

# SCREENING FOR STRATEGIC ENVIRONMENTAL ASSESSMENT REPORT

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FOR  
**PROPOSED MATERIAL ALTERATIONS**  
TO THE  
**DRAFT**  
**DRAFT TUAM LOCAL AREA PLAN**  
**2023-2029**

**for: Galway County Council**

Áras an Chontae  
Prospect Hill  
Galway



**Comhairle Chontae na Gaillimhe**  
**Galway County Council**

**by: CAAS Ltd.**

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



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# Section 1 Introduction and Background

## 1.1 Introduction

This is the Strategic Environmental Assessment (SEA) Screening Report for the Proposed Material Alterations to the Draft Tuam Local Area Plan (LAP) 2023-2029 hereafter referred to as the "Draft Plan".

SEA is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or programme, or alteration to a plan or programme, before a decision is made to adopt it. The SEA Directive<sup>1</sup> requires, inter alia, that SEA is undertaken for certain plans, programmes or alterations to these. Screening is the process for deciding whether a particular plan - or alteration to a plan -, other than those for which SEA is mandatory, would be likely to have significant environmental effects, and would thus warrant SEA.

The purpose of this report is to inform whether or not to undertake SEA on the Proposed Material Alterations to the Tuam LAP. Requirements in relation to the screening of Proposed Material Alterations/Proposed Amendments to LAPs are provided under Section 20 (3) of the Planning and Development Act 2000, as amended, and Article 8 of the Planning and Development (SEA) Regulations 2004, as amended.

This report should be read in conjunction with the LAP and all other associated documents including the:

- Proposed Material Alterations to the Draft Tuam LAP 2023-2029;
- Screening Appropriate Assessment (AA) Report for Proposed Material Alterations to the Draft Tuam LAP 2023-2029;
- SEA Environmental Report for the Draft Tuam LAP 2023-2029; and
- AA Natura Impact Report for the Draft Tuam LAP 2023-2029.

## 1.2 Process so far

The LAP has been progressed to date in compliance with Sections 19 and 20 of the Planning and Development Act 2000, as amended.

SEA<sup>2</sup> is being undertaken on and has informed the Draft LAP in order to comply with the SEA Directive and transposing Regulations – the SEA Environmental Report that accompanied the Draft LAP on public display contains the findings of the assessment.

AA<sup>3</sup> is also being undertaken on the Draft LAP (informing both the Draft LAP and the SEA) in order to comply with the Habitats Directive and transposing Regulations. An AA Natura Impact Report was prepared that contains the findings of this assessment and accompanied the Draft LAP on public display.

The Draft LAP associated SEA and AA documents were placed on public display and submissions were invited. Submissions were responded to in a Chief Executive's Report and Elected Members decided upon Proposed Material Alterations to the Draft LAP and these are the subject of this report.

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<sup>1</sup> Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27<sup>th</sup> June 2001, on the Assessment of the Effects of Certain Plans and Programmes on the Environment

<sup>2</sup> Strategic Environmental Assessment is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or programme, or alteration to a plan or programme, before a decision is made to adopt it.

<sup>3</sup> Appropriate Assessment is an impact assessment process concerning European Sites designated on foot of habitats and species.

### 1.3 SEA Environmental Report (February 2023)

The SEA Environmental Report for the LAP contains the information specified in Annex I of the SEA Directive and Schedule 2B of the Planning and Development (SEA) Regulations 2004 (S.I. 436 of 2004) as amended. The relevant sections of the SEA Environmental Report that address these information requirements are detailed on Table 1.1 below.

The assessment undertaken on relevant Proposed Material Alterations (the findings of which are presented later in this document) has used the information contained in the SEA Environmental Report.

**Table 1.1 Information contained within the SEA Environmental Report that accompanies the Local Area Plan**

<b>Information Required to be included in the Environmental Report</b>	<b>Corresponding Section of this Report</b>
(A) Outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes	Sections 2, 5 and 8
(B) Description of relevant aspects of the current state of the environment and the evolution of that environment without implementation of the plan or programme	Section 4
(C) Description of the environmental characteristics of areas likely to be significantly affected	Sections 4, 7 and 8
(D) Identification of any existing environmental problems which are relevant to the plan or programme, particularly those relating to European protected sites	Section 4
(E) List of environmental protection objectives, established at international, EU or National level, which are relevant to the plan or programme and describe how those objectives and any environmental considerations have been taken into account when preparing the Plan	Sections 5, 7, 8, 9 and Appendix I
(F) Describe the likely significant effects on the environment	Sections 7 and 8
(G) Describe any measures envisaged to prevent, reduce and as fully as possible offset any significant adverse environmental effects of implementing the plan or programme	Section 9
(H) Give an outline of the reasons for selecting the alternatives considered, and a description of how the assessment was undertaken (including any difficulties)	Sections 3, 6, 7 and 8
(I) A description of proposed monitoring measures	Section 10
(J) A non-technical summary of the above information	Appendix II Non-Technical Summary
(K) Interrelationships between each environmental topic	Addressed as it arises within each Section

## Section 2 SEA Screening

### 2.1 Introduction

The section examines whether each Proposed Material Alteration to the LAP would be likely to have significant environmental effects (and thus would warrant the undertaking of SEA).

This examination takes account of relevant criteria set out in Schedule 2A '*Criteria for determining whether a plan is likely to have significant effects on the environment*' of the Planning and Development (SEA) Regulations, as amended, (see Section 2.5).

### 2.2 Strategic Flood Risk Assessment

Strategic Flood Risk Assessment (SFRA) is being undertaken to inform the preparation of the Draft Plan and has informed this SEA Screening. An SFRA document detailing changes to the original SFRA that was placed on public display alongside the Draft Plan on foot of submissions and providing more detail on the SFRA implications of Proposed Material Alterations is included as Appendix A to this SEA Screening document.

### 2.3 Appropriate Assessment

Appropriate Assessment (AA) is an impact assessment process concerning *Natura 2000*, or *European*, sites - these sites have been designated or proposed for designation by virtue of their ecological importance. The Habitats Directive<sup>4</sup>, its transposing Birds and Natural Habitats Regulations 2011 (as amended) and the Planning and Development Act 2000 (as amended) provide the requirement to screen for effects on European Sites. If the effects are deemed to be *significant, potentially significant or uncertain* then Stage 2 AA must be undertaken.

The Local Area Plan is being subject to Stage 2 AA and an AA Natura Impact Report was placed on public display alongside the Draft Plan. At adoption of the Plan, the AA Natura Impact Report will be finalised and an AA determination made by the Council.

An AA screening process has been undertaken on the Proposed Material Alterations. This process has determined that Stage 2 AA for certain Alterations is not necessary - a Screening for AA Report contains these findings, has informed this SEA Screening Report and accompanies the Proposed Material Alterations.

### 2.4 Screening Analysis of Proposed Material Alterations

The analysis of Proposed Material Alterations is undertaken considering interactions Strategic Environmental Objectives (see Table 2.1). Table 2.2 examines whether each part of the Proposed Material Alterations would be likely to have significant environmental effects (and thus would warrant the undertaking of SEA).

Table 2.2 is supplemented by Table 2.3 which provides details on:

- Likely significant effects of implementing the Draft Plan, if unmitigated;
- Key mitigation measure(s) that are already contained within the Draft Plan; and
- Likely residual non-significant adverse effects arising from the Draft Plan.

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<sup>4</sup> Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora

Effects encompass the full range of effects<sup>5</sup>, including those arising cumulatively – such as those potentially arising as a result of interactions with other plans and programmes.

The examination of Proposed Material Alterations also takes into account relevant criteria set out in Schedule 2A 'Criteria for determining whether a plan is likely to have significant effects on the environment' of the SEA Regulations, as amended, (see Section 2.5).

**Table 2.1 Strategic Environmental Objectives**

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
<b>Biodiversity, Flora and Fauna</b>	BFF	No net contribution to biodiversity losses or deterioration	<ul style="list-style-type: none"> <li>To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species</li> <li>Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function</li> <li>Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species</li> <li>Enhance biodiversity in line with the National Biodiversity Strategy and its targets</li> <li>To protect, maintain and conserve the County's natural capital</li> </ul>
<b>Population and Human Health</b>	PHH	Improve quality of life for all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working, educational and recreational environments	<ul style="list-style-type: none"> <li>Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management</li> <li>Ensure that existing population and planned growth is matched with the required public infrastructure and the required services</li> <li>Safeguard the County's citizens from environment-related pressures and risks to health and well-being</li> </ul>
<b>Soil (and Land)</b>	S	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> <li>Protect soils against pollution, and prevent degradation of the soil resource</li> <li>Promote the sustainable use of infill and brownfield sites over the use of greenfield within the County</li> <li>Safeguard areas of prime agricultural land and designated geological sites</li> </ul>
<b>Water</b>	W	Protection, improvement and sustainable management of the water resource	<ul style="list-style-type: none"> <li>Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive</li> <li>Ensure water resources are sustainably managed to deliver proposed regional and County growth targets in the context of existing and projected water supply and wastewater capacity constraints ensuring the protection of receiving environments</li> <li>Avoid inappropriate zoning and development in areas at risk of flooding and areas that are vulnerable to current and future erosion, particularly coastal areas</li> <li>Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals</li> </ul>
<b>Material Assets</b>	MA	Sustainable and efficient use of natural resources	<ul style="list-style-type: none"> <li>Optimise existing infrastructure and provide new infrastructure to match population distribution proposals in the County - this includes transport infrastructure</li> <li>Ensure access to affordable, reliable, sustainable and modern energy for all which encourages a broad energy generation mix to ensure security of supply – wind, solar, hydro, biomass, energy from waste and traditional fossil fuels</li> <li>Promote the circular economy, reduce waste, and increase energy efficiencies</li> <li>Ensure there is adequate sewerage and drainage infrastructure in place to support new development</li> <li>Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes</li> </ul>

<sup>5</sup> These include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects

<b>Environmental Component</b>	<b>SEO Code</b>	<b>Guiding Principle</b>	<b>Strategic Environmental Objectives</b>
			<ul style="list-style-type: none"> <li>• Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, cities and grids</li> </ul>
<b>Air</b>	<b>A</b>	Support clean air policies that reduce the impact of air pollution on the environment and public health	<ul style="list-style-type: none"> <li>• To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture</li> <li>• Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency</li> <li>• Promote continuing improvement in air quality</li> <li>• Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution</li> <li>• Meet Air Quality Directive standards for the protection of human health — Air Quality Directive</li> <li>• Significantly decrease noise pollution by 2020 and move closer to WHO recommended levels</li> </ul>
<b>Climatic Factors</b>	<b>C</b>	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul style="list-style-type: none"> <li>• To minimise emissions of greenhouse gasses</li> <li>• Integrate sustainable design solutions into the County's infrastructure (e.g. energy efficient buildings; green infrastructure)</li> <li>• Contribute towards the reduction of greenhouse gas emissions in line with national targets</li> <li>• Promote development resilient to the effects of climate change</li> <li>• Promote the use of renewable energy, energy efficient development and increased use of public transport</li> </ul>
<b>Cultural Heritage</b>	<b>CH</b>	Safeguard cultural heritage features and their settings through responsible design and positioning of development	Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage
<b>Landscape</b>	<b>L</b>	Protect and enhance the landscape character	To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention

**Table 2.2 SEA Screening Analysis of Proposed Material Alterations<sup>6</sup>**

Ref	SEA Screening Consideration
1	This alteration would further contribute towards provisions related to this sector/topic that are already contained within the Draft Plan. Considering the measures that have been already integrated into the Draft Plan and the existing Galway County Development Plan 2022-2028 that provide for and contribute towards environmental protection, environmental management and sustainable development, it is determined that all potential effects arising from this Proposed Alteration: either are present already (beneficial) and will be further contributed towards; and/or will be mitigated so as not to be significant (adverse). <b>Consequently, SEA is not required.</b> Refer also to Table 2.3 and Section 2.5.
2	The update to terminology/language/wording/mapping would not change the effects arising from the Plan. Where the change relates to mapping, the implications of the change may have been considered under other related Alterations. As such, this alteration would not be considered as being likely to result in significant environmental effects. <b>Consequently, SEA is not required.</b>
3	This alteration relates to Plan text that sets the context for, summarises and/or provides clarification to Plan provisions. It does not interact with existing Plan provisions to an extent that it would have additional significant environmental effects. <b>Consequently, SEA is not required.</b>
4	This alteration adds more detail but would not have the potential to result in significant environmental effects. <b>Consequently, SEA is not required.</b>
5	This alteration provides consistency with other parts of the Plan and/or with the wider planning and policy framework. It would not interact with Plan provisions to the extent that it would have environmental effects. <b>Consequently, SEA is not required.</b>
6	Removal of this provision/text would remove the potential for any environmental effects; however, removal of the provision/text would not be likely to result in any environmental effects. <b>Consequently, SEA is not required.</b>
7	These alterations relate to supporting documents but would not change Plan provisions. <b>Consequently, SEA is not required.</b>
8	This alteration is related to the zoning of lands that include those at higher risk of flooding as identified by the SFRA. The zoning needs further consideration in an SEA. Taking this into account, <b>SEA is required.</b>
9	This alteration would not provide the most evidence-based framework for development in compliance with the Core Strategy of the County Development Plan and therefore has the potential to undermine sustainable development and proper planning - with potential for associated unnecessary adverse environmental effects on various environmental components. Taking this into account, <b>SEA is required.</b>

No.	SEA Screening Consideration Ref. – see above	No.	SEA Screening Consideration Ref. – see above
MA1	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA32	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA2	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA33	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA3	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA34	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA4	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA35	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA5	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA36	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA6	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA37	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA7	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA38	Ref. 9 – SEA required
MA8	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA39	Ref. 8 – SEA required
MA9	Ref. 8 – SEA required	MA40	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA10	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA41	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA11	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA42	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA12	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA43	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA13	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA44	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA14	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA45	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA15	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA46	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA16	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA47	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA17	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA48	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA18	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA49	Ref. 9 – SEA required
MA19	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA50	Ref. 8 – SEA required
MA20	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA51	Ref. 8 – SEA required
MA21	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA52	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA22	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA53	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA23	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA54	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA24	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA55	Ref. 8 – SEA required
MA25	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA56	Ref. 8 – SEA required
MA26	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA57	Ref. 9 – SEA required
MA27	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA58	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA28	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA59	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA29	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA60	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA30	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA61	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA31	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA62	Selection of Considerations from Ref. 1 to 7 - SEA not required

<sup>6</sup> For detail on Proposed Material Alterations please refer to Proposed Material Alterations document.



**Table 2.3 Detail of effects<sup>7</sup>, if unmitigated, mitigation measures for potential effects and residual adverse effects**

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	Mitigation Measures, including:	
				From Tuam Draft Local Area Plan: <sup>8</sup>	From Galway County Development Plan
Various – see below	Various – see below	Various – see below	Various – see below	<p><b>Strategic Aims</b> Promote development of the Town Centre to enhance the vitality and viability of Tuam with a focus on providing for retail, commercial and residential development. Development will be focused within the town centre to act as the economic, social and cultural hub of the town. Support investment in regeneration and other town centre improvement works to maintain Tuam as an attractive place to work and visit.</p> <p><b>TKT 2 Service Led Development</b> Development under the plan shall be preceded by sufficient capacity in the public wastewater infrastructure and potable water infrastructure.</p> <p><b>TKT 3 Environmental Assessment</b> To require the preparation and assessment of all planning applications in the plan area to have regard to the information, data and requirements of the Appropriate Assessment Natura Impact Report, SEA Environmental Report and Strategic Flood Risk Assessment Report that accompany this LAP.</p> <p><b>TKT 5 Residential Development Phasing</b> Support the development of lands designated as Residential (Phase 1) within the lifetime of the plan, subject to normal planning, access and servicing requirements, and reserve the lands designated as Residential (Phase 2) for the longer-term growth needs of Tuam. Residential (Phase 2) lands are generally not developable for housing within the lifetime of this plan, with the exception of the following developments, which may be considered by the Planning Authority, subject to a suitable evidence based case being for the proposal: (refer to Draft Plan for more detail)</p> <p><b>TKT 6 Residential Infill Development</b> Within the town centre, small scale limited infill housing development will be considered on appropriate sites. These infill sites shall have regard to the existing character of the street, respecting the existing building line, scale, proportions, layout, heights and materials of surrounding developments. A proposed site must have a safe means of access and egress and comply with development management standards for new dwellings.</p> <p><b>TKT 7 Sequential Development</b> Endeavour to promote the orderly and phased development of residential development in accordance with the principles of the sequential approach as set out in the Sustainable Residential Development in Urban Areas (Cities, Towns and Villages) Guidelines 2009 (or as updated). This shall include a positive presumption in favour of the sequential development of suitably serviced Residential Phase 1 lands emanating outwards from the town core and/or sequential extensions to the existing residential fabric of suitably serviced</p>	<p>MM1 Monitoring. The Council shall, in conjunction with the Regional Assembly and other sources as relevant, implement the monitoring programme as set out in the SEA Environmental Report and Statement. This will include the preparation of stand-alone SEA Monitoring Reports:</p> <p>1. To accompany the report required of the manager under section 15(2) of the Act, including information in relation to progress on, and the results of, monitoring the significant environmental effects of implementation of the Development Plan</p> <p>2. On the significant environmental effects of implementing the Plan, in advance of the beginning of the review of the next Plan.</p> <p>PRP 2 Corridor and Route Selection Process. Policy objectives relating to new roads and other transport infrastructure projects that are not already provided for by existing plans/ programmes or are not already permitted, are subject to the undertaking of feasibility assessment, taking into account planning need, environmental sensitivities as identified in the SEA Environmental Report and the policy objectives of the Plan relating to sustainable mobility. Where feasibility is established, a Corridor and Route Selection Process will be undertaken where appropriate, for relevant new road infrastructure in two stages: Stage 1 – Route Corridor Identification, Evaluation and Selection; and Stage 2 – Route Identification, Evaluation and Selection.</p> <p>WM 5 Construction and Environmental Management Plans. Construction Environment Management Plans shall be prepared in advance of the construction of relevant projects and implemented throughout. Such plans shall incorporate relevant mitigation measures which have been integrated into the Plan and any lower tier Environmental Impact Statement or Appropriate Assessment. CEMPs typically provide details of intended construction practice for the proposed development, including:</p> <p>a) location of the sites and materials compound(s) including area(s) identified for the storage of construction refuse;</p> <p>b) location of areas for construction site offices and staff facilities;</p> <p>c) details of site security fencing and hoardings;</p> <p>d) details of on-site car parking facilities for site workers during the course of construction;</p> <p>e) details of the timing and routing of construction traffic to and from the construction site and associated directional signage;</p> <p>f) measures to obviate queuing of construction traffic on the adjoining road network;</p> <p>g) measures to prevent the spillage or deposit of clay, rubble or other debris;</p> <p>h) alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public right of way during the course of site development works;</p> <p>i) details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels;</p> <p>j) containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained (such bunds shall be roofed to exclude rainwater);</p> <p>k) disposal of construction/demolition waste and details of how it is proposed to manage excavated soil, including compliance with 2006 Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects, Department of the Environment, Heritage and Local Government;</p> <p>l) a water and sediment management plan, providing for means to ensure that surface water runoff is controlled such that no silt or other pollutants enter local water courses or drains.</p> <p>WM 6 Waste Management. To continue to meet the duties under the Waste Management (certification of historic unlicensed waste disposal and recovery activity) Regulations 2008, including those in relation to the identification and registration of closed landfills.</p> <p>WM7 Recycling Infrastructure. To provide for the provision of recycling infrastructure throughout the county where it is considered necessary and support the provision of additional recycling infrastructure throughout the county.</p> <p>WM 8 Sustainable Waste Management Practices. Promote and facilitate communities to become involved in environmental awareness activities and community based recycling initiatives or environmental management initiatives that will lead to local sustainable waste management practices.</p> <p>WM 9 Separate Collection of Waste. Encourage and support the provision of separate collection of waste in accordance with the requirements of the Waste Management (Food Waste) Regulations 2009, the Waste Framework Directive Regulations, 2011 and other relevant legislation.</p> <p>MAS 1 Separation Distances from SEVESO Sites. To ensure that appropriate distances are maintained between any proposed development and any existing Seveso II establishment, in the interest of the health and safety of the occupiers of the proposed development.</p> <p>MAS 2 Soil Protection Measures. To require that, the siting of new establishments, or modification of existing establishments classified under the Seveso II Directive, and new development in the vicinity of existing establishments shall take into account the need to prevent major accidents involving hazardous substances and safeguard both the public and the environment.</p> <p>MAS 3 SEVESO III Sites. Take into account the provisions of the Major Accidents Directive, relating to the control of major accident hazards involving dangerous substances, and the recommendations of the Health and Safety Authority in the</p>

<sup>7</sup> Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP, the Northern and Western RSES, the Galway County Development Plan 2021-2027 and adjacent Development Plans and lower-tier land use plans.

<sup>8</sup> May be updated to take account of Proposed Material Alterations and any Further Modifications, in advance of Plan adoption.

Screening for SEA Report for Proposed Material Alterations

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	Mitigation Measures, including:	
				From Tuam Draft Local Area Plan: <sup>8</sup>	From Galway County Development Plan
				<p>Residential Phase 1 lands within the LAP boundary, subject to the principles of proper planning and sustainable development and the current County Development Plan.</p> <p><b>TKT 8 Town Centre</b></p> <p>1. It is a policy objective of Galway County Council that Tuam Town Centre will remain the primary focus for the location of new retail and commercial development. The Planning Authority will ensure that the location of future retail development is consistent with the key policy principles and order of priority as set out in the Guidelines for Planning Authorities: Retail Planning 2012 (and any updated/superseded document) and will require Retail Impact Assessments, including details of the sequential approach and Design Statements for retail developments in accordance with the Retail Planning Guidelines.</p> <p>2. This plan will also promote the development of commercial and complementary mixed uses, on suitable land that can provide a focal point for the provision of services to the town and opportunities for commercial enterprises, retail developments and employment creation.</p> <p>3. The plan will protect and enhance the vitality and viability of the town centre by ensuring that it remains the primary retail, commercial and mixed-use centre of Tuam and prohibit a proliferation of any individual use or other uses, which in the opinion of the Planning Authority do not contribute to the vitality and viability of the town centre.</p> <p><b>TKT 15 Tourism Development</b></p> <p>Encourage and assist in the development of the sustainable tourism potential within Tuam in a manner that respects, builds on, protects and enhances the cultural, built, architectural, archaeological and heritage significance of the town including natural heritage and biodiversity and its local amenities.</p> <p><b>TKT 24 Tuam Regeneration Masterplan</b></p> <p>It is a policy objective of Galway County Council to support and facilitate the implementation of the Tuam Regeneration Masterplan.</p> <p><b>TKT 57 Development Management Standards and Guidelines</b></p> <p>Ensure that the general development management standards and guidelines set out in the current <i>Galway County Development Plan 2022-2028</i>, or any subsequent variation or review shall apply as appropriate in the plan area. In addition, any specified development management guidelines set out within this Local Area Plan shall also be applied, as appropriate, to development proposals in the plan area.</p>	<p>assessment of all planning applications located within the consultation distance of such sites.</p> <p>TI 4 Tourism and Infrastructure Capacity. The potential environmental effects of a likely increase in tourists/tourism-related traffic volumes in particular locations/along particular routes shall be considered and mitigated as appropriate. Such a consideration should include potential impacts on existing infrastructure (including drinking water, wastewater, waste and transport) resulting from tourism proposals. Galway County Council will support Irish Water and Fáilte Ireland to ensure that tourism is serviced by adequate and appropriate water services infrastructure.</p> <p>MCH 2 Marine Based Environment. It is a policy objective of the Local Authority to protect and enhance where appropriate marine biodiversity in accordance with proper planning and sustainable development.</p> <p>MCC 1 Environmental Values of the Coast. Protect the amenity, character, visual, recreational, economic potential and environmental values of the coast. Ensure that natural coastal defences including sand dunes, beaches and coastal wetlands are not compromised by inappropriate development.</p> <p>MCC 2 Protection of Coastal Habitats. To strictly control the nature and pattern of development within coastal areas and ensure that it is designed and landscaped to the highest standards and sited appropriately so as not to detract from the visual amenity of the area.</p> <p>(a) Development shall be prohibited where the development poses a significant or potential threat to coastal habitats or features, and/or where the development is likely to result in altered patterns of erosion or deposition elsewhere along the coast;</p> <p>(b) To prohibit development along the coast outside existing towns and villages where such development is not adequately safeguarded over the lifetime of the development without the need to construct additional coastal defences.</p> <p>MCC 3 Protection of Coastal Area. It is a policy objective to protect the Coastal Area through the following measures:</p> <p>(a) Ensure that conservation works undertaken in coastal areas are in accordance with best practice and measures to protect the coast, the coastal edge and coastal habitats are supported;</p> <p>(b) Seek to prevent the unauthorised removal of sand and related beach material;</p> <p>(c) Protect, enhance and conserve beaches in the County from inappropriate development and seek to maintain the current status of the designated Blue Flag beaches and Green Coasts and to increase the number of beaches and coasts holding this status in the future;</p> <p>(d) Facilitate an Integrated Coastal Zone Management approach to ensure the conservation, management and protection of man-made and natural resources of the coastal zone;</p> <p>MCC 4 Integrated Framework Management Plan. Support the preparation of an Integrated Galway Bay Framework Management Plan by all relevant stakeholders to provide for the sustainable and integrated development of the Galway Bay Area in a co-ordinated manner</p> <p>GICT 3 Tourism Development within An Gaeltacht and Islands. (a) Encourage and facilitate the development of the tourism potential of the Gaeltacht and Islands in a manner that respects, builds on, protects and enhances the cultural, built and natural heritage and local amenities of the area;</p> <p>(b) Provide where feasible, and support the provision of tourism infrastructure and services including, walking, cycling and water-based infrastructure and short-term guest accommodation facilities throughout the Gaeltacht area in appropriate locations. Such infrastructure and services shall seek to manage any increase in visitor numbers in order to avoid significant effects including loss of habitat and disturbance and ensuring that any new projects, such as greenways, are developed at suitable locations.</p> <p>AD1 Sustainable Agriculture Practices. To facilitate the development of sustainable agricultural practices and facilities within the county, subject to complying with best practice guidance, normal planning and environmental criteria and the development management standards in Chapter 15 Development Management and Standards.</p> <p>AD3 Modernisation of Agriculture Buildings. To facilitate the modernisation of agriculture and to encourage best practice in the design and construction of new agricultural buildings and installations to protect the environment, natural and built heritage and residential amenity.</p>
<b>Biodiversity and Flora and Fauna</b>	<ul style="list-style-type: none"> <li>Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to the Plan area) that have</li> </ul>	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> <li>Loss of/damage to biodiversity in designated sites (including</li> </ul>	<ul style="list-style-type: none"> <li>Loss of an extent of non-protected habitats and species arising from the replacement of semi-natural land covers with artificial surfaces.</li> <li>Losses or damage</li> </ul>	<p><b>TKT 14 Open Space/ Recreation &amp; Amenity</b></p> <p>Promote the sustainable management, use and/or development, as appropriate, of open space/recreation and amenity lands. This will include:</p> <ul style="list-style-type: none"> <li>Development of open spaces, sport and recreational activities, in accordance with best practice and on appropriate lands with suitable levels of access to local community;</li> <li>Existing open space, sport and recreational</li> </ul>	<p>Also refer to detailed measures for settlements contained in Volume 2 of the Plan.</p> <p>LP 1 Lighting Schemes. To require that all developments shall ensure lighting schemes are designed so that excessive light spillage is minimised to ensure light pollution in the surrounding environment including residential amenity, wildlife and near public roads is limited. Such lighting schemes shall be submitted and agreed with the Planning Authority.</p> <p>LP 2 Lighting and Climate Action. To require the use of low energy LED (or equivalent) lighting in support of Climate Action.</p> <p>LP 3 Dark Skies. To encourage the maintenance of dark skies in rural areas and to limit light pollution in urban and rural areas.</p> <p>F2 Sustainable Development. To encourage the development of a well-managed sustainable forestry sector, which is compatible with the protection of the environment including the avoidance of likely significant effects on European sites (SACs and SPAs) and is planted, managed and harvested in accordance with the Forest Service Guidelines for Landscape,</p>

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	<p>relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond.</p> <ul style="list-style-type: none"> <li>Contribution towards the maintenance of existing green infrastructure and associated ecosystem services, listed species, ecological connectivity and non-designated habitats.</li> <li>Contribution towards protection and/or maintenance of biodiversity and flora and fauna by contributing towards the protection of natural capital including the environmental vectors of air, water and soil. Biodiversity and flora and fauna includes biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species (including birds and bats), listed/protected species, ecological connectivity and non-designated habitats (including terrestrial and aquatic habitats), and disturbance to biodiversity and flora and fauna – including terrestrial and aquatic biodiversity and flora and fauna.</li> <li>Sustains existing sustainable rural management practices – and the communities who support them – to ensure the continuation of long-established managed landscapes and the</li> </ul>	<p>European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna;</p> <ul style="list-style-type: none"> <li>Habitat loss, fragmentation and deterioration, including patch size and edge effects; and</li> <li>Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species such as birds (e.g. swifts) and bats.</li> </ul>	<p>to ecology (these would be in compliance with relevant legislation).</p>	<p>facilities should be retained unless it can be clearly demonstrated to the satisfaction of Galway County Council that these uses are surplus to requirements of the local community or are to be replaced by an equivalent or better provision;</p> <ul style="list-style-type: none"> <li>Appropriate management and use of any flood risk areas within the Open Space/Recreation and Amenity zone to avoid, reduce and/or mitigate, as appropriate the risk and potential impact of flooding.</li> <li>Appropriate management and use of any areas of high biodiversity value.</li> </ul> <p><b>TKT 15 Tourism Development</b> Encourage and assist in the development of the sustainable tourism potential within Tuam in a manner that respects, builds on, protects and enhances the cultural, built, architectural, archaeological and heritage significance of the town including natural heritage and biodiversity and its local amenities.</p> <p><b>TKT 40 European Sites</b> Protect European sites that form part of the European Sites network (including Special Protection Areas and Special Areas of Conservation) in accordance with the requirements in the EU Habitats Directive (92/43/EEC), EU Birds Directive (2009/147/EC), the Planning and Development (Amendment) Act 2010, the European Communities (Birds and Natural Habitats) Regulations 2011 (SI No. 477 of 2011) (and any subsequent amendments or updated legislation) and having due regard to the guidance in the Appropriate Assessment Guidelines 2010 (and any updated/superseding guidance). (refer to Draft Plan for more detail)</p> <p><b>TKT 56 Trees, Parkland/Woodland and Hedgerows</b></p> <ul style="list-style-type: none"> <li>Protect important trees, tree clusters and hedgerows in the plan area and ensure that development proposals take cognisance of significant trees/tree stands. Ensure that all planning schemes use suitable native variety of trees.</li> <li>Seek to retain natural boundaries, including stone walls, hedgerows and tree boundaries, wherever possible and replace with a boundary type similar to the existing boundary where removal is unavoidable. Discourage the felling of mature trees where possible. All works to be carried out in accordance with the provisions of the <i>Forestry Act, 1946</i> (as amended).</li> <li>Carry out a tree survey on important tree stands within the plan area by suitably qualified personnel.</li> </ul>	<p>Forest Harvesting and Environmental, Archaeology, Biodiversity and Water Quality.</p> <p>F3 Native Woodlands. To ensure that existing native woodlands are protected and enhanced and, where appropriate, encourage the conversion of coniferous forest to native woodlands with a focus on opportunities for habitat linkage and wider eco-services.</p> <p>F4 Forestry Development. To encourage forestry and forestry related development, as a means of diversifying from traditional agriculture activity with a preference for native species.</p> <p>F5 Deforestation. To promote the avoidance of deforestation or commercial afforestation within European sites unless directly relating to the management of the site for its qualifying interests.</p> <p>MEQ2 "Protection of the Environment. The Council shall require the following in relation to the management of authorised aggregate extraction</p> <ul style="list-style-type: none"> <li>All quarries shall comply with the requirements of the EU Habitats Directive, the Planning and Development (Amendment) Act 2010 and by the guidance as contained within the DoEHLG Quarries and Ancillary Facilities Guidelines 2004, the EPA Guidelines 'Environmental Management in the Extractive Industry: Non Scheduled Minerals 2006 (including any updated/superseding documents) and to DM Standard 21 of this Development Plan;</li> <li>Require development proposals on or in the proximity of quarry sites, to carry out appropriate investigations into the nature and extent of old quarries (where applicable). Such proposals shall also investigate the nature and extent of soil and groundwater contamination and the risks associated with site development works together with appropriate mitigation;</li> <li>Require Development Proposals to assess the potential impact of extraction in areas where geo-morphological interest, groundwater and important aquifers, important archaeological features and Natural Heritage Areas are located;</li> <li>Have regard to the Landscape Character Assessment of the County and its recommendations;</li> <li>Ensure that any quarry activity has minimal adverse impact on the road network and that the full cost of road improvements, including during operations and at time of closure, which are necessary to facilitate those industries are borne by the industry itself.</li> <li>Ensure that the extraction of minerals or aggregates does not adversely impact on residential or environmental amenity;</li> <li>Protect all known un-worked deposits from development that might limit their scope for extraction."</li> </ul> <p>NHB 1 Natural Heritage and Biodiversity of Designated Sites, Habitats and Species. Protect and where possible enhance the natural heritage sites designated under EU Legislation and National Legislation (Habitats Directive, Birds Directive, European Communities (Birds and Natural Habitats) Regulations 2011 and Wildlife Acts) and extend to any additions or alterations to sites that may occur during the lifetime of this plan. Protect and, where possible, enhance the plant and animal species and their habitats that have been identified under European legislation (Habitats and Birds Directive) and protected under national Legislation (European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011), Wildlife Acts 1976-2010 and the Flora Protection Order (SI 94 of 1999). Support the protection, conservation and enhancement of natural heritage and biodiversity, including the protection of the integrity of European sites, that form part of the Natura 2000 network, the protection of Natural Heritage Areas, proposed Natural Heritage Areas, Ramsar Sites, Nature Reserves, Wild Fowl Sanctuaries (and other designated sites including any future designations) and the promotion of the development of a green/ ecological network."</p> <p>NHB 2 European Sites and Appropriate Assessment. To implement Article 6 of the Habitats Directive and to ensure that Appropriate Assessment is carried out in relation to works, plans and projects likely to impact on European sites (SACs and SPAs), whether directly or indirectly or in combination with any other plan(s) or project(s). All assessments must be in compliance with the European Communities (Birds and Natural Habitats) Regulations 2011. All such projects and plans will also be required to comply with statutory Environmental Impact Assessment requirements where relevant.</p> <p>NHB 3 Protection of European Sites. No plans, programmes, or projects etc. giving rise to significant cumulative, direct, indirect or secondary impacts on European sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either individually or in combination with other plans, programmes, etc. or projects.*</p> <p>NHB 4 Ecological Appraisal of Biodiversity. Ensure, where appropriate, the protection and conservation of areas, sites, species and ecological/networks of biodiversity value outside designated sites. Where appropriate require an ecological appraisal, for development not directly connected with or necessary to the management of European Sites, or a proposed European Site and which are likely to have significant effects on that site either individually or cumulatively.</p> <p>NHB 5 Ecological Connectivity and Corridors. Support the protection and enhancement of biodiversity and ecological connectivity in non-designated sites, including woodlands, trees, hedgerows, semi-natural grasslands, rivers, streams, natural springs, wetlands, stonewalls, geological and geo-morphological systems, other landscape features and associated wildlife areas where these form part of the ecological network and/or may be considered as ecological corridors in the context of Article 10 of the Habitats Directive.</p> <p>NHB 6 Implementation of Plans and Strategies. Support the implementation of any relevant recommendations contained in the National Heritage Plan 2030, the National Biodiversity Plan, the All Ireland Pollinator Plan and the National Peatlands Strategy and any such plans and strategies during the lifetime of this plan.</p> <p>NHB 7 Mitigation Measures. Require mitigating measures in certain cases where it is evident that biodiversity is likely to be affected. These measures may, in association with other specified requirements, include establishment of wildlife areas/corridors/parks, hedgerow, tree planting, wildflower meadows/marshes and other areas. With regard to residential development, in certain cases, these measures may be carried out in conjunction with the provision of open space and/or play areas.</p>

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	flora and fauna that they contain.				<p>NHB 8 Increased Awareness of the County's Biodiversity and Natural Heritage. Facilitate increased awareness of the County's biodiversity and natural heritage through the provision of information to landowners and the community generally, in cooperation with statutory and other partners.</p> <p>NHB 9 Protection of Bats and Bats Habitats. Seek to protect bats and their roosts, their feeding areas, flight paths and commuting routes. Ensure that development proposals in areas which are potentially important for bats, including areas of woodland, linear features such as hedgerows, stone walls, watercourses and associated riparian vegetation which may provide migratory/foraging uses shall be subject to suitable assessment for potential impacts on bats. This will include an assessment of the cumulative loss of habitat or the impact on bat populations and activity in the area and may include a specific bat survey. Assessments shall be carried out by a suitably qualified professional and where development is likely to result in significant adverse effects on bat populations or activity in the area, development will be prohibited or require mitigation and/or compensatory measures, as appropriate. The impact of lighting on bats and their roosts and the lighting up of objects of cultural heritage must be adequately assessed in relation to new developments and the upgrading of existing lighting systems.</p> <p>NHB 10 NPWS &amp; Integrated Management Plans. Article 6(1) of the Habitats Directive requires that Member States establish the necessary conservation measures for European sites involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans. The NPWS's current priority is to identify site specific conservation objectives; management plans may be considered after this is done. Where Integrated Management Plans are being prepared by the NPWS for European sites (or parts thereof), the NPWS shall be engaged with in order to ensure that plans are fully integrated with the Plan and other plans and programmes, with the intention that such plans are practical, achievable and sustainable and have regard to all relevant ecological, cultural, social and economic considerations, including those of local communities.</p> <p>NHB 11 Increases in Visitor Numbers to Semi-Natural Areas, Visitor and Habitat Management. Seek to manage any increase in visitor numbers in order to avoid significant effects including loss of habitat and disturbance, including ensuring that any new projects, such as greenways, are a suitable distance from ecological sensitivities, such as riparian zones. Where relevant, the Planning Authority and those receiving permission for development under the Plan shall seek to manage any increase in visitor numbers and/or any change in visitor behaviour in order to avoid significant effects, including loss of habitat and disturbance. Management measures may include ensuring that new projects and activities are a suitable distance from ecological sensitivities. Visitor/Habitat Management Plans will be required for proposed projects as relevant and appropriate.</p> <p>WTWF 1 Wetland Sites Protect and conserve the ecological and biodiversity heritage of the wetland sites in the County. Ensure that an appropriate level of assessment is completed in relation to wetland habitats that are subject to proposals which would involve drainage or reclamation that might destroy, fragment or degrade any wetland in the county. This includes lakes and ponds, turloughs, watercourses, springs and swamps, marshes, fens, heath, peatlands, some woodlands as well as some coastal and marine habitats. Protect Ramsar sites under The Convention on Wetlands of International Importance (especially as Waterfowl Habitat).</p> <p>P 1 Protection of Peatlands. Ensure that peatland areas which are designated (or proposed for designation) as NHAs, SACs or SPAs are conserved for their ecological, climate regulation, education and culture, archaeological potential including any ancient walkways (toghers) through bogs.</p> <p>P 2 Best Practice in Peatland conservation and management. Work in partnership with relevant stakeholders on all suitable peatland sites to demonstrate best practice in sustainable peatland conservation, management and restoration techniques and to promote their heritage and educational value subject to Ecological Impact Assessment and Appropriate Assessment Screening, as appropriate.</p> <p>P3 Framework Plans. Seek to support relevant agencies such as Bord na Mona in advancing rehabilitation works for the peatlands and related infrastructure, to provide for the future sustainable and environmentally sensitive use of peatlands sites including for amenity purposes.</p> <p>IS 1 Control of Invasive and Alien Invasive Species. It is a policy objective of the Planning Authority to support measures for the prevention and eradication of invasive species.</p> <p>IS 2 Invasive Species Management Plan. Ensure that proposals for development do not lead to the spread or introduction of invasive species. If developments are proposed on sites where invasive species are currently or were previously present, an invasive species management plan will be required. A landscaping plan will be required for developments near water bodies and such plans must not include alien invasive species.</p> <p>PO 1 Delivery of All Ireland Pollinator Plan To facilitate the delivery of the All Ireland Pollinator Plan where possible. In the interest of preserving and enhancing biodiversity and working in conjunction with the All Ireland Pollinator Plan, it shall be the policy objective of the Planning Authority to ensure that at least 20% of the green space on all housing estates being built will have to be dedicated, developed and maintained as a pollinator zone. The area dedicated can be confined to one single lot or various lots around the site providing that the total area of the lots meets the minimum requirement of 20%. The pollinator zones should be planted with a mix of pollinator friendly-bulbs, self-seeding annuals and biennials, perennials, shrubs, trees, fruit trees and fruit bushes and the majority of this planting should consist of native plants.</p> <p>TWHS 1 Trees, Hedgerows, Natural Boundaries and Stone Walls Protect and seek to retain important trees, tree clusters and tree boundaries, ancient woodland, natural boundaries including stone walls, existing hedgerows particularly species rich roadside and townland boundary hedgerows, where possible and replace with a boundary type similar to the existing boundary. Ensure that new development proposals take cognisance of significant trees/tree stands and that all planting schemes developed are suitable for the specific site and use</p>

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					<p>suitable native variety of trees of Irish provenance and hedgerows of native species. Seek Tree Management Plans to ensure that trees are adequately protected during development and incorporated into the design of new developments.</p> <p>TWHS 2 Planting of Trees and Woodlands Encourage and promote in co-operation with Coillte and the Department of Agriculture, Food and the Marine and other organisations, the planting of trees and woodlands, as an important means of contributing to its objective of sustaining, protecting and enhancing the County's biodiversity, natural resources, amenity, landscape and developing tourism product. Encourage community woodlands in urban/urban fringe areas utilising funding available through schemes such as the NeighbourWood and Native Woodland Schemes.</p> <p>TWHS 3 Protection of Forestry Protect all substantial areas of deciduous forest, other than areas of commercial forestry. Proposals for development in these areas should seek to interact with the landscape character of the forested areas and its limits while also enhancing the forested areas so as to increase biodiversity value.</p> <p>BMSP 8 Jetty/Marina Development. Support the preparation of a feasibility study for a jetty/marina development in the vicinity of Bearna Pier and any necessary marine/foreshore works to facilitate public access to and use of the area around the pier, such as breakwaters. This feasibility study shall take account of the requirements to comply with the European Habitats Directive</p> <p>CT 2 Water Sports To encourage the development of coastal tourism in areas such as water-sports and water-related activities and events subject to normal planning and environmental criteria</p> <p>CT3 Tourism Development To support proposals for tourism development in coastal areas where it can be demonstrated that there will be no negative impacts on the amenities of the area, the integrity of the natural environment or the economic value of the County's coastline and beaches.</p> <p>CT 4 Blue Flags To continue to work with An Taisce, the local community and other relevant stakeholders to retain and increase the number of Blue Flag awards in the County.</p> <p>CT 5 Tourism Products To support the protection and enhancement of our islands, coastline and waterways as tourism products and attractions, subject to community and environmental carrying capacity.</p> <p>HT 3 Sustainable Tourism Industry To support the development of a more sustainable tourism industry which minimises adverse impacts on local communities, the built heritage, landscapes, habitats and species; leaving them undiminished as a resource for future generations, while supporting social and economic prosperity.</p> <p>GICT 3 Tourism Development within An Ghaeltacht and Islands (a) Encourage and facilitate the development of the tourism potential of the Gaeltacht and Islands in a manner that respects, builds on, protects and enhances the cultural, built and natural heritage and local amenities of the area; (b) Provide where feasible and support the provision of tourism infrastructure and services including, walking, cycling and water-based infrastructure and short-term guest accommodation facilities throughout the Gaeltacht area in appropriate locations. Such infrastructure and services shall seek to manage any increase in visitor numbers in order to avoid significant effects including loss of habitat and disturbance and ensuring that any new projects, such as greenways are developed at suitable locations.</p> <p>RE4 Solar Energy Developments. Promote and facilitate solar farm developments in suitable locations, having regard to areas of the County designated for this purpose in the Local Authority Renewable Energy Strategy. The Planning Authority will assess any planning application proposals for solar energy production having due regard to the Habitats Directive and to the detailed policy objectives and Development Standards set out in the Local Authority Renewable Energy Strategy.</p>
<p><b>Population and Human Health</b></p>	<ul style="list-style-type: none"> <li>Promotion of economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management.</li> <li>Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands</li> </ul>	<ul style="list-style-type: none"> <li>Potential adverse effects arising from flood events.</li> <li>Potential interactions if effects arising from environmental vectors.</li> </ul>	<ul style="list-style-type: none"> <li>Potential interactions with residual effects on environmental vectors – please refer to residual adverse effects under “Soil”, “Water” and “Air and Climatic Factors” below.</li> </ul>	<p>Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors.</p> <p><b>Strategic Aim</b> Ensure sustainable settlement patterns, including the provision of necessary planning framework to accommodate educational, community, leisure and recreational facilities to satisfactorily complement the population increase.</p>	<p>Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors.</p> <p>AQ 1 Ambient Air Quality To promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU Ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/50/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards as set out in the Air Quality Standards Regulations 2011 (SI No. 180 of 2011) (or any updated/superseding documents).</p> <p>AQ 2 Assessment of Air Quality To require developments which would have the potential to have adverse impacts on air quality to carry out assessments of the impact of the development on air quality.</p> <p>AQ 3 Air Quality Mitigation Measures To require the use of appropriate mitigation measures such as dust dampeners to minimise the potential impacts of developments on air quality.</p> <p>AQ 4 Air Purification Galway County Council shall encourage landscaping and deciduous tree planting in an environmentally sensitive manner within towns and villages as a means of air purification, the filtering of suspended particles and the improvement of their micro-climate.</p> <p>AQ 5 Radon Galway County Council shall have regard, to the specific guidance on radon prevention measures for new homes as</p>

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	<p>(including those within and adjacent to the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the Plan area and beyond</p> <ul style="list-style-type: none"> <li>Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond.</li> <li>Contributes towards protection of human health as a result of contributing towards the protection of natural capital including environmental vectors, including air and water.</li> </ul>				<p>contained within the existing Building Regulations (including any updated/superseding Regulations that may be published within the lifetime of this Development Plan).</p> <p>NP 1 Galway County Council Noise Action Plan 2019-2023</p> <p>To implement the Galway County Council Noise Action Plan 2019-2023 (and any subsequent Plan) in order to avoid, prevent and reduce the harmful effects, including annoyance, due to environmental noise exposure.</p> <p>NP 2 Developments within Noise Maps (Noise Action Plan 2019-2023)</p> <p>To require that where new developments are proposed within the noise limits of the noise maps for the designated sections of roads in the County, appropriate mitigation measures are undertaken so as to prevent harmful effects from environmental noise.</p> <p>NP3 Noise Impact Assessments</p> <p>To require an assessment of impact of the development on noise levels, having regard to the provisions of the Environmental Protection Agency Acts 1992 and 2003 and the EPA Noise Regulations 1994 when assessing planning application.</p> <p>NP 4 Noise Pollution and Regulation</p> <p>Restrict development proposals causing noise pollution in excess of best practice standards and regulate and control activities likely to give rise to excessive noise, other than those activities which are regulated by the EPA</p> <p>NP 5 Noise Mitigation Measures</p> <p>Require activities likely to give rise to excessive noise to install noise mitigation measures and monitors. The provision of a noise audit may be required where appropriate.</p> <p>SQ 3 Soil Protection, Contamination and Remediation</p> <p>Adequate and appropriate investigations shall be carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work, where brownfield development is proposed. All undeveloped, contaminated sites shall be remediated to internationally accepted standards prior to redevelopment. All applications shall be accompanied by a report from a qualified, expert consultant remediation incorporating international best practice and expertise on innovative ecological restoration techniques including specialist planting and green initiatives that create aesthetically improved sites, healthy environments and contribute to the provision of new green open spaces as integral parts of newly created areas. Treatment/management of any contaminated material shall comply as appropriate with the Waste Management Act 1996 (waste licence, waste facility permit), as amended, and under the EPA Act 1992 (Industrial Emissions licensing, in particular the First Schedule, Class 11 Waste), as amended. These measures will ensure that contaminated material will be managed in a manner that removes any risk to human health and ensures that the end use will be compatible with any risk.</p> <p>MAS 1 Separation Distances from SEVESO Sites</p> <p>To ensure that appropriate distances are maintained between any proposed development and any existing Seveso II establishment, in the interest of the health and safety of the occupiers of the proposed development.</p> <p>MAS 2 Soil Protection Measures</p> <p>To require that, the siting of new establishments, or modification of existing establishments classified under the Seveso II Directive, and new development in the vicinity of existing establishments shall take into account the need to prevent major accidents involving hazardous substances and safeguard both the public and the environment.</p> <p>MAS 3 SEVESO III Sites</p> <p>Take into account the provisions of the Major Accidents Directive, relating to the control of major accident hazards involving dangerous substances, and the recommendations of the Health and Safety Authority in the assessment of all planning applications located within the consultation distance of such sites.</p>
<b>Soil</b>	<ul style="list-style-type: none"> <li>Contribution towards the protection of soils (including those used for agriculture) and designated sites of geological heritage by facilitating development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-</li> </ul>	<ul style="list-style-type: none"> <li>Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands.</li> <li>Potential for riverbank erosion.</li> </ul>	<ul style="list-style-type: none"> <li>Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces.</li> <li>Riverbank erosion will continue to occur naturally over time and is likely to be enhanced by climate change.</li> </ul>	Also refer to measures under other environmental components including Water.	<p>Also refer to measures under other environmental components including Water.</p> <p>SQ 1 Soil Impact Assessments</p> <p>Ensure good soil quality throughout the county by requiring developments of a certain nature (as specified in the relevant environmental legislation) to carry out assessments of the impact of the development on soil quality.</p> <p>SQ 2 Soil Protection Measures</p> <p>To ensure that adequate soil protection measures are undertaken where appropriate.</p> <p>SQ 3 Soil Protection, Contamination and Remediation</p> <p>Adequate and appropriate investigations shall be carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work, where brownfield development is proposed. All undeveloped, contaminated sites shall be remediated to internationally accepted standards prior to redevelopment. All applications shall be accompanied by a report from a qualified, expert consultant remediation incorporating international best practice and expertise on innovative ecological restoration techniques including specialist planting and green initiatives that create aesthetically improved sites, healthy environments and contribute to the provision of new green open spaces as integral parts of newly created areas. Treatment/management of any contaminated material shall comply as appropriate with the Waste Management Act 1996 (waste licence, waste facility permit), as amended, and under the EPA Act 1992 (Industrial Emissions licensing, in particular the First Schedule, Class 11 Waste), as amended. These measures will ensure that contaminated material will be managed in a manner that removes any risk to human health and ensures that the end use will be compatible with any risk.</p> <p>PG 1 Geological and Geo-Morphological Systems</p> <p>Protect and conserve geological and geo-morphological systems, county geological heritage sites and features from inappropriate development that would detract from their heritage value and interpretation and ensure that any plan or</p>

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	<p>serviced lands elsewhere in the Plan area and beyond.</p> <ul style="list-style-type: none"> <li>Contribution towards the protection of the environment from contamination the highest standards of remediation, and where appropriate to consultations with the EPA and other relevant bodies, will be required to resolve any instances of environmental pollution created by contaminated land.</li> </ul>				<p>project affecting karst formations, eskers or other important geological and geo-morphological systems are adequately assessed with regard to their potential geophysical, hydrological or ecological impacts on the environment.</p> <p>PG 2 Geological Heritage of County Galway Support the implementation of recommendations made in the Geological Heritage of County Galway – An Audit of County Geological Sites in County Galway (2019). Consult with the Geological Survey of Ireland when undertaking, approving or authorising developments which are likely to impact on County Geological Sites or involve significant ground excavations including sites identified as part of the Geological Heritage of County Galway – An Audit of County Geological Sites in County Galway (2019).</p> <p>PG 3 Promotion of and Access to Geological Sites Encourage greater awareness of the geological heritage sites of the county and promote, where appropriate, public access to geological and geomorphological sites and avoid inappropriate development.</p> <p>ESK 1 Protection of Eskers Systems Protect and conserve the landscape, natural heritage and biodiversity value of esker systems in the county. Assess applications for quarrying and other proposed developments with reference to their status or relative importance, for example, amenity, landscape and scientific value in the context of the overall esker system.</p> <p>ESK 2 Esker Areas Have regard to the Landscape Character Assessment of the County of Galway and its recommendations relating to the Esker areas and any other subsequent relevant reports/ data.</p> <p>UGG 1 UNESCO Global Geopark Status. To continue to work in partnership with all relevant stakeholders to facilitate and support the ongoing work of the Joyce Country and Western Lakes aspiring Geopark and its application for full UNESCO Global Geopark status. Support initiatives in relation to the Burren Lowlands, The Burren and Cliffs of Moher UNESCO Global Geopark that relate to the county.</p>
<b>Water</b>	<ul style="list-style-type: none"> <li>Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-served lands elsewhere in the Plan area and beyond.</li> <li>Contributions towards the protection of water resources including the status of surface and groundwaters and water-based designations.</li> <li>Contribution towards flood risk management and appropriate drainage.</li> </ul>	<ul style="list-style-type: none"> <li>Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology.</li> <li>Increase in flood risk and associated effects associated with flood events.</li> </ul>	<ul style="list-style-type: none"> <li>Any increased loadings as a result of development to comply with the River Basin Management Plan.</li> <li>Flood related risks remain due to uncertainty with regard to extreme weather events – however such risks will be mitigated by measures that have been integrated into the Plan.</li> </ul>	<p>Also refer to measures under other environmental components including Soil and Material Assets.</p> <p><b>TKT 14 Open Space/ Recreation &amp; Amenity</b> Promote the sustainable management, use and/or development, as appropriate, of open space/recreation and amenity lands. This will include: - Development of open spaces, sport and recreational activities, in accordance with best practice and on appropriate lands with suitable levels of access to local community; - Existing open space, sport and recreational facilities should be retained unless it can be clearly demonstrated to the satisfaction of Galway County Council that these uses are surplus to requirements of the local community or are to be replaced by an equivalent or better provision; - Appropriate management and use of any flood risk areas within the Open Space/Recreation and Amenity zone to avoid, reduce and/or mitigate, as appropriate the risk and potential impact of flooding. - Appropriate management and use of any areas of high biodiversity value.</p> <p><b>TKT 41 Constrained Land Use</b> To facilitate the appropriate management and sustainable use of Flood Risk within the zoning plan area. This zoning indicates where the Plan Making Justification Test may need to be applied and as such can limit new development, while recognising that existing development uses within these zones may require small scale development, as outlined below, over the life of the Local Area Plan, which would contribute towards the compact and sustainable urban development of the town. The underlying zoning or the existing permitted uses may be deemed to be acceptable in principle, however within Flood Zone A/B development is typically limited to extensions, renovations and change of use. Infill highly vulnerable development and demolition and reconstruction can only take place in Flood Zone C. Less vulnerable</p>	<p>Also refer to measures under other environmental components including Soil and Material Assets.</p> <p>RH 11 Waste Water Treatment provision. Provide for sustainable rural housing in the county in accordance with the EPA Code of Practice: Wastewater Treatment Systems for Single Houses (2009).</p> <p>AD4 Agriculture Waste. To ensure agricultural waste is managed and disposed of in a safe, efficient and sustainable manner having regard to the environment and in full compliance with the European Communities Good Agricultural Practice for the Protection of Waters Regulations (2014) and relevant best practice guidelines.</p> <p>WS 1 Enhancement of Water Supply Infrastructure Liaise with Irish Water, to maximise the potential of existing capacity and to facilitate the timely delivery of new water services infrastructure, to facilitate existing and future growth.</p> <p>WS 2 Protection of Water Supplies Collaborate with Irish Water and the Group Water Federation Scheme to protect, conserve and enhance all existing and potential water resources in the County to ensure compliance with the European Union (Drinking Water) Regulations 2014 (as amended) and compliance of water supplies with the parameters identified in these Regulations.</p> <p>WS 3 River Basin Management Plan for Ireland 2018-2021 Support the implementation of the relevant recommendations and measures as outlined in the relevant River Basin Management Plan 2018-2021, and associated Programme of Measures, or any such plan that may supersede same during the lifetime of this plan.</p> <p>WS 4 Requirement to Liaise with Irish Water – Water Supply Ensure that new developments are adequately serviced with a suitable quantity and quality of drinking water supply and require that all new developments intending to connect to a public water supply liaise with Irish Water with regard to the water (and wastewater) infrastructure required.</p> <p>WS 5 Private Water Supply Support the provision of a private water supply in instances where there is no public water supply or where the existing supply does not have sufficient capacity to serve the proposed development. This will only be considered where it can be demonstrated that the proposed water supply meets the standards set out in the EU and national legislation and guidance including adherence to Article 6 of the EU Habitats Directive, and would not be prejudicial to public health or would not significantly impact negatively on the source or yield of an existing supply."</p> <p>WS 6 Water Framework Directive Support the preparation of Drinking Water Safety Plans and Source Protection Plans to protect sources of public water supply, in accordance with the requirements of the Water Framework Directive.</p> <p>WS 7 Water Quality Require that new development proposals would ensure that there would not be an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands.</p> <p>WS 8 Proliferation of Septic Tanks Encourage the use of high standard treatment plants to minimise the risk of groundwater pollution.</p> <p>CWS 1 Water Conservation with all Developments To ensure all developments incorporate water conservation measures such as rainwater harvesting to minimise wastage of water supply.</p> <p>CWS 2 Water Mains Rehabilitation</p>

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				<p>development in Flood Zone B will also need to be considered carefully. These aspects are assessed on a case by case basis under the application of the Plan Making Justification Test and as supported by specific objectives in the written statement.</p> <p>Where the Justification Test is passed there is also a requirement for a detailed Flood Risk Assessment at Development Management stage. The FRA should be carried out in accordance with The Planning System and Flood Risk Assessment Guidelines and Circular PL 2/2014 (or as updated), which shall assess the risks of flooding associated with the proposed development.</p> <p>Specifications for developments in flood vulnerable areas set out in this plan shall be complied with as appropriate.</p> <p><b>TKT 42 Flood Risk Management Guidelines</b> It is a policy objective of Galway County Council to support, in co-operation with the OPW, the implementation of the EU Flood Risk Direction (2007/60/EC), the Flood Risk Regulations (SI No. 122 of 2010) and the DEHLG/OPW publication The Planning System and Flood Risk Management Guidelines (2009) (and any updated/superseding legislation or policy guidance) and Department Circular PL2/2014 or updated/superseding version.</p> <p><b>TKT 43 Flood Risk Management and Assessment</b> It is a policy objective of the Council to comply with the requirements of the DoEHLG/OPW <i>The Planning System and Flood Risk Management Guidelines for Planning Authorities</i> and its accompanying Technical Appendices Document 2009 (including any updated/superseding documents). This will include the following: (a) Avoid, reduce and/or mitigate, as appropriate in accordance with the Guidelines; (b) Development proposals in areas where there is an identified or potential risk of flooding or that could give rise to a risk of flooding elsewhere will be required to carry out a Site Specific Flood Risk Assessment, and Justification Test where appropriate, in accordance with the provisions of the Planning System and Flood Risk Management Guidelines 2009 (or any superseding document); Any flood risk assessment should include an assessment of the potential impacts of climate change, such as an increase in the extent or probability of flooding, and any associated measures necessary to address these impacts; (c) Development that would be subject to an inappropriate risk of flooding or that would cause or exacerbate such a risk at other locations shall not normally be permitted; (d) Galway County Council shall work with other bodies and organisations, as appropriate, to help protect critical infrastructure, including water and wastewater, within the County from risk of flooding.</p> <p><b>TKT 44 Principles of Flood Risk Management Guidelines</b> The Council shall implement the key principles of flood risk management set out in the Flood Risk</p>	<p>To assist Irish Water in their commitment to water conservation and support efforts to tackle leakage through find and fix (active leakage control) and water mains rehabilitation. CWS 3 Promotion of Water Conservation To support Irish Water in promoting public awareness and involvement in water conservation measures by households, business and industry. WW 1 Enhancement of Wastewater Supply Infrastructure Work in conjunction with Irish Water to maximise the potential of existing capacity and to facilitate the delivery of new wastewater services infrastructure, to facilitate future growth in the county. WW 2 Delivery of Wastewater Infrastructure Liaise and co-operate with Irish Water in the implementation and delivery of the Water Services Strategic Plan (2015) and the Irish Water Investment Plan 2020-2024 and other relevant investment works programmes of Irish Water in the delivery of infrastructure within the county. WW 3 The Greater Galway Area Strategic Drainage Study To seek to accelerate and support the delivery of the Greater Galway Area Strategic Drainage Study and the associated solutions as identified in the RSES as an essential infrastructure requirement in conjunction with the Department of the Environment, Climate and Communications, Irish Water and Galway City Council. WW 4 Requirement to Liaise with Irish Water – Wastewater Ensure that new developments will only be permitted which are adequately serviced with sufficient capacity for appropriate collection, treatment and disposal (in compliance with the Water Framework Directive and River Basin Management Plan) to the public sewer unless provided for otherwise by the plan. Developers shall liaise with Irish Water with regard to the wastewater (and water) infrastructure to ensure sufficient capacity is available prior to the submission of a planning application. " WW 5 Serviced Sites Support the servicing of small towns and villages including initiatives to provide an alternative to one-off housing in the countryside, in accordance with the National Planning Framework. WW 6 Private Wastewater Treatment Plants Ensure that private wastewater treatment plants, where permitted, are operated in compliance with Environmental Protection Agency (EPA) Code of Practice for Domestic Waste Water Treatment System 2021 (Population Equivalent ≤10). WW 7 Sustainable Drainage Systems To require the use of Sustainable Drainage Systems to minimise and limit the extent of hard surfacing and paving and require the use of SuDS measures to be incorporated in all new development (including extensions to existing developments). All development proposals shall be accompanied by a comprehensive SuDS assessment including run-off quantity, run off quality and impacts on habitat and water quality. WW 8 Storm Water Infrastructure To support the improvement of storm water infrastructure and to increase the use of sustainable drainage and reduce the risk of flooding in urban environments. WW 9 Integrated Wetland Wastewater Treatment Systems Galway County Council will encourage the use of integrated wetland wastewater treatment systems for both one off and multi-unit housing developments that accord with the prevailing regulations and standards including the relevant EPA Code of Practice. WW10 Surface Water Drainage To require all new developments to provide a separate foul and surface water drainage system and to incorporate sustainable urban drainage systems where appropriate in new development and the public realm. WW11 Protection of Irish Water Collection Systems To prohibit the discharge of additional surface water to combined (foul and surface water) sewers in order to maximise the capacity of existing collection systems for foul water. AF 1 Marine Aquaculture To support the sustainable development of marine aquaculture and fishing industries, so as to maximise their contribution to jobs and growth in coastal communities where it can be demonstrated that the development will not have significant adverse effects on the environment. SF 1 Shellfish Waters Directive To continue to work with local communities, relevant stakeholders and with the Department of Agriculture, Food and Marine to ensure the proper and successful implementation of the Shellfish Waters Directive along County Galway's coastline. SF 2 Protection of Shellfish Waters To seek to protect the quality of designated shellfish waters off the County Galway coast. WR 1 Water Resources Protect the water resources in the plan area, including rivers, streams, lakes, wetlands, springs, turloughs, surface water and groundwater quality, as well as surface waters, aquatic and wetland habitats and freshwater and water dependant species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC), the European Union (Water Policy) Regulations 2003 (as amended), the River Basin District Management Plan 2018 – 2021 and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same) and also have regard to the Freshwater Pearl Mussel Sub-Basin Management Plans. WR 2 River Basin Management Plans It is a policy objective of the Planning Authority to implement the programme of measures developed by the River Basin</p>



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				<p>Management Guidelines as follows:</p> <p>(a) Avoid development that will be at risk of flooding or that will increase the flooding risk elsewhere, where possible;</p> <p>(b) Substitute less vulnerable uses, where avoidance is not possible; and,</p> <p>(c) Mitigate and manage the risk, where avoidance and substitution are not possible.</p> <p>Development should only be permitted in areas at risk of flooding when there are no alternative reasonable sites available in areas at lower risk that also meet the objectives of proper planning and sustainable development. Vulnerable development in areas which have the highest flood risk should be avoided and/or only considered in exceptional circumstances (through a prescribed Justification Test) if adequate land or sites are not available in areas which have lower flood risk.</p> <p><b>TKT 45 Connections to the Public Sewer &amp; Public Water Mains</b> Development shall connect to the public sewer and public water mains, subject to a connection agreement with Irish Water, in order to protect all waters in the plan area, and also to consolidate the urban structure and to control ribbon development along approach roads into Tuam.</p> <p><b>TKT 46 Surface Water Drainage and Sustainable Drainage Systems (SuDs)</b> Maintain and enhance, as appropriate, the existing surface water drainage system in Tuam. Ensure that new developments are adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems in all new developments. Surface water runoff from development sites will be limited to pre-development levels and planning applications for new developments will be required to provide details of surface water drainage and Sustainable Drainage Systems proposals. Refer also to Section 3.5 of the accompanying SFRA, "Sustainable Urban Drainage Systems and Surface Water Guidance and Strategy".</p> <p><b>TKT 47 Protection of Waterbodies and Watercourses</b> Protect waterbodies and watercourses within the County from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in the riverine, wetland and coastal areas as appropriate. To contribute towards protection and improvement of the status of surface and ground waters in accordance with the Water Framework Directive. Applications for development under the Plan must demonstrate that the proposal for development would not adversely affect a water body's ability to meet its objectives under the Water Framework Directive, individually as a result of the proposed development or cumulatively, in combination with other developments.</p> <p><b>TKT 48 Flood Risk Assessment for Planning Applications and CFRAMS</b> Protect Flood Zone A and Flood Zone B from inappropriate development and direct</p>	<p>District Projects under the Water Framework Directive in relation to: Surface and groundwater interaction, Dangerous substances, Hydro-morphology, Forestry, On site wastewater treatment systems, Municipal and industrial discharges, Urban pressures, Abstractions.</p> <p>WTWF 1 Wetland Sites Protect and conserve the ecological and biodiversity heritage of the wetland sites in the County. Ensure that an appropriate level of assessment is completed in relation to wetland habitats that are subject to proposals which would involve drainage or reclamation that might destroy, fragment or degrade any wetland in the county. This includes lakes and ponds, turloughs, watercourses, springs and swamps, marshes, fens, heath, peatlands, some woodlands as well as some coastal and marine habitats. Protect Ramsar sites under The Convention on Wetlands of International Importance (especially as Waterfowl Habitat).</p> <p>IW 1 Inland Waterways (a) Protect and conserve the quality, character and features of inland waterways by controlling developments close to navigable and non-navigable waterways in accordance with best practice guidelines. (b) Preserve, protect and enhance Galway's inland lakes and waterways for their amenity and recreational resource amenity. (c) Protect the riparian zones of watercourse systems throughout the County, recognising the benefits they provide in relation to flood risk management and their protection of the ecological integrity of watercourse systems and ensure they are considered in the land use zoning in Local Area Plans. (d) The Planning Authority will support in principle the development and upgrading of the Inland Waterways and their associated facilities in accordance with legislation, best practice and relevant management strategies, key stakeholders and bodies including Waterways Ireland. (e) Ensure all abstractions of water will be subject to assessment for compliance with the requirements of Article 6 of the Habitats Directive. (f) Seek to provide additional accesses to lake shores and rivers for public rights of way, parking and layby facilities, where appropriate. (g) Developments shall ensure that adequate soil protection measures are undertaken, where appropriate, including investigations into the nature and extent of any soil/groundwater contamination.</p> <p>FL 1 Flood Risk Management Guidelines It is the policy objective of Galway County Council to support, in co-operation with the OPW, the implementation of the EU Flood Risk Directive (2007/60/EC), the Flood Risk Regulations (SI No. 122 of 2010) and the DEHLG/OPW publication The Planning System and Flood Risk Management Guidelines (2009) (and any updated/superseding legislation or policy guidance) and Department Circular PL2/2014 or any updated / superseding version.</p> <p>FL 2 Flood Risk Management and Assessment Comply with the requirements of the DoEHLG/OPW The Planning System and Flood Risk Management Guidelines for Planning Authorities and its accompanying Technical Appendices Document 2009 (including any updated/superseding documents). This will include the following: (a) Avoid, reduce and/or mitigate, as appropriate in accordance with the Guidelines; (b) Development proposals in areas where there is an identified or potential risk of flooding or that could give rise to a risk of flooding elsewhere will be required to carry out a Site-Specific Flood Risk Assessment, and justification test where appropriate, in accordance with the provisions of The Planning System and Flood Risk Management Guidelines 2009 (or any superseding document); Any flood risk assessment should include an assessment of the potential impacts of climate change, such as an increase in the extent or probability of flooding, and any associated measures necessary to address these impacts; (c) Development that would be subject to an inappropriate risk of flooding or that would cause or exacerbate such a risk at other locations shall not normally be permitted; (d) Galway County Council shall work with other bodies and organisations, as appropriate, to help protect critical infrastructure, including water and wastewater, within the County, from risk of flooding.</p> <p>FL 3 Principles of the Flood Risk Management Guidelines The Planning Authority shall implement the key principles of flood risk management set out in the Flood Risk Management Guidelines as follows: (a) Avoid development that will be at risk of flooding or that will increase the flooding risk elsewhere, where possible; (b) Substitute less vulnerable uses, where avoidance is not possible; and (c) Mitigate and manage the risk, where avoidance and substitution are not possible. Development should only be permitted in areas at risk of flooding when there are no alternative, reasonable sites available in areas at lower risk that also meet the objectives of proper planning and sustainable development. Vulnerable development in areas which have the highest flood risk should be avoided and/or only considered in exceptional circumstances (through a prescribed Justification Test) if adequate land or sites are not available in areas which have lower flood risk</p> <p>FL 4 Flood Relief Schemes The Planning Authority shall support and co-operate with the Office of Public Works (OPW) in the delivery of Flood Relief Schemes.</p> <p>FL 5 Catchment Planning The Planning Authority will support the OPW'S CFRAM Programme and catchment-based Flood Planning Groups, especially</p>

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				<p>developments/land uses into the appropriate Flood Zone in accordance with The Planning System and Flood Risk Management Guidelines for Planning Authorities 2009 (or any superseding document) and the guidance contained in Development Management Standards 2 and 3. Site-specific Flood Risk Assessment (FRA) is required for all planning applications in areas at elevated risk of flooding, even for developments appropriate to the particular flood zone. The detail of these site-specific FRAs will depend on the level of risk and scale of development. A detailed site specific FRA should quantify the risks, the effects of selected mitigation and the management of any residual risks. The Council shall have regard to the results of any CFRAM Studies in the assessment of planning applications. Where a development/land use is proposed that is inappropriate within the Flood Zone, then the development proposal will need to be accompanied by a Development Management Justification Test in addition to the site-specific Flood Risk Assessment. In Flood Zone C, where the probability of flooding is low (less than 0.1%, Flood Zone C), site-specific Flood Risk Assessment may be required, and the developer should satisfy themselves that the probability of flooding is appropriate to the development being proposed.</p> <p><b>TKT 49 Flood Risk Assessment and Climate Change</b> Flood Risk Assessment in Tuam shall provide information on the implications of climate change with regards to flood risk in relevant locations. The 2009 OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management (or any superseding document) shall be consulted with to this effect.</p> <p><b>TKT 50 Flood Risk Assessment and Environmental Impact Assessment (EIA)</b> Flood risk may constitute a significant environmental effect of a development proposal that in certain circumstances may trigger a sub-threshold EIA. FRA should therefore be an integral part of any EIA undertaken for projects within Tuam.</p> <p><b>TKT 51 Flood Vulnerable Zones</b> It is a policy objective of the Council to ensure that applications pertaining to existing developments in flood vulnerable zones provide details of structural and non-structural risk management measures to include, but not be limited to specifications of the following – floor levels, internal layout, flood resilient construction, flood resistant construction, emergency response planning, access and egress during flood events.</p> <p><b>TKT 52 Flood Risk Management</b> Ensure each flood risk management activity is examined to determine actions required to embed and provide for effective climate change adaptation as set out in the OPE Climate Change Sectoral Adaptation Plan for Flood Risk Management applicable at the time.</p>	<p>where catchments go beyond the Council’s administrative boundary, in the development and implementation of catchment-based strategies for the management of flood risk - including those relating to storage and conveyance.</p> <p>FL 6 Surface Water Drainage and Sustainable Drainage Systems (SuDs) Maintain and enhance, as appropriate, the existing surface water drainage system in the County. Ensure that new developments are adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems in all new developments. Surface water run-off from development sites will be limited to pre-development levels and planning applications for new developments will be required to provide details of surface water drainage and sustainable drainage systems proposals.</p> <p>FL 7 Protection of Waterbodies and Watercourses Protect waterbodies and watercourses within the County from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in riverine, wetland and coastal areas as appropriate.</p> <p>FL 8 Flood Risk Assessment for Planning Applications and CFRAMS Protect Flood Zone A and Flood Zone B from inappropriate development and direct developments/land uses into the appropriate Flood Zone in accordance with The Planning System and Flood Risk Management Guidelines for Planning Authorities 2009 (or any superseding document) and the guidance contained in Development Management Standard 69. Site-specific Flood Risk Assessment (FRA) is required for all planning applications in areas at elevated risk of flooding, even for developments appropriate to the particular flood zone. The detail of these site-specific FRAs will depend on the level of risk and scale of development. A detailed site-specific FRA should quantify the risks, the effects of selected mitigation and the management of any residual risks. The Planning Authority shall have regard to the results of any CFRAM Studies in the assessment of planning applications. Development proposal will need to be accompanied by a Development Management Justification Test in addition to the site-specific Flood Risk Assessment. Where only a small proportion of a site is at risk of flooding, the sequential approach shall be applied in site planning, in order to seek to ensure that no encroachment onto or loss of the flood plain occurs and/or that only water compatible development such as Open Space would be permitted for the lands which are identified as being at risk of flooding within that site. In Flood Zone C, where the probability of flooding is low (less than 0.1%, Flood Zone C), site-specific Flood Risk Assessment may be required and the developer should satisfy themselves that the probability of flooding is appropriate to the development being proposed.</p> <p>In addition to the County Plan SFRA datasets (including the Flood Zones, CFRAMS mapping, historical and predictive groundwater mapping, predictive pluvial mapping and historical flood risk indicator mapping, such as the Benefitting Lands mapping), new and emerging datasets (such as the OPW’s National Fluvial Mapping that will supersede existing PFRA fluvial mapping for catchments greater than 5km2) must be consulted by prospective applicants for developments and will be made available to lower-tier Development Management processed in the Council. Applications for developments in coastal areas and associated assessments shall also consider wave overtopping and coastal erosion.</p> <p>FL 9 SFRA of Lower Tier Plans Lower tier plans shall undertake SFRA (Strategic Flood Risk Assessment) in compliance with the Flood Risk Management Guidelines.</p> <p>FL 10 SFRA/FRA and Climate Change SFRAs and site-specific FRAs shall provide information on the implications of climate change with regard to flood risk in relevant locations. The 2009 OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management (or any superseding document) shall be consulted with to this effect.</p> <p>FL 11 FRA and Environmental Impact Assessment (EIA) Flood risk may constitute a significant environmental effect of a development proposal that in certain circumstances may trigger a sub-threshold EIA. FRA should therefore be an integral part of any EIA undertaken for projects within the County.</p> <p>FL 12 Inland Fisheries It is a policy objective of the Planning Authority to consult, where necessary, with Inland Fisheries Ireland, the National Parks and Wildlife Service and other relevant agencies in the construction of flood alleviation measures in County Galway.</p> <p>FL 13 CFRAM It is a policy objective of the Planning Authority to take account of and incorporate into local planning policy and decision making, including possible future variations to this plan, CFRAM measures that may be published in the future, including planned investment measures for managing and reducing flood risk.</p> <p>FL 14 Flood Vulnerable Zones It is a policy objective of the Planning Authority to ensure that applications pertaining to existing developments in flood vulnerable zones provide details of structural and non-structural risk management measures to include, but not be limited to specifications of the following - floor levels, internal layout, flood resilient construction, flood resistant construction, emergency response planning, access and egress during flood events.</p> <p>FL 15 Flood Risk Management Ensure each flood risk management activity is examined to determine actions required to embed and provide for effective climate change adaptation as set out in the OPW Climate Change Sectoral Adaptation Plan for Flood Risk Management applicable at the time.</p> <p>FL 16 Benefitting Land Applications for development on land identified as benefiting land may be prone to flooding, and as such site-specific flood risk assessments may be required in these areas.</p> <p>FL 17 Consultation with OPW Consult with the OPW in relation to proposed developments in the vicinity of drainage channels and rivers for which the</p>

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				From Tuam Draft Local Area Plan: <sup>8</sup>	From Galway County Development Plan
					<p>OPW are responsible and retain a strip on either side of such channels where required, to facilitate maintenance access thereto. In addition, promote the sustainable management and uses of water bodies and avoid culverting or realignment of these features.</p> <p>FL 18 Inappropriate Development on Flood Zones Where a development/land use is proposed within any area subject to this objective the development proposal will need to be accompanied by a detailed hydrological assessment and robust SUDS design which demonstrates the capacity to withstand potential flood events to maintain water quality and avoid potential effects to ecological features.</p> <ul style="list-style-type: none"> <li>Any development proposals should be considered with caution and will be required to comply with The Planning System and Flood Risk Management Guidelines for Planning Authorities/Circular PL2/2014 &amp; the associated Development Management Justification Test.</li> <li>Climate Change should be duly considered in any development proposal.</li> <li>Protect the riparian zones of watercourse systems throughout the plan area through a general 10 metre protection buffer from rivers within the plan area as measured from the near riverbank, (this distance may be increased and decreased on a site by site basis, as appropriate).</li> <li>Any development proposals submitted for this site will require a detailed ecological report (s), carried out by suitably qualified personnel for the purposes of informing Appropriate Assessment Screening by Galway County Council, the competent authority.</li> <li>The relevant lands will be outlined and flagged with a symbol on the land use zoning map and on the GIS system of Galway County Council so that staff and the public are aware of the special conditions/constraints attached.</li> <li>A briefing will be provided to relevant staff within Galway County Council on the special conditions and constraints on relevant lands.</li> </ul>
<b>Material Assets</b>	<ul style="list-style-type: none"> <li>Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the Plan area and beyond.</li> <li>Contribution towards compliance with national and regional water services and waste management policies.</li> <li>Contribution towards increase in renewable energy use by facilitating renewable energy and electricity transmission infrastructure developments.</li> <li>Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth.</li> <li>Contribution towards reductions in average</li> </ul>	<ul style="list-style-type: none"> <li>Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts).</li> <li>Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts).</li> <li>Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts).</li> <li>Increases in waste levels.</li> <li>Potential impacts upon public assets and infrastructure.</li> <li>Interactions between agricultural waste and soil, water, biodiversity and human health –</li> </ul>	<ul style="list-style-type: none"> <li>Exceedance of capacity in critical infrastructure risks remain, including due to uncertainty with regard to climate – however, such risks will be mitigated by: measures, including those requiring the timely provision of critical infrastructure, and compliance with the Water Framework Directive and associated River Basin Management Plan.</li> <li>Residual wastes to be disposed of in line with higher-level waste management policies.</li> <li>Any impacts upon public assets and infrastructure to comply with statutory planning/conse</li> </ul>	<p>Also refer to measures under other environmental components including Population and Human Health, Cultural Heritage, Soil, Water, Air, various Land Use and Phasing provisions.</p> <p><b>Strategic Aims</b> Tuam is strategically located as a centre for growth in North Connaught, it has excellent connections to the motorway route from Limerick to Sligo as well as motorway linkages to Galway and Dublin. It has the opportunity to develop as the focus for future development in North Connaught providing the infrastructure and services for its surrounding small towns/villages and rural lands. Promote future residential development in Tuam with sustainable, liveable and safe neighbourhoods supported by good quality services and infrastructure as appropriate, including social infrastructure with retail, community and amenity areas. Recognises the town's potential as an attractive place for people and locals to enjoy by promoting local amenities such as St. Joseph's Park, Tuam Stadium, local sporting facilities such as a rugby club, GAA club and football clubs and Leisure Centre.</p> <p><b>TKT 17 Public Utilities</b> Facilitate the provision and maintenance of essential public utility infrastructure, together with the necessary ancillary facilities and uses, as appropriate. Development proposals in the vicinity of public utilities infrastructure will be assessed on a case-by-case basis in accordance with proper planning and sustainable development.</p> <p><b>TKT 18 Water Supply, Wastewater and Combined Drainage Infrastructure</b> Support Irish Water in the provision and maintenance adequate wastewater disposal and water supply and the maintenance of existing combined (sewage and surface water) drainage infrastructure, in accordance with EU Directives, to service Tuam. This will include satisfactory capacity for public wastewater and a satisfactory quantity and quality of water supply, Sustainable Drainage</p>	<p>Also refer to measures under other environmental components including Population and Human Health, Cultural Heritage, Soil, Water, Air, various Land Use and Phasing provisions.</p> <p>RH 11 Waste Water Treatment provision Provide for sustainable rural housing in the county in accordance with the EPA Code of Practice: Wastewater Treatment Systems for Single Houses (2009).</p> <p>AD4 Agriculture Waste To ensure agricultural waste is managed and disposed of in a safe, efficient and sustainable manner having regard to the environment and in full compliance with the European Communities Good Agricultural Practice for the Protection of Waters Regulations (2014) and relevant best practice guidelines.</p> <p>WS 1 Enhancement of Water Supply Infrastructure Liaise with Irish Water, to maximise the potential of existing capacity and to facilitate the timely delivery of new water services infrastructure, to facilitate existing and future growth.</p> <p>WS 2 Protection of Water Supplies Collaborate with Irish Water and the Group Water Federation Scheme to protect, conserve and enhance all existing and potential water resources in the County to ensure compliance with the European Union (Drinking Water) Regulations 2014 (as amended) and compliance of water supplies with the parameters identified in these Regulations.</p> <p>WS 3 River Basin Management Plan for Ireland 2018-2021 Support the implementation of the relevant recommendations and measures as outlined in the relevant River Basin Management Plan 2018-2021, and associated Programme of Measures, or any such plan that may supersede same during the lifetime of this plan.</p> <p>WS 4 Requirement to Liaise with Irish Water – Water Supply Ensure that new developments are adequately serviced with a suitable quantity and quality of drinking water supply and require that all new developments intending to connect to a public water supply liaise with Irish Water with regard to the water (and wastewater) infrastructure required.</p> <p>WS 5 Private Water Supply Support the provision of a private water supply in instances where there is no public water supply or where the existing supply does not have sufficient capacity to serve the proposed development. This will only be considered where it can be demonstrated that the proposed water supply meets the standards set out in the EU and national legislation and guidance including adherence to Article 6 of the EU Habitats Directive, and would not be prejudicial to public health or would not significantly impact negatively on the source or yield of an existing supply.</p> <p>WS 6 Water Framework Directive Support the preparation of Drinking Water Safety Plans and Source Protection Plans to protect sources of public water supply, in accordance with the requirements of the Water Framework Directive.</p> <p>WS 7 Water Quality Require that new development proposals would ensure that there would not be an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands.</p> <p>WS 8 Proliferation of Septic Tanks Encourage the use of high standard treatment plants to minimise the risk of groundwater pollution.</p> <p>CWS 1 Water Conservation with all Developments To ensure all developments incorporate water conservation measures such as rainwater harvesting to minimise wastage of water supply.</p> <p>CWS 2 Water Mains Rehabilitation</p>

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				From Tuam Draft Local Area Plan: <sup>9</sup>	From Galway County Development Plan
	energy consumption per capita including promoting energy efficient buildings, retrofitting, smart buildings, cities and grids.	including as a result of emissions of ammonia from agricultural activities (e.g. manure handling, storage and spreading) and the production of secondary inorganic particulate matter.	nt-granting framework.	<p>System approaches and techniques within the plan area shall also be supported.</p> <p><b>TKT 19 Water Supply and Water Conservation</b> Ensure that new developments are adequately serviced with a suitable quantity and quality of drinking water supply, promote water conservation to reduce the overall level of water loss in the public supply and require that new domestic developments provide for water supply metering.</p> <p><b>TKT 31</b> Support the implementation of the Local Transport Plan as set out in Section 3 in accordance with proper planning and sustainable development<sup>9</sup>.</p> <p><b>Additional Mitigation in relation to Policy Objective TKT 31:</b> Ensure that new transport infrastructure, including cycling and walking infrastructure and multi-modal hubs, are subject to the following, as appropriate:</p> <ul style="list-style-type: none"> <li>As outlined in the Galway County Development Plan Policy Objective PRP 2; and</li> <li>Environmental constraints, including those related to habitats and potential impacts, such as disturbance from lighting. This will include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques.</li> </ul> <p>To reallocate corresponding road space to walking, cycling and public transport to accompany / occur concurrently with the provision of additional road space capacity.</p> <p><b>TKT 32 Transport Infrastructure</b> Facilitate the provision and maintenance of essential transportation infrastructure. This shall include the reservation of lands to facilitate public roads, footpaths, cycleways, bus stops and landscaping together with any necessary associated works, as appropriate.</p> <p><b>TKT 33 Sustainable Transportation</b> Facilitate any Smarter Travel initiatives that will improve sustainable transportation within the plan area and facilitate sustainable transportation options including public transportation, rail freight, electric vehicles, car clubs, public bike schemes, as appropriate.</p> <p><b>TKT 34 Pedestrian and Cycle Network</b> Facilitate the improvement of the pedestrian and cycling environment and network so that it is safe and accessible to all, through the provision of the necessary infrastructure. New development shall promote and prioritise walking and cycling, shall be permeable, adequately linked and connected to neighbouring areas, the town centre, recreational, educational, residential and employment destinations and shall adhere to the principles contained within the national policy document</p>	<p>To assist Irish Water in their commitment to water conservation and support efforts to tackle leakage through find and fix (active leakage control) and water mains rehabilitation.</p> <p>CWS 3 Promotion of Water Conservation To support Irish Water in promoting public awareness and involvement in water conservation measures by households, business and industry.</p> <p>WW 1 Enhancement of Wastewater Supply Infrastructure Work in conjunction with Irish Water to maximise the potential of existing capacity and to facilitate the delivery of new wastewater services infrastructure, to facilitate future growth in the county.</p> <p>WW 2 Delivery of Wastewater Infrastructure "Liaise and co-operate with Irish Water in the implementation and delivery of the Water Services Strategic Plan (2015) and the Irish Water Investment Plan 2020-2024 and other relevant investment works programmes of Irish Water in the delivery of infrastructure within the county.</p> <p>WW 3 The Greater Galway Area Strategic Drainage Study To seek to accelerate and support the delivery of the Greater Galway Area Strategic Drainage Study and the associated solutions as identified in the RSES as an essential infrastructure requirement in conjunction with the Department of the Environment, Climate and Communications, Irish Water and Galway City Council.</p> <p>WW 4 Requirement to Liaise with Irish Water – Wastewater Ensure that new developments will only be permitted which are adequately serviced with sufficient capacity for appropriate collection, treatment and disposal (in compliance with the Water Framework Directive and River Basin Management Plan) to the public sewer unless provided for otherwise by the plan. Developers shall liaise with Irish Water with regard to the wastewater (and water) infrastructure to ensure sufficient capacity is available prior to the submission of a planning application."</p> <p>WW 5 Serviced Sites Support the servicing of small towns and villages including initiatives to provide an alternative to one-off housing in the countryside, in accordance with the National Planning Framework.</p> <p>WW 6 Private Wastewater Treatment Plants Ensure that private wastewater treatment plants, where permitted, are operated in compliance with Environmental Protection Agency (EPA) Code of Practice for Domestic Waste Water Treatment System 2021 (Population Equivalent ≤10).</p> <p>WW 7 Sustainable Drainage Systems To require the use of Sustainable Drainage Systems to minimise and limit the extent of hard surfacing and paving and require the use of SuDS measures be incorporated in all new development (including extensions to existing developments). All development proposals shall be accompanied by a comprehensive SuDS assessment including run-off quantity, run off quality and impacts on habitat and water quality.</p> <p>WW 8 Storm Water Infrastructure To support the improvement of storm water infrastructure and to increase the use of sustainable drainage and reduce the risk of flooding in urban environments.</p> <p>WW 9 Integrated Wetland Wastewater Treatment Systems Galway County Council will encourage the use of integrated wetland wastewater treatment systems for both one off and multi-unit housing developments that accord with the prevailing regulations and standards including the relevant EPA Code of Practice.</p> <p>WW10 Surface Water Drainage To require all new developments to provide a separate foul and surface water drainage system and to incorporate sustainable urban drainage systems where appropriate in new development and the public realm.</p> <p>WW11 Protection of Irish Water Collection Systems To prohibit the discharge of additional surface water to combined (foul and surface water) sewers in order to maximise the capacity of existing collection systems for foul water.</p> <p>WM 1 Connacht and Ulster Waste Management Plan 2015-2021 Support the implementation of the Connacht and Ulster Waste Management Plan 2015-2021 or any updated version of this document within the lifetime of the plan.</p> <p>WM 2 Requirements for Waste Management Support and promote the circular economy principles, prioritising prevention, reuse, recycling and recovery, and to sustainably manage residual waste. New developments will be expected to take account of the provisions of the Waste Management Plan for the Region and observe those elements of it that relate to waste prevention and minimisation, waste recycling facilities, and the capacity for source segregation.</p> <p>WM 3 Waste Recovery and Disposal Facilities Support and facilitate the provision of adequate waste recovery and disposal facilities for the County.</p> <p>WM 4 Waste Legalisation To require that all waste disposal shall be undertaken in compliance with the requirements of the Environmental Protection Agency and relevant Waste Management Legislation.</p>

<sup>9</sup> Including complying with the measures outlined in relation to this Policy Objective in Table 9.1 of the SEA Environmental Report and Table 5.1 of the AA Natura Impact Report for the Draft Plan.

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Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	Mitigation Measures, including:	
				From Tuam Draft Local Area Plan: <sup>8</sup>	From Galway County Development Plan
				<p>Smarter Travel – A Sustainable Transport Future 2009-2020 and the Design Manual for Urban Roads and Streets (2013), as updated in 2019.</p> <p><b>TKT 35 Traffic and Transport Assessment (TTA) and Road Safety Audits</b> Require all significant development proposals to be accompanied by a Road Safety Audit and Traffic and Transport Assessment carried out by suitably competent consultants, which are assessed in association with their cumulative impact with neighbouring developments on the road network, in accordance with the requirements contained in TII's Traffic and Transport Assessment Guidelines (PE-PDU-02045) 2014 (including any updated/superseding document) and 'Road Safety Audit' (GE-STY-01024) December 2017.</p> <p><b>TKT 36 Preservation of Routes, Road Upgrades and Infrastructure Provision</b> Prohibit development on lands which are reserved for proposed road/street corridors and associated buffers and where development would affect a route, line, level or layout of any proposed new roadway.</p> <p><b>TKT 45 Connections to the Public Sewer &amp; Public Water Mains</b> Development shall connect to the public sewer and public water mains, subject to a connection agreement with Irish Water, in order to protect all waters in the plan area, and also to consolidate the urban structure and to control ribbon development along approach roads into Tuam.</p>	
<b>Air and Climatic Factors</b>	<ul style="list-style-type: none"> <li>Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the Plan area and beyond.</li> <li>In combination with other plans, programmes etc., contribution towards the objectives of the wide policy framework relating to climate mitigation and adaptation, and associated contribution towards maintaining and improving air quality and managing noise levels, including through measures</li> </ul>	<ul style="list-style-type: none"> <li>Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives.</li> <li>Potential conflicts between transport emissions, including those from cars, and air area quality.</li> <li>Potential conflicts between increased frequency of noise emissions and protection of sensitive receptors.</li> <li>Potential conflicts with climate adaptation measures including those relating to flood risk management.</li> </ul>	<ul style="list-style-type: none"> <li>An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable compact growth and sustainable mobility.</li> <li>Interactions between noise emissions and sensitive receptors. Various provisions have been integrated into the Plan to ensure that noise levels at sensitive receptors will be minimised.</li> </ul>	<p><b>Strategic Aim</b> Encourage the promotion of sustainable mobility, including walking and cycling, in accordance with the aspirations of the Local Transport Plan and support the continued provision of investment in public transport.</p> <p><b>TKT 9 Town Centre Management</b> Subject to appropriate resources, the Council in collaboration with stakeholders, shall prepare a town centre management plan for Tuam. The management plan will consider some or all of the following: a) The feasibility of a Town Centre market; b) Upgrade of public lighting and tidying of wirescapes in the Town Centre; c) Connectivity of the Town Centre including upgrading of paving, consideration of feasibility of identified pedestrianised lanes and routes through the Town; d) Scheme for façade improvement on identified priority streetscapes; e) Upgrade and improvement of street furniture; f) A co-ordinated vehicular access arrangement, which shall be in consultation and agreement with the Road Design Section of Galway County Council; g) Consistent sustained signage design policy within the Town Centre; h) Provision of appropriate quality landscaping and functional public spaces; i) Provide footpath and cycling links to the Town Centre; and, j) Car parking management.</p>	<p>AQ 1 Ambient Air Quality To promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU Ambient Air Quality and Cleaner Air for Europe (CAFÉ) Directive (2008/50/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards as set out in the Air Quality Standards Regulations 2011 (SI No. 180 of 2011) (or any updated/superseding documents).</p> <p>AQ 2 Assessment of Air Quality To require developments which would have the potential to have adverse impacts on air quality to carry out assessments of the impact of the development on air quality.</p> <p>AQ 3 Air Quality Mitigation Measures To require the use of appropriate mitigation measures such as dust dampeners to minimise the potential impacts of developments on air quality.</p> <p>AQ 4 Air Purification Galway County Council shall encourage landscaping and deciduous tree planting in an environmentally sensitive manner within towns and villages as a means of air purification, the filtering of suspended particles and the improvement of their micro-climate.</p> <p>AQ 5 Radon Galway County Council shall have regard, to the specific guidance on radon prevention measures for new homes as contained within the existing Building Regulations (including any updated/superseding Regulations that may be published within the lifetime of this Development Plan).</p> <p>NP 1 Galway County Council Noise Action Plan 2019-2023 To implement the Galway County Council Noise Action Plan 2019-2023 (and any subsequent Plan) in order to avoid, prevent and reduce the harmful effects, including annoyance, due to environmental noise exposure.</p> <p>NP 2 Developments within Noise Maps (Noise Action Plan 2019-2023) To require that where new developments are proposed within the noise limits of the noise maps for the designated sections of roads in the County, appropriate mitigation measures are undertaken so as to prevent harmful effects from environmental noise.</p> <p>NP3 Noise Impact Assessments To require an assessment of impact of the development on noise levels, having regard to the provisions of the Environmental Protection Agency Acts 1992 and 2003 and the EPA Noise Regulations 1994 when assessing planning application.</p> <p>NP 4 Noise Pollution and Regulation Restrict development proposals causing noise pollution in excess of best practice standards and regulate and control activities likely to give rise to excessive noise, other than those activities which are regulated by the EPA</p>

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				From Tuam Draft Local Area Plan: <sup>8</sup>	From Galway County Development Plan
	<p>relating to:</p> <ul style="list-style-type: none"> <li>o Sustainable compact growth;</li> <li>o Sustainable mobility, including walking, cycling and public transport;</li> <li>o Drainage, flood risk management and resilience;</li> <li>o Sectors including agriculture, residential heating and infrastructure;</li> <li>o Sustainable design, energy efficiency and green infrastructure.</li> </ul>			<p><b>TKT 31</b> Support the implementation of the Local Transport Plan as set out in Section 3 in accordance with proper planning and sustainable development<sup>10</sup>.</p> <p><b>Additional Mitigation in relation to Policy Objective TKT 31:</b></p> <p>Ensure that new transport infrastructure, including cycling and walking infrastructure and multi-modal hubs, are subject to the following, as appropriate:</p> <ul style="list-style-type: none"> <li>• As outlined in the Galway County Development Plan Policy Objective PRP 2; and</li> <li>• Environmental constraints, including those related to habitats and potential impacts, such as disturbance from lighting. This will include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques.</li> </ul> <p>To reallocate corresponding road space to walking, cycling and public transport to accompany / occur concurrently with the provision of additional road space capacity.</p> <p><b>TKT 32 Transport Infrastructure</b></p> <p>Facilitate the provision and maintenance of essential transportation infrastructure. This shall include the reservation of lands to facilitate public roads, footpaths, cycleways, bus stops and landscaping together with any necessary associated works, as appropriate.</p> <p><b>TKT 33 Sustainable Transportation</b></p> <p>Facilitate any Smarter Travel initiatives that will improve sustainable transportation within the plan area and facilitate sustainable transportation options including public transportation, rail freight, electric vehicles, car clubs, public bike schemes, as appropriate.</p> <p><b>TKT 34 Pedestrian and Cycle Network</b></p> <p>Facilitate the improvement of the pedestrian and cycling environment and network so that it is safe and accessible to all, through the provision of the necessary infrastructure. New development shall promote and prioritise walking and cycling, shall be permeable, adequately linked and connected to neighbouring areas, the town centre, recreational, educational, residential and employment destinations and shall adhere to the principles contained within the national policy document Smarter Travel – A Sustainable Transport Future 2009-2020 and the Design Manual for Urban Roads and Streets (2013), as updated in 2019.</p> <p><b>TKT 35 Traffic and Transport Assessment (TTA) and Road Safety Audits</b></p> <p>Require all significant development proposals to be accompanied by a Road Safety Audit and Traffic and Transport Assessment carried out by suitably competent consultants, which are assessed in association with their cumulative impact with</p>	<p>NP 5 Noise Mitigation Measures</p> <p>Require activities likely to give rise to excessive noise to install noise mitigation measures and monitors. The provision of a noise audit may be required where appropriate.</p> <p>CC 1 Climate Change</p> <p>Support and facilitate the implementation of European, National and Regional objectives for climate adaptation and mitigation taking into account other provisions of the Plan (including those relating to land use planning, energy, sustainable mobility, flood risk management and drainage) and having regard to the Climate mitigation and adaptation measures.</p> <p>CC 2 Transition to a low carbon, climate-resilient society</p> <p>It is a policy objective of the Planning Authority to support the transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050, by way of reducing greenhouse gases, increasing renewable energy, and improving energy efficiency.</p> <p>CC 3 County Galway Climate Adaptation Strategy 2019-2024</p> <p>To implement the County Galway Climate Adaptation Strategy 2019-2024 as appropriate.</p> <p>CC 4 Local Authority Climate Action Plan</p> <p>Support the preparation of a Climate Action Plan for County Galway.</p> <p>CC 5 Climate Adaptation and Mitigation</p> <p>To promote, support and direct effective climate action policies and objectives that seek to improve climate outcomes across County Galway through the encouragement and integration of appropriate mitigation and adaptation considerations and measures into all development and decision-making processes.</p> <p>CC 6 Local Authority Renewable Energy Strategy (LARES)</p> <p>To support the implementation of the Renewable Energy Strategy contained in Appendix 1 of the Galway County Development Plan to facilitate the transition to a low carbon county.</p> <p>CC 7 Climate Action Fund</p> <p>Support the delivery of sustainable development projects under the European Green Deal and utilise the Climate Action Fund/ Just Transition Fund established under the National Development Plan to encourage public and private climate mitigation and adaptation projects in line with criteria set out by the Fund at that time.</p> <p>CC 8 Climate Action and Development Location</p> <p>To implement, through the plan and future local areas plans, policies that support and encourage sustainable compact growth and settlement patterns, integrate land use and transportation, and maximise opportunities through development location, form, layout and design to secure climate resilience and reduce carbon dioxide and greenhouse emissions.</p> <p>CC 9 Mainstreaming Climate Change Adaptation</p> <p>Galway County Council shall incorporate climate change adaptation into land use planning, building layouts, energy, transport, natural resource management, forestry, agriculture and marine waters.</p> <p>CC 10 Green Infrastructure</p> <p>Galway County Council shall promote the benefit of open spaces and implement the integration of green infrastructure/networks (e.g., interconnected network of green spaces (including aquatic ecosystems) and other physical features on land) into new development and regeneration proposals in order to mitigate and adapt to climate change.</p>

<sup>10</sup> Including complying with the measures outlined in relation to this Policy Objective in Table 9.1 of the SEA Environmental Report and Table 5.1 of the AA Natura Impact Report.

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				neighbouring developments on the road network, in accordance with the requirements contained in TII's Traffic and Transport Assessment Guidelines (PE-PDU-02045) 2014 (including any updated/superseding document) and 'Road Safety Audit' (GE-STY-01024) December 2017. <b>TKT 39 Climate Change</b> To implement, through this Local Area Plan, policy objectives that support and encourage sustainable compact growth and settlement patterns, integrate land use and transportation and maximise opportunities through development location, form, layout and design to secure climate resilience and reduce carbon dioxide and greenhouse emissions.	
<b>Cultural Heritage</b>	<ul style="list-style-type: none"> <li>Contributes towards protection of cultural heritage elsewhere by facilitating development within the Plan area.</li> <li>Contributes towards protection of cultural heritage within the Plan area by facilitating brownfield development and regeneration.</li> </ul>	<ul style="list-style-type: none"> <li>Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.</li> </ul>	<ul style="list-style-type: none"> <li>Potential effects on known architectural and archaeological heritage and unknown archaeology however, these will occur in compliance with legislation.</li> </ul>	<p><b>Strategic Aim</b> Promoting and facilitating the appropriate growth of the Town, while protecting the built, cultural and natural heritage of Tuam in accordance with applicable legislation and policy. This also includes consideration of particular features of Tuam capitalising on the existing historic fabric of the town. Supporting development in Tuam in a sensitive manner which conserves and protects the historic core, recognising the towns cultural and historic built environment as a valuable asset.</p> <p><b>TKT 15 Tourism Development</b> Encourage and assist in the development of the sustainable tourism potential within Tuam in a manner that respects, builds on, protects and enhances the cultural, built, architectural, archaeological and heritage significance of the town including natural heritage and biodiversity and its local amenities.</p> <p><b>TKT 20 Archaeological Heritage</b> a) Ensure the protection and sympathetic enhancement of archaeological heritage in the Plan Area, in particular by implementing the relevant provisions of the Planning and Development Act 2000 (as amended), the National Monuments Act 1930 (as amended), and the Archaeology and Development: Guidelines for Good Practice for Developers. b) Ensure that any development in the immediate vicinity of a National Monument and a Recorded Monument is sensitively designed and sited and does not detract from the Recorded Monument or its visual amenity.</p> <p><b>TKT 23 Architectural Heritage</b> Ensure the protection and conservation of the architectural heritage in the Plan area in particular by implementing the relevant legislative provisions of the Planning and Development Act 2000 (as amended) in relation to architectural heritage and policy guidance contained within the Architectural Heritage Protection Guidelines 2004/2011 and the published Department of Arts Heritage and the Gaeltacht and National Disability Authority's advice series titled Access: Improving the Accessibility to Historic Buildings and Places 2011 (or any superseding document). Policy Objective AH2 'Protected Structures' (refer to current County Development Plan) ensures the protection and sympathetic enhancement of structures included on the Record of Protected Structures (RPS) that</p>	<p>AH 1 Architectural Heritage Ensure the protection of the architectural heritage of County Galway, which is a unique and special resource, having regard to the policy guidance contained in the Architectural Heritage Protection Guidelines 2011 (and any updated/superseding document).</p> <p>AH 2 Protected Structures (Refer to Appendix 6) (a) Ensure the protection and sympathetic enhancement of structures including their curtilage and attendant grounds included and proposed for inclusion in the Record of Protected Structures (RPS) that are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, together with the integrity of their character and setting. (b) Review the Record of Protected Structures in order to provide a comprehensive schedule for the protection of structures of special importance in the County during the lifetime of the plan. (c) Ensure that development proposals are appropriate in terms of architectural treatment, character, scale and form to the existing protected structure and not detrimental to the special character and integrity of the protected structure and its setting. (d) Ensure high quality architectural design of all new developments relating to or which may impact on structures (and their settings) included in the Record of Protected Structures. (e) Promote and ensure best conservation practice through the use of specialist conservation professionals and craft persons. (f) Prohibit development proposals, either in whole or in part, for the demolition of protected structures, save in exceptional circumstances.</p> <p>AH 3 Protection of Structure on the NIAH Give regard to and consideration of all structures which are included in the NIAH for County Galway, which are not currently included in the Record of Protected Structures, in development management functions.</p> <p>AH 4 Architectural Conservation Areas (Refer to Appendix 7) Protect, conserve and enhance the special character of the Architectural Conservation Areas (ACA) included in this plan through the appropriate management and control of the design, location and layout of new development, modifications, alterations or extensions to existing structures, surviving historic plots and street patterns and/or modifications to the character or setting of the Architectural Conservation Area. Works within the ACA shall ensure the conservation of traditional features and building elements that contribute to the character of the area. The special character of an area includes its traditional building stock and material finishes, spaces, streetscape, shop fronts, landscape and setting. New proposals shall have appropriate regard to scale, plot, form, mass, design, materials, colours and function. This will be achieved by; (a) Protecting all buildings, structures, groups of structures, sites, landscapes and all features which contribute to the special character of the ACA from demolition and non-sympathetic alterations. (b) Promote appropriate and sensitive reuse and rehabilitation of buildings and sites within the ACA. (c) Ensure new development within or adjacent to an ACA respects the established character of the area and contributes positively in terms of design, scale, setting and material finishes to the ACA. (d) Promote high quality architectural design within ACAs. (e) Seek the repair and reuse of traditional shopfronts and where appropriate, encourage new shopfronts of a high quality architectural design. (f) Ensure that all new signage, lighting, advertising and utilities to buildings within ACA are designed, constructed, and located in such a manner that they do not detract from the character of the ACA. (g) Protect and enhance the quality of open spaces within ACAs and ensure the protection and where necessary reuse of street furniture and use of appropriate materials during the course of public infrastructure schemes within ACAs. (h) Prohibit development proposals, either in whole or in part for the demolition of a structure within an Architectural Conservation Area that contributes to the special character of the area. (i) Protect structures in ACAs from non-sympathetic alterations and encourage appropriate in-fill developments. (j) Works materially affecting the character of a protected structure or the exterior of a building/ structure within an ACA will require planning permission; (k) Any works carried out to a protected structure or the exterior of a building/structure within an ACA shall be in accordance with best conservation practice and use sustainable and appropriate materials. (l) Ensure that any development, modifications, alterations, or extensions materially affecting the character of a protected structure, or a structure adjoining a protected structure, or a structure within or adjacent to an Architectural Conservation Area (ACA), is sited and designed appropriately and is not detrimental to the character or setting of the protected structure or of the ACA.</p> <p>AH 5 Maintenance and Re-use of existing Building Stock Promote the maintenance and appropriate re-use of the existing stock of buildings with architectural merit as a more sustainable option to their demolition and redevelopment.</p> <p>AH 6 Vernacular Architecture</p>

Screening for SEA Report for Proposed Material Alterations

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	Mitigation Measures, including:	
				From Tuam Draft Local Area Plan: <sup>8</sup>	From Galway County Development Plan
				<p>are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, together with the integrity of their character and setting.</p> <p><b>TKT 25 Architectural Conservation Area</b> Protect, conserve and enhance the essential character of the Tuam Architectural Conservation Area, through respecting the surviving historic plots and street patterns and through the appropriate management and control of the design, location and layout of new development, alterations or extensions to existing structures, and/or modifications to the setting of the structure and the character of the Architectural Conservation Area. The identification of areas of special interest within the Plan boundary may be considered during the lifetime of the Plan.</p>	<p>Recognise the importance of the contribution of vernacular architecture to the character of a place and ensure the protection, retention and appropriate revitalisation and reuse of the vernacular built heritage including structures that contribute to landscape and townscape character and resist the demolition of these structures.</p> <p>AH 7 Local Place Names Protect local place names as an important part of the cultural heritage and unique character of an area. Support the use of appropriate names for new developments that reflect the character and heritage of the area and that contribute to the local distinctiveness of a place.</p> <p>AH 8 Energy Efficiency and Traditionally Built Structures Ensure that measures to upgrade the energy efficiency of protected structures and traditionally built historic structures are sensitive to traditional construction methods, employ best practice and use appropriate materials and methods that will not have a detrimental impact on the material, functioning or character of the building.</p> <p>AH 9 Local Landscape and Place Assessment To support proposals from local communities including Tidy Town Committees, Chambers of Commerce and residents' groups in analysing the character of their place and promoting its regeneration for their own use and enjoyment and that of visitors to the area.</p> <p>AH 10 Designed Landscapes Protect the surviving historic designed landscapes in the County and promote the conservation of their essential character, both built and natural. Consider protection of the designed landscape by inclusion in an Architectural Conservation Area. Development proposals in designed landscape shall be accompanied by an appraisal of the contributing elements and an impact assessment.</p> <p>AH 11 Custodianship Promote an inter-disciplinary approach demonstrating best practice with regard to the custodianship of protected structures, recorded monuments and elements of built heritage.</p> <p>AH 12 Placemaking for Towns and villages Promote the value of placemaking in cooperation with communities in their towns, villages and local areas.</p> <p>AH 13 Traditional Building Skills Support and promote traditional building skills, training and awareness of the use of appropriate materials and skills within the Local Authority, community groups, owners and occupiers of traditionally built structures.</p> <p>AH 14 Design and Landscaping in New Buildings Encourage new buildings that foster an innovative approach to design and acknowledges the diversity of suitable design solutions in appropriate locations while promoting the added economic, amenity and environmental value of good design.</p> <p>ARC 1 Legislative Context Support and promote the preservation, conservation and appropriate management and enhancement of the County's archaeological sites and monuments, together with the settings of these monuments, having regard to the legislative, statutory and policy provisions relevant to the conservation of the archaeological heritage.</p> <p>ARC 2 Archaeological Sites Seek to encourage and promote awareness of and access to archaeological heritage of the County for all, through the provision of information to landowners and the community generally, in co-operation with statutory and other partners.</p> <p>ARC 3 Archaeological Landscapes To facilitate where possible the identification of important archaeological landscapes in the County</p> <p>ARC 4 Protection of Archaeological Sites All planning applications for new development, redevelopment, any ground works, refurbishment, and restoration, etc. within areas of archaeological potential or within close proximity to Recorded Monuments or within the historic towns of County Galway will take account of the archaeological heritage of the area and the need for archaeological mitigation.</p> <p>ARC 6 Burial Grounds Protect the burial grounds, identified in the Record of Monuments and Places, in co-operation with the National Monuments Service of the Department of Housing, Local Government and Heritage. Encourage the local community to manage burial grounds in accordance with best conservation and heritage principles.</p> <p>ARC 7 Battlefield Sites Protect the Battle of Aughrim site and other battlefield sites and their settings.</p> <p>ARC 8 Underwater Archaeological Sites To protect and preserve the archaeological value of underwater archaeological sites and associated features. In assessing proposals for development, the Council will take account of the potential underwater archaeology of rivers, lakes, intertidal and sub-tidal locations.</p> <p>ARC 9 Recorded Monuments Ensure that any development in the immediate vicinity of a Recorded Monument is sensitively designed and sited and does not detract from the monument or its visual amenity.</p> <p>ARC 10 Zones of Archaeological Potential To protect the Zones of Archaeological Potential located within both urban and rural areas and around archaeological monuments generally as identified in the Record of Monuments and Places. Any development within the ZAPs will need to take cognisance of the potential for subsurface archaeology and if archaeology is demonstrated to be present appropriate mitigation (such as preservation in situ/buffer zones) will be required.</p> <p>ARC 11 Industrial and Post Medieval Archaeology Protect and preserve the archaeological value of industrial and post medieval archaeology such as mills, limekilns, bridges,</p>



Screening for SEA Report for Proposed Material Alterations

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	Mitigation Measures, including:	
				From Tuam Draft Local Area Plan: <sup>8</sup>	From Galway County Development Plan
					<p>piers, harbours, penal chapels and dwellings. Proposals for refurbishment, works to or redevelopment/conversion of these sites should be subject to careful assessment.</p> <p>ARC 12 Archaeology and Infrastructure Schemes</p> <p>Have regard to archaeological concerns when considering proposed service schemes (including electricity, sewerage, telecommunications, water supply) and proposed roadwork's (both realignments and new roads) located in close proximity to Recorded Monuments and Places and their known archaeological monuments.</p> <p>CUH 1 Cultural heritage</p> <p>Protect and promote the cultural heritage assets and the intangible cultural heritage assets of County Galway as important social and economic assets.</p> <p>CUH 2 Special Places of Historic Interest</p> <p>To protect and promote where possible special places of historical interest.</p> <p>CUH 3 Placenames/Naming of New Developments</p> <p>Promote and preserve local place names, local heritage and the Irish language by ensuring the use of local place names or geographical or cultural names which reflect the history and landscape of their settings in the naming of new residential and other developments. All names will be in the Irish language only. The naming and numbering schemes including associated signage must be submitted to the Planning Authority prior to the commencement of a new development.</p> <p>CUH 4 The Gaeltacht and Linguistic Heritage</p> <p>(a) To protect the linguistic and cultural heritage of the Gaeltacht and to promote Irish as a community language. To promote and facilitate the sustainable development of An Ghaeltacht and Island communities in County Galway.</p> <p>(b) To support organisations involved in the continued promotion and preservation of the Irish language and culture. To work in a positive and encouraging way to create and maintain a bilingual environment in the County, and to ensure the availability of opportunities for the use of spoken and written Irish.</p> <p>CUH 5 Library and Archives</p> <p>(a) To facilitate the development and implementation of Galway Library Development Programme 2016-2021 or subsequent programme and support the development and promotion of the library network in the county.</p> <p>(b) Galway County Council shall support the provision of a purpose built repository, meeting international archival standards, to house, and ensure the preservation, of this important heritage resource.</p>
<b>Landscape</b>	<ul style="list-style-type: none"> <li>Contributes towards protection of wider landscape and landscape designations by facilitating development within the Plan area.</li> </ul>	<ul style="list-style-type: none"> <li>Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.</li> </ul>	<ul style="list-style-type: none"> <li>Landscapes will change overtime as a result of natural changes in vegetation cover combined with new developments that will occur in compliance with the Plan's landscape protection measures.</li> </ul>	<p>Also refer to measures under Biodiversity and Flora and Fauna and Cultural Heritage</p> <p><b>TKT 21 High Quality, Contextually Sensitive Design</b></p> <p>Ensure that new developments are responsive to their site context and in keeping with the character, heritage, amenity, environment and landscape of the area. New development proposals will be required to complement the existing character of the area in terms of scale, height, massing, building line, urban grain and definition and through high quality design proposals for buildings/structures/shop fronts, the use of high quality, appropriate materials and the provision of appropriate signage, lighting, landscaping proposals and other such details.</p>	<p>Also refer to measures under Biodiversity and Flora and Fauna and Cultural Heritage.</p> <p>Policy Objectives Landscape Conservation and Management</p> <p>LCM 1 Preservation of Landscape Character</p> <p>Preserve and enhance the character of the landscape where, and to the extent that, in the opinion of the Planning Authority, the proper planning and sustainable development of the area requires it, including the preservation and enhancement, where possible of views and prospects and the amenities of places and features of natural beauty or interest.</p> <p>LCM 2 Landscape Sensitivity Classification</p> <p>The Planning Authority shall have regard to the landscape sensitivity classification of sites in the consideration of any significant development proposals and, where necessary, require a Landscape/Visual Impact Assessment to accompany such proposals. This shall be balanced against the need to develop key strategic infrastructure to meet the strategic aims of the plan.</p> <p>LCM 3 Landscape Sensitivity Ratings</p> <p>Consideration of landscape sensitivity ratings shall be an important factor in determining development uses in areas of the County. In areas of high landscape sensitivity, the design and the choice of location of proposed development in the landscape will also be critical considerations.</p> <p>LCM 4 Open/Unfenced Landscape</p> <p>Preserve the status of traditionally open/unfenced landscape. The merits of each case will be considered in light of landscape sensitivity ratings and views of amenity importance.</p> <p>PVSR 1 – Protected Views and Scenic Routes</p> <p>Preserve the protected views and scenic routes as detailed in Maps 8.3 and 8.4 from development that in the view of the Planning Authority would negatively impact on said protected views and scenic routes. This shall be balanced against the need to develop key infrastructure to meet the strategic aims of the plan.</p> <p>TWHS 1 Tentative World Heritage Sites.</p> <p>Protect the Outstanding Universal Value of the tentative World Heritage Sites in County Galway namely the Western Stone Forts and the Burren that are included in the UNESCO Tentative List and engage with other national and international initiatives which promote the special built, natural and cultural heritage of places in the County. Collaborate with landowners, local communities and other relevant stakeholders to achieve World Heritage Site status for the sites identified in County Galway.</p>

## 2.5 Schedule 2A

### PART 1

**1. *The characteristics of the plan having regard, in particular, to: the degree to which the plan sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources***

The Draft Tuam Local Area Plan 2023-2029 provides a six-year framework for the sustainable development of Tuam, while considering the conservation and protection of the built and natural environment. It sets out an overall strategy for the proper planning and sustainable development of the town in terms of its social, cultural, economic and physical development and consists of a written statement supported by mapping and other appendices. The Material Alterations propose a number of text and map-based changes to the Draft Plan.

Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

**Table 2.4 Proposed Material Alterations Requiring SEA<sup>11</sup>**

<b>No.</b>	<b>SEA Screening Consideration Ref. – see Table 2.2 above</b>	<b>No.</b>	<b>SEA Screening Consideration Ref. – see Table 2.2 above</b>
MA9	Ref. 8 – SEA required	MA51	Ref. 8 – SEA required
MA38	Ref. 9 – SEA required	MA55	Ref. 8 – SEA required
MA39	Ref. 8 – SEA required	MA56	Ref. 8 – SEA required
MA49	Ref. 9 – SEA required	MA57	Ref. 9 – SEA required
MA50	Ref. 8 – SEA required		

Taking the above and the examination of the Proposed Material Alterations provided under Sections 2.2 to 2.4 into account, arising from the degree to which the Proposed Material Alterations and the Draft Local Area Plan set a framework for projects and other activities, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

**2. *The characteristics of the plan having regard, in particular, to: the degree to which the plan influences other plans, including those in a hierarchy***

The Draft Tuam Local Area Plan 2023-2029 has been guided by the National Planning Framework, the Regional Spatial and Economic Strategy for the Northern and Western Region and the Galway County Development Plan 2022-2028. In turn, the Plan will guide any lower-tier plans and future proposals for land use developments and activities. The Material Alterations are being proposed to the Draft Local Area Plan.

The Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Taking the above and the examination of the Proposed Material Alterations provided under Sections 2.2 to 2.4 into account, arising from the degree to which the Proposed Material Alterations and the Draft Local Area Plan influence other plans, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

<sup>11</sup> For detail on Proposed Material Alterations please refer to Proposed Material Alterations document. For detail on SEA Screening Ref please refer to Table 2.2.

**3. *The characteristics of the plan having regard, in particular, to: the relevance of the plan for the integration of environmental considerations in particular with a view to promoting sustainable development***

The Draft Tuam Local Area Plan 2023-2029 - to which the Proposed Material Alterations relate - has undergone SEA. This process integrated environmental considerations into the Plan and found that the Plan contributes to environmental protection and management and sustainable development.

The Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Taking the above and the examination of the Proposed Material Alterations provided under Sections 2.2 to 2.4 into account, arising from the degree to which the Proposed Material Alterations and the Draft Local Area Plan are relevant for the integration of environmental considerations with a view to promoting sustainable development, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

**4. *The characteristics of the plan having regard, in particular, to: environmental problems relevant to the plan***

Environmental problems arise where there is a conflict between current environmental conditions and legislative targets. Through its provisions relating to environmental protection and management, the Draft Tuam Local Area Plan 2023-2029 contributes towards ensuring that environmental conditions do not get worse and, where possible, they contribute towards its amelioration.

The Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Taking the above and the examination of the Proposed Material Alterations provided under Sections 2.2 to 2.4 into account, arising from environmental problems relevant to the Proposed Material Alterations and the Draft Local Area Plan, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

**5. *The characteristics of the plan having regard, in particular, to: the relevance of the plan for the implementation of European Union legislation on the environment (e.g. plans linked to waste-management or water protection)***

The Draft Tuam Local Area Plan 2023-2029 relates to the land use and town planning sector and has fulfilled requirements in relation to SEA. This process integrated considerations with regard to EU and national legislation on the environment, including those relating to the waste management and the Water Framework Directive.

The Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Taking the above and the examination of the Proposed Material Alterations provided under Sections 2.2 to 2.4 into account, arising from the relevance of the Proposed Material Alterations and the Draft Local Area Plan for the implementation of European Union legislation on the environment, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

## **PART 2**

### **1. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the probability, duration, frequency and reversibility of the effects**

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

### **2. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the cumulative nature of the effects**

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

### **3. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the transboundary nature of the effects**

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

### **4. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the risks to human health or the environment (e.g. due to accidents)**

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

### **5. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected)**

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

### **6. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the value and vulnerability of the area likely to be affected due to:**

#### **a) special natural characteristics or cultural heritage;**

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

**b) exceeded environmental quality standards or limit values, and;**

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

**c) intensive land-use.**

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

**7. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the effects on areas or landscapes which have a recognised national, European Union or international protection status**

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

## Section 3 Conclusion

Most Proposed Material Alterations are advised not to result in likely significant effects. Taking into account the measures that have been already integrated into the Draft Plan and the existing Galway County Development Plan 2022-2028 that provide for and contribute towards environmental protection, environmental management and sustainable development, it is identified that all potential effects arising from most Proposed Alterations: either are present already (beneficial) and will be further contributed towards; or will be mitigated so as not to be significant (adverse). In addition, some alterations merely added clarifications or amended context setting text for Plan provisions and these will not result in significant environmental effects. Consequently, these Proposed Material Alterations do not require SEA.

The Proposed Material Alterations identified on Table 2.4 are advised as requiring SEA and consideration in an SEA Environmental Report.

An SEA Statement will be prepared following adoption of the Plan, which will detail how environmental considerations were integrated into the Plan and how consultations on the SEA and associated Plan-preparation process were considered. The Appropriate Assessment Natura Impact Report will be finalised in a similar manner at adoption, taking into account how environmental considerations were integrated into the Plan and how consultations were considered.

## **Appendix A SFRA Addendum**

# STRATEGIC FLOOD RISK ASSESSMENT

## ADDENDUM

### AMENDED FOLLOWING PUBLIC DISPLAY OF THE DRAFT PLAN AND ASSOCIATED DOCUMENTS

TEXT TO BE ADDED IS IN RED: LIKE THIS  
TEXT TO BE DELETED IS IN RED STRIKETHROUGH: ~~LIKE THIS~~

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FOR THE

## DRAFT TUAM LOCAL AREA PLAN 2023-2029

for: **Galway County Council**

Áras an Chontae  
Prospect Hill  
Galway



Comhairle Chontae na Gaillimhe  
Galway County Council

by: **CAAS Ltd.**

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



**FEBRUARY-JUNE 2023**



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## Appendix I

Summary of the requirements of the Flood Guidelines for land uses in Flood Zones

## Appendix II

Selection of Flood Risk Indicator Mapping and Flood Zone Mapping

# **Section 1 Introduction and Policy Background**

## **1.1 Introduction**

Galway County Council has prepared a new Draft Local Area Plan (LAP) for Tuam under the Planning and Development Act 2000 (as amended). The Plan sets out an overall strategy for the proper planning and sustainable development over the years 2023-2029.

This Strategic Flood Risk Assessment (SFRA) document has been prepared alongside the LAP taking into account *The Planning System and Flood Risk Management - Guidelines for Planning Authorities* (Department of the Environment, Heritage and Local Government and Office of Public Works, 2009) and Department of the Environment, Community and Local Government Circular PL 2/2014.

## **1.2 The Draft Local Area Plan**

LAPs are required to be consistent with the policies and objectives of the County Development Plan and its Core Strategy, as well as the National Planning Framework and Regional Spatial Economic Strategies.

The LAP should be read in conjunction with the Galway County Development Plan 2022-2028, which sets out the overarching development strategy for the County. Where conflicting objectives arise between the County Development Plan and the LAP, the objectives of the relevant County Development Plan shall take precedence.

The general development management standards, zoning matrix/descriptions and policies and objectives in the County Development Plan (including provisions relating to flood risk management and drainage) can be applied to the Plan area, while additional policies and objectives that are specific to Tuam are included in the LAP.

In addition, land use zoning contained within the Draft Plan has been informed by the SFRA process and associated delineation of flood risk zones. The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process facilitated zoning that helps to avoid inappropriate development being permitted in areas of high flood risk.

## **1.3 Flood Risk and its Relevance as an Issue to the Plan**

### **1.3.1 Flood Risk**

Flooding is an environmental phenomenon and can pose a risk to human health as well as causing economic and social effects. Some of the effects of flooding are identified on Table 1.

Certain lands within the Plan area have the potential to be vulnerable to flooding and this vulnerability could be exacerbated by changes in both the occurrence of severe rainfall events and associated flooding. Local conditions such as low-lying lands and slow surface water drainage can increase the risk of flooding.

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

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

## **1.4 Flood Risk Management Policy**

### **1.4.1 EU Floods Directive**

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

- Carry out a preliminary assessment by 2011 in order to identify the river basins and associated coastal areas where potential significant flood risk exists (preliminary mapping was prepared and a list of Areas for Further Assessment finalised in 2012).
- Prepare flood extent maps for the identified areas (finalised in 2016 for inclusion in Flood Risk Management Plans – see below).
- Prepare flood risk management plans focused on prevention, protection and preparedness. These plans are to include measures to reduce the probability of flooding and its potential consequences. These Plans were adopted in 2018.

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

### **1.4.2 National Flood Policy**

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

In line with changing national and international paradigms on how to manage flood risk most effectively and efficiently, a review of national flood policy was undertaken in 2003-2004. The review was undertaken by an Inter-Departmental Review Group, led by the Minister of State at the Department of Finance with special responsibility for the OPW. The Review Group prepared a report that was put to Government, and subsequently approved and published in September 2004 (Report of the Flood Policy Review Group, OPW, 2004).

The scope of the review included a review of the roles and responsibilities of the different bodies with responsibilities for managing flood risk, and to set a new policy for flood risk management in Ireland into the future. The adopted policy was accompanied by many specific recommendations, including:

- Focus on managing flood risk, rather than relying only flood protection measures aimed at reducing flooding;

- Taking a catchment-based approach to assess and manage risks within the whole-catchment context; and
- Being proactive in assessing and managing flood risks, including the preparation of flood maps and flood risk management plans.

### **1.4.3 National CFRAM Programme**

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

The CFRAM Programme comprises three phases as follows:

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

The Programme provides for three main consultative stages as follows:

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

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

### **1.4.4 Flood Risk Management Guidelines**

#### **1.4.4.1 Introduction**

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

The core objectives of the Guidelines are to:

- Avoid inappropriate development in areas at risk of flooding;
- Avoid new developments increasing flood risk elsewhere, including that which may arise from surface water run-off;
- Ensure effective management of residual risks for development permitted in floodplains;
- Avoid unnecessary restriction of national, regional or local economic and social growth;
- Improve the understanding of flood risk among relevant stakeholders; and

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<sup>1</sup> The PFRAs identified areas at risk of significant flooding and includes maps showing areas deemed to be at risk. The areas deemed to be most significant risk, where the flood risk that is of particular concern nationally, are identified as Areas for Further Assessment (AFAs). Tuam was identified as an AFA. The OPW has undertaken a detailed assessment on the extent and degree of fluvial flood risk for various areas in County Galway, including these AFAs, producing Flood Extent Mapping.

- Ensure that the requirements of EU and national law in relation to the natural environment and nature conservation are complied with at all stages of flood risk management.

#### **1.4.4.2 Principles of Flood Risk Management**

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

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

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

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

#### **1.4.4.3 Stages of SFRA**

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

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

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

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

#### **1.4.4.4 Flood Zones**

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

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

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

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

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

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

- **Flood Zone A** – where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding<sup>2</sup>);
- **Flood Zone B** – where the probability of flooding from rivers and the sea is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding and between 0.1% or 1 in 1000 year and 0.5% or 1 in 200 for coastal flooding); and
- **Flood Zone C** – where the probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 1000 for both river and coastal flooding). Flood Zone C covers all other areas that are not in zones A or B.

A summary of the requirements of the Flood Guidelines for land uses across each of the above flood zones is provided at Appendix I.

## 1.5 Emerging Information and Disclaimer

It is important to note that compliance with the requirements of the Flood Risk Management Guidelines is currently based on emerging and best available data at the time of preparing the assessment, including Flood Risk Management Plans, which will be updated on a cyclical basis as part of CFRAM activities. The SFRA process for the Draft Plan is ongoing and will be updated as relevant, including to take account of any submissions made and any Material Alterations that arise during the Plan-preparation process.

Following adoption of the Plan, information in relation to flood risk may be altered in light of future data and analysis, by, for example, the OPW, or future flood events. As a result, all landowners and developers are advised that Galway County Council and their agents can accept no responsibility for losses or damages arising due to assessments of the vulnerability to flooding of lands, uses and developments. Owners, users and developers are advised to take all reasonable measures to assess the vulnerability to flooding of lands and buildings (including basements) in which they have an interest prior to making planning or development decisions.

Any future SFRAs for the Plan area or for the County will integrate other new and emerging data.

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<sup>2</sup> Coastal flooding is not relevant to the LAP

# Section 2 Stage 1 SFRA - Flood Risk Identification

## 2.1 Introduction

Stage 1 SFRA (flood risk identification) has been undertaken in order to identify whether there may be any flooding or surface water management issues within or adjacent to zoned lands and consequently whether Stage 2 SFRA (flood risk assessment) should be proceeded to. It is reproduced in part this document.

Tuam is located within the Corrib River Basin for which the Flood Risk Management Plan for the Corrib River Basin (UOM30). Stage 1 SFRA is based on existing information on flood risk indicators based on historical evidence and computational models. A selection of key indicators is mapped for Tuam in Appendix II.

## 2.2 Drainage, Defences and Early Warning Systems

With regard to areas benefitting from drainage and defences (flood relief scheme works), there are various measures that have been implemented in County Galway that will contribute towards flood risk management. These include the culverting of various streams and rivers in many urban areas and embankments.

Arterial Drainage Schemes were carried out by the Office of Public Works under the Arterial Drainage Act 1945 to improve land for agricultural purposes and to mitigate flooding. Arterial drainage maintenance and monitoring of these schemes is still carried out by OPW on rivers, lakes, weirs, bridges and embankments to maintain adequate conveyance and ensure that flood waters (of varying magnitude but typically the 3-year flood) are retained in bank by lowering water levels during the growing season thus reducing waterlogging on the adjacent land during wetter periods. Various channels within the Tuam LAP area benefit from the Arterial Drainage Schemes (see Appendix II mapping).

The 2018 Flood Risk Management Plan (FRMP) for the Corrib River Basin (UOM30) identifies various general measures applicable to the catchment under "Measures Applicable for all Areas"<sup>3</sup>. The Plan identifies the following measures for the Corrib catchment in particular: Maintenance of Arterial Drainage Schemes; and Maintenance of Drainage Districts.

The provision of flood protection measures can significantly reduce flood risk. However, the Ministerial Guidelines require that the presence of flood protection structures should be ignored in determining flood zones. This is because of risks relating to failure and severe flood events that exceed design capacity (the risk of severe events is exacerbated with climate change). Notwithstanding this, new development can proceed in areas that are at elevated levels of flood risk subject to the Justification Test provided for by the Guidelines being passed, which takes into account proposals to manage flood risk, such as the development of defences. Although insurance can be challenging to attain in these instances.

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<sup>3</sup> Under the headings of:

- Prevention: Sustainable Planning and Development Management
- Prevention: Sustainable Urban Drainage Systems
- Prevention: Voluntary Home Relocation
- Prevention: Adaptation Planning
- Prevention: Land Use Management and Natural Flood Risk Management Measures
- Protection: Maintenance of Channels Not Part of a Scheme
- Preparedness: Promotion of Individual and Community Resilience
- Preparedness: Flood Forecasting and Warning
- Preparedness: Emergency Response Planning
- Preparedness: Individual Property Protection
- Preparedness: Flood-Related Data Collection

As provided for under Plan Objective FRM 07 from the County Development Plan, it is Council policy to "Protect waterbodies and watercourses within the County from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in riverine, wetland and coastal areas as appropriate". Such protection will, in combination with the direction of development within the existing footprints of settlements, safeguard flood plains from development throughout the County.

Various rivers and their banks and culverts in the area are maintained by the Office of Public Works and Galway County Council. New developments should ensure that access is preserved for the maintenance of Arterial Drainage Districts and the OPW will be consulted with in the consideration of applications for developments in the vicinity of the Drainage District in this regard. Applications for development on land identified as benefiting land may be prone to flooding, and as such site-specific flood risk assessments may be required in these areas.

Met Éireann currently issues flood warnings for County Galway. Met Éireann, in collaboration with the OPW, is currently engaged in the establishment of a National Flood Forecasting and Warnings Service to forecast for fluvial and coastal flood events.

## 2.3 Other Flood Studies

Other Flood Studies considered in the preparation of this assessment include:

- Flood Risk Management Plan (Corrib River Basin), 2018;
- Previous SFRA in County Galway; and
- Regional Flood Risk Assessment for the Northern and Western Regional Spatial and Economic Strategy, 2020.

## 2.4 Flood Risk Indicators

Indicators of flood risk that are based on historical flooding events are identified and described on Table 2. Indicators of flood risk that are based on computational models – predictive flood risk indicators – are identified and described on Table 3. A selection of the historical and predictive flood risk indicators that were considered by the SFRA are mapped at settlement level for Tuam in Appendix II.

**Table 2 Historical Flood Risk Indicators**

Information Source	Description	Strategic Limitations
<b>Recorded Flood Events from the OPW</b>	A flood event is the occurrence of recorded flooding at a given location on a given date. The flood event is derived from different types of information (reports, photographs etc.).	This dataset only provides a spot location
<b>Recurring Flood Events</b>	A flood event that has occurred more than once at a certain area is named a recurring flood event.	This dataset only provides a spot location
<b>OPW Flood Extent</b>	A flood extent is an inundated area as recorded at a certain moment in time. This layer of information includes floods recorded in 1999/2000 and 1954.	Coverage limited
<b>Alluvium Soils</b>	Mineral alluvial soil mapping is indicative of recurrent or significant fluvial flooding at some point in the past and was generated by Teagasc with co-operation of the Forest Service, EPA and GSI. This project was completed May 2006.	Drainage may have changed significantly since these soils were deposited.
<b>Benefitting lands (OPW)</b>	Benefitting lands mapping is a dataset identifying land that might benefit from the implementation of Arterial (Major) Drainage Schemes (under the Arterial Drainage Act 1945) and indicating areas of land estimated or reported to be subject to flooding or poor drainage.	Identifies broad areas - low resolution for flood risk management
<b>Drainage Districts (OPW)</b>	This drainage scheme mapping dataset was prepared on behalf of the Drainage Districts (Local Authorities with statutory responsibility for maintenance under the Arterial Drainage Act, 1925). These maps identify land that might benefit from the implementation of Arterial (Major) Drainage Schemes and indicate areas of land subject to flooding or poor drainage.	Identifies large broad areas - very low resolution for flood risk management



Information Source	Description	Strategic Limitations
<b>Land Commission (OPW)</b>	This dataset indicates areas of land defended to some degree against flooding that were formerly the responsibility of the Land Commission.	Identifies broad areas - low resolution for flood risk management
<b>Geological Survey of Ireland (GSI) Flood Event</b>	Probabilistic and historic groundwater flood maps available on the GSI's Groundwater Flooding Data Viewer have been prepared by Geological Survey Ireland through the 2016-2019 GW Flood Project. The Groundwater Flood Probability Maps show the probabilistic flood extent of groundwater flooding in limestone regions and are focused primarily (but not entirely) on flooding at seasonally flooded wetlands known as turloughs. The Historic Groundwater Flood Map shows the observed peak flood extents caused by groundwater in Ireland and are largely based on the winter 2015 / 2016 flood event which was the largest flood on record in many areas.	This 2015-2016 data shows surface water flooding and does not distinguish between fluvial and pluvial flooding.  There is no GSI Flood Event mapping available within the Plan area, although it indicates areas of potential surface water risk beyond the Plan area.

**Table 3 Predictive Flood Risk Indicators**

Information Source	Description	Strategic Limitations
<b>CFRAM Study, Flood Extent Mapping, 2016</b>	Following the undertaking of the PFRA, the OPW, through its engineering consultants and working with local authorities and other stakeholders, conducted extensive engineering assessments to better understand and detail the actual risk from flooding for areas that were at highest levels of risk. This was the subject of public consultation. The outcome of that work includes Predicted Flood Extent maps that were finalised in 2016. For fluvial flood levels, calibration and verification of the models make use of the best available data including hydrometric records, photographs, videos, press articles and anecdotal information.	Spatial spread is limited, including to the areas that are considered to be at most risk of flooding.
<b>National Indicative Fluvial Mapping (NIFM) 2021</b>	The PFRA indicative flood maps have now been superseded by the recently published NIFM.  The OPW NIFM project has produced second generation indicative fluvial flood spatial data that are of a higher quality and accuracy to those produced for the first cycle PFRA. This project has covered 27,000 km of river reaches, separated into 37 drainage areas, consisting of 509 sub-catchments.	Does not cover smaller sized catchments.  There is no NIFM available within the Plan area, although it indicates areas of potential risk beyond the Plan area.
<b>GSI Predictive groundwater flood map</b>	The predictive groundwater flood map presents the probabilistic flood extents for locations of recurrent karst groundwater flooding. It consists of a series of stacked polygons at each site representing the flood extent for specific AEP's mapping floods that are expected to occur every 10, 100 and 1000 years (AEP of 0.1, 0.01, and 0.001 respectively). The map is focussed primarily (but not entirely) on flooding at seasonally inundated wetlands known as turloughs. Sites were chosen for inclusion in the predictive map based on existing turlough databases as well as manual interpretation of SAR imagery. The mapping process tied together the observed and SAR-derived hydrograph data, hydrological modelling, stochastic weather generation and extreme value analysis to generate predictive groundwater flood maps for over 400 qualifying sites.	Not all turloughs are included in the predictive map as some sites could not be successfully monitored with SAR and/or modelled.

Information Source	Description	Strategic Limitations
<p><b>OPW Preliminary Flood Risk Assessment (PFRA) Fluvial, Groundwater and Pluvial flood maps, 2012</b></p>	<p>The OPW PFRA mapping dataset has been arrived at by:</p> <ul style="list-style-type: none"> <li>• Reviewing records of floods that have happened in the past;</li> <li>• Undertaking analysis to determine which areas might flood in the future, and what the impacts might be; and</li> <li>• Extensive consultation with each local authorities and other Government departments and agencies.</li> </ul> <p>This assessment has considered all types of flooding, including that which can occur from rivers, the sea and estuaries, heavy rain, groundwater, the failure of infrastructure, and so on. It has also considered the impacts flooding can have on people, property, businesses, the environment and cultural assets. Further information on the purpose and development of the OPW PFRA Maps are available on <a href="http://www.cfram.ie">www.cfram.ie</a>.</p>	<p>The PFRA is only a preliminary assessment, based on available or readily derivable information. Analysis has been undertaken to identify areas prone to flooding, and the risks associated with such flooding, but this analysis is purely indicative and undertaken for the purpose of completing the PFRA. The mapping has been developed using simple and cost-effective methods and is based on broad-scale simple analysis and may not be accurate for a specific location/use.</p> <p>Pluvial flood risk is likely to be present in local areas, however; it is not taken into account in the delineation of flood zones. Furthermore, PFRA indicative pluvial maps (2012) are not considered to be reliable for the purposes of zoning or decision-making.</p>

## 2.5 Conclusion

The information detailed above indicates elevated levels of flood risk in various locations across the town; therefore, a Stage 2 SFRA was proceeded to.

## Section 3 Stage 2 SFRA - Flood Risk Assessment

### 3.1 Introduction

Stage 2 SFRA (flood risk assessment) has been undertaken in order to:

- Confirm the sources of flooding that may affect zoned and adjacent areas;
- Appraise the adequacy of existing information as identified by the Stage 1 SFRA; and
- Scope the extent of the risk of flooding through the preparation of flood zone maps.

### 3.2 Findings and Adequacy of Existing Information and Delineation of Flood Zones

Desk and in-field studies were undertaken taking into account the following factors:

- OPW's CFRAMS fluvial flood extent mapping (2016) and other predictive indicators;
- Historical indicators of flood risk;
- Documented Council knowledge of lands;
- The potential source and direction of flood paths from rivers and streams;
- Vegetation indicative of flood risk; and
- The locations of topographic/built features that coincide with the flood indicator related boundaries/topographical survey.

Within the annual exceedance probabilities specified by the Flood Guidelines for Flood Zones A and B, there are elevated levels of flood risk at certain areas in Tuam, as shown in Appendix II.

### 3.3 Flood Risk Zone Mapping

Flood Risk Zone maps have been produced taking into account the findings of the Stage 1 and Stage 2 SFRA desk and in field studies as identified above<sup>4</sup>.

The Flood Risk Zone map for Tuam is provided in Appendix II and identifies Flood Zone A (darker blue) and Flood Zone B<sup>5</sup> (lighter blue). All other areas fall within Flood Zone C. As per the Guidelines, the flood zones are as follows:

- Flood Zone A – where the probability of flooding from rivers is highest (greater than 1% or 1 in 100 for river flooding);
- Flood Zone B – where the probability of flooding from rivers is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding); and
- Flood Zone C – where the probability of flooding from rivers is low (less than 0.1% or 1 in 1000 for river flooding).

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<sup>4</sup> Including taking into account predictive and historical indicators of flood risk, documented Council knowledge of lands, Council Engineer review and input into indicators and flood zones (local knowledge), the potential source and direction of flood paths from rivers and streams, vegetation indicative of flood risk and the locations of topographic/built features that coincide with the flood indicator related boundaries/topographical survey.

<sup>5</sup> As identified by the Guidelines, in rivers with a well-defined floodplain or where the coastal plain is well defined at its rear, the limits of Zones A and B will virtually coincide. Zone B will only be significantly different in spatial extent from Zone A where there is extensive land with a gentle gradient away from the river or the sea.

### 3.4 Sensitivity to Climate Change

'The Planning System and Flood Risk Management Guidelines for Planning Authorities and Technical Appendices, 2009' recommends that a precautionary approach to climate change is adopted due to the level of uncertainty involved in the potential effects. In this regard, the Guidelines recommends:

- Recognising that significant changes in the flood extent may result from an increase in rainfall or tide events and accordingly adopting a cautious approach to zoning land in these potential transitional areas;
- Ensuring that the levels of structures designed to protect against flooding such as flood defences<sup>6</sup>, 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 (normally 85-100 years); and
- Ensuring 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.

~~Advice on the expected impacts of climate change and the allowances to be provided for future flood risk management in Ireland is given in the OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management (2009). Two climate change scenarios are considered. These are the Mid-Range Future Scenario (MRFS) and the High-End Future Scenario (HEFS). The MRFS is intended to represent a "likely" future scenario based on the wide range of future predictions available. The HEFS represents a more "extreme" future scenario at the upper boundaries of future projections. Based on these two scenarios the OPW recommended allowances for climate change in relation to river flows and sea levels are given in Table 4. These climate change allowances are particularly important at the development management stage of planning, and will ensure that proposed development is designed and constructed to take into account best current knowledge. Climate change allowances have been integrated into the recommendations provided at Section 4 of this report and MRFS and HEFS mapping is available from the OPW for certain areas, including AFAs.~~

~~**Table 4 Allowances for Future Scenarios (100-Year Time Horizon)<sup>7</sup>**~~

<del>Criteria</del>	<del>MRFS – to be considered for most development scenarios</del>	<del>HEFS – to be considered in relation to high value, high vulnerability development which cannot be relocated</del>
<del>Extreme Rainfall Depths</del>	<del>+20%</del>	<del>+30%</del>
<del>Flood Flows</del>	<del>+20%</del>	<del>+30%</del>
<del>Mean Sea Level Rise</del>	<del>+500mm</del>	<del>+1000mm</del>

The CFRAM Programme include maps for two potential future scenarios taking account of different degrees of climate impact, the Mid-Range Future Scenario (more likely to occur over the coming decades) and the High-Range Future Scenario (less likely to occur over the coming decades). A selection of Future Scenario Mapping is provided under Appendix II of this SFRA report. In compliance with the Guidelines, the Flood Zones identified by the SFRA are defined on the basis of current flood risk. The CFRAMS potential future scenarios mapping and the potential impacts of climate change, including increased rainfall intensities and increased fluvial flood flows, are required to be further taken into account at lower tiers of decision making concerning individual projects.

Flood Risk Assessments shall apply the precautionary approach recommended in the Guidelines and shall be informed by the advice on the expected impacts of climate change and the allowances to be provided for future flood risk management provided in the OPW's (2019) Flood Risk Management Climate Change Sectoral Adaptation Plan [and the guidance on potential future scenarios contained therein.](#)

<sup>6</sup> Defended areas are highly sensitive to climate change as the likelihood of defence failure and resulting flooding increases.

<sup>7</sup> OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management (2009)

### 3.5 Sustainable Drainage Systems and Surface Water Guidance and Strategy

As provided for by measures integrated into both the existing, already in force, Galway County Development Plan and the Draft Local Area Plan (including the measures reproduced at Section 4 of this report), new developments will be required to incorporate the requirement for Sustainable Urban Drainage Systems (SuDS) where appropriate. In combination, these provisions contribute towards a sustainable drainage strategy for the Plan area.

It is likely that some or all of the following SuDS techniques will be applicable to key development sites<sup>8</sup> within Tuam, including to manage surface water run-off:

- Rainwater harvesting
- Green roofs
- Infiltration systems
- Proprietary treatment systems
- Filter strips
- Filter drains
- Swales
- Bioretention systems
- Trees
- Pervious pavements
- Attenuation storage tanks
- Detention basins
- Ponds and wetlands

Each land use zoning objective, including those for opportunity sites, allows for a range of possible uses and the Local Area Plan, and associated County Development Plan, allow for a range of scales, heights, densities configurations/layouts and designs. The application of different SuDS techniques will be dependent on a combination of the site's characteristics and the development (when known) being considered.

Because of the infinite range of land use types and associated developments and designs that could occur on sites within the Plan area under this type of Plan<sup>9</sup>, the guidance from this SFRA is to consider the full range of SUDs available, taking into account the recommendations and information provided above and below. On key development/opportunity sites, in particular, integrated and area-based provision of SuDS and green infrastructure may be appropriate in order to avoid reliance on individual site by site solutions.

Some sites, such as those for which guidance is provided for below, will pose particular challenges for SuDS. The best practice manuals cited at the end of this sub-section should be considered in determining solutions at these and other development sites.

At sites with high groundwater levels:

- Infiltration techniques may be particularly challenging and shallow infiltration basins or permeable pavements, may be most appropriate.
- Storage and conveyance systems need to be kept above maximum groundwater levels and membranes of appropriate robustness should be used to line any tanks
- Locating storage tanks or lined sub-base systems below the maximum likely groundwater level can cause result in flotation and structural risks

At sites that are steeply sloping:

- Effective utilisation of SuDS storage capacity should be considered, which can benefit from aligning with contours of roads and other structures, where these sites are terraced. Terraced

<sup>8</sup> Including: Opportunity Site 1–Corner of The Mall & Stable Lane, Opportunity Site 2–Corner of Chapel Lane & Egan's Lane, Opportunity Site 3–Corner of Barracks Street & Liam Mellows Street and Opportunity Site 4 –Bishop Street.

<sup>9</sup> Refer to Plan "Table 1.6.1 Land Use Matrix Table", for example, for the wide range of land uses possible at sites zoned with single land use zoning objectives.

car-parking areas can allow for storage of water through pervious pavements. Basins on terraces can provide open space. The runoff catchment on these sites can also be divided into smaller sub catchments.

- Velocities in swales and basins due to the steep slope can be managed by using check dams in swales or in storage layers, such as below permeable pavements.
- The possibility of infiltrating water resurfacing downslope or to increase pressure on downslope structures, such as walls, causing them to fail should be considered.

At sites that are very flat:

- On very flat sites, it is often not possible to construct piped drainage systems with sufficient falls to achieve minimum self-cleansing velocities. The solution can involve the use of shallow SuDS components such as swales, pervious pavements or high-capacity linear drainage channels, often dividing the site into small sub-catchments and providing local combined storage and conveyance components.
- A slight fall on any subgrade exposed to water is preferred in order to avoid ponding of water and reduction in strength in the soil due to waterlogging. If this is not possible then reduction in strength should be taken into account in the structural design of tanks or pervious pavements.
- Pumping should be a last resort and only allowable in situations where guaranteed maintenance of the pumps can be ensured.

At sites that include areas of floodplain:

- Notwithstanding that all storage volume should normally be provided within the development footprint, outside of the floodplain, SuDS on floodplains can be effective in managing routine rainfall/treatment for frequent events.
- SuDS should be selected and designed taking account of the likely high groundwater table and vulnerability to erosion during periods of high flows/water levels and SuDS should not reduce floodplain storage or conveyance.
- Conveyance routes should limit grading and the creation of surface features that could either reduce floodplain capacity or be washed out in a flood.
- Surface discharge from SuDS should be dispersed with point discharges minimised or eliminated.
- All SuDS within or crossing a floodplain should take full consideration of the likely influence of river water levels on the design performance. Combined probability assessments may be required.
- Siltation and subsequent clearance after a flood event has subsided should also be taken into account in the design.

SuDS are effective technologies, which aim to reduce flood risk, improve water quality and enhance biodiversity and amenity.

The systems should aim to mimic the natural drainage of the application site to minimise the effect of a development on flooding and pollution of existing waterways. SuDS include devices such as swales, permeable pavements, filter drains, storage ponds, constructed wetlands, soakways and green roofs. The integration of nature-based solutions, such as amenity areas, ecological corridors and attenuation ponds, into public and private development initiatives, is applicable within the provisions of the Plan and should be encouraged. [Applications for development should take into account, as appropriate, the Department of Housing, Local Government and Heritage's \(2022\) "Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas - Water Sensitive Urban Design - Best Practice Interim Guidance Document"](#).

In some exceptional cases, and at the discretion of the Council, where it is demonstrated that SuDS devices are not feasible, approval may be given to install underground attenuation tanks or enlarged pipes in conjunction with other devices to achieve the required water quality. Such alternative measures will only be considered as a last resort. Proposals for surface water attenuation systems should include maintenance proposals and procedures.

Urban developments, both within developments and within the public realm, should seek to minimise and limit the extent of hard surfacing and paving and require the use of sustainable drainage

techniques for new development or for extensions to existing developments, in order to reduce the potential impact of existing and predicted flood risk. Development proposals should be accompanied by a comprehensive SuDS assessment that addresses run-off rate, run-off quality and its impact on the existing habitat and water quality.

For larger sites (i.e. multiple dwellings or commercial units) master planning should ensure that existing flow routes are maintained, through the use of green infrastructure. In addition, where multiple individual proposals are being made SuDS should be integrated where appropriate and relevant.

All proposed development, should consider the impact of surface water flood risks on drainage design e.g. in the form of a section within the flood risk assessment (for sites in Flood Zone A or B) or part of a surface water management plan.

Pluvial flood risk is likely to be present in local areas, however; it is not taken into account in the delineation of flood zones. Furthermore, PFRA indicative pluvial maps (2012) are not considered to be reliable for the purposes of zoning or decision-making. Particular attention should be given to development in low-lying areas which may act as natural ponds for collection of run-off. The drainage design should ensure no increase in flood risk to the site, or the downstream catchment. Where possible, and particularly in areas of new development, floor levels should be at an appropriate height above adjacent roads and hard standing areas to reduce the consequences of any localised flooding. Where this is not possible, an alternative design appropriate to the location may be prepared.

Further to the above, proposals for development should consider the Construction Industry Research and Information Association (CIRIA) SuDS Manual 2015 and any future update of this guidance and Greater Dublin Strategic Drainage Study documents in designing SuDS solutions, including the New Development Policy, the Final Strategy Report, the Code of Practice and "Irish SuDS: guidance on applying the GDSDS surface water drainage criteria".

## Section 4 Flood and Drainage Provisions

### 4.1 Introduction

In order to comply with *The Planning System and Flood Risk Management - Guidelines for Planning Authorities* (Department of the Environment, Heritage and Local Government and Office of Public Works, 2009) and Department of the Environment, Community and Local Government Circular (*PL 2/2014*) and in order to contribute towards flood risk management within the Plan area, the measures below have been integrated into the Draft Tuam Local Area Plan and the existing, already in force, Galway County Development Plan 2022-2028.

### 4.2 Land Use Zoning

That Flood Zones identified by the SFRA were used in line with the requirements provided for by the Flood Guidelines for land uses in Flood Zones A and B.

With respect to lands which have already been developed, the potential conflict between zonings and *highly* and *less vulnerable* development (see Tables 87 and 98 in Appendix I) were avoided by applying the constrained land use approach, with blue hatched shaded zone, 'Constrained Land Use', applied on the land use zone mapping in order to differentiate that there is a flood risk issue.

To this effect, the following provisions have been integrated into the Local Area Plan:

#### **DM Guideline 1**

##### **Minimum Finished Floor Levels (FFL's)**

In areas of limited flood depth, the specification of the threshold and floor levels of new structures shall be raised above expected flood levels to reduce the risk of flood losses to a building, by raising floor heights within the building structure using a suspended floor arrangement or raised internal concrete platforms.

When designing an extension or modification to an existing building, an appropriate flood risk reduction measure shall be specified to ensure the threshold levels into the building are above the design flood level. However, care must also be taken to ensure access for all is provided in compliance with Part M of the Building Regulations.

Where threshold levels cannot be raised to the street for streetscape, conservation or other reasons, the design shall specify a mixing of uses vertically in buildings - with less vulnerable uses located at ground floor level, along with other measures for dealing with residual flood risk.

#### **Surface Water Drainage and Flooding**

##### **DM Standard 2: Sustainable Drainage Systems (SuDS)**

All new developments (including amendments/extensions to existing developments) will be required to incorporate 'Sustainable Urban Drainage Systems' (SuDS) as part of the development/design proposals. SuDS are effective technologies which aim to reduce flood risk, improve water quality and enhance biodiversity and amenity. The systems should aim to mimic the natural drainage of the application site to minimise the effect of a development on flooding and pollution of existing waterways.

SuDS include devices such as swales, permeable pavements, filter drains, storage ponds, constructed wetlands, soakaways and green roofs. In some exceptional cases, and at the discretion of the Council, where it is demonstrated that SuDS devices are not feasible, approval may be given to install underground attenuation tanks or enlarged pipes in conjunction with other devices to achieve the required water quality. Such alternative measures will only be considered as a last resort. Proposals for surface water attenuation systems should include maintenance proposals and procedures. Development proposals will be required to be accompanied by a comprehensive SuDS assessment that addresses run-off rate, run-off quality and its impact on the existing habitat and water quality. This approach using SuDS offers a total solution to rainwater management and is applicable in urban and rural situations. Current best practice guidance on SuDS is available from the Guidance Documents produced by the Greater Dublin Strategic Drainage Study (GSDSDS).

Refer also to DM Standard 68 of the Galway County Development Plan 2022 – 2028.



**DM Standard 3: Flooding  
Flood Zones and Appropriate Uses**

The table below indicates the types of land uses that are appropriate in each of the Flood Zones identified within the Plan area, in accordance with the 2009 Flood Risk Management Guidelines for Planning Authorities and Departmental Circular PL2/2014 (or any updated/superseding legislation or policy guidance).

Where developments/land uses are proposed that are inappropriate to the Flood Zone, then a Development Management Justification Test and site-specific Flood Risk Assessment will be required per The Planning System and Flood Risk Management Guidelines 2009 (and as updated).

Flood Zones	Overall probability	Planning implications for land uses		
		Highly Vulnerable Development	Less Vulnerable Development	Water Compatible Development
Flood Zone A	Highest	Inappropriate – if proposed, then Justification Test and detailed Flood Risk Assessment are required	Inappropriate – if proposed, then Justification Test and detailed Flood Risk Assessment are required	Appropriate – screen for flood risk
Flood zone B	Moderate	Inappropriate – if proposed, then Justification Test and detailed Flood Risk Assessment are required	Inappropriate due to climate change – if proposed, then Justification Test and detailed Flood Risk Assessment are required	Appropriate – screen for flood risk
Flood Zone C	Lowest	Appropriate - detailed Flood Risk Assessment may be required	Appropriate - detailed Flood Risk Assessment may be required	Appropriate – screen for flood risk

Table 3 Flood Zones Planning Implications

Refer to Flood Risk Management Guidelines 2009 and 'SFRA for the Tuam Local Area Plan 2023-2029' for additional detail:

- Highly Vulnerable Development - Houses, schools, hospitals, residential institutions, emergency services, essential infrastructure, etc.
- Less Vulnerable Development - Economic uses (retail, leisure, warehousing, commercial, industrial, non-residential institutions, etc.), land and buildings used for agriculture or forestry, local transport infrastructure, etc.
- Water Compatible Development - Docks, marinas, wharves, water-based recreation and tourism (excluding sleeping accommodation), amenity open space, sports and recreation, flood control infrastructure, etc.

Refer also to DM Standard 68 in the Galway County Development Plan 2022 – 2028.

Further to the above, following public display of the Draft Plan and associated documents, the following clarifications to the meanings of Land Use Zoning Objectives were proposed to be added to the "General Notes on Land Use Zoning Matrix" under Table 1.6.1 "Land Use Matrix" of the Plan:

- "8. Lands zoned "A - Agriculture" would not pass the Plan Making Justification Test. Furthermore, the Plan Making Justification Test is unsuitable for assessing Agricultural zoned lands, which are not consistent with the condition that any lands justified are essential in achieving compact and sustainable urban growth. Consequently, developments on lands zoned "A - Agriculture" shall be limited as per the requirements of Policy Objective TKT 41 Constrained Land Use. This limitation shall take primacy over any related provision relating to the land use zoning matrix."
- "9. Uses under "R – Residential Existing" that have not passed the Justification Test (residential developments to the north of the Weir Road and to the immediate south east of the N17) shall be limited as per the requirements of Policy Objective TKT 41 Constrained Land Use. This limitation shall take primacy over any related provision relating to the land use zoning matrix."

- 10. Uses under "Public, Community and Institutional Uses" to the east of Parkmore shall be limited in Flood Zone B to less-vulnerable and water compatible uses (as per the Flood Risk Management Guidelines).  
This limitation shall take primacy over any related provision relating to the land use zoning matrix.
- 11. Uses under "Commercial and Industrial Uses" adjacent to the existing commercial/industrial development between the River Clare and the N17 shall be limited in areas at elevated risk of flooding, as per the Flood Risk Management Guidelines, as follows:
  - In Flood Zone A, uses shall be limited to water compatible uses;
  - In Flood Zone B, uses shall be limited to less-vulnerable and water compatible uses (as per the Flood Risk Management Guidelines);These limitations shall take primacy over any related provision relating to the land use zoning matrix.

### 4.3 Integration of provisions relating to flood risk management into the existing, already in force, Galway County Development Plan

Provisions relating to flood risk management, including the following, have also been integrated into the Galway County Development Plan 2022-2028:

**Table 45 County Development Plan Provisions relating to Flood Risk Management**

Provision
<p>Policy Objectives Flood Risk Management</p> <p>FL 1 Flood Risk Management Guidelines It is the policy objective of Galway County Council to support, in co-operation with the OPW, the implementation of the EU Flood Risk Directive (2007/60/EC), the Flood Risk Regulations (SI No. 122 of 2010) and the DEHLG/OPW publication The Planning System and Flood Risk Management Guidelines (2009) (and any updated/superseding legislation or policy guidance) and Department Circular PL2/2014 or any updated / superseding version.</p> <p>FL 2 Flood Risk Management and Assessment</p> <p>Comply with the requirements of the DoEHLG/OPW The Planning System and Flood Risk Management Guidelines for Planning Authorities and its accompanying Technical Appendices Document 2009 (including any updated/superseding documents).</p> <p>This will include the following:</p> <p>(a) Avoid, reduce and/or mitigate, as appropriate in accordance with the Guidelines;</p> <p>(b) Development proposals in areas where there is an identified or potential risk of flooding or that could give rise to a risk of flooding elsewhere will be required to carry out a Site-Specific Flood Risk Assessment, and justification test where appropriate, in accordance with the provisions of The Planning System and Flood Risk Management Guidelines 2009 (or any superseding document); Any flood risk assessment should include an assessment of the potential impacts of climate change, such as an increase in the extent or probability of flooding, and any associated measures necessary to address these impacts;</p> <p>(c) Development that would be subject to an inappropriate risk of flooding or that would cause or exacerbate such a risk at other locations shall not normally be permitted;</p> <p>(d) Galway County Council shall work with other bodies and organisations, as appropriate, to help protect critical infrastructure, including water and wastewater, within the County, from risk of flooding.</p> <p>FL 3 Principles of the Flood Risk Management Guidelines</p> <p>The Planning Authority shall implement the key principles of flood risk management set out in the Flood Risk Management Guidelines as follows:</p> <p>(a) Avoid development that will be at risk of flooding or that will increase the flooding risk elsewhere, where possible;</p> <p>(b) Substitute less vulnerable uses, where avoidance is not possible; and</p> <p>(c) Mitigate and manage the risk, where avoidance and substitution are not possible.</p> <p>Development should only be permitted in areas at risk of flooding when there are no alternative, reasonable sites available in areas at lower risk that also meet the objectives of proper planning and sustainable development. Vulnerable development in areas which have the highest flood risk should be avoided and/or only considered in exceptional circumstances (through a prescribed Justification Test) if adequate land or sites are not available in areas which have lower flood risk</p> <p>FL 4 Flood Relief Schemes</p> <p>The Planning Authority shall support and co-operate with the Office of Public Works (OPW) in the delivery of Flood Relief Schemes.</p>

**Provision****FL 5 Catchment Planning**

The Planning Authority will support the OPW'S CFRAM Programme and catchment-based Flood Planning Groups, especially where catchments go beyond the Council's administrative boundary, in the development and implementation of catchment-based strategies for the management of flood risk - including those relating to storage and conveyance.

**FL 6 Surface Water Drainage and Sustainable Drainage Systems (SuDs)**

Maintain and enhance, as appropriate, the existing surface water drainage system in the County. Ensure that new developments are adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems in all new developments. Surface water run-off from development sites will be limited to pre-development levels and planning applications for new developments will be required to provide details of surface water drainage and sustainable drainage systems proposals.

**FL 7 Protection of Waterbodies and Watercourses**

Protect waterbodies and watercourses within the County from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in riverine, wetland and coastal areas as appropriate.

**FL 8 Flood Risk Assessment for Planning Applications and CFRAMS**

"Protect Flood Zone A and Flood Zone B from inappropriate development and direct developments/land uses into the appropriate Flood Zone in accordance with The Planning System and Flood Risk Management Guidelines for Planning Authorities 2009 (or any superseding document) and the guidance contained in Development Management Standard 69.

Site-specific Flood Risk Assessment (FRA) is required for all planning applications in areas at elevated risk of flooding, even for developments appropriate to the particular flood zone. The detail of these site-specific FRAs will depend on the level of risk and scale of development. A detailed site-specific FRA should quantify the risks, the effects of selected mitigation and the management of any residual risks. The Planning Authority shall have regard to the results of any CFRAM Studies in the assessment of planning applications.

Development proposal will need to be accompanied by a Development Management Justification Test in addition to the site-specific Flood Risk Assessment.

Where only a small proportion of a site is at risk of flooding, the sequential approach shall be applied in site planning, in order to seek to ensure that no encroachment onto or loss of the flood plain occurs and/or that only water compatible development such as Open Space would be permitted for the lands which are identified as being at risk of flooding within that site.

In Flood Zone C, where the probability of flooding is low (less than 0.1%, Flood Zone C), site-specific Flood Risk Assessment may be required and the developer should satisfy themselves that the probability of flooding is appropriate to the development being proposed.

In addition to the County Plan SFRA datasets (including the Flood Zones, CFRAMS mapping, historical and predictive groundwater mapping, predictive pluvial mapping and historical flood risk indicator mapping, such as the Benefitting Lands mapping), new and emerging datasets (such as the OPW's National Fluvial Mapping that will supersede existing PFRA fluvial mapping for catchments greater than 5km<sup>2</sup>) must be consulted by prospective applicants for developments and will be made available to lower-tier Development Management processed in the Council. Applications for developments in coastal areas and associated assessments shall also consider wave overtopping and coastal erosion.

**FL 9 SFRA of Lower Tier Plans**

Lower tier plans shall undertake SFRA (Strategic Flood Risk Assessment) in compliance with the Flood Risk Management Guidelines.

**FL 10 SFRA/FRA and Climate Change**

SFRAs and site-specific FRAs shall provide information on the implications of climate change with regard to flood risk in relevant locations. The 2009 OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management (or any superseding document) shall be consulted with to this effect.

**FL 11 FRA and Environmental Impact Assessment (EIA)**

Flood risk may constitute a significant environmental effect of a development proposal that in certain circumstances may trigger a sub-threshold EIA. FRA should therefore be an integral part of any EIA undertaken for projects within the County.

**FL 12 Inland Fisheries**

It is a policy objective of the Planning Authority to consult, where necessary, with Inland Fisheries Ireland, the National Parks and Wildlife Service and other relevant agencies in the construction of flood alleviation measures in County Galway.

**FL 13 CFRAM**

It is a policy objective of the Planning Authority to take account of and incorporate into local planning policy and decision making, including possible future variations to this plan, CFRAM measures that may be published in the future, including planned investment measures for managing and reducing flood risk.

**FL 14 Flood Vulnerable Zones**

It is a policy objective of the Planning Authority to ensure that applications pertaining to existing developments in flood vulnerable zones provide details of structural and non-structural risk management measures to include, but not be limited to specifications of the following - floor levels, internal layout, flood resilient construction, flood resistant construction, emergency response planning, access and egress during flood events.

**FL 15 Flood Risk Management**

Ensure each flood risk management activity is examined to determine actions required to embed and provide for effective climate change adaptation as set out in the OPW Climate Change Sectoral Adaptation Plan for Flood Risk Management applicable at the time.

**FL 16 Benefitting Land**

Applications for development on land identified as benefiting land may be prone to flooding, and as such site-specific flood risk assessments may be required in these areas.

**FL 17 Consultation with OPW**

Consult with the OPW in relation to proposed developments in the vicinity of drainage channels and rivers for which the OPW are responsible and retain a strip on either side of such channels where required, to facilitate maintenance access

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<p>thereto. In addition, promote the sustainable management and uses of water bodies and avoid culverting or realignment of these features.</p> <p><b>FL 18 Inappropriate Development on Flood Zones</b></p> <p>Where a development/land use is proposed within any area subject to this objective the development proposal will need to be accompanied by a detailed hydrological assessment and robust SUDS design which demonstrates the capacity to withstand potential flood events to maintain water quality and avoid potential effects to ecological features.</p> <ul style="list-style-type: none"> <li>• Any development proposals should be considered with caution and will be required to comply with The Planning System and Flood Risk Management Guidelines for Planning Authorities/Circular PL2/2014 &amp; the associated Development Management Justification Test.</li> <li>• Climate Change should be duly considered in any development proposal.</li> <li>• Protect the riparian zones of watercourse systems throughout the plan area through a general 10 metre protection buffer from rivers within the plan area as measured from the near riverbank, (this distance may be increased and decreased on a site by site basis, as appropriate).</li> <li>• Any development proposals submitted for this site will require a detailed ecological report (s), carried out by suitably qualified personnel for the purposes of informing Appropriate Assessment Screening by Galway County Council, the competent authority.</li> <li>• The relevant lands will be outlined and flagged with a symbol on the land use zoning map and on the GIS system of Galway County Council so that staff and the public are aware of the special conditions/constraints attached.</li> <li>• A briefing will be provided to relevant staff within Galway County Council on the special conditions and constraints on relevant lands.</li> </ul>

## 4.4 Integration of other provisions relating to flood risk management into the Draft Local Area Plan

Further to the measures relating to land use zoning integrated into the LAP (see Section 4.2 above) and those already in force through the Galway County Development Plan 2022-2028 (see Section 4.3 above), a number of other measures relating to flood risk and drainage have been integrated into the Draft Local Area plan as detailed on Table 65 below. In combination, these provisions contribute towards a sustainable drainage strategy for the Plan area (see also Section 3.5 of this document).

**Table 56 Draft Local Area Plan Provisions relating to Flood Risk Management**

Provision
<p><b>TKT 41 Constrained Land Use</b></p> <p>To facilitate the appropriate management and sustainable use of Flood Risk within the zoning plan area. This zoning indicates where the Plan Making Justification Test may need to be applied and as such can limit new development, while recognising that existing development uses within these zones may require small scale development, as outlined below, over the life of the Local Area Plan, which would contribute towards the compact and sustainable urban development of the town. <u>New development will generally be limited to water-compatible uses in Flood Zone A, and less vulnerable or water compatible uses in Flood Zone B, and a detailed site-specific Flood Risk Assessment will be required in these areas.</u></p> <p>The underlying zoning or the existing permitted uses may be deemed to be acceptable in principle, however within Flood Zone A/B development is typically limited to extensions, renovations and change of use. Infill highly vulnerable development and demolition and reconstruction can only take place in Flood Zone C. Less vulnerable development in Flood Zone B will also need to be considered carefully. These aspects are assessed on a case by case basis under the application of the Plan Making Justification Test and as supported by specific objectives in the written statement.</p> <p>Where the Justification Test is passed there is also a requirement for a detailed Flood Risk Assessment at Development Management stage. The FRA should be carried out in accordance with The Planning System and Flood Risk Assessment Guidelines and Circular PL 2/2014 (or as updated), which shall assess the risks of flooding associated with the proposed development.</p> <p>Specifications for developments in flood vulnerable areas set out in this plan shall be complied with as appropriate.</p> <p><b>TKT 42 Flood Risk Management Guidelines</b></p> <p>It is a policy objective of Galway County Council to support, in co-operation with the OPW, the implementation of the EU Flood Risk Directive (2007/60/EC), the Flood Risk Regulations (SI No. 122 of 2010) and the DEHLG/OPW publication The Planning System and Flood Risk Management Guidelines (2009) (and any updated/superseding legislation or policy guidance) and Department Circular PL2/2014 or updated/superseding version.</p> <p><b>TKT 43 Flood Risk Management and Assessment</b></p> <p>It is a policy objective of the Council to comply with the requirements of the DoEHLG/OPW <i>The Planning System and Flood Risk Management Guidelines for Planning Authorities</i> and its accompanying Technical Appendices Document 2009 (including any updated/superseding documents). This will include the following:</p> <ol style="list-style-type: none"> <li>(a) Avoid, reduce and/or mitigate, as appropriate in accordance with the Guidelines;</li> <li>(b) Development proposals in areas where there is an identified or potential risk of flooding or that could give rise to a risk of flooding elsewhere will be required to carry out a Site Specific Flood Risk Assessment, and Justification Test where appropriate, in accordance with the provisions of the Planning System and Flood Risk Management Guidelines 2009 (or any superseding document); Any flood risk assessment should include an assessment of the potential impacts of climate</li> </ol>

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change, such as an increase in the extent or probability of flooding, and any associated measures necessary to address these impacts;

(c) Development that would be subject to an inappropriate risk of flooding or that would cause or exacerbate such a risk at other locations shall not normally be permitted;

(d) Galway County Council shall work with other bodies and organisations, as appropriate, to help protect critical infrastructure, including water and wastewater, within the County from risk of flooding.

**TKT 44 Principles of Flood Risk Management Guidelines**

The Council shall implement the key principles of flood risk management set out in the Flood Risk Management Guidelines as follows:

(a) Avoid development that will be at risk of flooding or that will increase the flooding risk elsewhere, where possible;

(b) Substitute less vulnerable uses, where avoidance is not possible; and,

(c) Mitigate and manage the risk, where avoidance and substitution are not possible.

Development should only be permitted in areas at risk of flooding when there are no alternative reasonable sites available in areas at lower risk that also meet the objectives of proper planning and sustainable development. Vulnerable development in areas which have the highest flood risk should be avoided and/or only considered in exceptional circumstances (through a prescribed Justification Test) if adequate land or sites are not available in areas which have lower flood risk.

**TKT 45 Connections to the Public Sewer & Public Water Mains**

Development shall connect to the public sewer and public water mains, subject to a connection agreement with Irish Water, in order to protect all waters in the plan area, and also to consolidate the urban structure and to control ribbon development along approach roads into Tuam.

**TKT 46 Surface Water Drainage and Sustainable Drainage Systems (SuDs)**

Maintain and enhance, as appropriate, the existing surface water drainage system in Tuam. Ensure that new developments are adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems in all new developments. Surface water runoff from development sites will be limited to pre-development levels and planning applications for new developments will be required to provide details of surface water drainage and Sustainable Drainage Systems proposals. Refer also to Section 3.5 of the accompanying SFRA, "Sustainable Urban Drainage Systems and Surface Water Guidance and Strategy".

**TKT 47 Protection of Waterbodies and Watercourses**

Protect waterbodies and watercourses within the County from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in the riverine, wetland and coastal areas as appropriate.

To contribute towards protection and improvement of the status of surface and ground waters in accordance with the Water Framework Directive.

Applications for development under the Plan must demonstrate that the proposal for development would not adversely affect a water body's ability to meet its objectives under the Water Framework Directive, individually as a result of the proposed development or cumulatively, in combination with other developments.

**TKT 48 Flood Risk Assessment for Planning Applications and CFRAMS**

Protect Flood Zone A and Flood Zone B from inappropriate development and direct developments/land uses into the appropriate Flood Zone in accordance with The Planning System and Flood Risk Management Guidelines for Planning Authorities 2009 (or any superseding document) and the guidance contained in Development Management Standards 2 and 3. Site-specific Flood Risk Assessment (FRA) is required for all planning applications in areas at elevated risk of flooding, even for developments appropriate to the particular flood zone. The detail of these site-specific FRAs will depend on the level of risk and scale of development. A detailed site specific FRA should quantify the risks, the effects of selected mitigation and the management of any residual risks. The Council shall have regard to the results of any CFRAM Studies in the assessment of planning applications. Where a development/land use is proposed that is inappropriate within the Flood Zone, then the development proposal will need to be accompanied by a Development Management Justification Test in addition to the site-specific Flood Risk Assessment. In Flood Zone C, where the probability of flooding is low (less than 0.1%, Flood Zone C), site-specific Flood Risk Assessment may be required, and the developer should satisfy themselves that the probability of flooding is appropriate to the development being proposed.

**TKT 49 Flood Risk Assessment and Climate Change**

Flood Risk Assessment in Tuam shall provide information on the implications of climate change with regards to flood risk in relevant locations. The 2009 OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management (or any superseding document) shall be consulted with to this effect.

**TKT 50 Flood Risk Assessment and Environmental Impact Assessment (EIA)**

Flood risk may constitute a significant environmental effect of a development proposal that in certain circumstances may trigger a sub-threshold EIA. FRA should therefore be an integral part of any EIA undertaken for projects within Tuam.

**TKT 51 Flood Vulnerable Zones**

It is a policy objective of the Council to ensure that applications pertaining to existing developments in flood vulnerable zones provide details of structural and non-structural risk management measures to include, but not be limited to specifications of the following – floor levels, internal layout, flood resilient construction, flood resistant construction, emergency response planning, access and egress during flood events.

**TKT 52 Flood Risk Management**

Ensure each flood risk management activity is examined to determine actions required to embed and provide for effective climate change adaptation as set out in the OPWE Climate Change Sectoral Adaptation Plan for Flood Risk Management applicable at the time.

## 4.5 Justification Test

The levels of flood risk identified by the SFRA were a key informant of land uses in undeveloped areas in Flood Zones A and B. The Justification Test (including its various criteria – see **Appendix I**) is required to be passed for uses that would be otherwise considered inappropriate.

Only appropriate land uses are being proposed for previously undeveloped lands within Flood Zones A and B.

Potential conflict between zonings and *highly* and *less vulnerable* development will be avoided by applying the measures which have been integrated into the Plan, including those detailed above under Section 4 of this report.

Although Stage 3 detailed flood risk assessment has not been required for the Plan-preparation process, it may be required for individual projects following adoption of the Plan.

**Table 67 Justification Tests**

Site and Zoning in Draft Plan	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)			
	Is the settlement targeted for growth under the RSES, existing CDP and/or Draft CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria <sup>10</sup> must be satisfied	SFRA recommendation integrated into the Plan for management of risk?	Overall Result
(Previously developed) C1 Town Centre at junction of Ballygaddy Road and Chapel Lane  <del>Note that the meaning of zoning objectives has been influenced by the SFRA process and these meanings are explained in the Draft Plan</del>	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.	Yes, see provisions repeated in Section 4 of this report	<b>Pass</b>
(Previously developed) CF <u>Public, Community and Institutional Uses/Community Facilities</u> off Abbey Trinity Road  <del>Note that the meaning of zoning objectives has been influenced by the SFRA process and these meanings are explained in the Draft Plan</del>	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.	Yes, see provisions repeated in Section 4 of this report	<b>Pass</b>
(Previously developed) T Tourism at Weir Road  <del>Note that the meaning of zoning objectives has been influenced by the SFRA process and these meanings are explained in the Draft Plan</del>	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.	Yes, see provisions repeated in Section 4 of this report	<b>Pass</b>
Various (Previously developed) R Existing Residential zoned sites <u>(these are the existing residential developments: to the north the Weir Road in the estates of Millstream Park and Carrigweir; and along the Birmingham Road)</u>  <del>Note that the meaning of zoning objectives has been influenced by the SFRA process and these meanings are explained in the Draft Plan</del>	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.	Yes, see provisions repeated in Section 4 of this report	<b>Pass</b>
<u>Previously developed I Commercial and Industrial Uses lands between the River Clare and the N17</u>	<u>Yes</u>	<u>This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.</u>	<u>Yes, see provisions repeated in Section 4 of this report</u>	<b>Pass</b>
<u>Various A Agricultural sites</u>  <del>Note that the meaning of zoning objectives has been influenced by the SFRA process and these meanings are explained in the Draft Plan</del>	<u>Yes</u>	<u>This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.</u>	<u>Yes, see provisions repeated in Section 4 of this report</u>	<b>Pass</b>

<sup>10</sup> (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 core 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.

## **4.6 Proposed Material Alterations**

Proposed Material Alterations MA9, MA39, MA50, MA51, MA55 and MA56 are related to the zoning of lands that include those at higher risk of flooding as identified by the SFRA. These proposals could result in an increase in flood risk – including to populations and human health and material assets – and associated adverse effects.

MA39, MA50, MA51, MA55 and MA56 propose zoning that would not be considered compatible to complying with the Flood Risk Management Ministerial Guidelines.

The current meaning of the proposed zonings would fail the Justification Test set out in the 2009 Guidelines as, inter alia, there are alternative lands available elsewhere, in areas of lower risk. Please also refer to the suggested further modifications below:

1. The following further modification could be considered with respect to MA9, which relates to land use zoning under MA39, MA50, MA51, MA55 and MA56 (further modification to be considered – additional text in green, text to be omitted in red strikethrough):

- To update the meaning of the “BE – Business and Enterprise” land use zoning objective by adding the following to the “General Notes on Land Use Zoning Matrix” under Table 1.6.1 “Land Use Matrix”:

12. Uses “Permitted in Principle” and “Open to Consideration” for Lands zoned “BE – Business and Enterprise” shall be limited in areas, as per the Flood Risk Management Guidelines, as follows:

○ In Flood Zone A, uses shall be limited to water compatible uses.

○ In Flood Zone B, uses shall be limited to less vulnerable and water compatible uses

would not pass the Plan Making Justification Test. Furthermore, the Plan Making Justification Test is unsuitable for assessing Business and Enterprise zoned lands, which are not consistent with the condition that any lands justified are essential in achieving compact and sustainable urban growth. Consequently, developments on lands zoned “BE Business and Enterprise” shall be limited as per the requirements of Policy Objective V Constrained Land Use.

These ~~This~~ limitations shall take primacy over any related provision relating to the land use zoning matrix.

- To update the meaning of the “I – Industrial” land use zoning objective by adding the following to the “General Notes on Land Use Zoning Matrix” under Table 1.6.1 “Land Use Matrix” of the Plan

13. Lands zoned “I Industrial” would not pass the Plan Making Justification Test. Furthermore, the Plan Making Justification Test is unsuitable for assessing Industrial zoned lands, which are not consistent with the condition that any lands justified are essential in achieving compact and sustainable urban growth. Consequently, developments on lands zoned “I Industrial” shall be limited as per the requirements of Policy Objective TKT 41 Constrained Land Use.

This limitation shall take primacy over any related provision relating to the land use zoning matrix



2. The following further modification could be considered with respect to MA8, which would relate to land use zoning under MA50 and MA51, MA55 and MA56 (further modification to be considered – additional text in green, text to be omitted in red ~~striketrough~~):

- To update text in the Land Use Matrix Table by adding the following to the “General Notes on Land Use Zoning Matrix” under Table 1.6.1 “Land Use Matrix” of the Plan.

11. Insert Asterix under all uses for Industrial Zoning where the matrix indicates “Permitted in Principle” and “Open to Consideration”. This is applicable on the lands: adjacent and including the existing commercial/industrial development between the River Clare and the N83; and lands to the south east of the N17/M17 and N83/Galway Road roundabout. This shall be limited in areas at elevated risk of flooding, as per the Flood Risk Management Guidelines, as follows:

- In Flood Zone A, uses shall be limited to water compatible uses.
- In Flood Zone B, uses shall be limited to less vulnerable and water compatible uses (as per the Flood Risk Management Guidelines);

These limitations shall take primacy over any related provision relating to the land use zoning matrix.

## **Section 5 Conclusion**

Galway County Council has prepared a new Draft Local Area Plan (LAP) for Tuam under the Planning and Development Act 2000 (as amended). The Plan sets out an overall strategy for the proper planning and sustainable development over the years 2023-2029.

The LAP should be read in conjunction with the Galway County Development Plan 2022-2028, which sets out the overarching development strategy for the County. Where conflicting objectives arise between the County Development Plan and the LAP, the objectives of the relevant County Development Plan shall take precedence.

The general development management standards, zoning matrix/descriptions and policies and objectives in the County Development Plan (including provisions relating to flood risk management and drainage) can be applied to the Plan area, while additional policies and objectives that are specific to Tuam are included in the LAP.

In addition, land use zoning contained within the Draft Plan has been informed by the SFRA process and associated delineation of flood risk zones. The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process facilitated zoning that helps to avoid inappropriate development being permitted in areas of high flood risk.

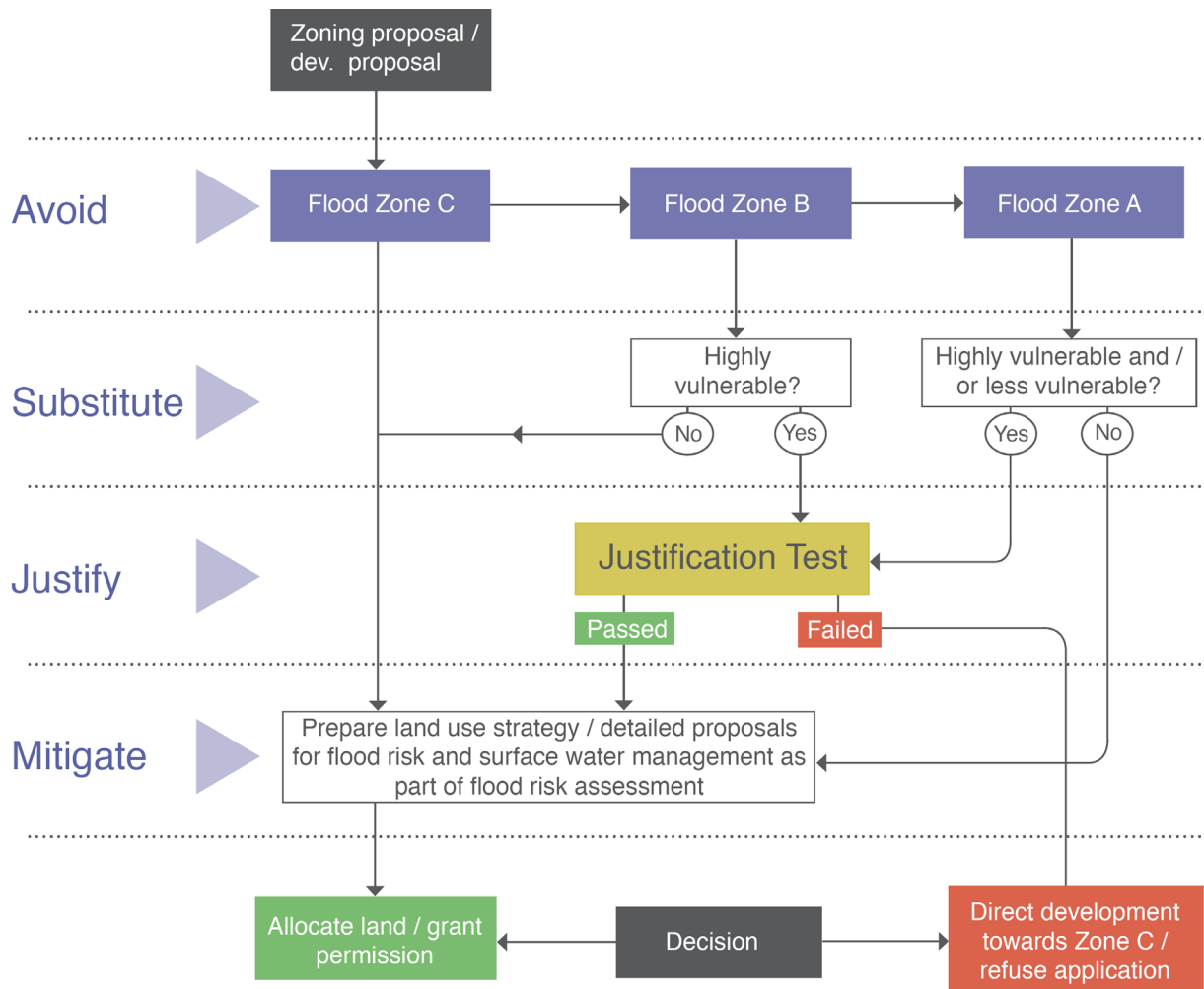
## **Appendix I: Summary of the requirements of the Flood Guidelines for land uses in Flood Zones**

Requirements relating to land uses in Flood Zones as set out in the Department of Environment, Heritage and Local Government (DEHLG) and Office of Public Works (OPW) 2009 Flood Guidelines (including at Chapter 3 Principles and Key Mechanisms and Chapter 5 Flooding and Development Management) and Departmental Circular PL2/2014 should be adhered to.

### **- The Sequential Approach, including the Justification test -**

The key principles of the Guidelines' risk-based sequential approach (see [Figure 1](#)~~Figure 1~~) are:

- Avoid development in areas at risk of flooding. If this is not possible, consider substituting a land use that is less vulnerable to flooding. Only when both avoidance and substitution cannot take place should consideration be given to mitigation and management of risks.
- Inappropriate types of development that would create unacceptable risks from flooding should not be planned for or permitted.
- Exceptions to the restriction of development due to potential flood risks are provided for through the use of a Justification Test, where the planning need and the sustainable management of flood risk to an acceptable level must be demonstrated.



**Figure 1 Sequential Approach Process<sup>11</sup>**

In summary, the **planning implications** for each of the flood zones are:

**Zone A** - High probability of flooding. Most types of development would be considered inappropriate in this zone. Development in this zone should be avoided and/or only considered in exceptional circumstances, such as in city and town centres, or in the case of essential infrastructure that cannot be located elsewhere, and where the Justification Test has been applied. Only water-compatible development, such as docks and marinas, dockside activities that require a waterside location, amenity open space, outdoor sports and recreation, would be considered appropriate in this zone.

**Zone B** - Moderate probability of flooding. Highly vulnerable development, such as hospitals, residential care homes, Garda, fire and ambulance stations, dwelling houses and primary strategic transport and utilities infrastructure, would generally be considered inappropriate in this zone, unless the requirements of the Justification Test can be met. Less vulnerable development, such as retail, commercial and industrial uses, sites used for short-let for caravans and camping and secondary strategic transport and utilities infrastructure, and water-compatible development might be considered appropriate in this zone. In general however, less vulnerable development should only be considered in this zone if adequate lands or sites are not available in Zone C and subject to a flood risk assessment to the appropriate level of detail to demonstrate that flood risk to and from the development can or will adequately be managed.

**Zone C** - Low probability of flooding. Development in this zone is appropriate from a flood risk perspective (subject to assessment of flood hazard from sources other than rivers and the coast) but

<sup>11</sup> Flood Zone C covers all areas outside of Zones A and B

would need to meet the normal range of other proper planning and sustainable development considerations.

| ~~Table 8-Table 7~~overleaf classifies the vulnerability of different types of development while ~~Table 9-Table 8~~ identifies the appropriateness of development belonging to each vulnerability class within each of the flood zones as well as identifying what instances in which the Justification Test should be undertaken. Inappropriate development that does not meet the criteria of the Justification Test should not be considered at the plan-making stage or approved within the development management process.

**Table 78 Classification of vulnerability of different types of development**

Vulnerability class	Land uses and types of development which include*:
<b>Highly vulnerable development (including essential infrastructure)</b>	<p>Garda, ambulance and fire stations and command centres required to be operational during flooding;</p> <p>Hospitals;</p> <p>Emergency access and egress points;</p> <p>Schools;</p> <p>Dwelling houses, student halls of residence and hostels;</p> <p>Residential institutions such as residential care homes, children's homes and social services homes;</p> <p>Caravans and mobile home parks;</p> <p>Dwelling houses designed, constructed or adapted for the elderly or, other people with impaired mobility; and</p> <p>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.</p>
<b>Less vulnerable development</b>	<p>Buildings used for: retail, leisure, warehousing, commercial, industrial and non-residential institutions;</p> <p>Land and buildings used for holiday or short-let caravans and camping, subject to specific warning and evacuation plans;</p> <p>Land and buildings used for agriculture and forestry;</p> <p>Waste treatment (except landfill and hazardous waste);</p> <p>Mineral working and processing; and</p> <p>Local transport infrastructure.</p>
<b>Water-compatible development</b>	<p>Flood control infrastructure;</p> <p>Docks, marinas and wharves;</p> <p>Navigation facilities;</p> <p>Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location;</p> <p>Water-based recreation and tourism (excluding sleeping accommodation);</p> <p>Lifeguard and coastguard stations;</p> <p>Amenity open space, outdoor sports and recreation and essential facilities such as changing rooms; and</p> <p>Essential ancillary sleeping or residential accommodation for staff required by uses in this category (subject to a specific warning and evacuation plan).</p>
*Uses not listed here should be considered on their own merits	

**Table 89 Vulnerability Classes and Flood Zones**

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

The **Justification Test** which is referred to as part of the Sequential Approach is an assessment of whether a development proposal within an area at risk of flooding meets specific criteria for proper planning and sustainable development and demonstrates that it will not be subject to unacceptable risk nor increase flood risk elsewhere. The Justification Test should be applied only where development is within flood risk areas that would be defined as inappropriate under the screening test of the sequential risk based approach outlined above. This Justification Test is shown below.

Where, as part of the preparation and adoption or variation and amendment of a development/local area plan<sup>1</sup>, a planning authority is considering the future development of areas in an urban settlement that are at moderate or high risk of flooding, for uses or development vulnerable to flooding that would generally be inappropriate as set out in Table 3.2, all of the following criteria must be satisfied:

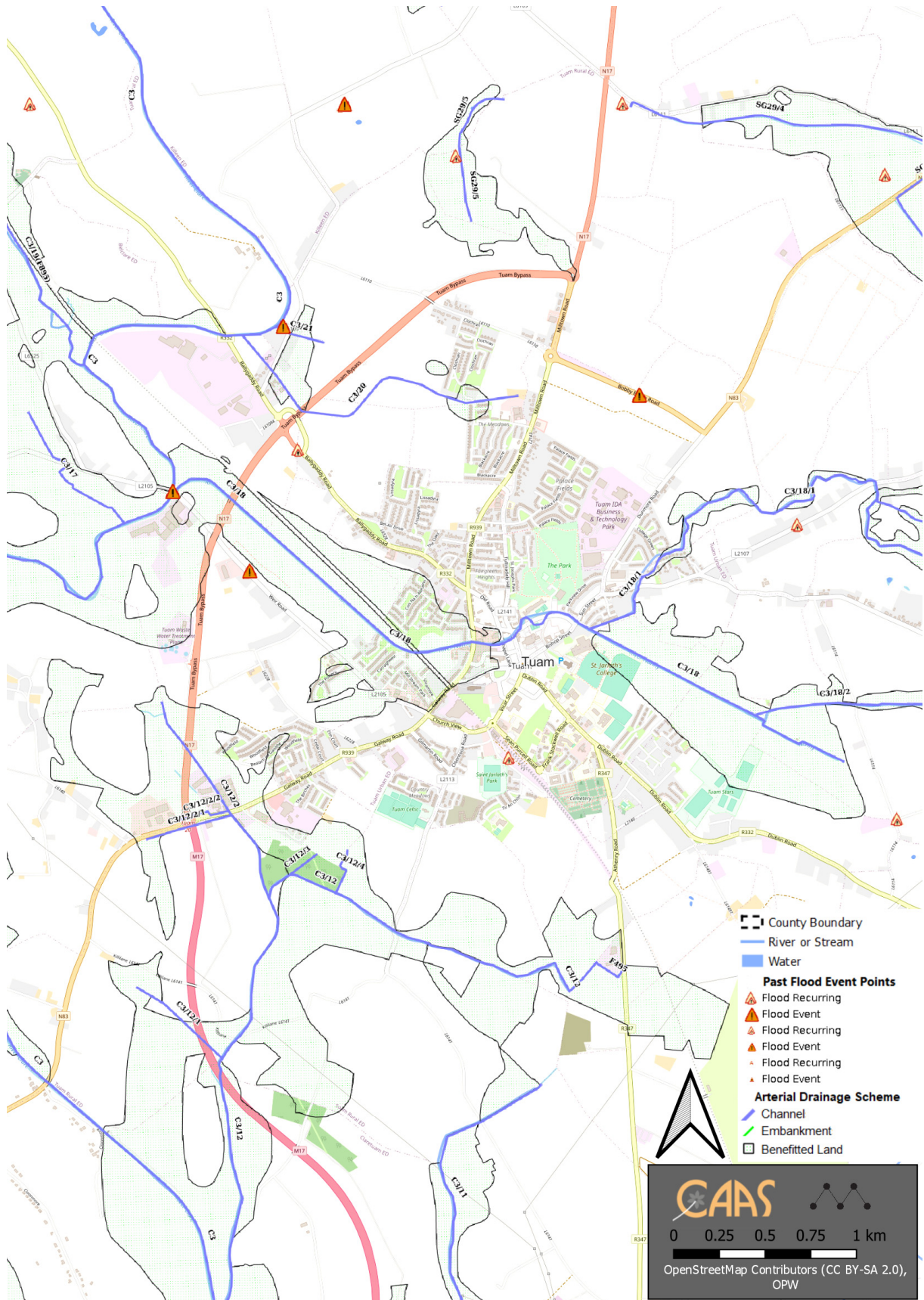
- 1 The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act, 2000, as amended.
- 2 The zoning or designation of 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<sup>2</sup>;
  - (ii) Comprises significant previously developed and/or under-utilised lands;
  - (iii) Is within or adjoining the core<sup>3</sup> 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<sup>4</sup>
- 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.

**Figure 2 Justification Test** <sup>12</sup>

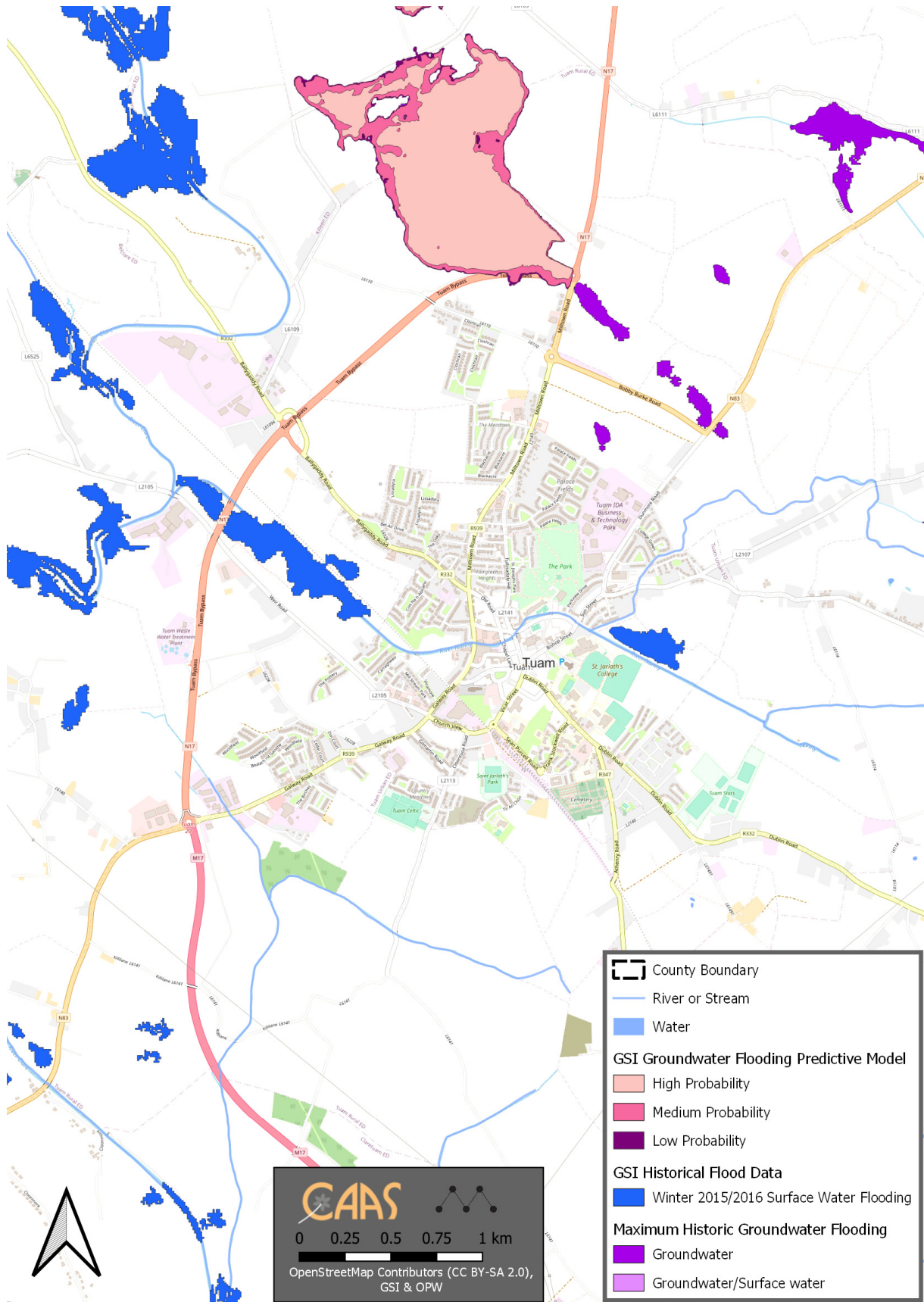
<sup>12</sup> Footnotes: <sup>1</sup> Including Strategic Development Zones and Section 25 Schemes in the area of the Dublin Docklands Development Authority <sup>2</sup>In the case of Gateway planning authorities, where a number of strategic growth centres have been identified within the overall area of the authority, the Justification Test may be applied for vulnerable development within each centre. <sup>3</sup> See definition of the core of an urban settlement in Glossary of Terms. <sup>4</sup> This criterion may be set aside where section 4.27b applies.

## **Appendix II: Flood Risk Indicator and Zone Mapping**

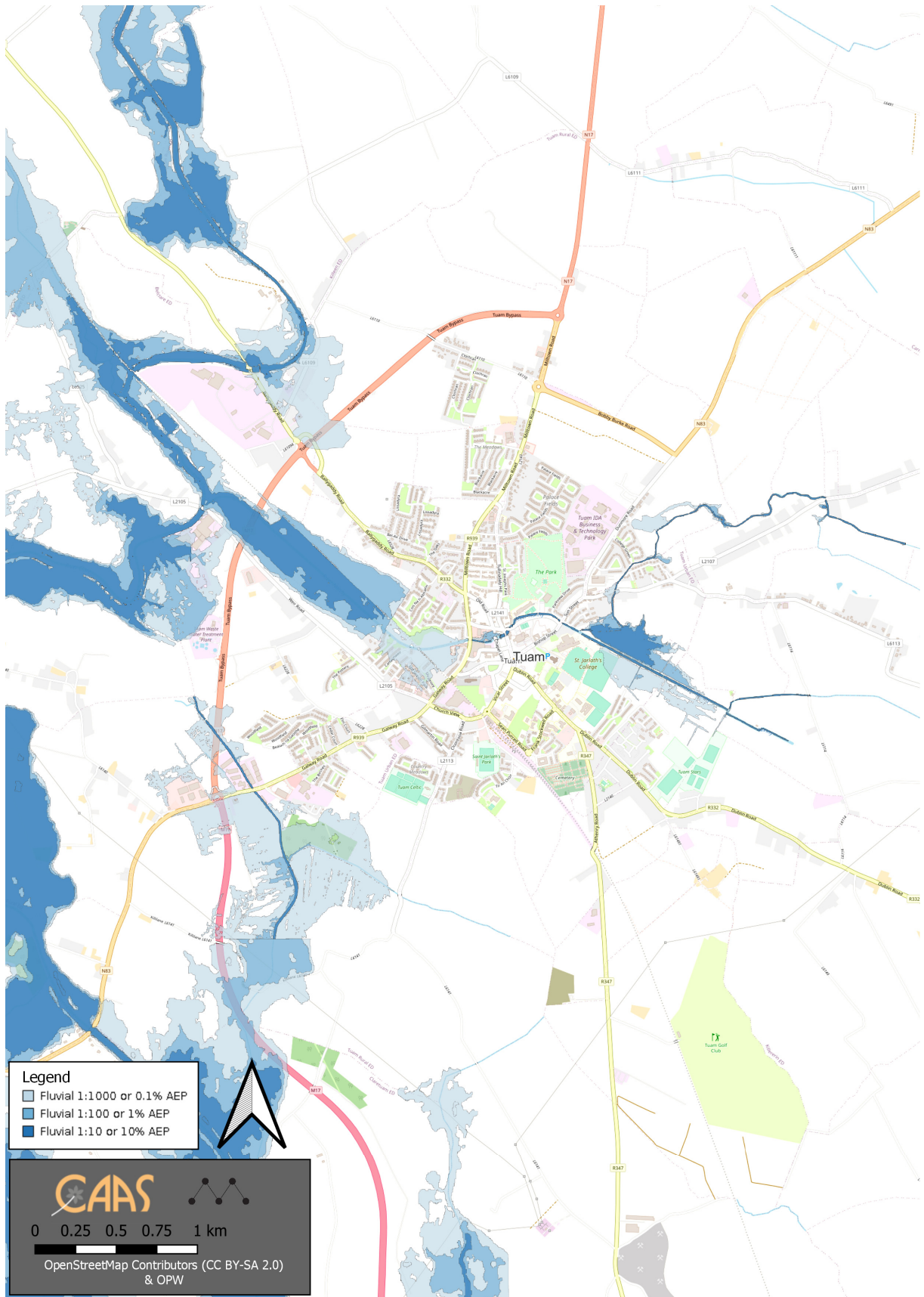




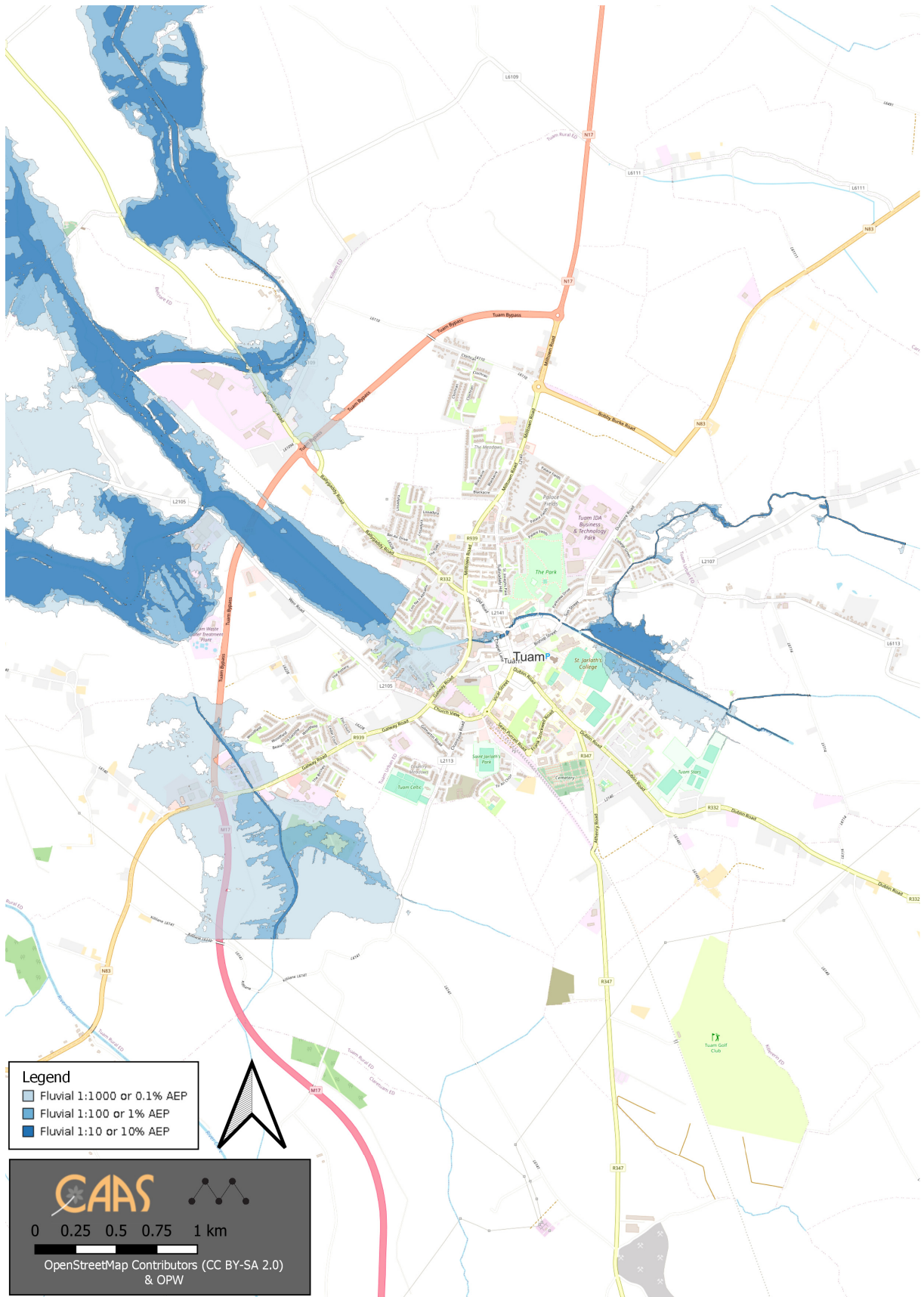
**Selection of Historical Indicators**



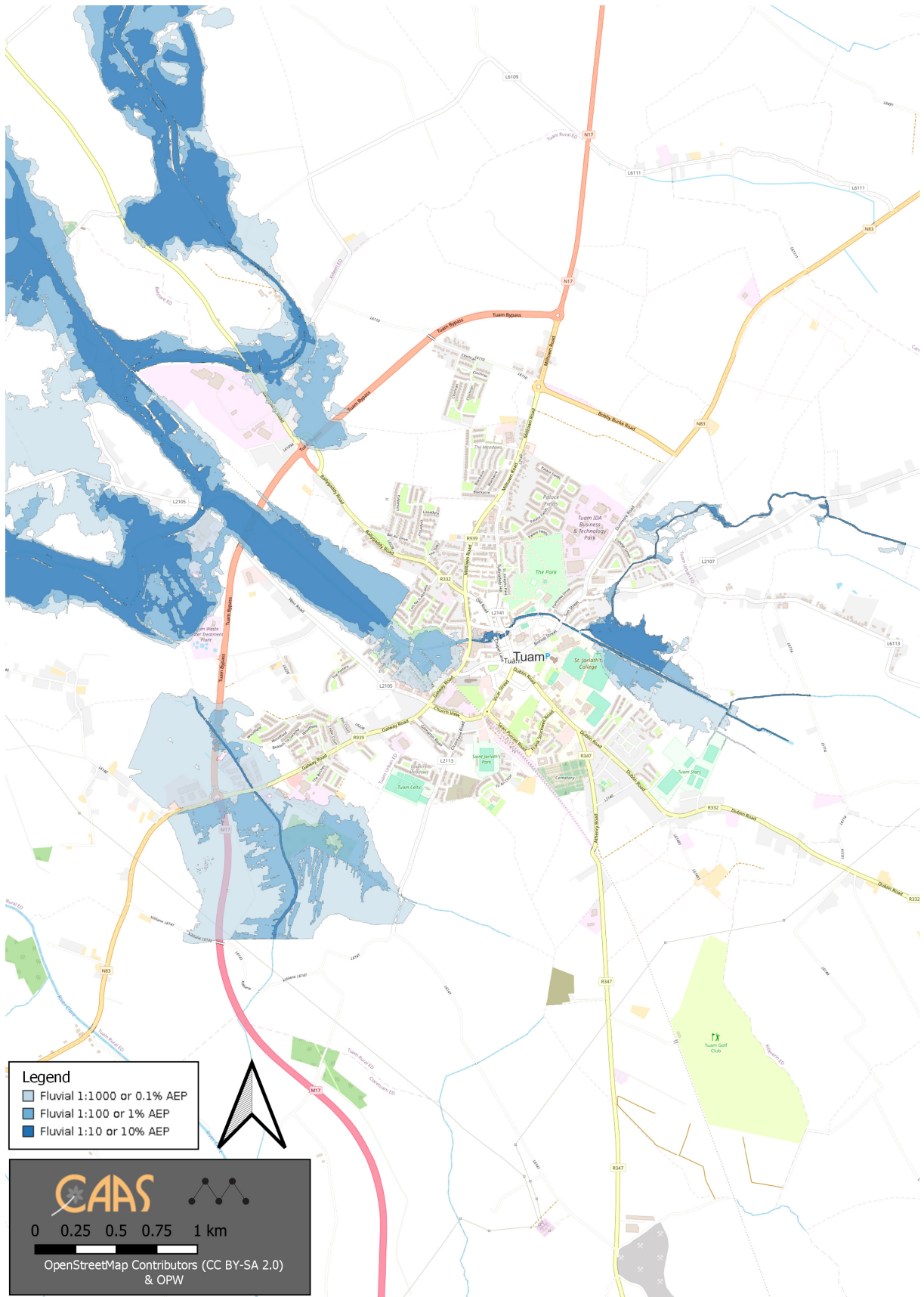
**Selection of Groundwater Indicators**



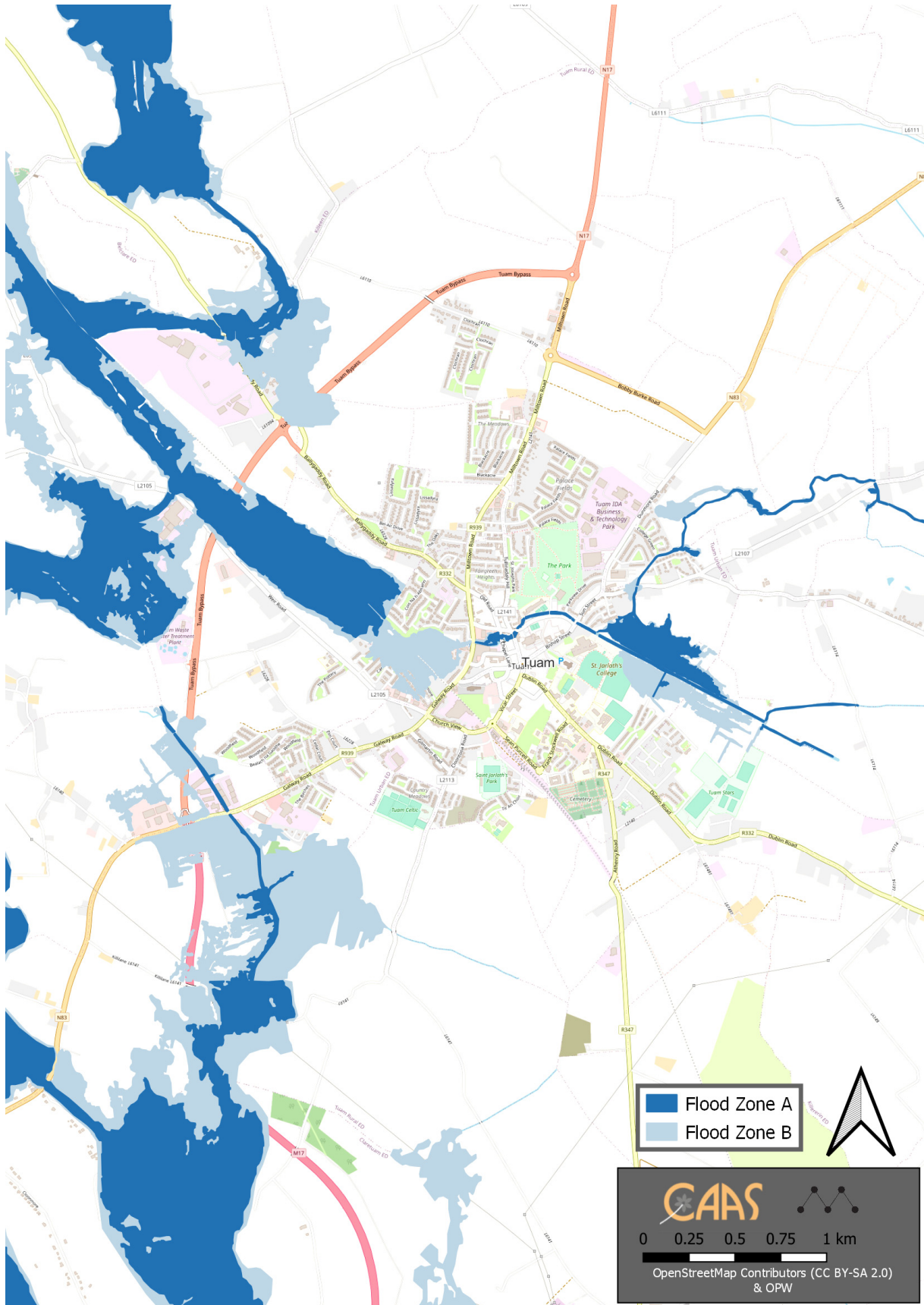
**CFRAMS Present Day**



**CFRAMS Mid-Range**



**CFRAMS High End**



**Flood Zones A and B**