For highly vulnerable development in Flood Zone A or B For less vulnerable development in Flood Zone A	
F - Open Space & Amenity	Less / Water	For highly vulnerable development in Flood Zone A or B	



Objective Vulnerability		Justification Test Required	
	Compatible	For less vulnerable development in Flood Zone A	
H – Industry & Warehousing	Less	For Development in Flood Zone A	
I – Agriculture	Less	For Development in Flood Zone A	
K - Commercial & Residential	High / Less	For highly vulnerable development in Flood Zone A or B For less vulnerable development in Flood Zone A	
M - Future Park & Green Wedge	Water Compatible	For highly vulnerable development in Flood Zone A or B For less vulnerable development in Flood Zone A	
N - Neighbourhood Centre	High / Less	For highly vulnerable development in Flood Zone A or B For less vulnerable development in Flood Zone A	
Q - Enterprise & Employment	Less	For Development in Flood Zone A	
R - Retail & Commercial	Less	For Development in Flood Zone A	
U – Utilities & Services	High	For Development in Flood Zone A or B	

6.2 Pre-existing Zoned Areas

Table 6-2 below summarises the applicability of the Justification Test to pre-existing zoned areas in Naas by overlaying the CFRAM flood mapping on the pre-existing land use zonings. Justification Tests where applicable for areas are shown in Appendix B.



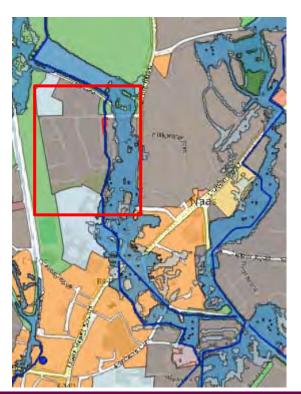
Table 6-2 Pre-existing zoned areas vulnerable to potential flooding

Site		Land Use Zoning	Land Use Vulnerability	Justification Test Requirement
1	Millbridge Residential Estate	Existing Residential	Highly Vulnerable	Required as some residential properties are located in Flood Zone A and B.
2	St David's Church & Schools	Existing Educational & Community	Highly Vulnerable	Required as the church and sections of two schools are located within Flood Zone A and B.
3	Naas Town Centre	Town Centre / Mixed Use	Highly / Less Vulnerable	Required as Town Centre zoning is located in Flood Zone A and B. Town Centre Zoning has mixed uses including residential which requires a Justification Test. Justification Test is not applicable to commercial development uses in Flood Zone B.
4	Monread Avenue Residential Areas	Existing Residential	Highly Vulnerable	Required as some residential properties are located in Flood Zone A and B.
5	Dublin Road and Blessington Road Residential Areas	Existing Residential	Highly Vulnerable	Required as some residential properties are located in Flood Zone A and B.
6	Blessington Road Business Park	Existing Commercial/Business	Less Vulnerable	Required as some commercial buildings are located in Flood Zone A.
7	Ballymore Eustace Road Residential Areas	Existing Residential	Highly Vulnerable	Required as some residential properties are located in Flood Zone B.
8	Vista Primary Care Centre & Piper's Hill College		Highly Vulnerable	Required as some community infrastructure is located within Flood Zone A and B.
9		Existing Commercial/Business	Less Vulnerable	Required as some commercial located in Flood Zone A.
10	Monread Avenue & Blessington Road Neighbourhood Centres	Neighbourhood Centres	Highly / Less Vulnerable	Required as some properties are located in Flood Zone A and B.
11	Larchfield Nursing Home	Existing Community	Highly Vulnerable	Required as the property is located in Flood Zone A and B.
12		Existing Industry & Warehousing	Less Vulnerable	Required as some commercial properties are located in Flood Zone A.
13	McCormack Centre & Millbrook Court	Existing Commercial & Retail	Less Vulnerable	Not required as some commercial properties are located in Flood Zone B.



Site No.	Location	Land Use Zoning	Land Use Vulnerability	Justification Test Requirement
	Retail Properties			
14	Blessington Road	New Residential	Highly Vulnerable	Required as some areas are located in Flood Zone A and B.
15	Kilcullen Road	New Residential	Highly Vulnerable	Required as some areas are located in Flood Zone A and B.
16	Oldtown- Northwest Quadrant	New Residential	Highly Vulnerable	Required as some areas are located in Flood Zone A and B.

6.2.1 Millbridge Residential Estate



Historical Flooding	No historical flooding reported in the area.
Flood Zone Mapping	CFRAM mapping
Comment	Fluvial Flooding The CFRAM flood zones show properties within the Millbridge residential estate inundated within Flood Zone A and B extents. The predicted flood zones are largely contained within the area between the right bank of the Naas River and the Sallins Road.

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Pluvial Flooding

The PFRA mapping does not highlight pluvial extents in this area.

Climate Change

The CFRAM mapping indicates an increase in flood extents for Flood Zone A taking into account climate change within Millbridge residential estate.

Justification Test

It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area remains suitable.

Development Strategy

KCC carried out a Justification Test and found that it is considered appropriate to retain the pre-existing zoning. The Justification Test and proposed flood risk management measures are included in Appendix B. Any future significant development should be subject to a SSFRA. The Justification Test does not apply to applications for minor development to existing buildings in areas of flood risk such as small extensions and most changes of use. However, a flood risk assessment of appropriate detail should accompany such applications to demonstrate that they would not have adverse flood risk impacts.

The FRMP proposed flood defence works and predicted flood zones for Millbridge will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in this area a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate revised Flood Zone A and B flood extents, where necessary. Any revision of the predicted flood extents will be subject to KCC approval.



6.2.2 St David's Church & Two Schools



No historical flooding reported in the area.
CFRAM mapping
Fluvial Flooding
The CFRAM flood zones show St David's Church to be inundated within the Flood Zones A and B extents. The predicted Flood Zone A and B extents encroaches the grounds of the Mercy Convent Primary School and St Mary's Secondary School.
Pluvial Flooding
The PFRA mapping does not highlight pluvial extents in this area.
Climate Change
The CFRAM mapping indicates an increase in flood extents for Flood Zone A taking into account climate change within the grounds of St Mary's Secondary School.



Justification Test

It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area remains suitable.

Conclusion

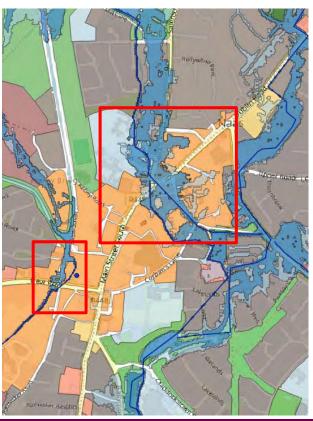
KCC carried out a Justification Test and found that it is considered appropriate to retain the pre-existing zoning. The Justification Test and proposed flood risk management measures are included in Appendix B. Any future significant development should be subject to a SSFRA. The Justification Test does not apply to applications for minor development to existing buildings in areas of flood risk such as small extensions and most changes of use. However, a flood risk assessment of appropriate detail should accompany such applications to demonstrate that they would not have adverse flood risk impacts.

The FRMP proposed flood defence works and predicted flood zones for the educational and community infrastructure in this area will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in this area a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate revised Flood Zone A and B flood extents, where necessary. Any revision of the predicted flood extents will be subject to KCC approval.



6.2.3 Naas Town Centre



Historical Flooding	Occasional Flooding on the Newbridge Road
Flood Zone Mapping	CFRAM mapping
Comment	Fluvial Flooding
	The CFRAM flood zones overlap with existing business properties within the town centre at two locations. The predicted flooding at the first location originated from the Naas River and extends from Sallins Road to Friary Road. The predicted flooding from the Grand Canal at the second location is less extensive and is confined to properties adjacent to the Basin Street and Harbour View.
	Pluvial Flooding
	The PFRA mapping indicates localised pluvial extents within the town centre. The land within the area consists of a range of steep to flat slopes in the direction towards the Naas River.



Climate Change

The CFRAM mapping indicates an increase in flood extents for Flood Zone A taking into account climate change within the two locations within Naas Town Centre.

Justification Test

It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area remains suitable. The SFRA identifies several areas of existing development which are at risk of flooding. In accordance with Circular PL2/2014 a Justification Test should be carried out to assess the appropriateness of the pre-existing zoning and proposed areas of regeneration at risk of flooding.

Conclusion

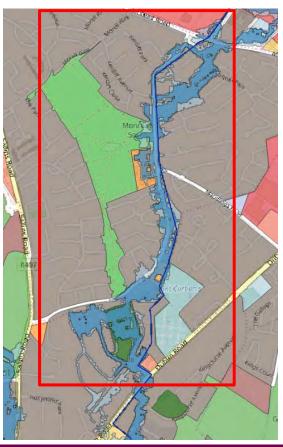
KCC carried out a Justification Test and found that it is considered appropriate to retain the pre-existing zoning and to identify the town as a zone for regeneration. The Justification Test and proposed flood risk management measures are included in Appendix B. Any future significant development should be subject to a SSFRA. The Justification Test does not apply to applications for minor development to existing buildings in areas of flood risk such as small extensions and most changes of use. However, a flood risk assessment of appropriate detail should accompany such applications to demonstrate that they would not have adverse flood risk impacts.

The FRMP proposed flood defence works and predicted flood zones for the town centre area will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in the town centre a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate revised Flood Zone A and B flood extents, where necessary. Any revision of the predicted flood extents will be subject to KCC approval.



6.2.4 Monread Avenue Residential Estates



Historical Flooding	No historical flooding in this area.
Flood Zone Mapping	CFRAM mapping
	Fluvial Flooding The CFRAM flood zones in this area show residential properties adjacent to Monread Avenue which overlap with Flood Zones A and B. The predicted flood extents from the Monread Stream shown extend along Monread Avenue and local access roads overlapping with the adjacent residential properties.
	Pluvial Flooding The OPW PFRA pluvial mapping shows localised pluvial flood extents within a cluster of residential properties adjacent to Monread Avenue (near Dun Na Riogh estate).

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Climate Change

The CFRAM mapping indicates an increase in flood extents for Flood Zone A taking into account climate change within the residential estates adjacent to Monread Avenue.

Justification Test

It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area remains suitable.

Conclusion

KCC carried out a Justification Test and found that it is considered appropriate to retain the pre-existing zoning. The Justification Test and proposed flood risk management measures are included in Appendix B. Any future significant development should be subject to a SSFRA. The Justification Test does not apply to applications for minor development to existing buildings in areas of flood risk such as small extensions and most changes of use. However, a flood risk assessment of appropriate detail should accompany such applications to demonstrate that they would not have adverse flood risk impacts.

The FRMP proposed predicted flood zones for the Monread area will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in the Monread Area a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate revised Flood Zone A and B flood extents, where necessary. Any revision of the predicted flood extents will be subject to KCC approval.



6.2.5 Dublin Road and Blessington Road Residential Estates



Historical Flooding	Properties within Millbrook Court, Mountain View & Roselawn Residential Estates flooded during the June 1993 event.
Flood Zone Mapping	CFRAM mapping
Comment	Fluvial Flooding
	The CFRAM flood zones in this area show residential properties adjacent to Dublin Road and Blessington Road which overlap with Flood Zones A and B. The predicted flood extents from the Monread Stream & Naas River extend along the Dublin Road and the Blessington Road and into adjacent residential estates
	Pluvial Flooding
	The OPW PFRA pluvial mapping shows no pluvial flooding within these areas.
	Climate Change
	The CFRAM mapping indicates an increase in flood extents for Flood Zone A taking into account climate change within the residential estates adjacent to Dublin Road and Blessington Road.

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Justification Test

It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area remains suitable.

Conclusion

KCC carried out a Justification Test and found that it is considered appropriate to retain the pre-existing zoning. The Justification Test and proposed flood risk management measures are included in Appendix B. Any future significant development should be subject to a SSFRA. The Justification Test does not apply to applications for minor development to existing buildings in areas of flood risk such as small extensions and most changes of use. However, a flood risk assessment of appropriate detail should accompany such applications to demonstrate that they would not have adverse flood risk impacts.

The FRMP proposed flood defence works and predicted flood zones the Naas Stream will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in these residential areas a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate revised Flood Zone A and B flood extents, where necessary. Any revision of the predicted flood extents will be subject to KCC approval.



6.2.6 Blessington Road Business Park



Historical Flooding	No historical flooding in this area.
Flood Zone Mapping	CFRAM mapping
Comment	Fluvial Flooding The CFRAM flood zones show Flood Zones A and B covering the access road and a section of the Business Park.
	Pluvial Flooding The OPW PFRA pluvial mapping shows no pluvial flooding within these areas. Climate Change The CFRAM mapping indicates an increase in flood extents for Flood Zone A taking into account climate change within the Business Park.
	Justification Test It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area remains suitable. (Part of the pre- existing zoning has been amended to new residential, see Section 6.3.2).

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Conclusion

KCC carried out a Justification Test and found that it is considered appropriate to retain the pre-existing zoning. The Justification Test and proposed flood risk management measures are included in Appendix B. Any future significant development should be subject to a SSFRA. The Justification Test does not apply to applications for minor development to existing buildings in areas of flood risk such as small extensions and most changes of use. However, a flood risk assessment of appropriate detail should accompany such applications to demonstrate that they would not have adverse flood risk impacts.

The FRMP proposed flood defence works and predicted flood zones for the Naas Stream will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in the business centre a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate revised Flood Zone A and B flood extents, where necessary. Any revision of the predicted flood extents will be subject to KCC approval.



6.2.7 Ballymore Eustace Road Residential Estates



Historical Flooding	No historical flooding in this area.
Flood Zone Mapping	CFRAM mapping
	Fluvial Flooding The CFRAM flood zones in this area show Flood Zone A and B encroaching Lakelands Residential Estate and Flood Zone B overtopping and extended along the Ballymore Eustace Road into adjacent residential properties. Pluvial Flooding The OPW PFRA pluvial mapping shows no pluvial flooding within these areas.

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Climate Change

The CFRAM mapping indicates an increase in flood extents for Flood Zone A taking into account climate change within Lakelands Residential Estates and properties adjacent to Ballymore Eustace Road.

Justification Test

It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area remains suitable.

Conclusion

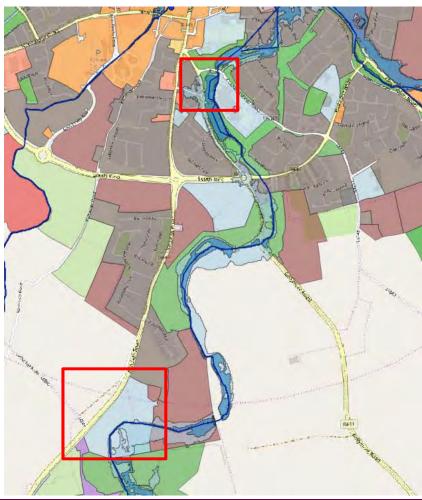
KCC carried out a Justification Test and found that it is considered appropriate to retain the pre-existing zoning. The Justification Test and proposed flood risk management measures are included in Appendix B. Any future significant development should be subject to a SSFRA. The Justification Test does not apply to applications for minor development to existing buildings in areas of flood risk such as small extensions and most changes of use. However, a flood risk assessment of appropriate detail should accompany such applications to demonstrate that they would not have adverse flood risk impacts.

The FRMP proposed predicted flood zones for these areas will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in these areas a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate revised Flood Zone A and B flood extents, where necessary. Any revision of the predicted flood extents will be subject to KCC approval.



6.2.8 Vista Primary Care Centre & Piper's Hill College



Historical Flooding	No historical flooding reported in the area.
Flood Zone Mapping	CFRAM mapping
Comment	Fluvial Flooding The CFRAM flood zones shows the following: Flood Zone B encroaching the western boundary of Vista Primary Care Centre, and Piper's Hill College to be inundated within the Flood Zone B extents.

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Pluvial Flooding

The PFRA mapping does not highlight pluvial extents in these areas.

Climate Change

The CFRAM mapping indicates an increase in flood extents for Flood Zone B taking into account climate change within the grounds of Piper's Hill College and Vista Primary Care Centre.

Justification Test

It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area remains suitable.

Conclusion

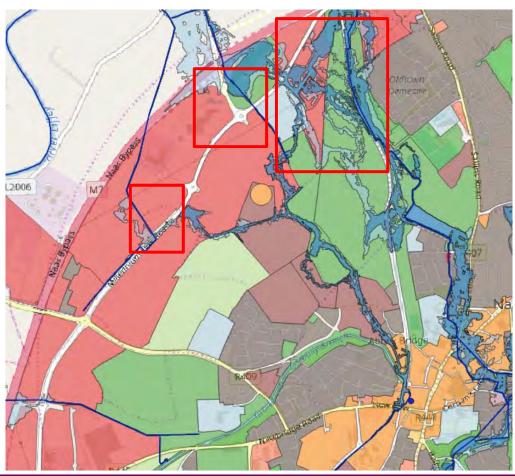
KCC carried out a Justification Test and found that it is considered appropriate to retain the pre-existing zoning. The Justification Test and proposed flood risk management measures are included in Appendix B. Any future significant development should be subject to a SSFRA. The Justification Test does not apply to applications for minor development to existing buildings in areas of flood risk such as small extensions and most changes of use. However, a flood risk assessment of appropriate detail should accompany such applications to demonstrate that they would not have adverse flood risk impacts.

The FRMP proposed predicted flood zones for these areas will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in these areas a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate revised Flood Zone A and B flood extents, where necessary. Any revision of the predicted flood extents will be subject to KCC approval.



6.2.9 Enterprise and Employment Lands - Northwest Quadrant



Historical Flooding	No historical flooding in this area.
Flood Zone Mapping	CFRAM mapping
Comment	Fluvial Flooding The CFRAM flood zones in this area show Flood Zones A and B extents within lands zone for Enterprise and Employment. The predicted flood extents are largely confined to existing greenfield, however the key exception is Millennium Park complex which is inundated with Flood Zones A and B extents. Pluvial Flooding The OPW PFRA pluvial mapping shows localised pluvial flooding within existing greenfield sites zoned Enterprise and Employment.

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Climate Change

The CFRAM mapping indicates an increase in flood extents for Flood Zone A taking into account climate change within some of the Enterprise and Employment lands.

Justification Test

It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area remains suitable. (Part of the pre-existing zoning has been amended to new residential, see Section 6.3.3).

Conclusion

KCC carried out a Justification Test and found that it is considered appropriate to retain the pre-existing zoning The Justification Test and proposed flood risk management measures are included in Appendix B. Any future significant development should be subject to a SSFRA. The Justification Test does not apply to applications for minor development to existing buildings in areas of flood risk such as small extensions and most changes of use. However, a flood risk assessment of appropriate detail should accompany such applications to demonstrate that they would not have adverse flood risk impacts. The Northwest Quadrant Masterplan will also be subject to a SFRA which will examine the flood zones in further detail which may lead to the zonings being refined to follow the sequential approach.

The FRMP proposed predicted flood zones for the Northwest Quadrant area will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in these areas a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval. FRAs should also address climate change scenarios.



6.2.10 Monread Avenue and Blessington Road Neighbourhood Centres



Historical Flooding	No historical flooding in this area.
Flood Zone Mapping	CFRAM mapping
Comment	Fluvial Flooding The CFRAM flood zones show three areas designated as neighbourhood centres overlapping with Flood Zones A and B.
	Pluvial Flooding The OPW PFRA pluvial mapping shows localised pluvial Flood Zone B within a section of the commercial/leisure properties adjacent to Monread Avenue. No pluvial flood extents shown for the existing greenfield along the Blessington Road

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Climate Change

The CFRAM mapping indicates an increase in flood extents for Flood Zone A taking into account climate change within the existing leisure/ commercial properties and also the existing greenfield site.

Justification Test

It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area remains suitable.

Conclusion

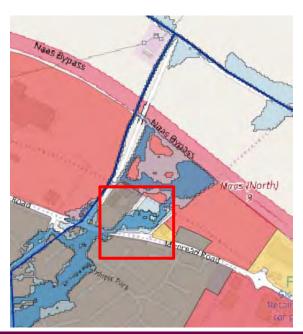
KCC carried out a Justification Test and found that it is considered appropriate to retain the pre-existing zoning. The Justification Test and proposed flood risk management measures are included in Appendix B. Any future significant development should be subject to a SSFRA. The Justification Test does not apply to applications for minor development to existing buildings in areas of flood risk such as small extensions and most changes of use. However, a flood risk assessment of appropriate detail should accompany such applications to demonstrate that they would not have adverse flood risk impacts.

The FRMP proposed predicted flood zones for these areas will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in these neighbourhood centres a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate revised Flood Zone A and B flood extents, where necessary. Any revision of the predicted flood extents will be subject to KCC approval.



6.2.11 Larchfield Nursing Home



Historical Flooding	No historical flooding in this area.
Flood Zone Mapping	CFRAM mapping
Comment	Fluvial Flooding The CFRAM flood zones in this area show Larchfield Nursing Home within Flood Zones A and B. The predicted flood extents from the Monread Stream shown, extend along Monread Road into Larchfield Nursing Home. Pluvial Flooding The PFRA mapping does not highlight pluvial extents in this area.
	Climate Change The CFRAM mapping indicates an increase in flood extents for Flood Zone A taking into account climate change within the property. Justification Test It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area remains suitable.



Conclusion

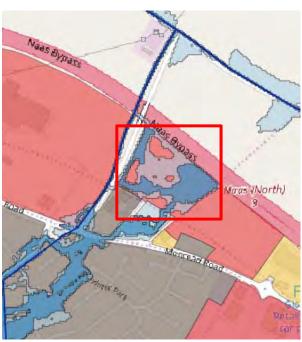
KCC carried out a Justification Test and found that it is considered appropriate to retain the pre-existing zoning. The Justification Test and proposed flood risk management measures are included in Appendix B. Any future significant development should be subject to a SSFRA. The Justification Test does not apply to applications for minor development to existing buildings in areas of flood risk such as small extensions and most changes of use. However, a flood risk assessment of appropriate detail should accompany such applications to demonstrate that they would not have adverse flood risk impacts.

The FRMP proposed predicted flood zones for this area will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in the Monread Area a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate revised Flood Zone A and B flood extents, where necessary. Any revision of the predicted flood extents will be subject to KCC approval.



6.2.12 Land to east of Monread Industrial Estate



Historical Flooding	No historical flooding in this area.
Flood Zone Mapping	CFRAM mapping
Comment	Fluvial Flooding The CFRAM flood zones in this area show extensive flooding within existing greenfields designated for industry and warehousing.
	Pluvial Flooding The OPW PFRA pluvial mapping shows localised pluvial flood extents scattered within Monread Industrial Estate. Climate Change The CFRAM mapping indicates an increase in flood extents for Flood Zone A taking into account climate change within existing greenfields designated for industry and warehousing.
	Justification Test It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area remains suitable.

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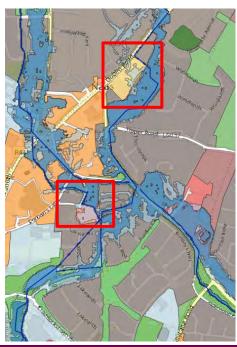
KCC carried out a Justification Test and found that it is considered appropriate to retain the pre-existing zoning. The Justification Test and proposed flood risk management measures are included in Appendix B. Any future significant development should be subject to a SSFRA. The Justification Test does not apply to applications for minor development to existing buildings in areas of flood risk such as small extensions and most changes of use. However, a flood risk assessment of appropriate detail should accompany such applications to demonstrate that they would not have adverse flood risk impacts.

The FRMP proposed predicted flood zones for this area will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in the Monread Area a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate revised Flood Zone A and B flood extents, where necessary. Any revision of the predicted flood extents will be subject to KCC approval.



6.2.13 McCormack Centre & Millbrook Court Retail Properties



Historical Flooding	No historical flooding in this area.
Flood Zone Mapping	CFRAM mapping
Comment	Fluvial Flooding The CFRAM flood zones in this area show that the retail properties within McCormack Centre adjacent to the Dublin Road and Millbrook Court overlap with Flood Zones B.
	Pluvial Flooding The OPW PFRA pluvial mapping shows localised pluvial flood extents within McCormack Centre and no pluvial flood extents shown for Millbrook Court. Climate Change The CFRAM mapping indicates an increase in flood extents for Flood Zone A and B taking into account climate change within the retail properties located at McCormack Centre and Millbrook Court.
	Justification Test No Justification Test Required

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Conclusion

The retail and commercial properties can be developed within Flood Zone B. However SSFRAs will be required for future developments within this area and all developments will be required to be built in accordance with SuDS principles and in compliance with the surface water and drainage policies of the Naas LAP and Kildare County Development Plan 2017-2923 or any subsequent plan.

The FRMP proposed predicted flood zones for this area will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in this area a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate revised Flood Zone A and B flood extents, where necessary. Any revision of the predicted flood extents will be subject to KCC approval.



6.2.14 Blessington Road



Historical Flooding	No historical flooding in this area.
Flood Zone Mapping	CFRAM mapping
Comment	Fluvial Flooding The CFRAM flood zones in this area show greenfield lands which are adjacent to Blessington Road which overlap with Flood Zones A and B. The predicted flood extents from the Naas River extend to the greenfield sites directly from the watercourse and also via hardstanding areas within the adjacent residential areas and the Blessington Road. A SSFRA which was submitted for planning as part of a planning application for the site undertook hydraulic modelling which showed flood extents similar to those for the CFRAM flood zones.



Pluvial Flooding

The OPW PFRA pluvial mapping shows no pluvial flooding within these areas.

Climate Change

The CFRAM mapping indicates an increase in flood extents for Flood Zone A taking into account climate change within the greenfields designated for future residential development.

Justification Test

It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area remains suitable.

Conclusion

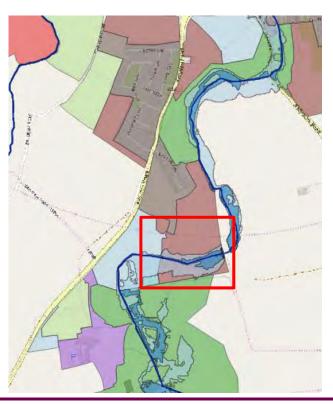
KCC carried out a Justification Test and found that it is considered appropriate to retain the pre-existing zoning. The Justification Test and proposed flood risk management measures are included in Appendix B. The site was subject to FRA for a planning application which recommended a series of flood risk mitigation measures including setting minimum floor levels above design flood waters, installation of flow control devices and construction of compensatory storage areas. The construction of the development should follow the recommendations of the FRA in terms of FFLs and proposed mitigation measures. Any future development should be subject to a SSFRA and the internal layout of the site should follow the sequential approach with flood zone areas designated as open space / flood compatible.

The FRMP proposed predicted flood zones for this area will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in this area a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval. FRAs should also address climate change scenarios.



6.2.15 Kilcullen Road



Historical Flooding	No historical flooding in this area.
Flood Zone Mapping	CFRAM mapping
Comment	Fluvial Flooding The CFRAM flood zones in this area show greenfield designated for future residential development adjacent to the Killcullen Road where localised areas overlap with Flood Zones A and B. A SSFRA was submitted for planning application made for the site previously, showed lesser flood extents in this area.
	Pluvial Flooding
	The PFRA mapping does not highlight pluvial extents in this area.
	Climate Change
	The CFRAM mapping indicates an increase in predicted flood extent for Flood Zone A taking into account climate change within the greenfield designated for future residential development.
	Justification Test

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It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area remains suitable.

Conclusion

KCC carried out a Justification Test and found that it is considered appropriate to retain the pre-existing zoning. The Justification Test and proposed flood risk management measures are included in Appendix B. The site was subject to FRA for a planning application which recommended a series of flood risk mitigation measures. The construction of the development should follow the recommendations of the FRA in terms of FFLs and proposed mitigation measures. Any future development should be subject to a SSFRA. should be subject to a SSFRA and the internal layout of the site should follow the sequential approach with flood zone areas designated as open space / flood compatible.

The FRMP proposed predicted flood zones for this area will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas. The extents will be reviewed against the SSFRA flood extents submitted as part of the planning application.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in this area a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval. FRAs should also address climate change scenarios.



6.2.16 Oldtown – Northwest Quadrant



Historical Flooding	No historical flooding in this area.
Flood Zone Mapping	CFRAM mapping
Comment	Fluvial Flooding The CFRAM flood zones in this area show greenfields at Oldtown which overlap with Flood Zones A and B. The predicted flood extents are localised within parts of the greenfield. Pluvial Flooding The OPW PFRA pluvial mapping shows localised pluvial flood extents within the greenfields. Climate Change The CFRAM mapping indicates an increase in flood extents for Flood Zone A taking into account climate change within the greenfields designated for future residential development. Justification Test It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area remains suitable.
Conclusion	KCC carried out a Justification Test and found that it is considered appropriate to retain the pre-existing zoning (Part of the pre-existing zoning has been amended to new residential, see Section 6.3.3). The Justification Test and proposed flood risk management measures are included in Appendix B. Any future development should be

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subject to a SSFRA and the internal layout of the site should follow the sequential approach with flood zone areas designated as open space / flood compatible. The Northwest Quadrant Masterplan will also be subject to a SFRA which will examine the flood zones in further detail which may lead to the zonings being refined to follow the sequential approach.

The FRMP proposed predicted flood zones for this area will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in this area a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval. FRAs should also address climate change scenarios.

6.3 Proposed New Zonings

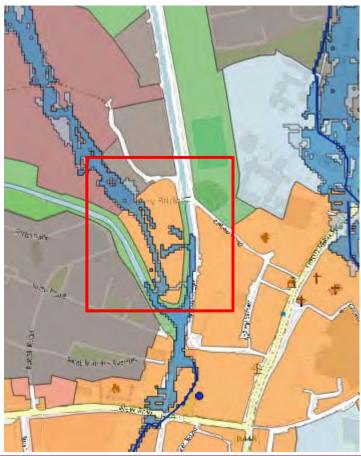
Table 6-3 below surmises the applicability of the Justification Test and flood risk management proposals for proposed new zonings in Naas. The zonings were compared against the CFRAM flood mapping. A review of historical flooding, significant watercourses and historical mapping did not indicate any further fluvial flood risk outside the scope of the CFRAM mapping. Therefore, no further flood zone mapping was deemed to be necessary.

Table 6-3 Proposed New Zoned areas vulnerable to potential flooding

Site No.	Location	Land Use Zoning		Justification Test Requirement
17	Canal Quarter – Northwest Quadrant	Town Centre / Mixed Use	Less Vulnerable	Required as some zonings located in Flood Zone A.
18	Tipper Road	New Residential	Highly Vulnerable	Required as zonings are located within Flood Zone A and B.
19	New Residential and Education – Northwest Quadrant	New Residential & Educational	Highly Vulnerable	Required as zonings are located within Flood Zone A and B.
20	New Enterprise and Employment Lands - Northwest Quadrant	Industrial Zoning	Less Vulnerable	Required as some zonings located in Flood Zone A.



6.3.1 Canal Quarter – Northwest Quadrant



Historical Flooding	No historical flooding in this area.
Flood Zone Mapping	CFRAM mapping
Comment	Fluvial Flooding The CFRAM flood zones in this area show Flood Zones A and B extents within the Canal Quarter. The predicted Flood Zone A and B extents are largely confined to existing greenfield.
	Pluvial Flooding The OPW PFRA pluvial mapping shows minor pluvial flooding within existing green areas within the Canal Quarter.



Climate Change

The CFRAM mapping indicates an increase in flood extents for Flood Zone A taking into account climate change within the Canal Quarter.

Justification Test

It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area is suitable.

Conclusion

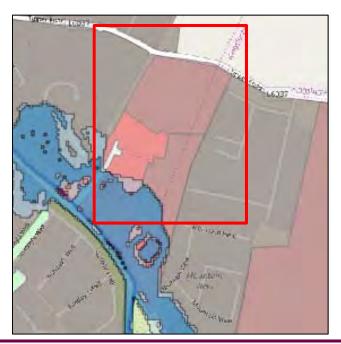
KCC carried out a Justification Test and found that it is considered appropriate to zone this land as residential. The Justification Test and proposed flood risk management measures are included in Appendix B. Any future development should be subject to a SSFRA and the internal layout of the site should follow the sequential approach with flood zone areas designated as open space / flood compatible. The Northwest Quadrant Masterplan will also be subject to a SFRA which will examine the flood zones in further detail which may lead to the zonings being refined to follow the sequential approach.

The FRMP proposed predicted flood zones for this area will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in this area a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval.



6.3.2 Tipper Road



Historical Flooding	No historical flooding in this area.
Flood Zone Mapping	CFRAM mapping
Comment	Fluvial Flooding
	The CFRAM flood zones in this area show a brownfield site adjacent to Tipper Road which partially overlaps with Flood Zones A and B. The predicted flood extents from the Naas River extend to the site directly from the watercourse and via hardstanding areas within the adjacent residential areas and the Blessington Road.
	Pluvial Flooding
	The OPW PFRA pluvial mapping shows no pluvial flooding within these areas.
	Climate Change
	The CFRAM mapping indicates an increase in flood extents for Flood Zone A taking into account climate change within the site designated for future residential development.
	Justification Test
	It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area is suitable. The pre-existing zoning was zoned Enterprise and Employment, see Section 6.2.6.



Conclusion

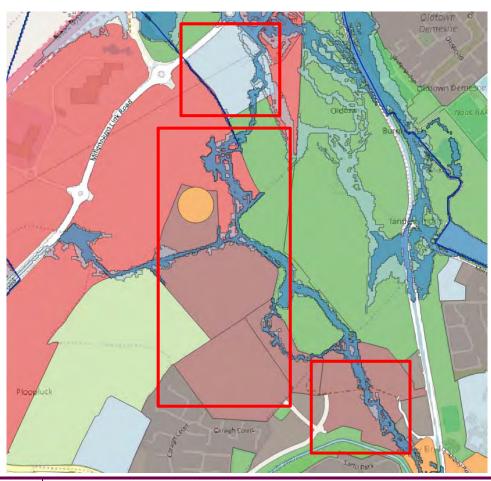
KCC carried out a Justification Test and found that it is considered appropriate to partially zone this land as residential. The Justification Test and proposed flood risk management measures are included in Appendix B. Any future development should be subject to a SSFRA and the internal layout of the site should follow the sequential approach with flood zone areas designated as open space / flood compatible.

The FRMP proposed predicted flood zones for this area will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in this area a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate revised Flood Zone A and B flood extents, where necessary. Any revision of the predicted flood extents will be subject to KCC approval.



6.3.3 New Residential and Education – Northwest Quadrant



Historical Flooding	No historical flooding in this area.
Flood Zone Mapping	CFRAM mapping
Comment	Fluvial Flooding The CFRAM flood zones in this area show greenfields which overlap with Flood Zones A and B. The predicted flood extents are localised within parts of the greenfield.
	Pluvial Flooding The OPW PFRA pluvial mapping shows localised pluvial flood extents within the greenfields.



Climate Change

The CFRAM mapping indicates an increase in flood extents for Flood Zone A taking into account climate change within the greenfields designated for future residential development.

Justification Test

It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area is suitable.

Conclusion

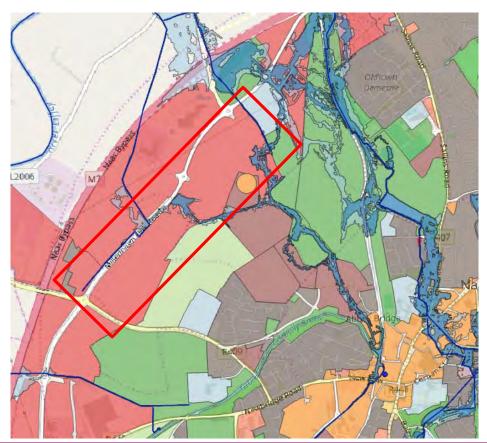
KCC carried out a Justification Test and found that it is considered appropriate to zone these lands as residential and educational. The Justification Test and proposed flood risk management measures are included in Appendix B. Any future development should be subject to a SSFRA and the internal layout of the site should follow the sequential approach with flood zone areas designated as open space / flood compatible. The Northwest Quadrant Masterplan will also be subject to a SFRA which will examine the flood zones in further detail which may lead to the zonings being refined to follow the sequential approach.

The FRMP proposed predicted flood zones for this area will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in this area a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval. FRAs should also address climate change scenarios.



6.3.4 New Enterprise and Employment Lands - Northwest Quadrant



Historical Flooding	No historical flooding in this area.
Flood Zone Mapping	CFRAM mapping
Comment	Fluvial Flooding The CFRAM flood zones in this area show Flood Zones A and B extents within lands zone for Enterprise and Employment. The predicted flood extents are largely confined to existing greenfield.
	Pluvial Flooding The OPW PFRA pluvial mapping shows localised pluvial flooding within existing greenfield sites zoned Enterprise and Employment. Climate Change The CFRAM mapping indicates an increase in flood extents for Flood Zone A taking into account climate change within some of the Enterprise and Employment lands.

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Justification Test

It was recommended that the Planning Authority carry out the Development Plan Justification Test to assess if the zoning in this area is suitable.

Conclusion

KCC carried out a Justification Test and found that it is considered appropriate to zone these lands as Enterprise and Employment. The Justification Test and proposed flood risk management measures are included in Appendix B. Any future significant development should be subject to a SSFRA. The Justification Test does not apply to applications for minor development to existing buildings in areas of flood risk such as small extensions and most changes of use. However, a flood risk assessment of appropriate detail should accompany such applications to demonstrate that they would not have adverse flood risk impacts. The Northwest Quadrant Masterplan will also be subject to a SFRA which will examine the flood zones in further detail which may lead to the zonings being refined to follow the sequential approach.

The FRMP proposed predicted flood zones for the Northwest Quadrant area will be revaluated as part of an updated modelling exercise to assess potential non-fluvial flooding sources, in order to achieve confidence in the modelling and to identify an integrated option to manage the existing risk in Naas.

Therefore, in the interim if a SSFRA were to re-evaluate the predicted flood extents for proposed significant development in these areas a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of enough detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval. FRAs should also address climate change scenarios.



7 FLOOD RISK MANAGEMENT POLICIES AND OBJECTIVES

7.1 General Development Plans and Strategies

The Kildare County Development Plan 2017-2023 outlines surface water and flooding flood risk management policies and objectives for the entire county. The Naas LAP will implement these policies to ensure flood risk and surface water management is considered during the planning process for development within the LAP boundary. The Naas LAP will also implement specific local policies and objectives which have also been adopted from the existing development plan and updated based on the information provided in the SFRA process and are shown in **Table 7-1**.

Table 7-1 LAP Flood Risk Management policies

Planning Policy / Objective	Policy Description
NHO1.2	Maintain a suitable buffer zone along the Grand Canal and other watercourses protecting them from development. The extent and composition of the buffer zone should be determined in consultation with a qualified ecologist and will be informed by Planning for Watercourses in the Urban Environment (SHRFB).
IO2.1	Carry out surface water infrastructure improvement works as required.
IO2.2	Incorporate Sustainable Urban Drainage Systems (SuDS) as part of all plans and development proposals in Naas. Proposals for development in KDAs, CRAs and masterplan areas should address the potential for SuDS at a local and district level to control surface water outfall and protect water quality.
IO2.5	Encourage 'daylighting'/de-culverting and the restoration of culverted water bodies within the town as a natural method of flood management.
Surface Water and Groundwater:	 To carry out a survey of surface water culverts in Naas to assess their current state and to develop a programme of improvements where necessary, and
Actions	 To regularly maintain the surface water drains in Naas to minimise the risk of flooding.
Policy I3 – Flood Risk Management	It is the policy of the Council to manage flood risk in Naas in conjunction with the OPW and in accordance with the requirements of the Planning System and Flood Risk Management Guidelines for Planning Authorities



Planning Policy / Objective	Policy Description
	(2009) and circular PL02/2014 (August 2014).
IO3.1	Ensure development proposals within the areas outlined on the Flood Risk Map (Map Ref. 9.1) are the subject of Site-Specific Flood Risk Assessment, appropriate to the nature and scale of the development being proposed.
IO3.2	Support and co-operate with the OPW in delivering the Eastern CFRAM Programme applicable to Naas.
GIO1.10	Deliver the green infrastructure routes identified on Map 7.1 through the integration of a network of natural habitat and biodiversity supporting spaces, parkland for passive and active recreational uses, heritage features, sustainable surface water and flood risk management measures.
OSO 1.2	Protect lands zoned F: Open Space and Amenity and M: Future Park/Green Wedge on Map 7.3 for a variety of passive and active uses.
OSO1.4:	Seek the enhancement of existing wetlands in Naas and to encourage the creation of new wetlands and the creation of new wetlands where appropriate, through the provision of Sustainable Urban Drainage Systems (SuDS) and Integrated Constructed Wetlands (ICW).
CCO 1.1	Support the implementation and adoption of the County Climate Change Adaptation Strategy and promote Naas as a key driver of the transition to a low carbon economy within the County.
CCO 1.2	Support the effective and efficient use of land, prioritising the development of brownfield land in preference to greenfield land.
CCO 1.6	Seek integration of positive climate change mitigation and adaptation measures to be considered for all planning applications. Promote use of biodiversity techniques, blue and green walls and roofs and Sustainable Urban Drainage Systems (SuDs) and support the design of developments that minimise the usage of fresh water supplies and harvest 'grey' water for re-use.

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7.2 Flood Risk Management Plans

KCC have committed to implementing the recommendations from the Eastern CFRAM FRMP for Naas. They will work in conjunction with the OPW to deliver any proposed flood alleviation works that are deemed appropriate and viable. This will also involve a detailed assessment of potential non-fluvial flooding sources, in order to achieve increased confidence in the CFRAM modelling and to identify an integrated option to manage the existing risk in Naas.

Due to the complexity of the modelling exercise KCC are committed to implementing this proposal in conjunction with the OPW to ensure that this measure is undertaken within the next 6-year CFRAM cycle. This modelling exercise and flood extent mapping will inform future SFRAs for the town and if it is completed prior to the next iteration of the development plan a variation of this current SFRA will be produced.

7.3 Flood Risk Management Objectives

KCC will implement the proposed flood risk management objectives for specific areas, ensuring planning applications, where applicable, will require an FRA of appropriate detail. The level of detail within the FRA will depend on the risks identified and the proposed land use. Applications should demonstrate the use of the sequential approach in terms of the site layout and design and, in satisfying the Justification Test (where required). The proposal must demonstrate that appropriate mitigation and management measures are put in place. For any development in flood risk areas that meet the Development Plan Justification Test, a Development Management Justification Test must then be applied. Development must satisfy all the criteria of the Development Management Justification Test.



8 SUMMARY

8.1 Overview

The SFRA Report has been prepared in accordance with the requirements of The Planning System and Flood Risk Assessment Guidelines for Planning Authorities (2009) and Circular PL02/2014 (August 2014). The SFRA has provided an assessment of all types of flood risk within Naas to assist KCC to make informed strategic land-use planning decisions. The flood risk information has enabled KCC to apply The Guidelines sequential approach, and where necessary the Justification Test, to appraise sites for development and identify how flood risk can be reduced as part of the development plan.

8.2 Flood Zones and Flood Risk

Naas is susceptible to several types of flood risk, including:

- Fluvial Flooding occurs when a river overtops its banks due to a blockage in the channel or the channel capacity is exceeded, and
- Pluvial Flooding occurs when overland flow cannot infiltrate into the ground, when drainage systems exceed their capacity or are blocked and when the water cannot discharge due to a high water level in the receiving watercourse.

These types of flood risk act independently or in combination to cause flooding within the town LAP boundary.

The flood zones extents have been prepared in accordance the Planning System and Flood Risk Assessment Guidelines identifying Flood Zones A, B and C. The flood zone maps are derived from the Eastern CFRAM Study. The Flood Zone mapping is based on the best currently available data and a more detailed, SSFRA may generate localised flood extents. As noted in **Section 5.3.3** there is high uncertainty regarding the flood risk in relation to Naas due to poor availability of model calibration events and possible interconnection between fluvial and surface water drainage and canal systems. However as the CFRAM maps are the most comprehensive flood maps produced for Kildare since the introduction of The Guidelines and the Floods Directive they are the best available source of flooding information to inform the SFRA. This allows the SFRA to be conservative in nature. The flood zones only account for inland flooding and are generated without the inclusion of climate change factors. They should not be used to suggest that any areas are free from flood risk as they do not account for potential flooding from pluvial and groundwater flooding. The flood zone maps are shown in Appendix A.

8.3 Flood Management Policies and Objectives

The Kildare County Development Plan 2017-2023 outlines surface water and flooding flood risk management policies and objectives for the entire county. The Naas Local Area 2019 -2023 will implement these policies to ensure flood risk and surface water management is considered during the planning process for development within the LAP boundary. The Naas LAP will also implement specific local policies and objectives which have also been adopted from the existing LAP and updated based on the information provided in the SFRA process and are shown in **Table 7-1**. The Council has committed to supporting and co-operating with the OPW in delivering the recommendations from the Eastern CFRAM



FRMP. KCC have committed to implementing the recommendations from the FRMP and will work in conjunction with the OPW to deliver any proposed flood alleviation works that are deemed appropriate and viable.

KCC will implement the proposed flood risk management objectives for specific areas, ensuring planning applications, where applicable, will require an FRA of appropriate detail. The level of detail within the FRA will depend on the risks identified and the proposed land use. Applications should demonstrate the use of the sequential approach in terms of the site layout and design and, in satisfying the Justification Test (where required), the proposal must demonstrate that appropriate mitigation and management measures are put in place. For any development in flood risk areas that meet the Development Plan Justification Test, a Development Management Justification Test must then be applied. Development must satisfy all of the criteria of the Development Management Justification Test.

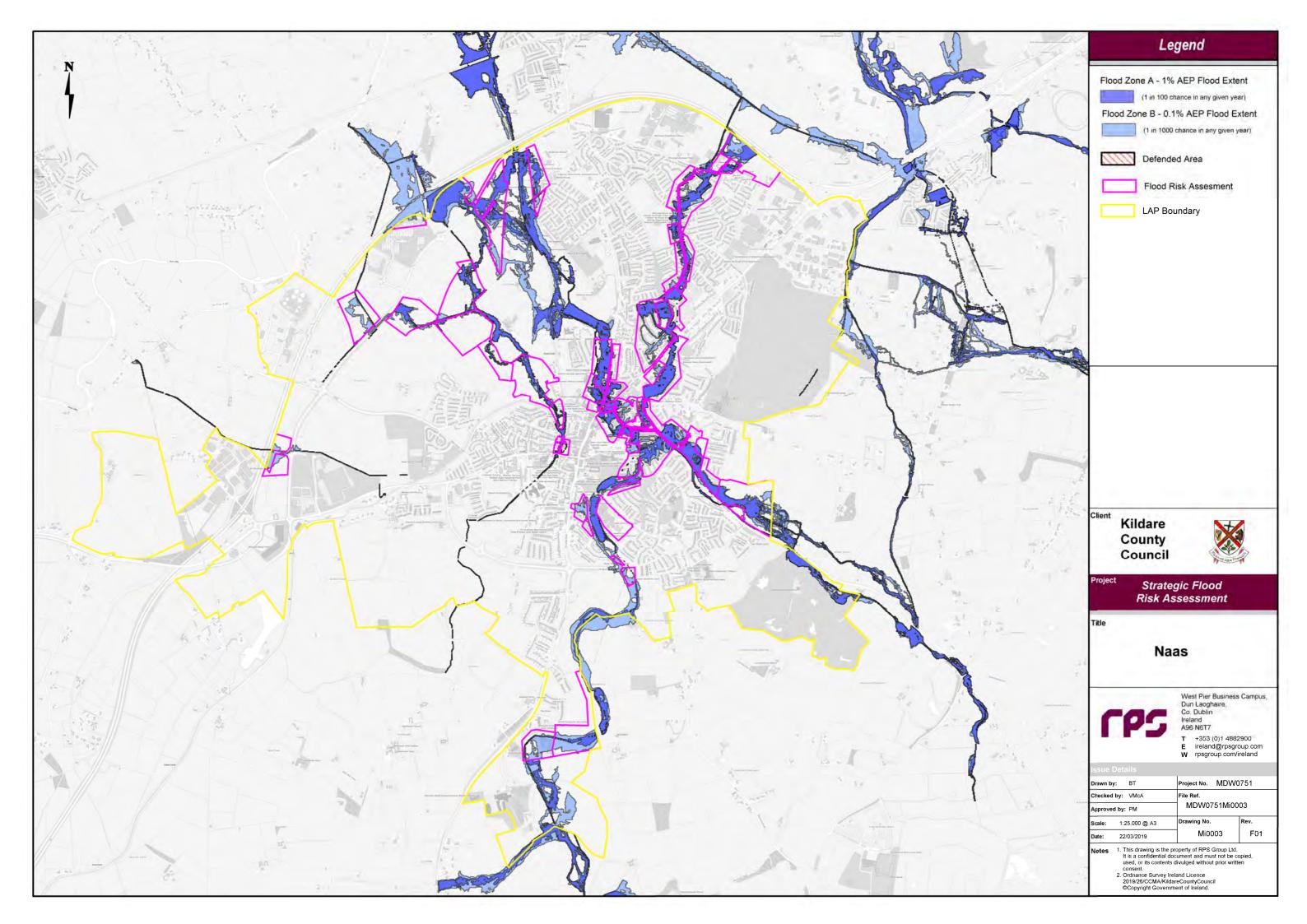
8.4 SFRA Review and Monitoring

The Naas SFRA will be reviewed and updated every six years in line with the Kildare Planning Authority's review process. Additionally, outputs from future studies and datasets may trigger a review and update of the SFRA during the lifetime of the LAP and also the Kildare County Development Plan. These include the outputs from the updated hydraulic study that is required to progress a proposed flood scheme for Naas as outlined the Eastern CFRAM FRMP. Other sources of information may not lead to an update of the SFRA during the lifetime of the Plan but they should be retained and collected to supplement the future SFRAs.



Appendix A

Fluvial Flood Zone Mapping



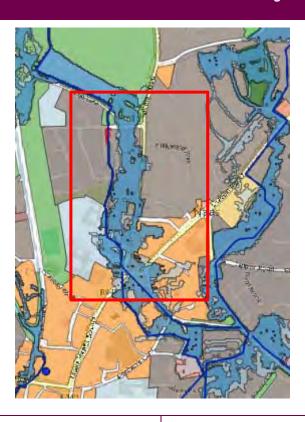


Appendix B

Justification Tests



Millbridge Residential Estate



1The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 set out the planned direction for growth within the Greater Dublin Area up to 2022 by giving regional effect to national planning policy under the National Spatial Strategy (NSS).

Naas is the County Town of Kildare and is identified as a Large Growth Town I and Economic Growth Town in the Regional Planning Guidelines for the Greater Dublin Area and is identified as a Level 2 Major Town Centre/County Town in the Retail Strategy for the Greater Dublin Area

The Draft Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region was published in November 2018 and is expected to be adopted in the first half of 2019. The RSES will replace the Regional Planning Guidelines for the Greater Dublin Area. The RSES will provide regional level strategic planning and economic policy in support of the implementation of the NPF and provide a greater level of focus around the National Policy Objectives and National Strategic Outcomes of the NPF.

Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft RSES also states that consolidation and the regeneration are key development



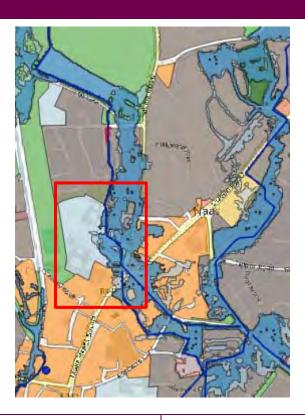
	priorities for Naas
2The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and in particular	Land Zoned: B - Existing Residential &Infill Lands are in located within and adjoining the town centre, zoning is required to maintain the proper planning and development of Naas
(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	No, as lands in the Milbridge Residential Estate are already developed as residential use.
(ii) Comprises significant previously developed and / or underutilized lands,	Yes, comprises significant previously developed lands
(iii) Is within or adjoining the core of an established or designated urban settlement,	Yes, is within the established designated urban settlement
(iv) Will be essential in achieving compact and sustainable urban growth, and	No, as lands in the Milbridge Residential Estate are already developed as residential use.
(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Milbridge Residential Estate is already developed as residential use. Having regard to the developed nature of lands it is considered reasonable to retain the use subject to a stipulation that any development within the areas of the flood risk zone include measures to mitigate against flooding. Therefore, prior to any further development being permitted a SSFRA should be undertaken to the satisfaction of Kildare County Council.
3A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere. N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment	Millbridge Residential Estate are within Flood Zones A and B. The pre-existing zonings should be retained but future significant development in this area should be subject to a
	 Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas.
	The Eastern CFRAM FRMP proposed flood defence works which would protect the Millbridge residential area against the



1% AEP event. The Eastern CFRAM FRMP also proposed further hydraulic analysis could be undertaken as a first phase of any flood defence works in Naas to refine defences and improve understanding of the flooding mechanisms. KCC are committed to advancing the updated analysis and any viable flood defence works within the timeline of the CDP. Any FRA should be cognisant of these proposed flood defences for Naas.



St David's Church & Two Schools



1The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 set out the planned direction for growth within the Greater Dublin Area up to 2022 by giving regional effect to national planning policy under the National Spatial Strategy (NSS).

Naas is the County Town of Kildare and is identified as a Large Growth Town I and Economic Growth Town in the Regional Planning Guidelines for the Greater Dublin Area and is identified as a Level 2 Major Town Centre/County Town in the Retail Strategy for the Greater Dublin Area

The Draft Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region was published in November 2018 and is expected to be adopted in the first half of 2019. The RSES will replace the Regional Planning Guidelines for the Greater Dublin Area. The RSES will provide regional level strategic planning and economic policy in support of the implementation of the NPF and provide a greater level of focus around the National Policy Objectives and National Strategic Outcomes of the NPF.

Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft RSES also states that consolidation and regeneration are key development priorities



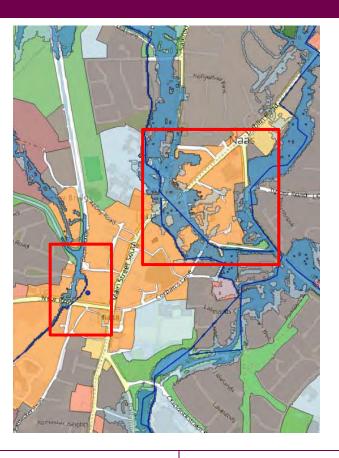
	for Naas.
2The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and in particular.	Land Zoned: E - Community & Educational
(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	No, the site adjoins lands that are within a proposed Regeneration Area, as identified in the draft Naas LAP.
(ii) Comprises significant previously developed and / or underutilized lands,	Comprises significant previously developed lands – existing established schools and church.
(iii) Is within or adjoining the core of an established or designated urban settlement,	Is within the established designated urban settlement and adjoins the core of the settlement.
(iv) Will be essential in achieving compact and sustainable urban growth, and	Yes, Mercy Convent school being redeveloped into a three storey 32 classroom presently.
(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Having regard to the developed nature of lands it is considered reasonable to retain the use subject to a stipulation that the areas within the flood risk zone include measures to mitigate against flooding. Prior to any further development being permitted a SSFRA should be undertaken to the satisfaction of Kildare County Council.
3A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere. N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment	The CFRAM flood mapping indicates that certain parts of Mercy's Convent Primary School and St Mary's Secondary School are within Flood Zone B. St David's Church is inundated within Flood Zone A. The pre-existing zonings should be retained but future significant development in this area should be subject to a SSFRA. SSFRAs should address the following: Apply sequential approach should be applied through site planning and should avoid encroachment onto, or loss of, the flood plain,
	Should address climate change scenarios in relation to FFLs and potential mitigation measures,
	• Finished floor levels should be above the 0.1% AEP level,
	Flood resilient construction materials and fittings should be considered, and
	Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas.
	The Eastern CFRAM FRMP proposed flood defence works which would protect the town centre area against the 1% AEP



event. The Eastern CFRAM FRMP also proposed further hydraulic analysis could be undertaken as a first phase of any flood defence works in Naas to refine defences and improve understanding of the flooding mechanisms. KCC are committed to advancing the updated analysis and any viable flood defence works within the timeline of the CDP. Any FRA should be cognisant of these proposed flood defences for Naas.



Naas Town Centre



1The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 set out the planned direction for growth within the Greater Dublin Area up to 2022 by giving regional effect to national Planning Guidelines for the Greater Dublin Area and is planning policy under the National Spatial Strategy (NSS).

Naas is the County Town of Kildare and is identified as a Large Growth Town I and Economic Growth Town in the Regional identified as a Level 2 Major Town Centre/County Town in the Retail Strategy for the Greater Dublin Area

The Draft Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region was published in November 2018 and is expected to be adopted in the first half of 2019. The RSES will replace the Regional Planning Guidelines for the Greater Dublin Area. The RSES will provide regional level strategic planning and economic policy in support of the implementation of the NPF and provide a greater level of focus around the National Policy Objectives and National Strategic Outcomes of the NPF.

Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education



	between Naas and Newbridge. The draft RSES also states that consolidation and regeneration are key development priorities for Naas.
2The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and in particular:	Land Zoned: A - Town Centre
(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	Yes, lands in the town centre are considered essential to facilitate regeneration and expansion of the town centre. The town centre core is proposed to be designated a Regeneration Area in the draft LAP, within which the subjects are located.
(ii) Comprises significant previously developed and / or underutilized lands,	Yes, the lands comprise significant previously developed lands and some underutilised lands
(iii) Is within or adjoining the core of an established or designated urban settlement,	Yes, is within the core of an established designated urban settlement - Naas
(iv) Will be essential in achieving compact and sustainable urban growth, and	The consolidation and regeneration of this area will be essential in achieving compact and sustainable urban growth. Development here would support national policy objectives set out in the National Planning Framework.
(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	The lands comprise the town centre; therefore no alternative options are available. Having regard to the developed nature of the lands it is considered reasonable to retain the use subject to a stipulation that development in areas subject to flood risk zone include measures to mitigate against flooding. Therefore, prior to any further development being permitted a SSFRA should be undertaken to the satisfaction of Kildare County Council.
3A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere. N.B. The acceptability	The CFRAM flood mapping indicates that parts of the town centre are within Flood Zone A. The pre-existing zonings should be retained but future significant development in this area should be subject to a SSFRA. SSFRAs should address the following:
or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local conte and should be described in the relevant flood risk assessment	 Apply sequential approach should be applied through site planning and should avoid encroachment onto, or loss of, the flood plain,
	Should address climate change scenarios in relation to FFLs and potential mitigation measures,
	 Finished floor levels should be above the 0.1% AEP level,
	Flood resilient construction materials and fittings should



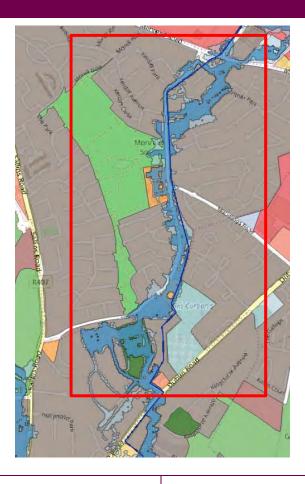
be considered.

- Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas, and
- Emergency evacuation plan and defined access / egress routes should be developed for extreme flood events.

The Eastern CFRAM FRMP proposed flood defence works which would protect the town centre area against the 1% AEP event. The Eastern CFRAM FRMP also proposed further hydraulic analysis could be undertaken as a first phase of any flood defence works in Naas to refine defences and improve understanding of the flooding mechanisms. KCC are committed to advancing the updated analysis and any viable flood defence works within the timeline of the CDP. Any FRA should be cognisant of these proposed flood defences for Naas.



Monread Avenue Residential Estates



1The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 set out the planned direction for growth within the Greater Dublin Area up to 2022 by giving regional effect to national planning policy under the National Spatial Strategy (NSS).

Naas is the County Town of Kildare and is identified as a Large Growth Town I and Economic Growth Town in the Regional Planning Guidelines for the Greater Dublin Area and is identified as a Level 2 Major Town Centre/County Town in the Retail Strategy for the Greater Dublin Area

The Draft Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region was published in November 2018 and is expected to be adopted in the first half of 2019. The RSES will replace the Regional Planning Guidelines for the Greater Dublin Area. The RSES will provide regional level strategic planning and economic policy in support of the implementation of the NPF and provide a greater level of focus around the National Policy Objectives and National Strategic Outcomes of the NPF.

Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby



	settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft RSES also states that consolidation and regeneration are key development priorities for Naas.
2The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and in particular	Land Zoned: B - Existing Residential and Infill
(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	No, as lands at Monread Avenue are already developed for residential use.
(ii) Comprises significant previously developed and / or underutilized lands,	Yes, comprises significant previously developed lands for residential use, with support facilities such as open space.
(iii) Is within or adjoining the core of an established or designated urban settlement,	Yes, is within the established designated urban settlement.
(iv) Will be essential in achieving compact and sustainable urban growth, and	No, as lands are already developed as residential use.
(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Monread Avenue residential estates are already developed for residential use. Having regard to the developed nature of lands it is considered reasonable to retain the use subject to a stipulation that development of areas in the flood risk zone include measures to mitigate against flooding. Therefore, prior to any further development being permitted a SSFRA should be undertaken to the satisfaction of Kildare County Council.
3A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere. N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment	residential estates adjacent to Monread Avenue are within Flood Zone A. The pre-existing zonings should be retained but future significant development in this area should be subject to
	Should address climate change scenarios in relation to FFLs and potential mitigation measures,
	Finished floor levels should be above the 0.1% AEP level,
	Bedrooms should be located in the upstairs of two story buildings,
	Flood resilient construction materials and fittings should be considered, and
	Proposals should not impede existing flow paths or cause

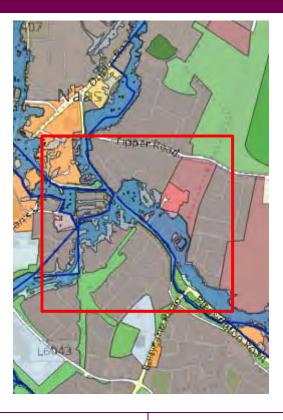


flood risk impacts to the surrounding areas.

The Eastern CFRAM FRMP proposed flood defence works which would protect the Monread Avenue area against the 1% AEP event. The Eastern CFRAM FRMP also proposed further hydraulic analysis could be undertaken as a first phase of any flood defence works in Naas to refine defences and improve understanding of the flooding mechanisms. KCC are committed to advancing the updated analysis and any viable flood defence works within the timeline of the CDP. Any FRA should be cognisant of these proposed flood defences for Naas.



Dublin Road and Blessington Road Residential Estates



1The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 set out the planned direction for growth within the Greater Dublin Area up to 2022 by giving regional effect to national planning policy under the National Spatial Strategy (NSS).

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Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft RSES also states that consolidation and regeneration are key development priorities



	for Naas.
2The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and	Land Zoned: B - Existing Residential and Infill.
sustainable development of the urban settlement and in particular:	
(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	No, lands comprising of residential estates at Dublin Road and Blessington Road are already developed for residential use.
(ii) Comprises significant previously developed and / or underutilized lands,	Yes, comprises significant previously developed lands for residential use, with support facilities such as open space.
(iii) Is within or adjoining the core of an established or designated urban settlement,	Yes, is within the established designated urban settlement
(iv) Will be essential in achieving compact and sustainable urban growth, and	No, as lands are already developed as residential use.
(v) There are no suitable alternative lands for the particular use o development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Residential areas on Dublin Road and Blessington Road are already developed for residential use. Having regard to the developed nature of lands it is considered reasonable to retain the use subject to a stipulation that any development of the areas within the flood risk zone include measures to mitigate against flooding. Therefore, prior to any further development being permitted a SSFRA should be undertaken to the satisfaction of Kildare County Council.
3A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands wi not cause unacceptable adverse impacts elsewhere. N.B. The acceptability or otherwise of levels of any residual risk should be	residential estates adjacent to Dublin Road and Blessington Road are within Flood Zone A. The pre-existing zonings should be retained but future significant development in this area
made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment	Apply sequential approach should be applied through site planning and should avoid encroachment onto, or loss of, the flood plain.
	Should address climate change scenarios in relation to FFLs and potential mitigation measures,
	Finished floor levels should be above the 0.1% AEP level,
	 Bedrooms should be located in the upstairs of two story buildings,
	Flood resilient construction materials and fittings should



be considered, and

 Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas.

The Eastern CFRAM FRMP proposed flood defence works which would protect the Blessington Road and Dublin Road areas against the 1% AEP event. The Eastern CFRAM FRMP also proposed further hydraulic analysis could be undertaken as a first phase of any flood defence works in Naas to refine defences and improve understanding of the flooding mechanisms. KCC are committed to advancing the updated analysis and any viable flood defence works within the timeline of the CDP. Any FRA should be cognisant of these proposed flood defences for Naas.



Blessington Road Business Park



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The Draft Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region was published in November 2018 and is expected to be adopted in the first half of 2019. The RSES will replace the Regional Planning Guidelines for the Greater Dublin Area. The RSES will provide regional level strategic planning and economic policy in support of the implementation of the NPF and provide a greater level of focus around the National Policy Objectives and National Strategic Outcomes of the NPF.

Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft RSES also states that consolidation and the regeneration are key development briorities for Naas.

2The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and

and Zoned: Q - Enterprise and Employment.

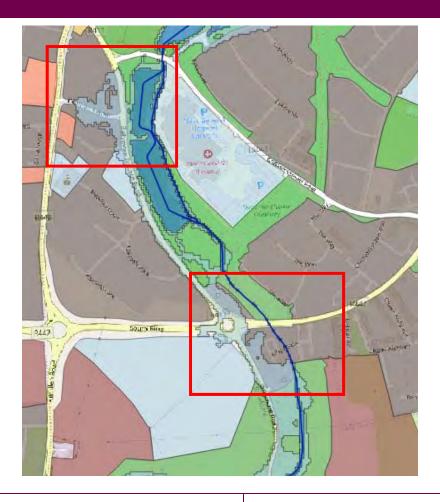


sustainable development of the urban settlement and in particular:	
(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	No, as lands occupied by Blessington Road Business Park are already developed.
(ii) Comprises significant previously developed and / or underutilized lands,	Yes, comprises significant previously developed lands for business /employment use.
(iii) Is within or adjoining the core of an established or designated urban settlement,	Yes, is within the established designated urban settlement.
(iv) Will be essential in achieving compact and sustainable urban growth, and	No, as lands are already developed for business/employment use.
(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	The lands occupied by Blessington Road Business Park are already developed. Having regard to the developed nature of lands it is considered reasonable to retain the use subject to a stipulation that further development of areas within the flood risk zone include measures to mitigate against flooding. Therefore, prior to any further development being permitted a SSFRA should be undertaken to the satisfaction of Kildare County Council.
3A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere. N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment	The CFRAM flood mapping indicates that certain parts of the Business Park are within Flood Zone A and B. The pre-existing zonings should be retained but future significant development in this area should be subject to a SSFRA. SSFRAs should address the following: Apply sequential approach should be applied through site planning and should avoid encroachment onto, or loss of, the flood plain, Should address climate change scenarios in relation to FFLs and potential mitigation measures, Finished floor levels should be above the 0.1% AEP level, Flood resilient construction materials and fittings should be considered, and Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas. The Eastern CFRAM FRMP proposed flood defence works which would reduce the risk to the commercial area against the 1% AEP event. The Eastern CFRAM FRMP also proposed further hydraulic analysis could be undertaken as a first phase of any flood defence works in Naas to refine defences and improve understanding of the flooding mechanisms. KCC are committed to advancing the updated analysis and any viable flood defence works within the timeline of the CDP. Any FRA should be cognisant of these proposed flood defences for Naas.





Ballymore Eustace Road Residential Estates



1The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 set out the planned direction for growth within the Greater Dublin Area up to 2022 by giving regional effect to national planning policy under the National Spatial Strategy (NSS).

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The Draft Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region was published in November 2018 and is expected to be adopted in the first half of 2019. The RSES will replace the Regional Planning Guidelines for the Greater Dublin Area. The RSES will provide regional level strategic planning and economic policy in support of the implementation of the NPF and provide a greater level of focus around the National Policy Objectives and National Strategic Outcomes of the NPF.

Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county



	town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft RSES also states that consolidation and regeneration are key development priorities for Naas.
2The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and in particular:	Land Zoned: B - Existing Residential and Infill.
(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	No, as lands at the Ballymore Eustace Road are already developed for residential use.
(ii) Comprises significant previously developed and / or underutilized lands,	Yes, comprises significant previously developed lands for residential use, with support facilities such as open space.
(iii) Is within or adjoining the core of an established or designated urban settlement,	Yes, is within the established designated urban settlement.
(iv) Will be essential in achieving compact and sustainable urban growth, and	No, as lands are already developed as residential use.
(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Ballymore Eustace Road residential estates are already developed for residential use. Having regard to the developed nature of lands it is considered reasonable to retain the use subject to a stipulation that further development of lands within areas subject to flood risk include measures to mitigate against flooding. Therefore, prior to any further development being permitted a SSFRA should be undertaken to the satisfaction of Kildare County Council.
3A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere. N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment	The CFRAM flood mapping indicates that certain parts of the residential estates adjacent to Ballymore Eustace Road are within Flood Zone B. The pre-existing zonings should be retained but future significant development in this area should be subject to a SSFRA. SSFRAs should address the following: Apply sequential approach should be applied through site planning and should avoid encroachment onto, or loss of, the flood plain,
	Should address climate change scenarios in relation to FFLs and potential mitigation measures,
	Finished floor levels should be above the 0.1% AEP level,
	 Bedrooms should be located in the upstairs of two story buildings,
	Flood resilient construction materials and fittings



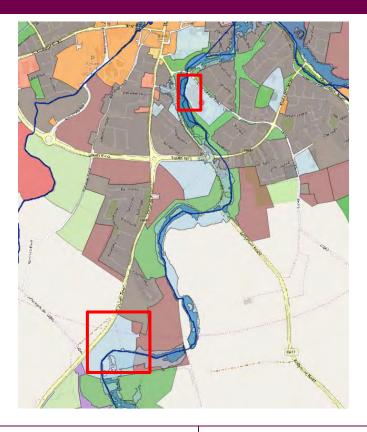
should be considered, and

 Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas.

The Eastern CFRAM FRMP proposed flood defence works which would protect the Ballymore Eustace Road area against the 1% AEP event. The Eastern CFRAM FRMP also proposed further hydraulic analysis could be undertaken as a first phase of any flood defence works in Naas to refine defences and improve understanding of the flooding mechanisms. KCC are committed to advancing the updated analysis and any viable flood defence works within the timeline of the CDP. Any FRA should be cognisant of these proposed flood defences for Naas.



Vista Primary Care Centre & Piper's Hill College



1The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 set out the planned direction for growth within the Greater Dublin Area up to 2022 by giving regional effect to national planning policy under the National Spatial Strategy (NSS).

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Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft RSES also states that consolidation and regeneration are key development



	priorities for Naas.
2The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and in particular:	Land Zoned: E - Community & Educational
(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	No, lands are significantly developed already, comprising the Vista Primary Care Centre and Piper's Hill College.
(ii) Comprises significant previously developed and / or underutilized lands,	Comprises significant previously developed lands, Vista Primary Care Centre and Piper's Hill College.
(iii) Is within or adjoining the core of an established or designated urban settlement,	While neither site is within the core of Naas, the Vista Primary Care Centre, to the north, is within an established designated urban settlement, while Piper's Hill College, site to the south, adjoins established designated settlement.
(iv) Will be essential in achieving compact and sustainable urban growth, and	No, these lands area are already developed.
(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Having regard to the developed nature of lands it is considered reasonable to retain the use subject to a stipulation that any development within the areas in the flood risk zone include measures to mitigate against flooding. Therefore, prior to any further development being permitted on the site a SSFRA should be undertaken to the satisfaction of Kildare County Council.
3A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere. N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment	SSFRA. SSFRAs should address the following:
	Should address climate change scenarios in relation to FFLs and potential mitigation measures,
	Finished floor levels should be above the 0.1% AEP level,
	 Bedrooms should be located in the upstairs of two story buildings,
	Flood resilient construction materials and fittings should



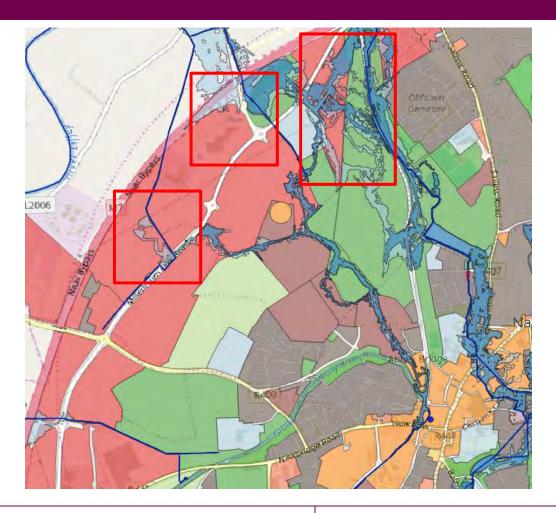
be considered.

- Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas, and
- There is potential for flood storage to be provided in the Pipers Hill playing pitches. This could be explored during the updated hydraulic analysis.

The Eastern CFRAM FRMP has proposed further hydraulic analysis that could be undertaken as a first phase of any flood defence works in Naas to refine defences and improve understanding of the flooding mechanisms. KCC are committed to advancing the updated analysis and any viable flood defence works within the timeline of the CDP. Any FRA should be cognisant of these proposed flood defences and hydraulic analysis for Naas.



Enterprise and Employment Lands - Northwest Quadrant



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Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding



	areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft RSES also states that consolidation and regeneration are key development priorities for Naas.
2The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and in particular:	Land Zoned: Q - Enterprise & Employment
(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	Lands that are undeveloped will facilitate expansion of the urban settlement, the lands will not facilitate regeneration, as they are either greenfield in nature or have been recently developed.
(ii) Comprises significant previously developed and / or underutilized lands,	Comprises significant underutilised lands (Greenfield in nature), though also contains some areas of significant development to the east of the 'E' Community and Education lands.
(iii) Is within or adjoining the core of an established or designated urban settlement,	Is proximate to the designated urban settlement but lands are not within the core of Naas.
(iv) Will be essential in achieving compact and sustainable urban growth, and	Development of these lands, where they remain to be developed will be essential in achieving sustainable and connected urban growth. Development here will assist in consolidating the urban form of Naas, allowing connection of the core to Naas periphery.
(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	There are other suitable alternative lands for employment use in areas at lower risk of flooding. These lands however will allow for a connection of the employment arc at Millennium Park with the core of Naas. Having regard to the semi-developed nature of lands it is considered reasonable to zone the lands subject to a stipulation that any development within the area in the flood risk zone include measures to mitigate against flooding. Therefore, prior to any further development being permitted a SSFRA should be undertaken to the satisfaction of Kildare County Council.
3A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere. N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment	The CFRAM flood mapping indicates that certain parts of the Millennium Link Business Park are within Flood Zone A and B. The pre-existing zonings should be retained but future significant development in this area should be subject to a SSFRA. SSFRAs should address the following: Apply sequential approach should be applied through site planning and should avoid encroachment onto, or loss of, the flood plain,



- Should address climate change scenarios in relation to FFLs and potential mitigation measures,
- Finished floor levels should be above the 0.1% AEP level.
- Flood resilient construction materials and fittings should be considered,
- Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas, and
- The Northwest Quadrant Masterplan will also be subject to a SFRA which will examine the flood zones in further detail which may lead to the zonings being refined to follow the sequential approach.

There are no flood defence works proposed in the Eastern CFRAM study to protect developments within Millennium Link Business Park against the 1% AEP event. The Eastern CFRAM flood extents used as a basis for this SFRA are considered to be conservative. Hence the flood extents may be subject to change due to FRMP recommendations for an updated hydraulic analysis for Naas. Therefore in the interim if a SSFRA were to reevaluate the predicted flood extents for a proposed development site a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of sufficient detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval.



Monread Avenue & Blessington Road Neighbourhood **Centres**



The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 set out the planned direction for growth effect to national planning policy under the National Spatial Strategy (NSS).

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> The Draft Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region was published in November 2018 and is expected to be adopted in the first half of 2019. The RSES will replace the Regional Planning Guidelines for the Greater Dublin Area. The RSES will provide regional level strategic planning and economic policy in support of the implementation of the NPF and provide a greater level of focus around the National Policy Objectives and National Strategic Outcomes of the NPF.

> Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft RSES also states that consolidation and regeneration are key development priorities for



		Naas.	
		inads.	
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and in particular:	Land Zoned: N - Neighbourhood Centre.	
		The lands at Blessington Road are considered essential to facilitate expansion of the centre of the urban settlement The land was previously zoned for residential use and there is an extant permission for a neighbourhood centre at this location. The planning application was subject to a detailed Flood Risk Assessment, which proposed mitigation measures through design.	
		The lands at Monread Ave are previously developed.	
	(ii) Comprises significant previously developed and / or underutilized lands,	The lands at Blessington Road comprise significant underutilised lands that were zoned for residential use in the last Plan. Permission was granted for a housing scheme including a neighbourhood centre; and a detailed flood risk assessment formed part of the planning application.	
		The two neighbourhood centres located on Monread Ave have previously been developed.	
	(iii) Is within or adjoining the core of an established or designated urban settlement,	The lands at Monread Ave are within the established / designated urban settlement of Naas; the lands on the Blessington Road were previously zoned for residential development, have extant permission which was subject to a detailed FRA.	
		Yes undeveloped lands at Blessington Road will be essential in achieving compact and sustainable urban growth	
	use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Lands are either developed or have extant permission. It is considered reasonable to zone the lands subject to a stipulation that any development within areas in the flood risk zone include measures to mitigate against flooding. Therefore, prior to any further development being permitted a SSFRA should be undertaken to the satisfaction of Kildare County Council.	
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere. N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk	The CFRAM flood mapping indicates that certain parts of the two community infrastructure areas adjacent are within Flood Zone B. The pre-existing zonings should be retained but future significant development in this area should be subject to a SSFRA. SSFRAs should address the following: Apply sequential approach should be applied through site planning and should avoid encroachment onto, or loss of,	



assessment

the flood plain,

- Should address climate change scenarios in relation to FFLs and potential mitigation measures,
- Finished floor levels should be above the 0.1% AEP level,
- Bedrooms should be located in the upstairs of two story buildings.
- Flood resilient construction materials and fittings should be considered, and
- Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas.

The Eastern CFRAM FRMP has proposed further hydraulic analysis that could be undertaken as a first phase of any flood defence works in Naas to refine defences and improve understanding of the flooding mechanisms. KCC are committed to advancing the updated analysis and any viable flood defence works within the timeline of the CDP. Any FRA should be cognisant of these proposed flood defences and hydraulic analysis for Naas.

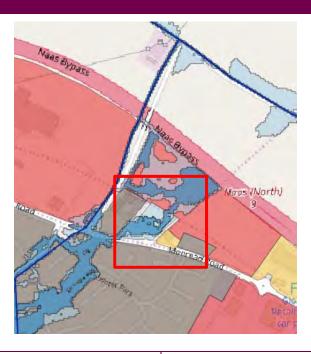
The Eastern CFRAM flood extents used as a basis for this SFRA are considered to be conservative. The flood extents may be subject to change due to FRMP recommendations outlined above. Therefore in the interim if a SSFRA were to re-evaluate the predicted flood extents for a proposed development site a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of sufficient detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval.

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Naas Local Area Plan 2019-2023

Larchfield Nursing Home



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Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft RSES also states that consolidation and the regeneration are key development priorities for Naas.

The zoning or designation of the lands for the particular use or Land Zoned: E - Community & Educational development type is required to achieve the proper planning and sustainable development of the urban settlement and in



	particular:	
	(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	Larchfield Nursing home already in-situ.
	(ii) Comprises significant previously developed and / or underutilized lands,	Comprises significant previously developed lands in the form of the nursing home.
	(iii) Is within or adjoining the core of an established or designated urban settlement,	The nursing home is within the established and designated urban settlement
	(iv) Will be essential in achieving compact and sustainable urban growth, and	The nursing home is already developed, there are no additional lands zoned for Community use there.
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	The nursing home is already developed and there are no additional lands zoned for Community use there. It is considered reasonable to zone the lands subject to a stipulation that the areas within the flood risk zone include measures to mitigate against flooding. Prior to any further development being permitted on the site a SSFRA should be undertaken to the satisfaction of Kildare County Council
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere. N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment	 Should address climate change scenarios in relation to FFLs and potential mitigation measures, Finished floor levels should be above the 0.1% AEP level, Flood resilient construction materials and fittings should be considered, and Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas. The Eastern CFRAM FRMP has proposed further hydraulic analysis that could be undertaken as a first phase of any flood defence works in Naas to refine defences and improve understanding of the flooding mechanisms. KCC are committed to advancing the updated analysis and any viable flood defence works within the timeline of the CDP. Any FRA should be cognisant of these proposed flood defences and hydraulic analysis for Naas. The Eastern CFRAM flood extents used as a basis for this
		The Eastern CFRAM flood extents used as a basis for this SFRA are considered to be conservative. The flood extents may be subject to change due to FRMP recommendations outlined above. Therefore in the interim if a SSFRA were to re-evaluate

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the predicted flood extents for a proposed development site a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of sufficient detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval.

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Naas Local Area Plan 2019-2023

Lands to the East of the Monread Industrial Estate



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Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft RSES also states that consolidation and the regeneration are key development priorities for Naas.

The zoning or designation of the lands for the particular use or Land Zoned: H - Industry & Warehousing development type is required to achieve the proper planning and sustainable development of the urban settlement and in



	particular:	
	(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	No, this land is not essential to facilitate regeneration and / or expansion of the centre of the urban settlement
	(ii) Comprises significant previously developed and / or underutilized lands,	No, this site is not a significant area and is within the 90m reservation for the M7. Development potential is therefore additionally restricted.
	(iii) Is within or adjoining the core of an established or designated urban settlement,	No, the lands are not within the core of an established urban settlement, the land however adjoins existing established development, such as the Larchfield Nursing Home.
	(iv) Will be essential in achieving compact and sustainable urban growth, and	No, this land is not essential in achieving compact and sustainable urban growth.
		There are suitable alternative lands for employment use in areas at lower risk of flooding. It is considered reasonable to zone the lands subject to a stipulation that the areas within the flood risk zone include measures to mitigate against flooding. Prior to any further development being permitted on the site a SSFRA should be undertaken to the satisfaction of Kildare County Council.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere. N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment	Apply coguential approach should be applied through site.
		The Eastern CFRAM flood extents used as a basis for this SFRA are considered to be conservative. The flood extents may

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be subject to change due to FRMP recommendations outlined above. Therefore in the interim if a SSFRA were to re-evaluate the predicted flood extents for a proposed development site a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of sufficient detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval.



Blessington Road



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		Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft RSES also states that consolidation and the regeneration are key development priorities for Naas.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and in particular:	Land Zoned: C – New Residential
	(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	These lands are considered essential to facilitate expansion of the centre of the urban settlement (Blessington Road). The lands were previously zoned for residential use in the Naas Development Plan 2011 – 2017. There is extant permission on the lands for a neighbourhood centre and residential units. The planning application was subject to a detailed flood risk assessment, and permission was subsequently granted subject to the recommendations of the FRA.
	(ii) Comprises significant previously developed and / or underutilized lands,	Comprises significant underutilised lands. The lands were previously zoned for residential units in the Naas Development Plan 2011 – 2017. There is extant permission on the lands for a neighbourhood centre and residential units. The planning application was subject to a detailed flood risk assessment, and permission was subsequently granted subject to the recommendations of the FRA.
	(iii) Is within or adjoining the core of an established or designated urban settlement,	Is within an established urban settlement of Naas and forms a logical and sequential extension of the town.
	(iv) Will be essential in achieving compact and sustainable urban growth, and	Development of the lands will be essential in achieving compact and sustainable urban growth of Naas, as these lands form a logical and sequential extension of the town.
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	There are other suitable alternative lands at lower risk of flooding, however these lands were the subject of a detailed Flood Risk Assessment as part of the planning permission for houses on this site. These lands have extant permission for residential units. It is considered reasonable to retain the zoning on the lands subject to a stipulation that the areas within the flood risk zone include measures to mitigate against flooding. Prior to any further development being permitted on the site a SSFRA should be undertaken to the satisfaction of Kildare County Council.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere. N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk	site are within Flood Zones A and B. The site was subject to a FRA for a planning application which recommended a series of flood risk mitigation measures including setting minimum



assessment

in terms of FFLs and proposed mitigation measures.

The pre-existing zoning should be retained but future development in this area should be subject to a SSFRA. SSFRAs should address the following:

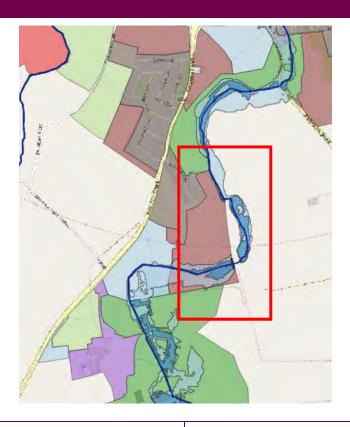
- Apply sequential approach should be applied through site planning and should avoid encroachment onto, or loss of, the flood plain,
- Should address climate change scenarios in relation to FFLs and potential mitigation measures,
- Finished floor levels should be above the 0.1% AEP level.
- Flood resilient construction materials and fittings should be considered, and
- Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas.

The Eastern CFRAM FRMP proposed flood defence works which would protect the Blessington Road area against the 1% AEP event. The Eastern CFRAM FRMP also proposed further hydraulic analysis could be undertaken as a first phase of any flood defence works in Naas to refine defences and improve understanding of the flooding mechanisms. KCC are committed to advancing the updated analysis and any viable flood defence works within the timeline of the CDP. Any FRA should be cognisant of these proposed flood defences for Naas.

The Eastern CFRAM flood extents used as a basis for this SFRA are considered to be conservative. The flood extents may be subject to change due to FRMP recommendations outlined above. Therefore in the interim if a SSFRA were to re-evaluate the predicted flood extents for a proposed development site a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of sufficient detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval.



Kilcullen Road



The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 set out the planned direction for growth within the Greater Dublin Area up to 2022 by giving regional effect to national planning policy under the National Spatial Strategy (NSS).

Naas is the County Town of Kildare and is identified as a Large Growth Town I and Economic Growth Town in the Regional Planning Guidelines for the Greater Dublin Area and is identified as a Level 2 Major Town Centre/County Town in the Retail Strategy for the Greater Dublin Area

The Draft Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region was published in November 2018 and is expected to be adopted in the first half of 2019. The RSES will replace the Regional Planning Guidelines for the Greater Dublin Area. The RSES will provide regional level strategic planning and economic policy in support of the implementation of the NPF and provide a greater level of focus around the National Policy Objectives and National Strategic Outcomes of the NPF.

Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft RSES also states that consolidation and the regeneration are key development



		priorities for Naas.	
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and in particular:	Land Zoned: C – New Residential	
	(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	The lands were previously zoned for residential units in the Naas Development Plan 2011 – 2017. There is extant permission on the lands for residential units, which is nearing completion. The planning application was subject to a flood risk assessment, and permission was subsequently granted.	
	(ii) Comprises significant previously developed and / or underutilized lands,	Comprises significant underutilised lands. The lands were previously zoned for residential use in the Naas Development Plan 2011 – 2017. There is extant permission on the lands for a significant residential development, which is nearing completion. The planning application was subject to a detailed flood risk assessment, and permission was subsequently granted.	
	(iii) Is within or adjoining the core of an established or designated urban settlement,	No, the site is not within the established core of an established designated urban settlement.	
_	(iv) Will be essential in achieving compact and sustainable urban growth, and	These lands are presently being built subject to a planning permission for a significant residential development.	
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	There are other suitable alternative lands at lower risk of flooding, however these lands were the subject of a detailed Flood Risk Assessment as part of the planning permission for houses on this site. These lands have extant permission for residential units, which is nearing completion. It is considered reasonable to retain the zoning on the lands subject to a stipulation that the areas within the flood risk zone include measures to mitigate against flooding. Prior to any further development being permitted on the site a SSFRA should be undertaken to the satisfaction of Kildare County Council.	
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere. N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment	including setting minimum floor levels above design flood waters and installation of flow control devices upstream of the residential area. These mitigation measures have not been included in the CFRAM flood zone mapping as it was developed prior to any development on the site. The construction of the development should follow the recommendations of the FRA in terms of FFLs and proposed mitigation measures.	
		The pre-existing zoning should be retained but future significant	



development in this area should be subject to a SSFRA. SSFRAs should address the following:

- Apply sequential approach should be applied through site planning and should avoid encroachment onto, or loss of, the flood plain,
- Should address climate change scenarios in relation to FFLs and potential mitigation measures,
- Finished floor levels should be above the 0.1% AEP level,
- Flood resilient construction materials and fittings should be considered, and
- Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas.

The Eastern CFRAM FRMP has proposed further hydraulic analysis that could be undertaken as a first phase of any flood defence works in Naas to refine defences and improve understanding of the flooding mechanisms. KCC are committed to advancing the updated analysis and any viable flood defence works within the timeline of the CDP. Any FRA should be cognisant of these proposed flood defences and hydraulic analysis for Naas.

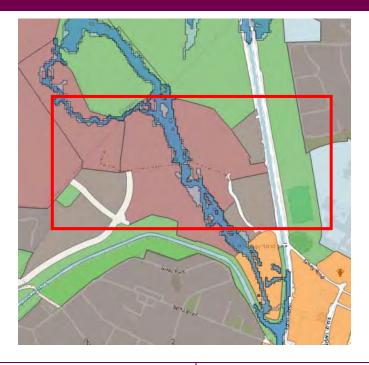
The Eastern CFRAM flood extents used as a basis for this SFRA are considered to be conservative. The flood extents may be subject to change due to FRMP recommendations outlined above. Therefore in the interim if a SSFRA were to re-evaluate the predicted flood extents for a proposed development site a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of sufficient detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval.

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Naas Local Area Plan 2019-2023

Oldtown - Northwest Quadrant



1 The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 set out the planned direction for growth within the Greater Dublin Area up to 2022 by giving regional effect to national planning policy under the National Spatial Strategy (NSS). Naas is the County Town of Kildare and is identified as a Large Growth Town I and Economic Growth Town in the Regional Planning Guidelines for the Greater Dublin Area and is identified as a Level 2 Major Town Centre/County Town in the Retail Strategy for the Greater Dublin Area

The Draft Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region was published in November 2018 and is expected to be adopted in the first half of 2019. The RSES will replace the Regional Planning Guidelines for the Greater Dublin Area. The RSES will provide regional level strategic planning and economic policy in support of the implementation of the NPF and provide a greater level of focus around the National Policy Objectives and National Strategic Outcomes of the NPF.

Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft RSES also states that consolidation and the regeneration are key development briorities for Naas.

2 The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning

Land Zoned: C - New Residential



	and sustainable development of the urban settlement and in particular:	
	(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	Yes, this land is considered essential to facilitate regeneration and or expansion of the centre of the urban settlement, due to strategic location proximate to the core of Naas.
	(ii) Comprises significant previously developed and / or underutilized lands,	These lands comprise significant previously underutilised lands. The proximity of these lands so close to the core of Naas would assist in achieving consolidation and regeneration of these lands and this area.
	(iii) Is within or adjoining the core of an established or designated urban settlement,	The lands are strategically located adjacent to the core of a designated urban settlement;
	(iv) Will be essential in achieving compact and sustainable urban growth, and	Will be essential in achieving compact and sustainable urban growth
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement. It is considered reasonable to zone the lands subject to a stipulation that the areas within the flood risk zone include measures to mitigate against flooding. Prior to any further development being permitted on the site a SSFRA should be undertaken to the satisfaction of Kildare County Council.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere. N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment	The CFRAM flood mapping indicates that certain parts of the site are within Flood Zone A. The pre-existing zoning should be retained but future significant development in this area should be subject to a SSFRA. SSFRAs should address the following: Apply sequential approach should be applied through site planning and should avoid encroachment onto, or loss of, the flood plain, Should address climate change scenarios in relation to FFLs and potential mitigation measures, Finished floor levels should be above the 0.1% AEP level, Flood resilient construction materials and fittings should be considered, Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas, and The Northwest Quadrant Masterplan will also be subject to a SFRA which will examine the flood zones in further detail which may lead to the zonings being refined to follow the sequential approach.



The Eastern CFRAM FRMP has proposed further hydraulic analysis that could be undertaken as a first phase of any flood defence works in Naas to refine defences and improve understanding of the flooding mechanisms. KCC are committed to advancing the updated analysis and any viable flood defence works within the timeline of the CDP. Any FRA should be cognisant of these proposed flood defences and hydraulic analysis for Naas.

The Eastern CFRAM flood extents used as a basis for this SFRA are considered to be conservative. The flood extents may be subject to change due to FRMP recommendations outlined above. Therefore in the interim if a SSFRA were to re-evaluate the predicted flood extents for a proposed development site a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of sufficient detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval.



Canal Quarter



2010-2022 set out the planned direction for growth within the Greater Dublin Area up to 2022 by giving regional effect to national planning policy under the National Spatial Strategy (NSS).

The Regional Planning Guidelines for the Greater Dublin Area Naas is the County Town of Kildare and is identified as a Large Growth Town I and Economic Growth Town in the Regional Planning Guidelines for the Greater Dublin Area and is identified as a Level 2 Major Town Centre/County Town in the Retail Strategy for the Greater Dublin Area

> The Draft Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region was published in November 2018 and is expected to be adopted in the first half of 2019. The RSES will replace the Regional Planning Guidelines for the Greater Dublin Area. The RSES will provide regional level strategic planning and economic policy in support of the implementation of the NPF and provide a greater level of focus around the National Policy Objectives and National Strategic Outcomes of the NPF.

> Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft RSES also states that consolidation and the regeneration are key development oriorities for Naas.



2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and in particular:	Land Zoned: A - Town Centre
	(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	Yes, this land is considered essential to facilitate regeneration and or expansion of the town centre of the urban settlement, due to strategic location proximate to the core of Naas.
	(ii) Comprises significant previously developed and / or underutilized lands,	These lands comprise significant previously underutilised lands. The location of these lands within an extended town centre core of Naas would assist in achieving consolidation and regeneration of these lands and this area.
	(iii) Is within or adjoining the core of an established or designated urban settlement,	The lands are strategically located adjacent to the established core of a designated urban settlement;
	(iv) Will be essential in achieving compact and sustainable urban growth, and	The development of these lands will be essential in achieving compact and sustainable urban growth
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement. It is considered reasonable to zone the lands subject to a stipulation that the areas within the flood risk zone include measures to mitigate against flooding. Prior to any further development being permitted on the site a SSFRA should be undertaken to the satisfaction of Kildare County Council.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere. N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment	 The CFRAM flood mapping indicates that certain parts of the site are within Flood Zone A. The proposed zoning can be allocated but development in this area should be subject to a SSFRA. SSFRAs should address the following: Apply sequential approach should be applied through site planning and should avoid encroachment onto, or loss of, the flood plain, Should address climate change scenarios in relation to FFLs and potential mitigation measures, Finished floor levels should be above the 0.1% AEP level, Bedrooms should be located in the upstairs of two story buildings, Flood resilient construction materials and fittings should be considered, Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas, and The Northwest Quadrant Masterplan will also be subject to a SFRA which will examine the flood zones in further



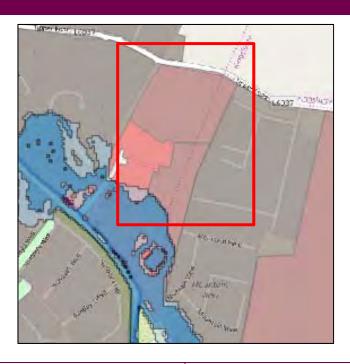
detail which may lead to the zonings being refined to follow the sequential approach.

The Eastern CFRAM FRMP has proposed further hydraulic analysis that could be undertaken as a first phase of any flood defence works in Naas to refine defences and improve understanding of the flooding mechanisms. KCC are committed to advancing the updated analysis and any viable flood defence works within the timeline of the CDP. Any FRA should be cognisant of these proposed flood defences and hydraulic analysis for Naas.

The Eastern CFRAM flood extents used as a basis for this SFRA are considered to be conservative. The flood extents may be subject to change due to FRMP recommendations outlined above. Therefore in the interim if a SSFRA were to reevaluate the predicted flood extents for a proposed development site a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of sufficient detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval.



Tipper Road



1 The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 set out the planned direction for growth within the Greater Dublin Area up to 2022 by giving regional effect to national planning policy under the National Spatial Strategy (NSS).

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Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft RSES also states that consolidation and the regeneration are key development priorities for Naas.

2 The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning

Land Zoned: C - New Residential



	and sustainable development of the urban settlement and in particular:	
	(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	Is essential to facilitate regeneration of the urban settlement (lands are partly brownfield to the north), previously used for employment, the building has since been removed. Infill development at this site is considered appropriate.
	(ii) Comprises significant previously developed and / or underutilized lands,	The lands here comprise significant previously developed and / or underutilised lands, and a large potion to the north was previously developed for employment use.
		Is within an established urban settlement, it is considered appropriate for consolidation and regeneration purposes to zone the land for housing, subject to a SSFRA.
	(iv) Will be essential in achieving compact and sustainable urban growth, and	Development of the site is considered to be essential in achieving compact and sustainable urban growth and would meeting with objectives of the National Planning Framework.
	or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	There are suitable alternative lands for housing in areas at lower risk of flooding, therefore, It is considered reasonable to zone the lands subject to a stipulation that the areas within the flood risk zone include measures to mitigate against flooding. Prior to any further development being permitted on the site a SSFRA should be undertaken to the satisfaction of Kildare County Council.
3		The CFRAM flood mapping indicates that certain parts of the residential zone is within Flood Zone A and B. The proposed zoning can be allocated retained but future development in this area should be subject to a SSFRA. SSFRAs should address the following:
	N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment	 Apply sequential approach should be applied through site planning and should avoid encroachment onto, or loss of, the flood plain,
		Should address climate change scenarios in relation to FFLs and potential mitigation measures,
		Finished floor levels should be above the 0.1% AEP level,
		Flood resilient construction materials and fittings should be considered, and
		 Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas.
		The Eastern CFRAM FRMP proposed flood defence works which would reduce the risk to the commercial area against the 1% AEP event. The Eastern CFRAM FRMP also proposed further hydraulic analysis could be undertaken as a first phase of any flood defence works in Naas to refine defences and improve understanding of the flooding mechanisms. KCC are committed to advancing the updated analysis and any viable

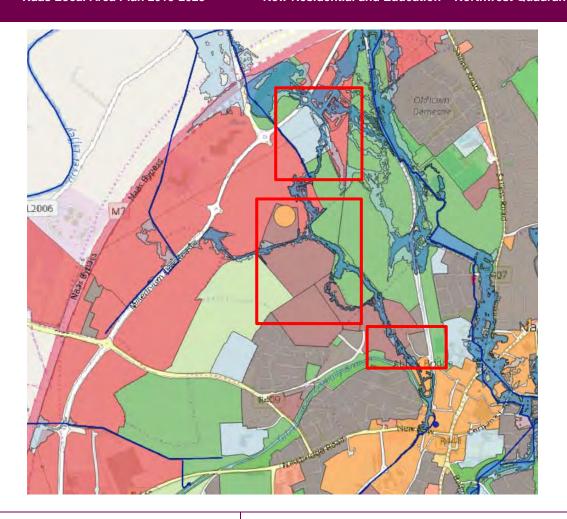


flood defence works within the timeline of the CDP. Any FRA should be cognisant of these proposed flood defences for Naas.

The Eastern CFRAM flood extents used as a basis for this SFRA are considered to be conservative. The flood extents may be subject to change due to FRMP recommendations outlined above. Therefore in the interim if a SSFRA were to reevaluate the predicted flood extents for a proposed development site a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of sufficient detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval.



New Residential and Education - Northwest Quadrant



1 The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 set out the planned direction for growth within the Greater Dublin Area up to 2022 by giving regional effect to national planning policy under the National Spatial Strategy (NSS).

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Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft



		RSES also states that consolidation and regeneration are key development priorities for Naas.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and in particular:	Land Zoned: C – New Residential & E - Community & Educational
	(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	No, this site is not essential to facilitate regeneration or expansion of the centre of the urban settlement.
	(ii) Comprises significant previously developed and / or underutilized lands,	The lands could be stated to comprise significant underutilised lands;
	(iii) Is within or adjoining the core of an established or designated urban settlement,	The lands are not within or adjoining the core of an established or designated urban settlement.
	(iv) Will be essential in achieving compact and sustainable urban growth, and	The development of these lands will assist in achieving sustainable urban growth as development of these lands will connect the established core of Naas with the periphery of Naas.
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	There is extant permission for a secondary school on lands proposed to be zoned 'E Community and Education'. The Planning application considered the issue of flood risk and detailed responses to flood risk assessment were submitted and assessed by KCC. It is considered reasonable to zone the lands subject to a stipulation that the areas within the flood risk zone include measures to mitigate against flooding. Prior to any further development being permitted a SSFRA should be undertaken to the satisfaction of Kildare County Council.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere. N.B. The acceptability or otherwise of levels of any residual risk should be	and should avoid encroachment onto, or loss of, the flood plain,
	made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment	 Should address climate change scenarios in relation to FFLs and potential mitigation measures, Finished floor levels should be above the 0.1% AEP level.
		Flood resilient construction materials and fittings should be considered,
		Proposals should not impede existing flow paths or cause flood risk



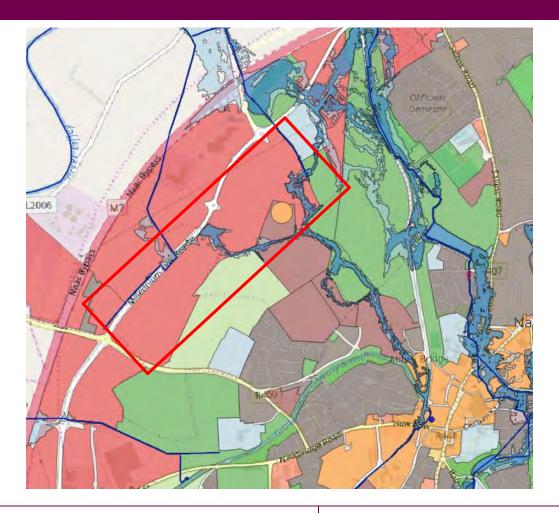
impacts to the surrounding areas, and

The Northwest Quadrant Masterplan will also be subject to a SFRA which will examine the flood zones in further detail which may lead to the zonings being refined to follow the sequential approach.

There are no flood defence works proposed in the Eastern CFRAM study to protect developments within Millennium Link Business Park against the 1% AEP event. The Eastern CFRAM flood extents used as a basis for this SFRA are considered to be conservative. Hence the flood extents may be subject to change due to FRMP recommendations for an updated hydraulic analysis for Naas. Therefore in the interim if a SSFRA were to re-evaluate the predicted flood extents for a proposed development site a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of sufficient detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval.



New Enterprise and Employment Lands - Northwest Quadrant



1 The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 set out the planned direction for growth within the Greater Dublin Area up to 2022 by giving regional effect to national planning policy under the National Spatial Strategy (NSS).

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Naas is identified as a Key Town in the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region. Key Towns are defined in the draft RSES as large towns which are economically active towns that provide employment for their surrounding



		areas. They have high quality transport links and the capacity to act as a regional driver to complement Regional Growth Centres. The designation of Naas as a Key Town is reflective of its county town status. The draft RSES recognises that there are strong links between Naas and the nearby settlements of Sallins and Newbridge, with a strong interrelationship of services, employment and education between Naas and Newbridge. The draft RSES also states that consolidation and regeneration are key development priorities for Naas.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and in particular:	Land Zoned: Q - Enterprise & Employment
	(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement,	No, this site is not essential to facilitate regeneration or expansion of the centre of the urban settlement.
		The lands could be stated to comprise significant underutilised lands;
	(iii) Is within or adjoining the core of an established or designated urban settlement,	The lands are not within or adjoining the core of an established or designated urban settlement.
	growth, and	The development of these lands will assist in achieving sustainable, connected urban growth as development of these lands will connect the established core of Naas with the periphery of Naas.
	development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	There are other suitable alternative lands for employment use in areas at lower risk of flooding. These lands however will allow for a connection of the employment arc at Millennium Park to the centre of Naas. It is considered reasonable to zone the lands subject to a stipulation that the areas within the flood risk zone include measures to mitigate against flooding. Prior to any further development being permitted on the site a SSFRA should be undertaken to the satisfaction of Kildare County Council.
3	carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use	



- Flood resilient construction materials and fittings should be considered,
- Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas, and
- The Northwest Quadrant Masterplan will also be subject to a SFRA which will examine the flood zones in further detail which may lead to the zonings being refined to follow the sequential approach.

There are no flood defence works proposed in the Eastern CFRAM study to protect developments within the lands against the 1% AEP event. The Eastern CFRAM flood extents used as a basis for this SFRA are considered to be conservative. Hence the flood extents may be subject to change due to FRMP recommendations for an updated hydraulic analysis for Naas. Therefore in the interim if a SSFRA were to re-evaluate the predicted flood extents for a proposed development site a hydraulic model of an appropriate scale is required to be constructed. The outputs from the hydraulic model will be expected to consist of sufficient detail and analysis to demonstrate the revised Flood Zone A and B flood extents. The revision of the predicted flood extents will be subject to KCC approval.