



**COMHAIRLE CONTAE FHINE GALL**  
**FINGAL COUNTY COUNCIL**

**CHIEF EXECUTIVE'S REPORT ON**  
**SUBMISSIONS AND OBSERVATIONS RECEIVED ON THE**  
**DRAFT LISSENHALL EAST LOCAL AREA PLAN**

**23<sup>rd</sup> November 2022**

## TABLE OF CONTENTS

<b>1.</b>	<b>Introduction .....</b>	<b>1</b>
<b>2.</b>	<b>List of Persons/Organisations that made Submissions.....</b>	<b>3</b>
<b>3.</b>	<b>Summary of the Recommendations, Submissions and Observations made by the Office of the Planning Regulator (OPR).....</b>	<b>4</b>
<b>4.</b>	<b>Summary of Submission made by the National Transport Authority.....</b>	<b>15</b>
<b>5.</b>	<b>Summary of Submissions made by Other Bodies/Persons .....</b>	<b>18</b>
	FIN-C512-01 – Irish Aviation Authority (IAA).....	18
	FIN-C512-02 – Health and Safety Authority (HSA) .....	18
	FIN-C512-03 – Environmental Protection Agency (EPA).....	18
	FIN-C512-04 – Irish Water (IW) .....	19
	FIN-C512-05 – Transport Infrastructure Ireland (TII).....	21
	FIN-C512-06 – Office of Public Works (OPW) .....	23
	FIN-C512-07 – Department of Education (DOE).....	26
	FIN-C512-08 – Patrick Morrissey .....	27
	FIN-C512-09 – Meath County Council.....	29
	FIN-C512-10 – The Grimes Family .....	30
	FIN-C512-12 – Fingal Chamber .....	32
	FIN-C512-13 – Health Service Executive (HSE) .....	33
	FIN-C512-14 – Department of Housing Local Government and Heritage (DHLGH).....	37
	FIN-C512-16 – Health Service Executive (HSE) .....	38
<b>6.</b>	<b>List of Chief Executive's Recommendations .....</b>	<b>41</b>
<b>Appendix 1</b>	<b>Screening of Recommendations for AA and SEA.....</b>	<b>48</b>
<b>Appendix 2</b>	<b>Amended SFRA Document .....</b>	<b>53</b>

## 1. Introduction

In accordance with Section 20 of the Planning and Development Act 2000 (as amended) the Draft Lissenhall East Local Area Plan (LAP) went on public display from Wednesday 31<sup>st</sup> August 2022 until Wednesday 12<sup>th</sup> October 2022 at the Fingal County Council Offices at Civic Offices, Grove Road, Blanchardstown, Dublin 15 and at County Hall, Main Street, Swords, at Swords Library, Rathbeale Rd, Commons West, Swords and on the County Council's online portal: <https://consult.fingal.ie/en/browse>.

A total of 16 submissions were received in relation to the Draft LAP, including a submission from the Office of the Planning Regulator, numerous submissions from public bodies including Transport Infrastructure Ireland (TII) and the National Transport authority (NTA) as well as two submissions from members of the public.

Section 20(c) of the Planning and Development Act requires the Chief Executive of a planning authority to prepare a report on any submissions or observations received which is to be submitted to the members of the planning authority for their consideration. According to the Act, such a report shall:

- i. List the persons who made submissions or observations
- ii. Provide a summary of:
  - o the recommendations, submissions and observations made by the Office of the Planning Regulator (OPR)
  - o the submissions and observations made by any other persons, in relation to the draft local area plan
- iii. Contain the opinion of the Chief Executive in relation to the issues raised, and his or her recommendations in relation to the proposed local area plan taking account of the proper planning and sustainable development of the area, the statutory obligations of any local authority in the area and any relevant policies or objectives of the Government or of any Minister of the Government.

It should also be noted that as stated in Section 20(3)(cc) In the case of each planning authority within the GDA, this Chief Executive's report is required to summarise the issues raised and the recommendations made by the DTA (now the NTA) and outline the recommendations of the Chief Executive in relation to the manner in which those issues and recommendations should be addressed in the proposed local area plan.

In order to fulfil the criteria set out above, the following sections of this report include:

- **Section 2** – A list of persons/organisations who made submissions
- **Section 3** – A summary of the recommendations and observations submitted by the OPR, the Chief Executive's response to each recommendation and observation, as well as a list of proposed recommendations to the Elected Members amendments to the Draft Plan (Section 3)

- **Section 4** – A summary of the recommendation and observations submitted by the National Transport Authority, the Chief Executive's response to the submission and any proposed recommendations.
- **Section 5** – A summary of each of the written submissions and observations received from other bodies / persons, as well as a list of proposed recommendations to the Elected Members for amendments to the Draft Plan
- **Section 6** – A list of the recommendations to the Elected Members for amendments to the Draft Plan (ordered in accordance with the structure of the Draft LAP document)

With regard to recommended changes to the text of the Draft LAP set out in Section 5, new text is denoted in green italics e.g. *new text*, with deleted text denoted by red strikethrough e.g. ~~deleted text~~.

Editorial changes and updating of the Draft LAP will be carried out and minor typographical or graphical errors or discrepancies will be rectified. In addition, all maps will be updated where relevant to reflect any proposed changes if agreed.

It should be noted that all changes as recommended have been subject to Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) Screening and **Appendix 1** to this report includes a table detailing the screening of the Chief Executives recommendations to the elected Members for Appropriate Assessment and Strategic Environmental Assessment.

In addition, **Appendix 2** consists of an updated version of the Strategic Flood Risk Assessment (SFRA) which has been amended to reflect changes which have been recommended by the Chief Executive on foot of the recommendations of the OPR and the contents of other submissions in relation to flood risk.

## 2. List of Persons/Organisations that made Submissions

A total of no. 16 submissions were received during the public display of the Draft Lissenhall East LAP between the 31<sup>st</sup> of August 2022 and the 12<sup>th</sup> of October 2022.

All submissions have been given careful and serious consideration and Fingal County Council wish to thank those who engaged in the public consultation process.

Table 1 below lists the submissions received and including the name of the person or organisation making the submission as well as its allocated identification number.

**Table 1: List of Submissions**

<b>ID NO.</b>	<b>First Name</b>	<b>Surname</b>	<b>Organisation/on behalf of</b>
<b>FIN-C512-1</b>	Deirdre	Forrest	Irish Aviation Authority (IAA)
<b>FIN C512-2</b>	Marcus	Phelan	Health and Safety Authority (HSA)
<b>FIN C512-3</b>	David	Galvin	Environmental Protection Agency (EPA)
<b>FIN C512-4</b>	Niamh	McDonald	Irish Water
<b>FIN C512-5</b>	Tara	Spain	Transport Infrastructure Ireland (TII)
<b>FIN C512-6</b>	Conor	Galvin	Office of Public Works (OPW)
<b>FIN C512-7</b>	Mairead	Garry	Department of Education (DOE)
<b>FIN C512-8</b>	Patrick	Morrissey	n/a
<b>FIN C512-9</b>	Alan	Russell	Meath County Council
<b>FIN C512-10</b>	Donal	Duffy	The Grimes Family
<b>FIN C512-11</b>	Owen	Shinkwin	National Transport Authority (NTA)
<b>FIN C512-12</b>	Siobhán	O'Donnell	Fingal Chamber
<b>FIN C512-13</b>	Donal	Duffy	Health Service Executive (HSE)
<b>FIN C512-14</b>	Sinead	O'Brien	Department of Housing, Local Government and Heritage (DHLGH)
<b>FIN C512-15</b>	Anne-Marie	O'Connor	Office of the Planning Regulator (OPR)
<b>FIN C512-16</b>	Lisa	Fitzpatrick	Health Service Executive

### **3. Summary of the Recommendations, Submissions and Observations made by the Office of the Planning Regulator (OPR)**

A comprehensive submission was received on the Draft Lissenhall East LAP from Anne Marie O'Connor acting on behalf of the Office of the Planning Regulator (FIN-C512-15).

#### ***Summary of Issues raised:***

##### Overview

The detailed submission from the OPR commences by acknowledging the considerable work put into the preparation of the Draft Lissenhall East LAP against the backdrop of an evolving national and regional planning policy and regulatory context and the need to balance competing pressures within an increasingly complex system.

It then goes on to provide an overview of the role of the OPR with regard to the evaluation of statutory plans including Local Area Plans and describe how the planning authority is required to implement or address recommendation(s) made by the Office in order to ensure consistency with the relevant policy and legislative provisions.

The submission then provides an overview of its approach to the Draft Lissenhall East LAP noting that although the preparation of the LAP is welcome, the preparation of a single LAP to cover the wider Swords area would better provide for an integrated approach to the planning of this important area at the terminus of the future MetroLink.

The submission once again acknowledges the extensive work that has been undertaken by the planning authority to inform the draft LAP, including the Strategic Flood Risk Assessment (SFRA), Transport Assessment, Sustainable Urban Drainage Systems Strategy, Heritage Report and Ecology Report, in addition to the SEA Environmental Report and Natura Impact Report.

It also states that, subject to specific concerns set in subsequent sections of the submission, that the draft LAP sets out a clear strategy and framework for the future development of the lands concerned. These issues are summarised as relating to

1. the nature and range of uses provided for, consistent with the role of Swords in the Development Plan and the proximity to the M1 junction;
2. the scale of development (number of employees) to be facilitated and;
3. flood risk management.

#### 1. Land Use and Consistency with the Development Plan

With regard to the issue of land use and consistency with the Development Plan, the submission notes that the draft LAP lands are zoned HT-High Technology which allows for a wide range of additional uses.

The submission expresses the concern that by facilitating such a wide range of retail, commercial, civic, cultural, leisure, community and other services uses in a highly accessible location adjacent to a junction on M1, there is a potential risk that the site

could become a destination centre, contrary to the HT – High Technology land use zoning objective for these lands. It is stated that this could impact on the development of Swords Town Centre as a Metropolitan Consolidation Town and potentially compromise the capacity and efficiency of the national road/associated junctions contrary to the Spatial Planning and National Roads Guidelines for Planning Authorities (2012). The submission therefore includes the following recommendation:

***Recommendation 1 – Land uses***

Having regard to Objective SWORDS 1 of the Fingal Development Plan 2017-2023, the provisions under section 2.7 of the Spatial Planning and National Roads Guidelines (2012), and the purpose of the HT – High Technology land use zoning objective, the planning authority is required to include clear and appropriate restrictions on the scale and range of such additional uses to be accommodated within the LAP.

**2. Transport and Accessibility**

The next issue addressed in the submission is that of transport and accessibility and the submission refers to the location of the subject lands adjacent Junction 4 of the M1, Dublin-Belfast motorway, emphasising the importance of protecting such important elements of national roads infrastructure.

The submission welcomes the preparation of a Transport Assessment (TA) to inform the draft LAP but expresses concerns that the TA only appears to have considered the potential traffic impact in terms of employment numbers and does not expressly take account of the traffic impact that would be likely to arise from the nature and range of uses that would be facilitated by the draft LAP.

The submission also notes the intention of the Draft LAP to limit development to c.1,000 employees in the pre-MetroLink scenario and states that it should be made clear that this limit applies to the full extent of the LAP, including the existing developed lands at the southern end and any redevelopment of same.

The submission goes on to note that Objective MT01 – Lissenhall East Transport Assessment which requires any planning application to demonstrate compliance with the recommendations of the Transport Assessment and questions whether this conflicts with the other objectives in the draft LAP regarding the scale of development to be accommodated in the pre-MetroLink scenario.

Additionally, the submission calls for the inclusion of a framework for providing pedestrian, cyclist and public transport infrastructure on a phased basis in tandem with future development in order to ensure a reasonable mode share for active and sustainable modes. Having regard to the above, the submission includes the following observation:

**Observation 1 – Transport and Accessibility**

The planning authority is requested to:

- i) amend Objective MT01 – Lissenhall East Transport Assessment' to clarify that, regardless of the recommendations of the Transport Assessment, in the pre-MetroLink scenario development will be limited to 1,000 employees for the entire local area plan, inclusive of the existing developed lands to the south; and
- ii) include a framework for the provision of relevant transport measures (pedestrian, cyclist and public transport infrastructure) on a phased basis in tandem with future development.

**3. Flood Risk Management**

The third issue addressed in the OPR submission is that of flood risk management. The submission welcomes the preparation of the Strategic Flood Risk Assessment, the detailed Sustainable Drainage Systems (SuDS) Strategy as well as the commitment under Objective SW2 to manage flood risk in line with The Planning System and Flood Risk Management Guidelines (2009).

The submission notes that the subject lands are at significant risk of flooding, which is likely to be exacerbated in the future climate change scenarios and recognises that the initial stage of the draft LAP takes account of this risk and has limited the location of development to avoid flood risk. However, it goes on to state that this would be more evident if the planning authority included an overlay of the flood zone mapping onto the proposed site layout plan and suggests that this is included as part of the final LAP.

The submission refers to the submission made by the Office of Public Works (OPW) (FIN-C512-06) and advises that the plan-making Justification Test should be reviewed to take account of residual risks such as blockage of the M1 culvert and sensitivity to climate change (including for coastal flooding), that it should consider all potential sources of flooding (pluvial, groundwater, etc) within flood zone C, and to make any changes to the LAP necessary on foot of this assessment.

Finally, the submission highlights that the draft LAP (Figure 11-5) shows extensive 'potential subsequent development' on land identified as flood risk zone A and B in the SFRA, which would be contrary to the sequential approach to flood risk management as set out in the Flood Guidelines due to the fact that it could lead to the location of vulnerable development in areas at high risk of flooding. The submission recommends that this figure should be amended to remove these areas. On the basis of the foregoing the submission includes the following recommendation:

**Recommendation 2 – Flood Risk Management**

Having regard to NPO 57 and to section 28 The Planning System and Flood Risk Management Guidelines for Planning Authorities (2009), the planning authority is required to amend figure 11-5 of the draft LAP to remove the indicated 'potential subsequent development' from Flood Risk Zone A and B.



**Chief Executive's Response:**

The Chief Executive welcomes the OPR's submission and acknowledges the thorough engagement of the Office with the contents of the Draft Lissenhall East Local Area Plan. The following section provides the Chief Executive's response to each of the points, recommendations and observations raised in the OPR submission.

Response to the Overview Section

The Chief Executive recognises the valuable work of the OPR in helping to ensure that statutory planning and land use plans including Local Area Plans fully comply with the requirements of national and regional planning policy and guidelines.

With regard to the issue of the preparation of the Draft Lissenhall East LAP in the context of the requirement under Section 19(b) of the Planning and Development Act (as amended) to prepare an LAP for the town of Swords as a whole, it should be noted that any LAP prepared in the functional area of Fingal County Council will have regard to the overall requirements of the County Development Plan in force at the time of adoption.

In this respect, it should be noted that the Draft Lissenhall East LAP was prepared having regard to the current Fingal Development Plan 2017-2023 as well as the Draft Fingal County Development Plan 2023-2029 which is due to be adopted by late March / early April of 2023.

While the recently published proposed material amendments to the Draft 2023-2029 Development Plan include an objective to prepare an LAP for Swords as a whole, this objective, like the Plan itself has yet to be formally adopted and a detailed timeline for the preparation of the Swords LAP is not yet available.

As a result, it is not considered appropriate to further delay the preparation and adoption of a LAP for Lissenhall East, especially given that the preparation of an LAP for the area is a stated objective of the current Development Plan and of previous Development Plans dating back to 2005.

Response to Section 1 Land Use and Consistency with the Development Plan

With regard to the concerns expressed in the OPR's submission that the HT land use zoning allows for a wide range of different uses which could lead to the area developing as a 'destination location', it should be noted that the zoning matrix for HT zoned lands clearly sets out the type of uses which are permitted in principle including:

Enterprise Centre, High Technology Manufacturing, Hospital, Industry – Light Office Ancillary to Permitted Use, Office ≤ 100sqm, Office > 100sqm and < 1,000sqm, Office ≥ 1,000sqm, Open Space, Research and Development, Restaurant/Café (To serve the local working population only), Retail - Local < 150 sqm nfa (To serve the local working population only), Sustainable Energy, Installation Telecommunications Structures Training Centre, Utility Installations.

Furthermore, it can be seen that the zoning matrix in the Current and Draft County Development Plans specifically preclude uses of the type which would normally be expected at such types of 'destination locations' or in town centres including:

- large scale retail uses  
(Retail - Comparison ≤ 500 sqm nfa, Retail - Comparison >500sqm nfa, Retail - Supermarket ≤ 2,500 sqm nfa, Retail - Superstore > 2,500 sqm nfa, Retail - Hypermarket > 5,000 sqm nfa, Retail - Factory Outlet Centre, Retail Warehouse, Retail - Warehouse Club, Garden Centre); and
- dedicated entertainment and restaurant related uses  
(Amusement Arcade, Dancehall/Nightclub, Fast Food Outlet/Take-Away, Public House).

In addition, it should be emphasised that Fingal County Council will assess any application for development on lands zoned HT on the basis of the stated objective and vision for the lands in the Development Plan which are follows:

- **Objective:** *Provide for office, research and development and high technology/high technology manufacturing type employment in a high quality built and landscaped environment.*
- **Vision:** *Facilitate opportunities for high technology, high technology and advanced manufacturing, major office and research and development based employment within high quality, highly accessible, campus style settings. The HT zoning is aimed at providing a location for high end, high quality, value added businesses and corporate headquarters. An emphasis on exemplar sustainable design and aesthetic quality will be promoted to enhance corporate image and identity.*

It is considered therefore, that the HT zoning objective to which the LAP lands are subject clearly sets out the objectives, visions, permitted in principle and not-permitted uses for the Lissenhall East LAP lands.

However, in order to provide reassurance to the OPR in relation to this matter and to comply with Recommendation 1 above, it is recommended that additional text be added to Section 3.4 'Achieving the Vision' and 'Section 11.4 Quantum and Proposed Uses' of the Draft LAP to emphasise that development proposals must provide for office, research and development and high technology/high technology manufacturing type employment in a high quality built and landscaped environment in accordance with the zoning objective for HT zoned lands.

#### Response to 2 Transport and Accessibility

With regard to the issues raised in OPR Observation 1 in relation to the Transport Assessment, it should be noted that as stated in Section 10.2 of the Draft LAP document the Transport Assessment considered a number of employment scenarios for the LAP lands and ultimately recommended limiting the permissible development to between 1,000 – 2,000 additional employees.

As also stated in the Draft LAP document, an even more conservative scenario was to be adopted which would limit development to providing for ca. 1,000 employees for the pre-MetroLink scenario. This figure provides an upper threshold for all future additional development proposals for the lands including those lands in the south of the LAP area.

Having regard to the first point of OPR Observation 1 – Transport and Accessibility, it is therefore recommended that additional text be added to Section 10.2.1 'Overall Approach and Transport Assessment' and to Objective MT1 – Lissenhall East Transport Assessment to clarify this matter further.

With regard to the second point of OPR Observation 1 – Transport and Accessibility which is to include a framework for the provision of relevant transport measures on a phased basis in tandem with future development, given that the Draft LAP document seeks to provide an overall framework for the development of the lands, it is considered that the specific phasing and timing of individual elements of transport infrastructure on the lands themselves, would best be addressed in the context of the Development Management process.

However, given the importance of improved access to the subject lands, including by sustainable, active travel modes, the Council will commit to extending the R132 scheme (which currently ends to the south of the LAP lands) to serve Lissenhall East as soon as practicable after the Local Area Plan is adopted. It is recommended that additional text to this effect be added to Section 10.2.4 'Pedestrian and Cycle Links' of the Draft LAP document.

#### Response to Section 3 Flood Risk Management

The third issue raised by the OPR in its submission relates to flood risk management. The Council acknowledges the need to ensure that flood risk on the LAP lands risk is properly considered and, in accordance with OPR's submission, it is recommended that the Figure 6-3 Sustainable Water Management on page 16 of the Draft LAP document is amended to show the extent of flood zones A and B.

The content of the OPR submission in relation to the plan-making justification test is also noted and the SFRA document has been updated to address the issues raised including: residual risk such as blockage of the M1 culvert; sensitivity to climate change, including for coastal flooding, the consideration all potential sources of flooding (pluvial, groundwater, etc) within flood zone C. An amended version of the SFRA document is attached as Appendix 2 to this document.

Finally, the OPR's concerns are noted in relation to the identification of 'extensive potential subsequent development' on lands partially in Flood Zone A as shown on Figure 11-5 'Potential Subsequent Development' in Section 11.5 Subsequent Development Areas.

Having regard to the OPR's Recommendation 2 – Flood Risk Management, and in order to comply with the requirements of the Flood Guidelines, it is recommended that Figure 11-5 be amended to omit the indicative blocks shown in the south-eastern portion of

the lands. In addition it is recommended that the attendant SD2 lands label on the map is changed to read SD7: Subject to Site Specific Flood Risk Assessment.

This changes alters the requirements for additional secondary attenuation areas on the eastern edge of the LAP lands and allows for a less elongated central attenuation pond and for a minor modification of the boundary of the initial development area at the far south of the LAP lands.

These changes will be shown on the amended Figures 6-3 and 11-5 but will also be reflected in the other drawings throughout the LAP document (including Figures 3-4, 4-2, 5-1, 7-6, 10-3, 11-2, 11-4 and the Development Framework Map on p. 36) which will be updated accordingly.

It is also recommended that additional text is added to Section 11.7 Subsequent Development Areas to clarify that the much of the south eastern area of the LAP lands is located in flood zone A and that any development proposals will be subject to a detailed site specific flood risk assessment.

***Chief Executive's Recommendations:***

**CE OPR CH 3.1, Section 3.4 Achieving the Vision, p. 11**

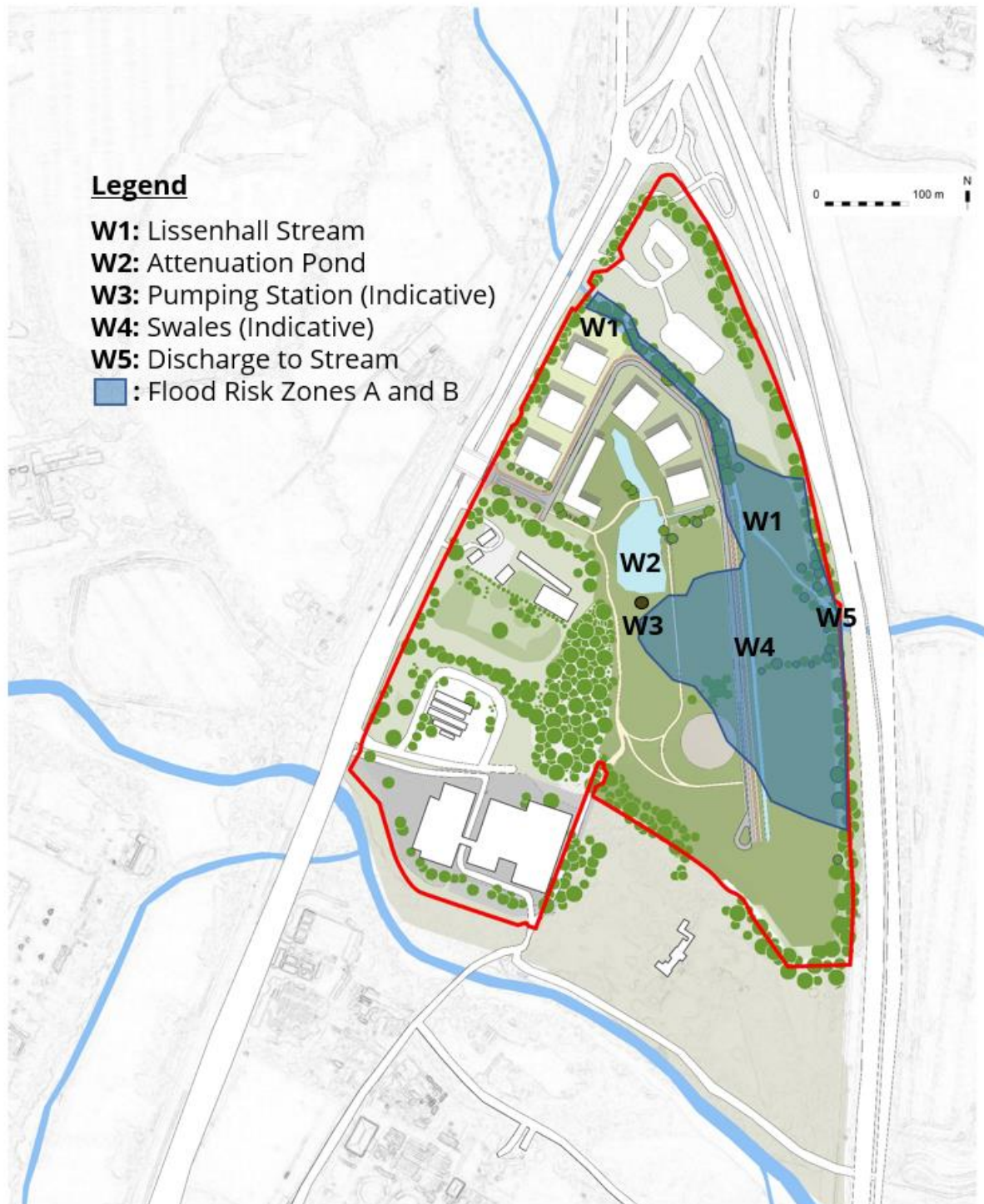
Insert additional text directly before Figure 3-4 as follows:

The final chapter of this Draft Local Area Plan document (Chapter 11) integrates the policies and objectives set out in the preceding chapters to present and overall development framework for the development of the Lissenhall East LAP ***to provide for office, research and development and high technology/high technology manufacturing type employment in a high quality built and landscaped environment*** as illustrated below.

**CE OPR CH 6.1, Section 6.2.1 Flood Risk Management, p. 16**

Replace existing Figure 6-3 with the following figure:

**Figure 6-3 Sustainable Water Management**



**CE OPR CH 10.1, Section 10.2.1 Overall Approach and Transport Assessment, p. 25**

Amend the text of the paragraph directly before Heading 10.2.2 as follows:

This Draft LAP has adopted a conservative scenario included in the Transport Assessment of a maximum of ca. 1,000 employees for the pre-MetroLink scenario. This provides the basis for an appropriate quantum of new development in this Draft LAP. *In the interests of clarity, it should be noted this figure of 1,000 additional employees applies to the full extent of the LAP lands, including the existing developed lands at the southern end and any redevelopment of same.*

**CE OPR CH 10.2, Section 10.3 Movement and Transport Policies, p. 25**

Amend the text of the Objective MT1 as follows:

**Objective MT1 – Lissenhall East Transport Assessment**

Implement the recommendations of the Lissenhall East Transport Assessment in respect of the Initial Development Area. It shall be a requirement that any planning application clearly demonstrate compliance with the recommendations of the Transport Assessment. *In the interests of clarity, it should be noted that in the pre-MetroLink scenario development will be limited to 1,000 additional employees for the entire local area plan, inclusive of the existing developed lands to the south.*

**CE OPR CH 10.3, Section 10.2.4 Pedestrian and Cycle Links, page 25**

Insert additional text after the first paragraph on page 26 as follows:

*Given the importance of improved access to the subject lands by sustainable, active travel modes, the Council will commit to extending the R132 scheme to serve Lissenhall East as soon as practicable after the Local Area Plan is adopted.*

**CE OPR CH 11.1, Section 11.4 Quantum and Proposed Uses, p. 29**

Amend the text of the Draft Plan as follows:

As set out in the Transport Assessment, the recommended strategy is the scenario based on 1,000 jobs, as it would not have an undue negative impact on the local road network or the motorway junction.

*In the interests of clarity, it should be noted that the figure of 1,000 additional jobs referred to above applies to the full extent of the LAP lands, including the existing developed lands at the southern end and any redevelopment of same.*

**CE OPR CH 11.2, Section 11.4 Quantum and Proposed Uses, p. 29**

Insert additional text directly before heading 11.5 Strategic Development Framework as follows:

*Any applications for development on LAP lands will be required to demonstrate compliance with the overall HT zoning objective which is to provide for office, research and development and high technology/high technology manufacturing type employment in a high quality built and landscaped environment.*

**CE OPR CH 11.3, Section 11.4 Quantum and Proposed Uses, p. 29**

Amend the text of the Draft Plan as follows:

As set out in the Transport Assessment, the recommended strategy is the scenario based on 1,000 jobs, as it would not have an undue negative impact on the local road network or the motorway junction.

***In the interests of clarity, it should be noted that the figure of 1,000 additional jobs referred to above applies to the full extent of the LAP lands, including the existing developed lands at the southern end and any redevelopment of same.***

**CE OPR CH 11.4, Section 11.7 Subsequent Development Areas, p. 32**

Amend the text of the Draft Plan as follows:

The intention of this Draft LAP is to establish new employment development on site (for in the region of 1,000 jobs as set out in the Transport Assessment but within a framework which anticipates the delivery of MetroLink. ***This figure of 1,000 additional employees applies to the full extent of the LAP lands, including the existing developed lands at the southern end and any redevelopment of same.***

**CE OPR CH 11.5, Section 11.7 Subsequent Development Areas, p. 33**

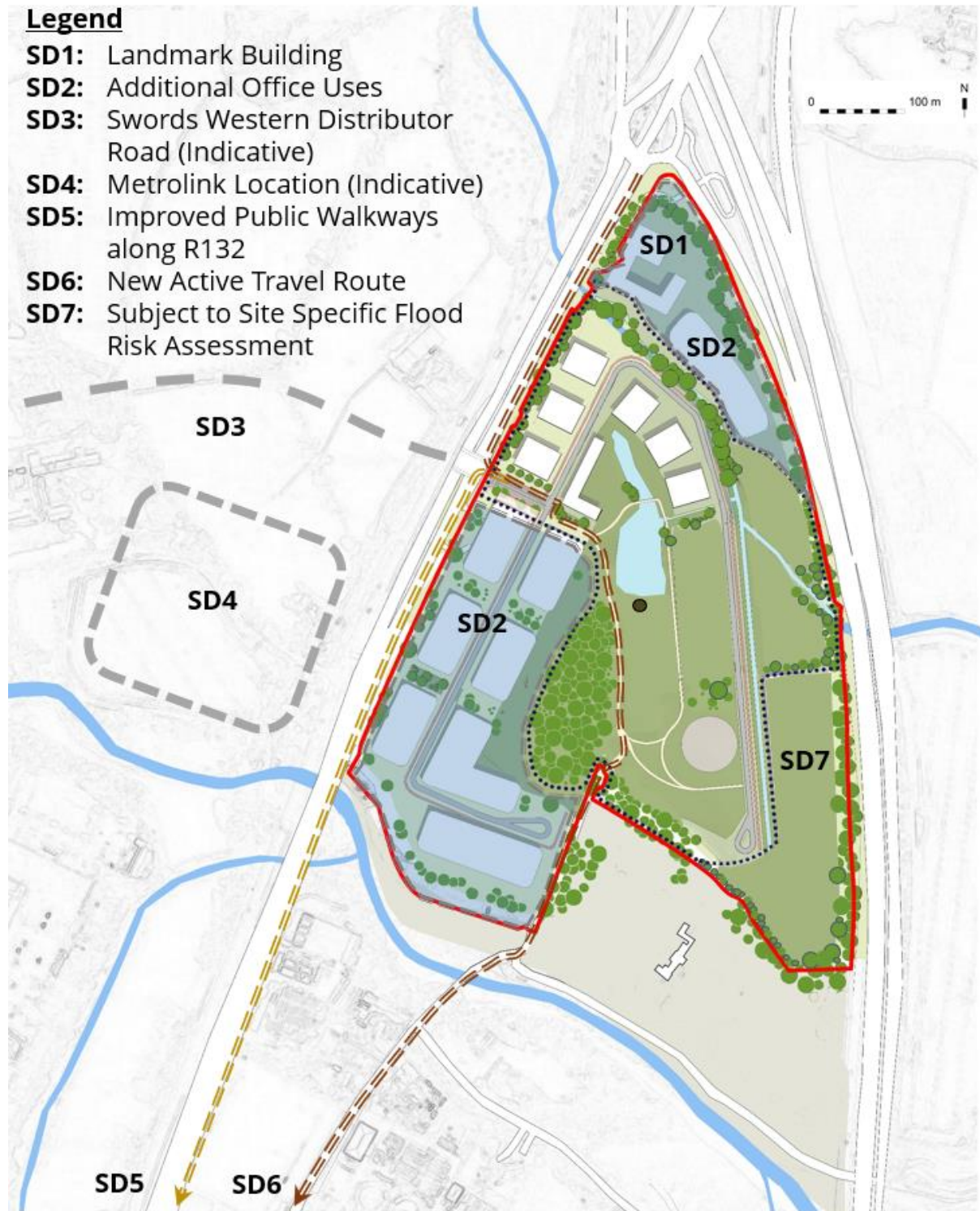
Insert additional text after the first bullet point in the middle column of page 33 as follows:

***Due to the fact that much of the south eastern area of the LAP lands is located in flood zone A any future development proposals in this area will be subject to a detailed site specific flood risk assessment in accordance with the requirements of the Planning System and Flood Risk Management Guidelines for Planning Authorities.***

**CE OPR CH 11.6, Section 11.7 Subsequent Development Areas, p. 33**

Replace Figure 11-5 Potential Subsequent Development with the following amended figure:

**Figure 11-5: Potential Subsequent Development**





#### **4. Summary of Submission made by the National Transport Authority**

As started in Section 20(3)(cc) In the case of each planning authority within the GDA, this Chief Executive's report is required to summarise the issues raised and the recommendations made by the DTA (now the NTA) and outline the recommendations of the Chief Executive in relation to the manner in which those issues and recommendations should be addressed in the proposed local area plan

A submission was received from Owen Shinkwin on behalf of the National Transport Authority (NTA) (ref. FIN-C512-11).

##### ***Summary of Issues raised:***

The submission addresses a number of transport related issues under the three headings of: Preparation of a Local Transport Plan to inform the preparation of the Local Area Plan; Pre-Metro Strategy; and Measures to Improve Access to the LAP Lands.

Under the first heading, the submission outlines how the NTA places a critical emphasis on the need for local transport plans (LTP) to be prepared as an integral part of the overall LAP preparation process, which would include consultation with statutory stakeholders including the NTA.

The submission goes on to refer to the statements in the Draft LAP that the overall strategy for the LAP lands was devised having regard to the Transport Assessment carried out by Fingal County Council in 2020' and that this transport assessment was prepared 'in consultation with the NTA and TII'.

The submission explains that this statement is inaccurate and includes a recommendation that that the Council further clarifies the manner in which consultation with the NTA and TII was undertaken, prior to the completion of the transport assessment process and the publication of the Draft LAP

Under the second heading 'Pre-Metro Strategy' the submission expresses the overall support for the Recommended Pre-Metro Strategy set out in Table 3 of the Appendix 5 on the basis that this pre-metro strategy is applicable to the whole LAP area including the Southern Plan area.

In its recommendation in relation this point, the NTA expresses its support for the recommended strategy set out in page 39 of Appendix 5 for a scenario based on 1,000 jobs' but only on the basis that this employment limit is applicable to the LAP lands as a whole, prior to the delivery of MetroLink.

As a result, the submission calls for further clarity is required as to how the current and future trip generating potential of these lands will be reconciled with the Draft LAP policies and objectives, including the Pre-Metro Strategy and recommends that Objective MT1 is amended as follows: 'Implement the recommendations of the Lissenhall East Transport Assessment in respect of the Initial Development Area LAP area as a whole'.

The final heading in the submission relates to a recommendation for measures to improve access to the LAP lands. The submission refers to Section 10.2.1 of the Draft LAP which identifies a number of potential measures to be implemented to improve access to the subject lands and recommends that the LAP includes frameworks for development proposals in the LAP lands which are linked to timescales for the transport measures required to deliver on the LAPs objectives relating to walking, cycling and public transport. The submission also calls for these frameworks to include associated mode split targets and car parking strategies.

The submission states that this is of particular importance given the potential impact of future development on the national road network, the current limited accessibility of the subject lands by sustainable transport modes and the need for material complementarity with both BusConnects and MetroLink. The submission concludes with the recommendation that the LAP policies and measures addressing accessibility to sustainable transport infrastructure and services should apply to all parts of the LAP area.

***Chief Executive's Response:***

The content of the submission from the NTA is noted. With regard to the issue of the involvement of the NTA in the Draft Lissenhall East LAP, the Council accepts that the text of the Draft LAP document was unclear as to the role of the NTA and TII in the preparation of the Transport Assessment. As a result, it is recommended that the text of the Draft LAP is amended to provide clarity in accordance with the NTA's recommendation.

With regard to the issue of the 'Pre-Metro Strategy', as previously discussed earlier in this Chief Executive's Report in the response to the submission from the OPR, as stated in Section 10.2 of the Draft LAP document the Transport Assessment considered a number of employment scenarios for the LAP lands and ultimately recommended limiting the permissible development to between 1,000 – 2,000 employees. An even more conservative scenario was adopted in the Draft LAP which would limit development to providing for ca. 1,000 additional employees for the pre-MetroLink scenario.

This figure provides an upper threshold for all future additional development proposals for the lands including those lands in the south of the LAP area. In response to the OPR's observation, the Chief Executive's Report included a recommendation that additional text be added to Section 10.2.1 'Overall Approach and Transport Assessment' and to Objective MT1 – Lissenhall East Transport Assessment to clarify this matter further.

Finally, in relation to the third issues raised in the NTA submission, as was stated in the response to the OPR submission, given that the Draft LAP document seeks to provide an overall framework for the development of the lands, it is considered that the specific phasing and timing of individual elements of transport infrastructure on the lands

themselves, would best be addressed in the context of the Development Management process.

However, as stated previously, given the importance of improved access to the subject lands, including by sustainable, active travel modes, the Council will commit to extending the R132 scheme (which currently ends to the south of the LAP lands) to serve Lissenhall East as soon as practicable after the Local Area Plan is adopted and the response to the OPR submission in this report includes a recommendation that additional text to this effect be added to Section 10.2.4 'Pedestrian and Cycle Links' of the Draft LAP document.

***Chief Executive's Recommendation:***

No change.

Please note that the Chief Executive's Recommendations set out in section 4 of this report in response to the submission received by the Office of the Planning Regulator addresses the main recommendations set out in the submission from the NTA.

## **5. Summary of Submissions made by Other Bodies/Persons**

A total of 14 submissions were received from various public bodies and from members of the public. The following section provides a brief summary of each submission, the Chief Executive's response to the issues raised, as well as any recommendations to the elected Members for amendments to the Draft Plan. The submissions have been addressed in order of their submission reference number (from FIN-C512-01 to FIN-C512-16).

### **FIN-C512-01 – Irish Aviation Authority (IAA)**

A submission was received from Deirdre Forrest on behalf of the Irish Aviation Authority (ref. FIN-C512-01).

#### ***Summary of Issues raised:***

The submission stated that the Safety Regulation Division, Aerodromes of the IAA has no observations on the Draft Lissenhall East LAP.

#### ***Chief Executive's Response:***

The submission is noted and the Chief Executive welcomes confirmation from the IAA has not identified any issues relevant to aviation associated with the Draft LAP.

#### ***Chief Executive's Recommendation:***

No change.

### **FIN-C512-02 – Health and Safety Authority (HSA)**

A submission was received from Marcus Phelan on behalf of the Health and Safety Authority (HSA) (ref. FIN-C512-02)

#### ***Summary of Issues raised:***

The submission consisted of an acknowledgement of correspondence received by the HSA in relation to the preparation of a LAP for Lissenhall East but did not raise any substantive issues.

#### ***Chief Executive's Response:***

The acknowledgement from the HSA of the receipt of correspondence is welcomed.

#### ***Chief Executive's Recommendation:***

No change.

### **FIN-C512-03 – Environmental Protection Agency (EPA)**

A submission was received from David Galvin on behalf of the Environmental Protection Agency (EPA) (ref. FIN-C512-03).

#### ***Summary of Issues raised:***

The submission sets out the role of the EPA as one of the statutory environmental authorities under the Strategic Environmental Assessment Regulations and explains that the Agency provides a 'self-service approach' via its SEA of Local Authority Land Use

Plans – EPA Recommendations and Resources' guidance document. The submission notes that this document is updated regularly and sets out the EPA's key recommendations for integrating environmental considerations into Local Authority Land Use Plans. The submission suggests that this guidance document is taken into account and that the relevant recommendations are incorporated, in finalising and implementing the Plan.

The submission goes on to state that Fingal County Council should also ensure that the Plan aligns with key relevant higher-level plans and programmes and is consistent with the relevant objectives and policy commitments of the National Planning Framework and the Eastern and Midlands Regional Spatial and Economic Strategy.

Following this, the submission provides information on the content of Environmental Report including mitigation measures and monitoring and refers to the EPA's State of the Environment Report – Ireland's Environment 2020. It also provides information in relation to the screening of future amendments to the Plan and to the preparation of an SEA Statement which it should be sent to the EPA once the Plan is adopted. Finally, it provides details of the environmental authorities which must be consulted under the SEA Regulations.

***Chief Executive's Response:***

The context of the submission from the EPA are noted. The Draft Lissenhall East has been prepared having full regard to the requirements of the SEA Regulations and all other relevant environmental assessment legislation.

As set out in Section 1.5.2 Environmental Assessment, the LAP has been subject to Strategic Environmental Assessment (SEA), Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) with the following documents included as appendices to the written statement of the Draft LAP:

- a Strategic Environmental Assessment Environmental Report, prepared by Brady Shipman Martin included as Appendix 1
- a Natura Impact Statement (NIS) included as Appendix 2.

It should be noted that the SEA and AA process for the Draft Lissenhall East LAP has been carried out having regard to best practice documents including the EPA's SEA of Local Authority Land Use Plans – EPA Recommendations and Resources' guidance document.

***Chief Executive's Recommendation:***

No change.

**FIN-C512-04 – Irish Water (IW)**

A submission was received from Niamh McDonald on behalf of Irish Water (IW) (ref. FIN-C512-04).

**Summary of Issues raised:**

The submission includes a number of general observations relating to land use zoning, Chapter 6 - Sustainable Water Management of the Draft LAP document; as well as to Chapter 9 – Infrastructure and Services.

The first observation, which relates to lands use zoning notes that while the Economic Spatial Strategy (RSES) for the East and Midlands Region and the Metropolitan Area Strategic Plan (MASP) identifies Swords as a Key Town re-allocating additional population growth to the town, that the LAP lands are zoned for High Technology manufacturing including mixed use employment.

The second observation which relates to Chapter 6 – Sustainable Water Management, notes and welcomes the inclusion of the Sustainable Urban Drainage Systems (SuDS) report that was prepared for the LAP lands which will support the delivery of IW plans and policies as referred to in the submission.

The third general observation included in the IW submission relates to Chapter 9 – Infrastructure and Services. The submission states that while there is some IW infrastructure to the west and south of the site, the plan area is generally unserved and interim solutions / localised network reinforcements and extensions will be required to facilitate development.

The submission outlines that where network reinforcements such as upgrades or extensions are required, these shall be developer driven as there are no committed IW project in place to progress such works. The submission goes on to state that new connections to Irish Water networks will be subject to IW's Connections Charging Policy and that in order to maximise the capacity of existing collection systems for foul water, the discharge of additional surface water to combined sewers is not permitted.

The submission notes that these issues have been addressed in objectives included in the Draft Lissenhall East LAP document in Section 9.3 Infrastructure and Services Objectives. Finally, the submission states that as Waste Water Treatment Capacity at the Swords Plant is currently reduced due to operational issues, developers should attain a Certificate of Feasibility from IW's connection and developer services section.

**Chief Executive's Response:**

The content of the submission from IW is noted. The Chief Executive welcomes the confirmation from IW that the Chapter 6 'Sustainable Water Management' and Chapter 9 'Infrastructure and Services' of the Draft LAP adequately addresses the issues raised in the submission. With regard to the requirement for developers to attain a certificate of feasibility, this is recognised in Section 9.2.2 of the Draft LAP which states that development will be dependent on the progress of the various improvement works and will be subject to the agreement of Irish Water.

**Chief Executive's Recommendation:**

No change.

**FIN-C512-05 – Transport Infrastructure Ireland (TII)**

A submission was received from Tara Spain on behalf of Transport Infrastructure Ireland (TII) (ref. FIN-C512-05).

***Summary of issues raised:***

The submission from the TII makes reference to a previous detailed submission made to Fingal County Council in 2017 in relation to the Lissenhall East LAP and states that the national roads issues raised in this submission have not yet been considered in the Draft Local Area Plan. The submission also notes that since the 2017 submission that national road policy issues have now been further supplemented by additional transport policy considerations.

The submission goes on to advise that TII was not involved in the preparation of Transport Assessment which accompanies this Draft Local Area Plan, that it did not identify the potential additional measures indicated in Section 10.2.1 of the Draft LAP and that as a result, the text of the Draft LAP should be updated to reflect this.

The submission clarifies the extent of discussions relating to the preparation of a Lissenhall East ABTA but that it had not had sight of the final ABTA output. It also clarifies that while it did agree with the pre-MetroLink strategy, this was to apply to the whole LAP area including the southern parts of the LAP lands.

Further issues raised by the submission relates to the need to apply appropriate objectives and mitigation measures for the whole LAP lands for the safeguarding of national roads, the reliance on the implementation of planning applications to address travel demand without a clear framework for the delivery of necessary measures. as well a lack of clarity as to the status of lands outside the Initial Development Area.

The submission concludes by emphasising the critical role of national road junctions and the need to control the impact of development generated traffic so as not to unduly interfere with the strategic movement of goods and people and recommends the following changes be made to the Draft LAP:

1. Accurately and correctly reflect the Authority's discussions undertaken with Fingal and its consultants, Systra in March 2021.
2. Demonstrate consistency with safeguarding the strategic role of the national road at this location reflecting the requirements established under current EU, National Regional and Local planning and transport policies.
3. Clarify in revised documentation policies and measures to:
  - (i) manage the quantum of employment for the entire local area plan,
  - (ii) frameworks for development proposals linked to timescales for delivery of transport/travel schemes required to encourage modal split, and
  - (iii) requirements for access to proposed sustainable transport infrastructure within the plan area to be accessible to all parts of the local area plan. With respect to the latter, mechanisms should be clearly outlined to ensure for access for

southern lands is integrated and committed into future and committed to the Transport Interchange (D4) and internal Active Travel Route under D7.

***Chief Executive's Response:***

The content of the TII submission on the Draft Lissenhall East LAP is noted. With regard to the first recommendation set out in the submission which relates to consultation with the TII prior to the publication of the Draft Lissenhall East LAP, the Council accepts that the text of the Draft LAP document was unclear as to the role of the TII and NTA in the preparation of the Transport Assessment. As a result, it is recommended that the text of the Draft LAP is amended to provide clarity in accordance with the TII's first recommendation.

With regard to the second recommendation which relates to issue of consistency with national, regional and local planning policies it should be noted that Chapter 2 Policy Context of the Draft LAP provides a high-level overview of the most relevant planning policies and documents for the purposes of the LAP.

It should also be noted that the Draft Lissenhall East LAP forms part of, and is required to have regard to a hierarchy of plans and policies including the current and Draft County Development Plans, the RSES, the National Planning Framework, Section 28 Guidelines as well as relevant government policy.

The current and Draft Plans are large, comprehensive documents which set out in a considerable level of detail how the existing and future development of the County must take account of a wide range of relevant issues, including transport and sustainable movement.

As the Draft LAP is required to fully accord with the provisions of the County Development Plan, it is not considered necessary or appropriate to repeat the myriad policies relating to the wide range of publications and issues already addressed in the Draft Development Plan.

Furthermore, as stated in Section 1.1 of the Draft LAP, where there is any discrepancy between the LAP and the relevant statutory Development Plan, the written statement and corresponding maps and appendices of the Development Plan in force at the time will take precedence.

With regard to the third recommendation set out in the TII submission, it is considered that the three individual issues raised have been addressed earlier in this Chief Executive's Report in the section which responded to the recommendations of the Office of the Planning Regulator, specifically the response to Observation 1 'Recommendation 1 – Land uses and Recommendation 2 'Transport and Accessibility'.

***Chief Executive's Recommendation:***

**CE CH 10.1, Section 10.2.1 Overall Approach and Transport Assessment, p. 25.**

Amend text of second paragraph on page 25 as follows:



The Transport Assessment, which ~~was carried out by Fingal County Council in consultation with the NTA and Transportation Infrastructure Ireland (TII)~~ *is included as Appendix 5* considered a number of employment scenarios for the LAP lands and identified a number of potential additional measures to be implemented to improve access to the lands.

#### **FIN-C512-06 – Office of Public Works (OPW)**

A submission was received from Conor Galvin on behalf of the Office of Public Works (OPW) (ref. FIN-C512-06).

##### ***Summary of Issues raised:***

The submission commences by stating that it is made specifically with regards to flood risk and the application of the Guidelines on the Planning System and Flood Risk Management (DECLG/OPW, 2009). The submissions welcomes the acknowledgement of the Guidelines in the Draft LAP and the preparation of a Strategic Flood Risk Assessment (SFRA). In particular, the OPW welcomes:

- The commitment to managing flood risk in line with the Guidelines, Objective SW2; and
- Sustainable Drainage Strategy document which informs the overall approach to SuDs for the area.

The submission goes on to discuss additional issues including: mapping and the sequential approach; the justification test; hydraulic and flood risk modelling; flood risk datasets; climate change impacts; arterial drainage schemes and drainage districts; SuDS and Nature Based Solutions; Site Specific Flood Risk Assessment (SSFRA); and finally, the construction, replacement or alteration of bridges and culverts over watercourses.

With regard to mapping and the sequential approach, the submission states that it would be useful if the Initial Development Area and the Potential Subsequent Development could be overlaid with the flood zone mapping to assess the application of the sequential approach.

It also goes on to query the inclusion of SD2: Additional Office Uses to the east on Figure 11-5 Potential Subsequent Development of the Draft Plan shows area SD2 Additional Office Uses to the east of the site within Flood Zone A, stating that development in Flood Zone A should be avoided and/or only considered in exceptional circumstances.

In relation to the justification test, the submission welcomes the plan-making justification but highlights that the test does not include discussion on residual risks, such as the blockage of the culvert under the M1, which has been included for SSFRAs to assess and that it does not include text on the sensitivity of climate change.

With regard to the issues of modelling and datasets for flood risk identification, the submission welcomes that hydraulic modelling was undertaken for the area and that

fluvial and coastal extents were then compared to OPW data for the present day and mid-range scenario. The submission provides details of the recent updates to preliminary flood risk assessment (PFRA), groundwater and pluvial flood mapping.

The next issue raised in the submission relates to the consideration of climate change impacts. The submission welcomes the discussion provided regarding climate change while noting that the potential impacts of climate change need to be considered, such as by avoiding development in areas potentially prone to flooding in the future, providing space for future flood defences and setting specific development management objectives.

The submission notes that SFRA focused on the mid-range scenario but that the area is also highly vulnerable to the high-end future scenarios as shown in the National Coastal Flood Hazard Mapping and that sea level rises could have significant consequences for the area. As a result, the submission calls for clarification of the recommended floor levels for coastal flooding and whether other mitigation measures or measures which are capable of adaptation are necessary. The submission also refers to minor errors in the SFRA document which should be corrected.

In relation to the issue of arterial drainage schemes and drainage districts, the submission notes that there is no discussion provided on the Broadmeadow and Ward Arterial Drainage Scheme, that the southwest area of the site is partially located within the benefiting lands of the scheme and that consideration should be given to ensuring that access requirements are preserved for the maintenance of Arterial Drainage Schemes and Drainage Districts. The submission requests that a 10m wide strip be retained for ongoing access for maintenance of channels.

With regard to SuDS and Nature Based Solutions, the submission requests clarification whether the design of attenuation to be provided for the 1% AEP rainfall event + 20% allowance for Climate Change as set detailed in the SFRA takes account of coastal flooding.

The next issue to be addressed is Site Specific Flood Risk Assessment (SSFRA) with the submission noting that the requirements for SSFRA differs between the text of Objective SW3 in the Draft LAP and the text in Section 6 of the SFRA document. The submission recommends that a more consistent approach is adopted and that SFRA should include for more consideration of elements such as climate change impacts, as well as potential sources of flooding that may affect the site.

The final issue addressed by the submission relates to the construction, replacement or alteration of bridges and culverts over watercourses. The submission notes the restrictions associated with such development and that appropriate consent from the Commissioners is required under Section 50 of the Arterial Drainage Act 1945. The submission also notes that highly vulnerable development, including essential infrastructure, is not appropriate in Flood Zone A and B and less vulnerable development, including local transport infrastructure, is not appropriate in Flood Zone

A, unless a Plan-making Justification Test completed by the local authority can be satisfied.

***Chief Executive's Response:***

The content of the submission from the OPW is noted and the Chief Executive welcomes the thorough consideration of the flood related issues by the OPW.

The Chief Executive acknowledges the point raised in the submission relating to the mapping of areas subject to flooding and as discussed in the response to Section 2 of the OPR submission above, it is recommended that Figure 6-3: Sustainable Water Management is updated to show the extent of flood zones A and B over the proposed development framework.

As also discussed in the response to the OPR's submission, it is recommended to amend Section 11.7 Subsequent Development Areas' to clarify that less vulnerable development in Flood Zone A will only be considered if no other lands are available and the criteria of the Development Justification Test have been met.

With regard to the issue of the consideration of the impacts climate change, it is noted that the SFRA was prepared in accordance with the requirements of the Flood Management Guidelines. However, as set out in the response to the OPR's submission previously, it is recommended that the SFRA document is updated to more robustly consider the potential impacts of climate change as highlighted in the OPW submission.

It is also recommended that the SuDS Strategy is also updated as appropriate having regard to the changes in the requirements for attenuation on site and to reflect the amended SFRA document.

With regard to the Broadmeadow and Ward Arterial Drainage Scheme, it should be noted that the Broadmeadow River flows to the south of the LAP lands and as a result, it is not within the remit of the Lissenhall East LAP to provide for channel maintenance strips to provide for maintenance strips for the arterial drainage scheme.

The points raised in the OPW submission regarding the different wording for the preparation of SSFRAs is noted and it is recommended that Objective SW 3 is amended to refer to an updated list of requirements as set out in the SFRA document.

Finally, the Chief Executive acknowledges the content of the submission as it relates to the construction, replacement or alteration of bridges and culverts over watercourses and recognises the restrictions and legislative requirements associated with such development.

***Chief Executives Recommendations:***

**CE CH 6.1, Section 6.3 Sustainable Water Management Objectives**

Amend Objective SW3 as follows:

**Objective SW3 – Site Specific Flood Risk Assessment**

All development proposals within a flood zone as indicated in Appendix 3 – Strategic Flood Risk Assessment shall be required to provide an appropriately detailed site specific Flood Risk Assessment *as set out in Section 6 Summary and Conclusion of Appendix 3, page 30 and 31.* ~~which should include (but not limited to) the following:~~

- ~~• An assessment of the reduction in flood volume storage,~~
- ~~• An assessment of impacts downstream of the M1,~~
- ~~• An assessment of climate change impacts,~~
- ~~• Any change of the site development framework (including roads, development parcels, buildings plots, landscaping) near flood zones A and B would necessitate the hydraulic modelling to be re-evaluated, and~~
- ~~• The drainage strategy for planning should comply with the recommendations from the SuDS Strategy for the Lissenhall East LAP as set out in Appendix 4.~~
- ~~• The drainage strategy for planning should comply with the recommendations from the SuDS Strategy for the Lissenhall East LAP as set out in Appendix 4.~~

#### **CE CH 11.1, Section 11.7 Subsequent Development Areas, p. 33**

Insert additional text directly before Figure 11-5 as follows:

*It should be emphasised that less vulnerable development in Flood Zone A will only be considered if no other lands are available and the criteria of the Development Justification Test have been met.*

#### **CE APP 3.1, Strategic Flood Risk Assessment**

Update Appendix 3 – Strategic Flood Risk Assessment as appropriate to more robustly consider the potential impacts of climate action. Please see the Amended SFRA document which accompanies this Chief Executive's Report for details of the changes made.

#### **CE APP 4.1, SuDS Strategy**

Update Appendix 4 – SuDS strategy as appropriate having regard to the changes in the requirements for attenuation on site and to reflect the amended SFRA document.

#### **FIN-C512-07 – Department of Education (DOE)**

A submission was received from Mairead Garry on behalf of the Department of Education (DOE) (ref. FIN-C512-07)

#### ***Summary of Issues raised:***

The submission from the Department of Education notes the high level of growth in Swords in recent years as well as the projections for the further growth of the town as set out in the Draft Fingal County Development Plan 2023-2029 and in the Your Swords: an Emerging City, Strategic Vision 2035 document. It also references the goal of the Sustainable Swords project to produce a strategy focused in the strategic regeneration and compact, sustainable development of Swords.

In this regard, the submission notes that the development of high-tech research and development employment within a campus setting as provided for in the Draft Lissenhall East LAP has the potential to impact on future population growth within the greater Swords area.

The submission concludes by welcoming the continued engagement of the Council with the DOE regarding the development of both new and existing schools, as appropriate, and emphasises the critical importance of the ongoing work of the Council in ensuring sufficient land is zoned for this purpose.

***Chief Executive's Response:***

The content of the submission by the DOE is noted. With regard to the potential impact of the Draft Lissenhall LAP on the population of the Swords area, it should be noted that no additional residential development is proposed (or permitted) on the LAP lands. It is further noted that the future growth of Swords is provided for in the Core Strategies of both the current (2017-2023) and Draft (2023-2029) Draft Development Plans in accordance with national and regional planning policy.

It is recognised that the development of a high tech research and technology type campus at Lissenhall has the potential to provide employment for current and future inhabitants of Swords. The adoption of a Local Area Plan for the Lissenhall East lands will help to ensure that any such development will take place in a well-planned and sustainable fashion.

With regard to the development of new and existing schools, the Council also welcomes the ongoing engagement of the DOE on this issue and will continue to cooperate with the DOE to ensure that the adequate provisions of schools across Fingal.

***Chief Executive's Recommendation:***

No change.

**FIN-C512-08 – Patrick Morrissey**

A submission was received from Patrick Morrissey (ref. FIN-C512-08).

***Summary of Issues raised:***

The submission raises the issue of potential cumulative negative impacts to the Turvey\_010 watercourse (Lissenhall Stream) and beyond arising from the Draft LAP. In this regard, the submission refers to Draft LAP Objective BI6 – Hedgerows and Watercourses which prohibits development, including clearance and storage of materials, to take place within a minimum distance of 10-15 metres measured from each bank of the Lissenhall Stream.

The submission states the riparian zone which is considered by the EPA for the purposes of accessing hydromorphology is a 20m corridor either side of the watercourse banks and that this size corridor should be designated on either side of Turvey\_010 to protect the hydromorphological condition of this watercourse which is already assessed as being at Poor WFD Status.

The submission goes on to state that while, at present, hydromorphology is not currently considered in the Status assessment for the TURVEY\_010, plans are underway at EU level to incorporate hydromorphology within WFD status assessment for such rivers.

The submission concludes its discussion of this issue by recommending that a 20m buffer zone free from development should be provided either side of the Turvey\_010 watercourse to allow for current and future WFD requirements to be met.

A second issue raised in the submission relates to flooding and climate change with the submission expressing strong opposition to any development being permitted in flood zones A and B under the Draft LAP and calling for a more extensive risk assessment for upstream and downstream cumulative flood risk and the impacts of climate change and coastal flooding.

The submission also opposes the approach to flood risk and attenuation set out in the Draft LAP and proposes the greater retention of natural floodplain with a buffer and set these lands aside for landscaping, woodland walks and biodiversity areas.

The submission concludes by outlining how scientific understanding of climate change and flooding is evolving and the existing methodology for assessing climate effects on extreme flood events may in fact be significantly altered in the short to medium term. This is said to include the use sophisticated Global and Regional Climate models to replace the existing mid-range and high-end future scenarios which the OPW currently uses (20% and 30% increases). The submission states that some global climate models are predicting impacts far in excess of the current "high-end" scenarios and criticises Local Authorities plans which proposing development in existing unfactored flood extents

***Chief Executive's Response:***

The content of the submission is noted. With regard to the issue of buffers along the Lissenhall Stream, it should be noted that, as acknowledged in the submission, Draft LAP Objective BI6 – Hedgerows and Watercourses prohibits development, including clearance and storage of materials, to take place within a minimum distance of 10-15 metres measured from each bank of the Lissenhall Stream. This overall approach is in accordance with the approach due to be adopted in the Draft Fingal County Development Plan in the form of the following objective:

**Objective DMSO211 – Riparian Corridors**

Establish riparian corridors free from new development along all significant watercourses and streams in the County:

- Ensure a minimum 10m wide riparian buffer strip measured from the top of the bank either side of all watercourses. This minimum 10m wide riparian buffer strip applies to lands within urban areas – I.e. within designated settlement

boundaries (as per FCC's Settlement Hierarchy set out in Chapter 2, Planning for Growth, Table 2.20: Fingal Settlement Hierarchy).

- A minimum 30m wide riparian buffer strip is required in all other areas outside of urban areas.
- Where lands encompass urban and rural areas, a transitional approach from the urban riparian requirements to the rural riparian requirements may be appropriate and will be assessed on a case-by-case basis.
- Notwithstanding the above, cognisance must be taken of Flood Zone A and B, as outlined in the accompanying SFRA.

It should be noted that the Lissenhall East LAP lands are located within the Swords urban area and as a result the buffer along the Lissenhall Stream will be subject to a minimum requirement of at least 10m.

With regard to the issue of flood risk and climate change, it should be noted that the SFRA included as Appendix 3 to the Draft LAP, has been prepared in accordance with all relevant planning and environmental legislative requirements and guidelines, including the Flood Risk Guidelines for Planning Authorities.

It should also be noted that as outlined in responses to the submissions from the OPR and OPW, that it is recommended that additional clarity will be provided that development will be restricted in flood zone areas A and B and that the SFRA will be updated to more comprehensively consider the potential impact of climate change on the LAP lands.

***Chief Executive's Recommendation:***

No change recommended.

**FIN-C512-09 – Meath County Council**

A submission was received from Alan Russell on behalf of Meath County Council (FIN-C512-09).

***Summary of Issues raised:***

The submission outlined that having reviewed the Draft Lissenhall East LAP in full, that Meath County Council does not consider that the Draft LAP presents any significant cross boundary issues with MCC.

The submission notes the intention of the LAP to establish new employment development on site but within a framework which anticipates the delivery of MetroLink. The submission outlines how the lands are strategically located approximately 5km north of Dublin Airport and adjacent to the M1 Motorway within the Dublin-Belfast economic corridor and that planned significant public transport upgrades will enhance the connectivity of the LAP lands include Bus Connects and the MetroLink project.

The submission also describes how the Draft LAP recognises that an important aspect of the traffic context for the Draft LAP will be the protection of the M1 pre Metrolink, in

line with national, regional and local public policy objectives. The submission concludes by confirming that Meath County Council fully supports the Draft Lissenhall East LAP and the objectives which have been set out within.

**Chief Executive's Response:**

The content of the submission from Meath County Council is noted. The Chief Executive recognises the importance of ensuring that the future development of the LAP lands will anticipate the delivery of MetroLink while also ensuring the protection of the M1 motorway in accordance with all relevant policy objectives.

**Chief Executive's Recommendation:**

No change.

**FIN-C512-10 – The Grimes Family**

A submission was received from Donal Duffy of Downey Planning Consultants on behalf of the Grimes Family (FIN-C512-10).

**Summary of Issues raised:**

The submission is a detailed 22 page document which includes a review of relevant national, regional and local planning policy as well as an overview of the relevant planning history of lands in the Lissenhall LAP area.

The submission starts by stating that the Grimes Family are the owners of the lands located to the northmost section of the strategic landbank at Lissenhall East , which is stated as comprising ca. 12% of the overall landholding at Lissenhall East.

The submission refers to how the development framework for the overall Lissenhall East LAP lands distinguishes between 'Initial' and 'Subsequent' Development Areas and argues that the land owned by the Grimes family are appropriate be included in the 'Initial' Development Area. The submission goes on to make a number of detailed points in support of this argument which are quoted below

- *“Absence of consistency in terms of the timeline of preparing the LAP contravenes the timely manner of plan-making outlined in the Section 20 of the Act,*
- *The disrupted plan-making process of Draft Lissenhall East LAP demonstrating c. 5 years' gap between completion of pre-draft stage public consultation and publication of the Draft LAP, considering this is the first local area plan for Lissenhall East, contravenes Section 19 of the Act*
- *Absence of a rationale to dividing up the lands and phasing of developing lands coupled with lack of consultation with landowners (would-be developers) led to a self-styled planning policy which would only delay development of the lands,*
- *Should the subject lands be included within the “Initial Development Area”, the potential of the LAP is more likely to be unlocked during the lifetime of the Plan,*
- *Should the subject lands be included within the “Initial Development Area” and the internal road proposal re-visited, our client’s land would not be isolated from the remainder of this strategic land reserve”.*



**Chief Executive's Response:**

The content of the submission is noted. With regard to the timeline for the preparation of the LAP, it should be noted that the submission refers to Section 20 of the Planning and Development Act, 2000 (as amended). However, the text quoted in the submission relates to a version of the Act which was subsequently amended. The correct text of Section 20(1) is as follows:

*20.—(1) A planning authority shall take whatever steps it considers necessary to consult the Minister, the Office of the Planning Regulator and the public before preparing, amending or revoking a local area plan including consultations with any local residents, public sector agencies, non-governmental agencies, local community groups and commercial and business interests within the area.*

In accordance with Section 20(1) of the Act, Fingal County Council considered it necessary to prepare the Draft LAP having regard to the results of an earlier pre-draft exercise undertaken in 2017 but also to any changes in national, regional and local planning policy which had occurred since that period. The Draft LAP was subsequently put on display in accordance with the requirements of Section 20(3)(b) and this report has been prepared in accordance with Section 20(3)(c) of the Act.

With regard to the second point listed in the submission, it is noted that reference is made to Section 19 of the Planning and Development Plan. However, once again, the submission includes the text of a previous, since amended version of Section 19 of the Act. The latest consolidated version of the Act (updated to 23<sup>rd</sup> June 2022 – see <https://revisedacts.lawreform.ie/eli/2000/act/30/revised/en/html>) indicates that the reference to the “first Local Area Plan” has been removed. It is clear therefore, that it is not possible for the Draft LAP to be in contravention of an element of Section 19 of the Act which is no longer in force.

With regard to the overall phasing of the lands, as stated in Section 1.3 Basis for a LAP for Lissenhall East:

*“The LAP provides a policy context for the entire LAP lands to ensure that any development which takes place within the lifetime of the LAP is consistent with strategic planning policy, considers the future development of the MetroLink scheme (anticipated in 2035), and has regard to all relevant planning and environmental considerations.*

*The intention of the LAP therefore is to establish new employment development on site but within a framework which anticipates the delivery of MetroLink. This is to be achieved by focusing on one development area - the Initial Development Area (comprising ca. 13.8 hectares / 34.1 acres) located along the western boundary of the lands with the R132 (see Section 11.6 and Figure 11-2.).*

The decision to focus on one development area relates to the need to limit the overall scale of employment related development to provide for 1,000 additional jobs for the

entire LAP lands having regard to the capacity of the road network, including the strategically important M1 junction 4 directly to the northeast of the Lissenhall East LAP lands.

This area of land currently designated as the Initial Development Area was considered appropriate due to its location contiguous to existing development on the Lissenhall East LAP lands, due to its general size and configuration, due to the fact that it has not yet been developed, and due to the potential it offered to integrate and provide additional protection of existing built heritage (Meudon) and archaeological features (RMP sites), while also allowing for better pedestrian and cycling access to the south of the lands.

It should be noted that the internal road and circulation proposals shown on the Draft LAP Development Framework Map only relate to areas in the initial development area as envisaged to be realised within the lifetime of the LAP. This does not preclude the future extension of these internal circulations routes to other subsequent development areas in the future.

***Chief Executive's Recommendation:***

No change.

**FIN-C512-12 – Fingal Chamber**

A submission was received from Siobhán O'Donnell on behalf of Fingal Chamber (ref. FIN-C512-12).

***Summary of issues raised:***

The submission expressed the support of Fingal Chamber for the sustainable economic development of Lissenhall East lands while also drawing attention to the pressing issues facing businesses in Fingal including a shortage of housing and public transport services as well as traffic congestion.

The submission notes that it is not expected for Metrolink to be delivered before 2034 and that as a result, it is imperative that the Lissenhall area is properly serviced with efficient, regular and timely transport services and that such services must be consciously woven into the plan.

In light of the above, the submission from Fingal Chamber call for robust and comprehensive engagement between FCC, NTA and TII on sustainable transport services so that prospective employers in the area are able to attract employees with excellent transport services to and from their workplaces.

***Chief Executive's Response:***

The support of Fingal Chamber for the sustainable economic development of the Lissenhall East LAP lands is noted and welcomed. With regard to the delivery of Metrolink and the provision of public transport services, a key element of the Draft LAP

was to ensure that an appropriate level of development could be provided on the lands in advance of the opening of Metrolink.

To this end, the Transport Assessment, which informed the Draft LAP, identified a number of potential additional measures to be implemented to improve access to the lands including

- the extension of the R132 Connectivity Project to the LAP lands to increase accessibility by pedestrians and cyclists;
- improved bus facilities on the R132 including sheltered stops served by existing and future BusConnects routes; and
- the integration of the LAP lands with existing and future BusConnects routes.

While the provision of public transport services is a matter for public bodies such as the NTA and TII and for providers such as Dublin Bus and other private operators, the Council is committed to cooperating closely with such organisations as required to improve the public transport offering in the area.

***Recommendation:***

No change.

**FIN-C512-13 – Health Service Executive (HSE)**

A submission was received from Donal Duffy of Downey Planning Consultants on behalf of the Health Service Executive (FIN-C512-13).

***Summary of Issues raised:***

The submission is a detailed 18 page document which includes a review of relevant national, regional and local planning policy as well as an overview of the relevant planning history of lands in the Lissenhall LAP area.

The submission starts by stating that the HSE is the owner of lands which comprise a portion of the Lissenhall East LAP lands. As set out in the submission, this ca. 3.4 hectare area which is accessed from the R132 via a “left in, left out” traffic arrangement, currently includes the following HSE facilities:

- HSE EVE Estuary (Mental Health Service) presently serving 61 people
- Maryfield Cottage (Mental Health Service)
- the National Ambulance Centre
- surface car parking including a car parking area for the emergency vehicles situated to the front of HSE EVE Estuary building.

The submission states that part of the lands are currently undeveloped, which could provide for the expansion of operations on site. According to the submission, the HSE is said to be exploring the possibility of developing their on-site campus to include offices and the provision of a primary care centre, which could lead to 200-250 staff working at the site in the future.

The submission refers to how the overall development framework for the overall Lissenhall East LAP lands distinguishes between 'Initial' and 'Subsequent' development areas and that the lands under the ownership of the HSE would form part of the subsequent development area.

The submission goes on to state that while the HSE is broadly supportive of the Draft LAP, they have concerns over access to their site, existing facilities, and future development of the lands at Lissenhall East. The main issues listed in the submission are quoted below:

- *"The disruptive plan-making process of the Draft Lissenhall East LAP demonstrating c. 5 years' gap between the completion of the pre-draft stage public consultation and the publication of the Draft LAP have led to outdated input for the plan which needs to be revisited to include concerns, priorities, and future indicative plans for the HSE,*
- *Absence of a rationale to dividing up the lands and phasing out of developing lands led to a self-styled planning policy which would only delay or adversely impact development of the HSE lands,*
- *Concern over the impact of the day-to-day operations of the National Ambulance Service Station and Mental Health Services currently on the HSE lands,*
- *Impact on the use of the existing access to the National Ambulance Service on the HSE lands and possible conflict arising from the future development of the lands and the new entrance to the site to be included within the Draft LAP,*
- *The need to ensure the future potential of the HSE lands with potential for c. 60,000sqft office development and a new Primary Care Centre with c. 90,000sqft in area to be considered within the Draft LAP,*
- *The need for an increased car parking capacity on site to cater the HSE facilities to be included within the Draft LAP".*

**Chief Executive's Response:**

The content of the submission is noted. With regard to the timeline for the preparation of the Draft Lissenhall East LAP in accordance with Section 20(1) of the Act, Fingal County Council considered it necessary to prepare the Draft LAP having regard to the results of an earlier pre-draft exercise undertaken in 2017 but also to any changes in national, regional and local planning policy which had occurred since that period. The Draft LAP was subsequently put on display in accordance with the requirements of Section 20(3)(b) and this report has been prepared in accordance with Section 20(3)(c) of the Act.

With regard to the overall phasing of the lands, as stated in Section 1.3 of the Draft LAP document 'Basis for a LAP for Lissenhall East':

*"The LAP provides a policy context for the entire LAP lands to ensure that any development which takes place within the lifetime of the LAP is consistent with strategic planning policy, considers the future development of the MetroLink scheme*

*(anticipated in 2035), and has regard to all relevant planning and environmental considerations.*

*The intention of the LAP therefore is to establish new employment development on site but within a framework which anticipates the delivery of MetroLink. This is to be achieved by focusing on one development area - the Initial Development Area (comprising ca. 13.8 hectares / 34.1 acres) located along the western boundary of the lands with the R132 (see Section 11.6 and Figure 11-2.).*

The decision to focus on one development area relates to the need to limit the overall scale of employment related development to 1,000 additional jobs for the entire LAP lands having regard to the capacity of the road network, including the strategically important M1 Junction 4 directly to the northeast of the Lissenhall East LAP lands.

This area of land currently designated as the Initial Development Area was considered appropriate due to its location contiguous to existing development on the Lissenhall East LAP lands, due to its general size and configuration, due to the fact that it has not yet been developed, and due to the potential it offered to integrate and provide additional protection of existing built heritage (Meudon) and archaeological features (RMP sites), while also allowing for better pedestrian and cycling access to the south of the lands.

It is noted that the remaining four points raised in the submission relate to the operations and future development of the existing HSE facilities within the Lissenhall East LAP boundary. As outlined above, this includes HSE EVE Estuary, Maryfield Cottage, the National Ambulance Centre, surface car parking and an area of undeveloped land which could be subject of future development proposals.

It is important to note that the Draft LAP provides both for the ongoing operation of existing uses on the LAP zoned lands and for development proposals for these lands as long as they are in accordance with the visions and objective HT-High Technology land use, with all other relevant Development Plan policies and objectives and with relevant national and regional policies and guidelines. In this regard, Section 11.7 of the Draft Lissenhall East LAP states that:

*New HT development is directed to the Initial Development Area. However, it is acknowledged that other proposals may come forward for the rest of the lands including but not limited to proposals relating to the existing commercial premises located along the western boundary of the LAP lands.*

*These proposals will be considered on their own merits, assessed in terms of their contribution towards the achievement of the Zoning Objective and Vision and their compliance and consistency with the policies and objectives of the Development Plan.*

*The LAP provides a policy context for the entire LAP lands to ensure that development which takes place within the lifetime of the plan is consistent with strategic planning*

*policy, considers the future development of the MetroLink scheme (anticipated in 2035), and has regard to all environmental considerations.*

*The intention of this Draft LAP is to establish new employment development on site for in the region of 1,000 jobs as set out in the Transport Assessment but within a framework which anticipates the delivery of MetroLink.*

Having regard to the above, it can be seen that the strategic, long term aim of the Draft LAP is to provide a framework for an appropriate level of new employment generating uses in advance of the delivery of Metrolink, which will serve to act as a catalyst for the development and redevelopment of the entire LAP area when Metrolink is in place (subject to all relevant environmental and environmental assessment procedures).

A key consideration in this regard was the need to ensure that the potential level of employment generated by development on the LAP lands would not have an undue negative impact on the local road network and on the regionally significant M1 junction just north of the Lissenhall East.

As clarified in the responses to the OPR, TII and NTA, the Draft Lissenhall East LAP does this by specifying a maximum of 1,000 additional jobs to be provided on the entirety of the LAP lands during the lifetime of the LAP. This requirement does not preclude the development of the HSE lands as outlined in the submission.

With regard to the issue of existing and proposed access to the LAP lands, the Movement and Transportation Chapter of the Draft LAP specified that that the main vehicular access into / out of the lands will be via a signalised junction on the R132, indicated as being north of the existing HSE lands access and aligned with the proposed Swords Western Distributor Road. It goes on to state that

*“The long term intention is for the phased closure of other existing vehicular entrances onto the R132 as existing sites / business come forward for redevelopment”.*

On this basis, the HSE land access will not be affected until such time that there are development proposals for these lands. The operation of the existing HSE lands entrance as a left-in/left-out only junction means there is no potential negative impact on its operation from the provision of a new signalised entrance to the north of its location.

The long term intention will see the consolidation of the existing access points to the LAP lands into this single main entrance, with internal access facilitated via a new road network within the LAP lands. The preparation of the LAP was informed by a comprehensive Transport Assessment which gave due consideration to a wide variety of factors including existing travel demand, projected increases in demand based on predicated development, background traffic growth and the feasibility of a single access point to the development lands.

The employment population set out within the LAP has been specifically based on the results of this assessment to ensure the integrity and viability of the local and proposed

road network is maintained. This will include, as part of the long term intention, serving the HSE lands via the proposed main entrance and any design for same will be required to consider the full future demand and prove it is fit for purpose as part of the respective refined transport assessments required at planning stage.

Finally, any future works related to the LAP proposals, including the extension of the R132 Connectivity Project, will be subject to standard development controls comprising a variety of details and factors. This would be expected to include maintaining appropriate accessibility for adjacent development and critical functions such as the existing HSE lands. The LAP proposals do not preclude the requirement for such standard controls and management measures.

***Chief Executive's Recommendation:***

No change.

**FIN-C512-14 – Department of Housing Local Government and Heritage (DHLGH)**

A submission was received from Sinéad O'Brien on behalf of the Development Applications Unit (DAU) of the Department of Housing Local Government and Heritage (DHLGH) (ref. FIN-C512-01).

***Summary of issues raised:***

The submission states that the Department has examined the archaeological component of the Archaeological, Architectural and Cultural Heritage Report which accompanied and informed the Draft Lissenhall East LAP.

The submission notes that the LAP lands are located in an area of high archaeological potential and contains or is in the vicinity of a number of monuments of archaeological interest which are/will be subject to statutory protection in the Record of Monuments and Places. It also notes that, the results of the archaeological geophysical survey carried out on the LAP lands indicate the presence of features of potential archaeological interest.

The submission states that based on the contents of the information presented there are no archaeological objections to the development of the Lissenhall East lands and that the Department concurs with the recommendations in the Archaeological, Architectural and Cultural Heritage Report (Section 7.2.5, page 38-39).

The submission concludes by recommending that Archaeological Impact Assessments should be prepared to assess the impacts and potential impacts, if any, on archaeological remains in the area where development is proposed to take place.

According to the submission, such assessments should address the infrastructural developments within the LAP lands and the individual components of proposed developments. The submission also suggests that future recommendations could include conditions relating to preservation in situ, preservation by record, archaeological testing and archaeological monitoring.

**Chief Executive's Response:**

The content of the DHLGH submission on the Draft Lissenhall East LAP is noted. The Council welcomes the confirmation provided by the submission that the DHLGH does not have any archaeological objections to the development of the Lissenhall East lands and that the Department concurs with the recommendations in the Archaeological, Architectural and Cultural Heritage Report.

With regard to the recommendation included in the submission for the preparation of Archaeological Impact Assessments to assess the impacts and potential impacts of proposed development, it should be noted that both the current and draft County Development Plans contain numerous policies which seek to protect archaeological heritage from inappropriate development.

Of particular relevance in this instance is Objective HCAO8 – Archaeological Impact Assessment in the Draft County Development Plan to

*“Require that proposals for linear development over one kilometre in length; proposals for development involving ground clearance of more than half a hectare; or developments in proximity to areas with a density of known archaeological monuments and history of discovery; to include an Archaeological Impact Assessment and refer such applications to the relevant Prescribed Bodies”.*

Having regard to the above, it is recommended that a new objectives be included in Section 7.3 Archaeological and Architectural Objectives to require proposals for developments in proximity to the archaeological features shown on Figure 7.5 to include an Archaeological Impact Assessment.

Finally, in relation to the issue of the imposition of conditions on planning permissions relating to preservation in situ, preservation by record, archaeological testing and archaeological monitoring, it is considered that this would be most appropriately addressed as part of the Development Management process. Nonetheless, it should also be noted that the current and Draft Development Plan also contain policies and objectives aimed at ensuring the proper preservation of archaeological remains.

**Chief Executive's Recommendation:****CE CH 7.1, Section 7.3 Archaeological and Architectural Heritage Objectives, p. 19**

Insert a new objective after Objective AAH4 – Signage and Education as follows:

**Objective AAH5 – Archaeological Impact Assessment**

**An Archaeological Impact Assessment will accompany applications for development in proximity to the archaeological features shown on Figure 7-5: 'RMP/SMR, RPS and NIAH Sites within 1km' with all such applications to be referred to the relevant Prescribed Bodies”.**

**FIN-C512-16 – Health Service Executive (HSE)**

A submission was received from Lisa Fitzpatrick on behalf of the Health Service Executive (HSE) (ref. FIN-C512-16).



**Summary of Issues raised:**

The submission commences by stating that it is being made under the remit of Health Ireland and relevant supporting health strategies and that the aim of the submission is to incorporate relevant health actions into the strategic planning of the spatial and built environment of Lissenhall East, with the overall aim of improving health and wellbeing in the population of the town and the surrounding area.

The submission then lists and summarises additional proposals and policy documents which may be considered and incorporated into the Lissenhall East Local Area Plan including:

1. Get Ireland Active - National Physical Activity Plan for Ireland
2. Healthy Ireland - A Healthy Weight for Ireland
3. Tobacco Free Ireland
4. Steering Group Report on National Substance Misuse Strategy
5. National Positive Ageing Strategy
6. Time to Move On from Congregated Settings - A strategy for community inclusion, greater connectivity, special accommodations for people with disabilities.
7. The National Climate Change Action Plan
8. Research 195: Health Benefits from Biodiversity and Green Infrastructure
9. Ireland's Second National Energy Efficiency Action Plan to 2020
10. The Government's Smarter Travel Policy
11. The National Cycle Policy Framework
12. A Resource Opportunity - Waste Management Policy in Ireland
13. The National Strategy on Biodegradable Waste
14. EPA Guidance Note for Noise Action Planning
15. Planning Systems and Flood Risk Management Guidelines for Planning Authorities.

In addition, the submission includes general suggestions in relation to sustainable development, biodiversity and green infrastructure, energy efficiency, cycle and pedestrian infrastructure, waste reduction, water conservation, environmental noise and air quality.

**Chief Executive's Response:**

The content of the HSE's submission is noted. With regard to the wide range of documents and issues referred to in the submission, it should be noted that the purpose of the Draft Lissenhall East LAP is to provide a robust framework for the future development of the LAP lands having regard to the requirements of the current and Draft Fingal County Development Plan, which in turn must have regard to regional and national planning policy documents.

The current and Draft Plans are large, comprehensive documents which set out in a considerable level of detail how the existing and future development of the County must take account of a wide range of relevant issues, including many of those referred to in the HSE's submission.

As the Draft LAP is required to fully accord with the provisions of the County Development Plan, it is not considered necessary or appropriate to repeat the myriad policies relating to the wide range of publications and issues as contained in the Draft Development Plan.

Nonetheless, the Chief Executive welcomes the comprehensive nature of the submission and notes the specific points it raises in relation to the Lissenhall LAP lands including transport and accessibility as well as flood risk considerations. It should be noted that these issues are addressed in detail in the Draft LAP document and also in the responses to other submissions (including the OPR, OPW, NTA and TII) elsewhere in this Chief Executive's Report.

***Recommendation:***

No change.

## 6. List of Chief Executive's Recommendations

This section of the report sets out the recommendations of the Chief Executive to the elected Members in relation to the Draft Local Area Plan.

In the interests of clarity, the recommendations are presented in the order they would appear in the Draft LAP document. It should also be noted that recommendations which are associated with the submission by the Office of the Planning Regulator are denoted by the inclusion of the initials OPR in the recommendation reference number.

### **CE OPR CH 3.1, Section 3.4 Achieving the Vision, p. 11**

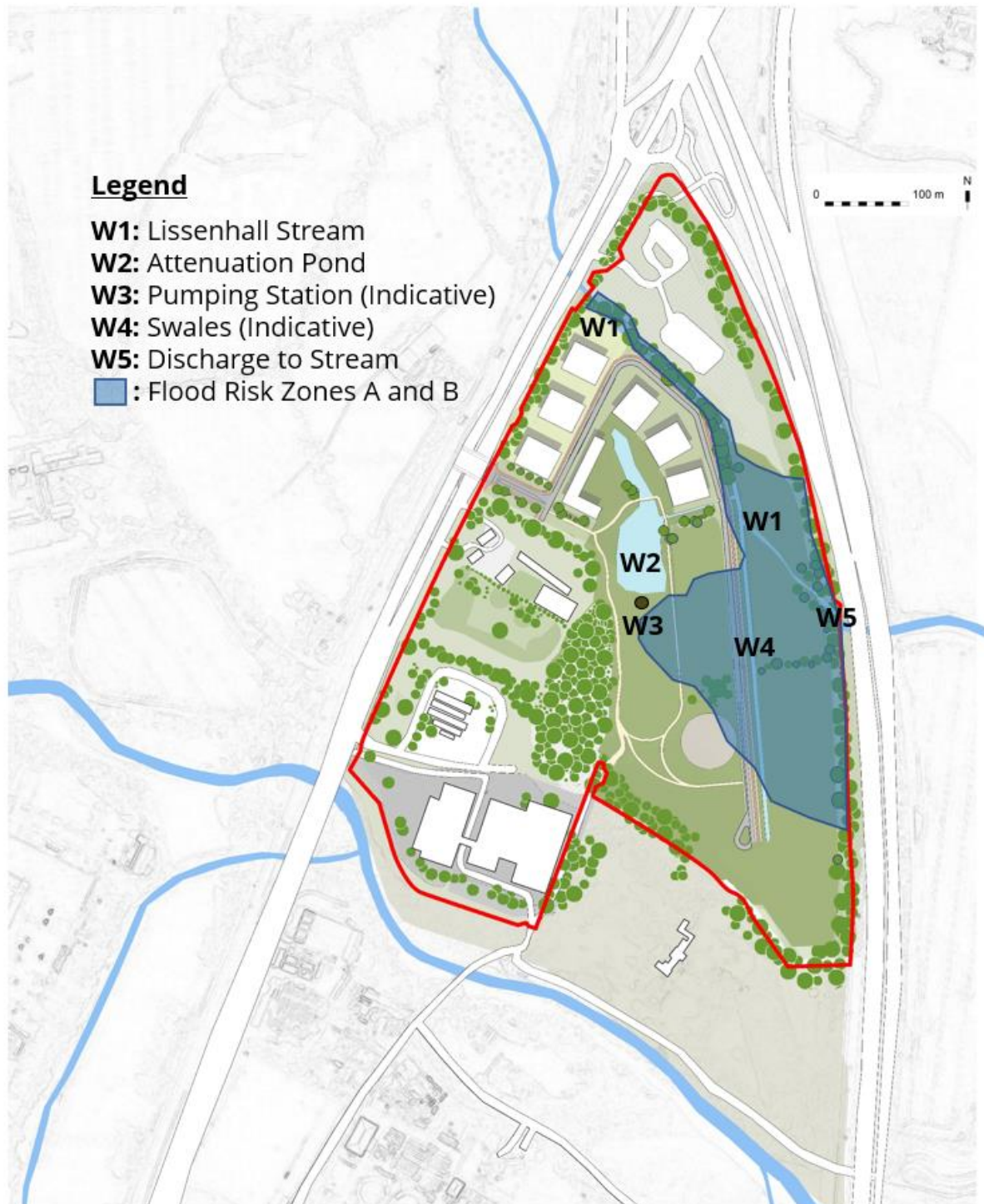
Insert additional text directly before Figure 3-4 as follows:

The final chapter of this Draft Local Area Plan document (Chapter 11) integrates the policies and objectives set out in the preceding chapters to present an overall development framework for the development of the Lissenhall East LAP ***to provide for office, research and development and high technology/high technology manufacturing type employment in a high quality built and landscaped environment*** as illustrated below.

**CE OPR CH 6.1, Section 6.2.1 Flood Risk Management, p. 16**

Replace existing Figure 6-3 with the following figure:

**Figure 6-3 Sustainable Water Management**



**CE CH 6.1, Section 6.3 Sustainable Water Management Objectives**

Amend Objective SW3 as follows:

**Objective SW3 – Site Specific Flood Risk Assessment**

All development proposals within a flood zone as indicated in Appendix 3 – Strategic Flood Risk Assessment shall be required to provide an appropriately detailed site specific Flood Risk Assessment *as set out in Section 6 Summary and Conclusion of Appendix 3, page 30 and 31.* ~~which should include (but not limited to) the following:~~

- ~~• An assessment of the reduction in flood volume storage,~~
- ~~• An assessment of impacts downstream of the M1,~~
- ~~• An assessment of climate change impacts,~~
- ~~• Any change of the site development framework (including roads, development parcels, buildings plots, landscaping) near flood zones A and B would necessitate the hydraulic modelling to be re-evaluated, and~~
- ~~• The drainage strategy for planning should comply with the recommendations from the SuDS Strategy for the Lissenhall East LAP as set out in Appendix 4.~~
- ~~• The drainage strategy for planning should comply with the recommendations from the SuDS Strategy for the Lissenhall East LAP as set out in Appendix 4.~~

**CE CH 7.1, Section 7.3 Archaeological and Architectural Heritage Objectives, p. 19**

Insert a new objective after Objective AAH4 – Signage and Education as follows:

**Objective AAH5 – Archaeological Impact Assessment**

**An Archaeological Impact Assessment will accompany applications for development in proximity to the archaeological features shown on Figure 7-5: 'RMP/SMR, RPS and NIAH Sites within 1km' with all such applications to be referred to the relevant Prescribed Bodies".**

**CE CH 10.1, Section 10.2.1 Overall Approach and Transport Assessment, p. 25.**

Amend text of second paragraph on page 25 as follows:

The Transport Assessment, which ~~was carried out by Fingal County Council in consultation with the NTA and Transportation Infrastructure Ireland (TII)~~ *is included as Appendix 5* considered a number of employment scenarios for the LAP lands and identified a number of potential additional measures to be implemented to improve access to the lands.

**CE OPR CH 10.1, Section 10.2.1 Overall Approach and Transport Assessment, p. 25**

Amend the text of the paragraph directly before Heading 10.2.2 as follows:

This Draft LAP has adopted a conservative scenario included in the Transport Assessment of a maximum of ca. 1,000 employees for the pre-MetroLink scenario. This provides the basis for an appropriate quantum of new development in this Draft LAP. *In the interests of clarity, it should be noted this figure of 1,000 additional employees applies to the full extent of the LAP lands, including the existing developed lands at the southern end and any redevelopment of same.*

**CE OPR CH 10.2, Section 10.3 Movement and Transport Policies, p. 25**

Amend the text of the Objective MT1 as follows:

**Objective MT1 – Lissenhall East Transport Assessment**

Implement the recommendations of the Lissenhall East Transport Assessment in respect of the Initial Development Area. It shall be a requirement that any planning application clearly demonstrate compliance with the recommendations of the Transport Assessment. *In the interests of clarity, it should be noted that in the pre-MetroLink scenario development will be limited to 1,000 additional employees for the entire local area plan, inclusive of the existing developed lands to the south.*

**CE OPR CH 10.3, Section 10.2.4 Pedestrian and Cycle Links, page 25**

Insert addition text after the first paragraph on page 26 as follows:

*Given the importance of improved access to the subject lands by sustainable, active travel modes, the Council will commit to extending the R132 scheme to serve Lissenhall East as soon as practicable after the Local Area Plan is adopted.*

**CE OPR CH 11.1, Section 11.4 Quantum and Proposed Uses, p. 29**

Amend the text of the Draft Plan as follows:

As set out in the Transport Assessment, the recommended strategy is the scenario based on 1,000 jobs, as it would not have an undue negative impact on the local road network or the motorway junction.

*In the interests of clarity, it should be noted that the figure of 1,000 additional jobs referred to above applies to the full extent of the LAP lands, including the existing developed lands at the southern end and any redevelopment of same.*

**CE OPR CH 11.2, Section 11.4 Quantum and Proposed Uses, p. 29**

Insert additional text directly before heading 11.5 Strategic Development Framework as follows:

*Any applications for development on LAP lands will be required to demonstrate compliance with the overall HT zoning objective which is to provide for office, research and development and high technology/high technology manufacturing type employment in a high quality built and landscaped environment.*

**CE OPR CH 11.3, Section 11.4 Quantum and Proposed Uses, p. 29**

Amend the text of the Draft Plan as follows:

As set out in the Transport Assessment, the recommended strategy is the scenario based on 1,000 jobs, as it would not have an undue negative impact on the local road network or the motorway junction.

*In the interests of clarity, it should be noted that the figure of 1,000 additional jobs referred to above applies to the full extent of the LAP lands, including the existing developed lands at the southern end and any redevelopment of same.*

**CE OPR CH 11.4, Section 11.7 Subsequent Development Areas, p. 32**

Amend the text of the Draft Plan as follows:

The intention of this Draft LAP is to establish new employment development on site (for in the region of 1,000 jobs as set out in the Transport Assessment but within a framework which anticipates the delivery of MetroLink. *This figure of 1,000 additional employees applies to the full extent of the LAP lands, including the existing developed lands at the southern end and any redevelopment of same.*

**CE OPR CH 11.5, Section 11.7 Subsequent Development Areas, p. 33**

Insert additional text after the first bullet point in the middle column of page 33 as follows:

*Due to the fact that much of the south eastern area of the LAP lands is located in flood zone A any future development proposals in this area will be subject to a detailed site specific flood risk assessment in accordance with the requirements of the Planning System and Flood Risk Management Guidelines for Planning Authorities.*

**CE CH 11.1, Section 11.7 Subsequent Development Areas, p. 33**

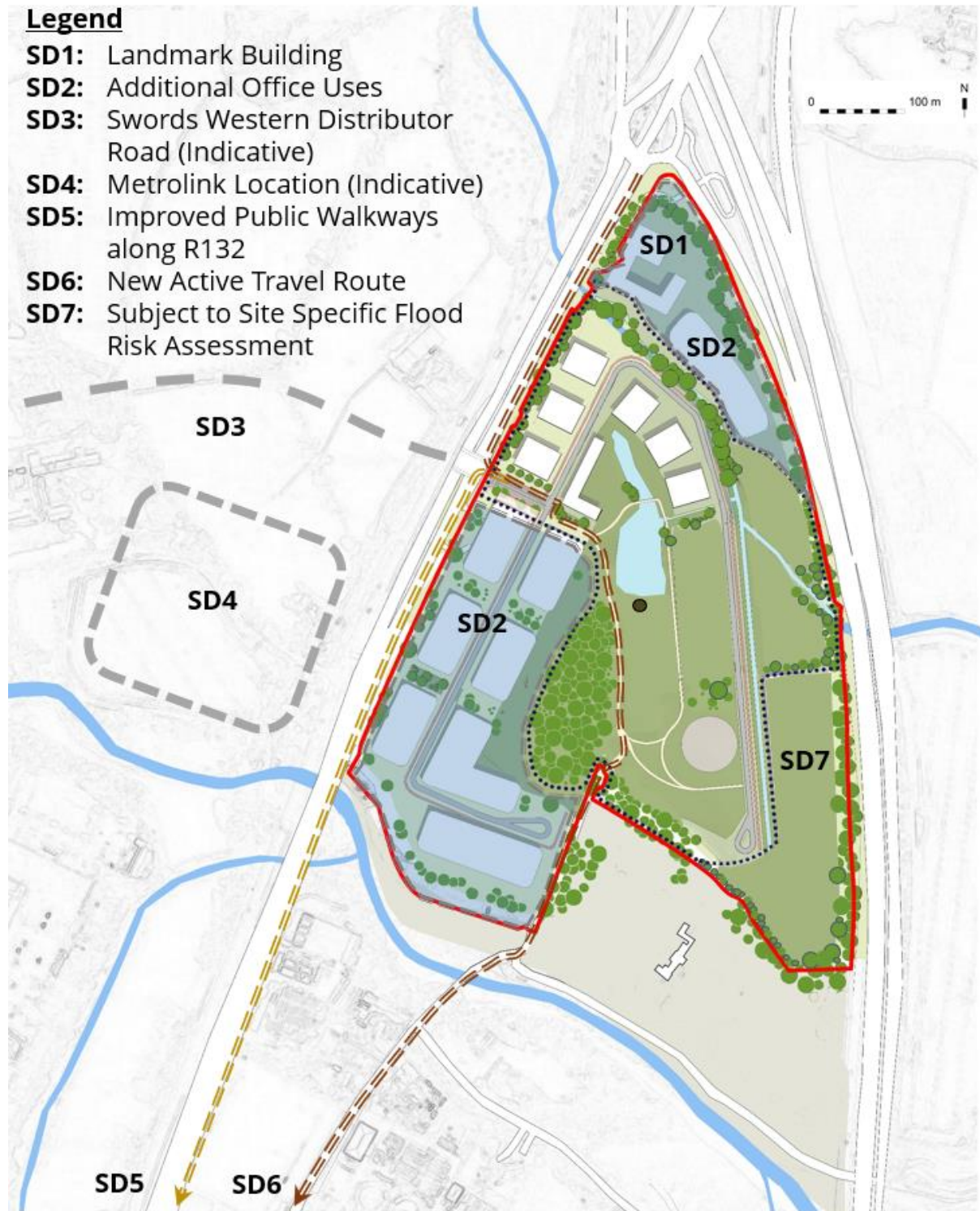
Insert additional text directly before Figure 11-5 as follows:

*It should be emphasised that less vulnerable development in Flood Zone A will only be considered if no other lands are available and the criteria of the Development Justification Test have been met.*

**CE OPR CH 11.6, Section 11.7 Subsequent Development Areas, p. 33**

Replace Figure 11-5 Potential Subsequent Development with the following amended figure:

**Figure 11-5: Potential Subsequent Development**



**CE APP 3.1, Strategic Flood Risk Assessment**



Update Appendix 3 – Strategic Flood Risk Assessment as appropriate to more robustly consider the potential impacts of climate action. Please see the Amended SFRA document which accompanies this Chief Executive's Report for details of the changes made.

**CE APP 4.1, SuDS Strategy**

Update Appendix 4 – SuDS strategy as appropriate having regard to the changes in the requirements for attenuation on site and to reflect the amended SFRA document.

## Appendix 1 Screening of Recommendations for AA and SEA

Refer to main text of this report for full description of the Proposed Amendments.

Proposed Amendment	Outline Description	Screening for Appropriate Assessment (AA)	Screening for Strategic Environmental Assessment (SEA)*
CE OPR CH 3.1	Include following text in Section 3.4 Achieving the Vision <i><u>...to provide for office, research and development and high technology/high technology manufacturing type employment in a high quality built and landscaped environment...</u></i>	New text provides clarity of vision for LAP lands. Requirement for Stage 2 AA is excluded.	Amendment provides for clarity of vision for LAP lands. No likely significant environmental effects. SEA not required.
CE OPR CH 6.1	Replace <b>Figure 6.3 Sustainable Water Management</b> with updated version (addressing potential flooding)	Amendment reduces flood risk. No AA issues arise. Requirement for Stage 2 AA is excluded.	Amendment reduces flood risk. No likely significant environmental effects. SEA not required.
CE CH 6.1	Amend Objective SW3 in relation to <b>Site Specific Flood Risk Assessment</b>	Amendment provides for clarity in relation to SSFRA. No AA issues arise. Requirement for Stage 2 AA is excluded.	Amendment provides for clarity in relation to SSFRA. No likely significant environmental effects. SEA not required.
CE CH 7.1	Insert a new objective to... <i><u>Provide for Archaeological Impact Assessments to accompany applications for development in proximity to the archaeological features with all such applications to be referred to the relevant Prescribed Bodies</u></i>	Amendment provides for enhanced protection in relation to heritage features. No AA issues arise.	Amendment provides for enhanced protection in relation to heritage features. No likely significant environmental effects.

Proposed Amendment	Outline Description	Screening for Appropriate Assessment (AA)	Screening for Strategic Environmental Assessment (SEA)*
		Requirement for Stage 2 AA is excluded.	SEA not required.
<b>CE CH 10.1</b>	Amend text in Section 10.2.1 Overall Approach and Transport Assessment in relation to the <b>Transport Assessment</b>	Amendment provides for clarity in relation to Transport Assessment. No AA issues arise. Requirement for Stage 2 AA is excluded.	Amendment provides for clarity in relation to Transport Assessment. SEA not required.
<b>CE OPR CH 10.1</b>	Include following text in Section 10.2.1 Overall Approach and Transport Assessment <i>In the interests of clarity, it should be noted this figure of 1,000 additional employees applies to the full extent of the LAP lands, including the existing developed lands at the southern end and any redevelopment of same.</i>	Amendment provides for clarity in relation to pre-MetroLink scenario. No AA issues arise. Requirement for Stage 2 AA is excluded.	Amendment provides for clarity in relation to pre-MetroLink scenario. No likely significant environmental effects. SEA not required.
<b>CE OPR CH 10.2</b>	Amend the text of Objective MT1 to include the following text <i>In the interests of clarity, it should be noted that in the pre-MetroLink scenario development will be limited to 1,000 additional employees for the entire local area plan, inclusive of the existing developed lands to the south.</i>	Amendment provides for clarity in relation to pre-MetroLink scenario. No AA issues arise. Requirement for Stage 2 AA is excluded.	Amendment provides for clarity in relation to pre-MetroLink scenario. No likely significant environmental effects. SEA not required.
<b>CE OPR CH 10.3</b>	Include following text in Section 10.2.4 Pedestrian and Cycle Links <i>Given the importance of improved access to the</i>	Amendment provides for clarity in relation to delivery of LAP	Amendment provides for clarity in relation to delivery of LAP

Proposed Amendment	Outline Description	Screening for Appropriate Assessment (AA)	Screening for Strategic Environmental Assessment (SEA)*
	<p><u><i>subject lands by sustainable, active travel modes, the Council will commit to extending the R132 scheme to serve Lissenhall East as soon as practicable after the Local Area Plan is adopted.</i></u></p>	<p>proposals for the R132. No AA issues arise. Requirement for Stage 2 AA is excluded.</p>	<p>proposals for the R132. No likely significant environmental effects. SEA not required.</p>
<p><b>CE OPR CH 11.1</b></p>	<p>Include following text in Section 11.4 Quantum and Proposed Uses <u><i>In the interests of clarity, it should be noted that the figure of 1,000 additional jobs referred to above applies to the full extent of the LAP lands, including the existing developed lands at the southern end and any redevelopment of same.</i></u></p>	<p>Amendment provides for clarity in relation to pre-MetroLink scenario. No AA issues arise. Requirement for Stage 2 AA is excluded.</p>	<p>Amendment provides for clarity in relation to pre-MetroLink scenario. No likely significant environmental effects. SEA not required.</p>
<p><b>CE OPR CH 11.2</b></p>	<p>Include following text in Section 11.4 Quantum and Proposed Uses <u><i>Any applications for development on LAP lands will be required to demonstrate compliance with the overall HT zoning objective which is to provide for office, research and development and high technology/high technology manufacturing type employment in a high quality built and landscaped environment.</i></u></p>	<p>Amendment provides for clarity in relation to compliance with land use zoning objective for the lands. No AA issues arise. Requirement for Stage 2 AA is excluded.</p>	<p>Amendment provides for clarity in relation to compliance with land use zoning objective for the lands. SEA not required.</p>
<p><b>CE OPR CH 11.3</b></p>	<p>Include following text in Section 11.4 Quantum and Proposed Uses <u><i>In the interests of clarity, it should be noted that the figure of 1,000 additional jobs</i></u></p>	<p>Amendment provides for clarity in relation to pre-MetroLink scenario. No AA issues arise.</p>	<p>Amendment provides for clarity in relation to pre-MetroLink scenario.</p>

Proposed Amendment	Outline Description	Screening for Appropriate Assessment (AA)	Screening for Strategic Environmental Assessment (SEA)*
	<p><u><i>referred to above applies to the full extent of the LAP lands, including the existing developed lands at the southern end and any redevelopment of same.</i></u></p>	<p>Requirement for Stage 2 AA is excluded.</p>	<p>No likely significant environmental effects. SEA not required.</p>
<p><b>CE OPR CH 11.4</b></p>	<p>Include following text in Section 11.7 Subsequent Development Areas  <u><i>This figure of 1,000 additional jobs applies to the full extent of the LAP lands, including the existing developed lands at the southern end and any redevelopment of same.</i></u></p>	<p>Amendment provides for clarity in relation to pre-MetroLink scenario. No AA issues arise. Requirement for Stage 2 AA is excluded.</p>	<p>Amendment provides for clarity in relation to pre-MetroLink scenario. No likely significant environmental effects. SEA not required.</p>
<p><b>CE OPR CH 11.5</b></p>	<p>Include additional bullet point after first in Section 11.7 Subsequent Development Areas  <u><i>Due to the fact that much of the south eastern area of the LAP lands is located in flood zone A any future development proposals in this area will be subject to a detailed site specific flood risk assessment in accordance with the requirements of the Planning System and Flood Risk Management Guidelines for Planning Authorities.</i></u></p>	<p>Amendment reduces flood risk. No AA issues arise. Requirement for Stage 2 AA is excluded.</p>	<p>Amendment reduces flood risk. No likely significant environmental effects. SEA not required.</p>
<p><b>CE CH 11.1</b></p>	<p>Include additional text before Figure 11-5, in Section 11.7, as follows:  <u><i>It should be emphasised that less vulnerable development in Flood Zone A will only be considered if no other lands are available and the criteria of the Development</i></u></p>	<p>Amendment reduces flood risk. No AA issues arise. Requirement for Stage 2 AA is excluded.</p>	<p>Amendment reduces flood risk. No likely significant environmental effects. SEA not required.</p>

Proposed Amendment	Outline Description	Screening for Appropriate Assessment (AA)	Screening for Strategic Environmental Assessment (SEA)*
	<i><u>Justification Test have been met.</u></i>		
<b>CE OPR CH 11.6</b>	Replace <b>Figure 11.5 Potential Subsequent Development</b> with updated version (addressing potential flooding)	Amendment reduces flood risk. No AA issues arise. Requirement for Stage 2 AA is excluded.	Amendment reduces flood risk. No likely significant environmental effects. SEA not required.
<b>CE AP 3.1</b>	Update <b>Appendix 3 – Strategic Flood Risk Assessment</b> as appropriate to more robustly consider the potential impacts of climate action.	Amendment provides for clarity in relation to Flood Risk. No AA issues arise. Requirement for Stage 2 AA is excluded.	Amendment provides for clarity in relation to Flood Risk. No likely significant environmental effects. SEA not required.
<b>CE AP 4.1</b>	Update <b>Appendix 4 – SuDS Strategy</b> as appropriate having regard to the changes in the requirements for attenuation on site and to reflect the amended SFRA document.	Amendment provides for clarity in relation to Flood Risk. No AA issues arise. Requirement for Stage 2 AA is excluded.	Amendment provides for clarity in relation to Flood Risk. No likely significant environmental effects. SEA not required.

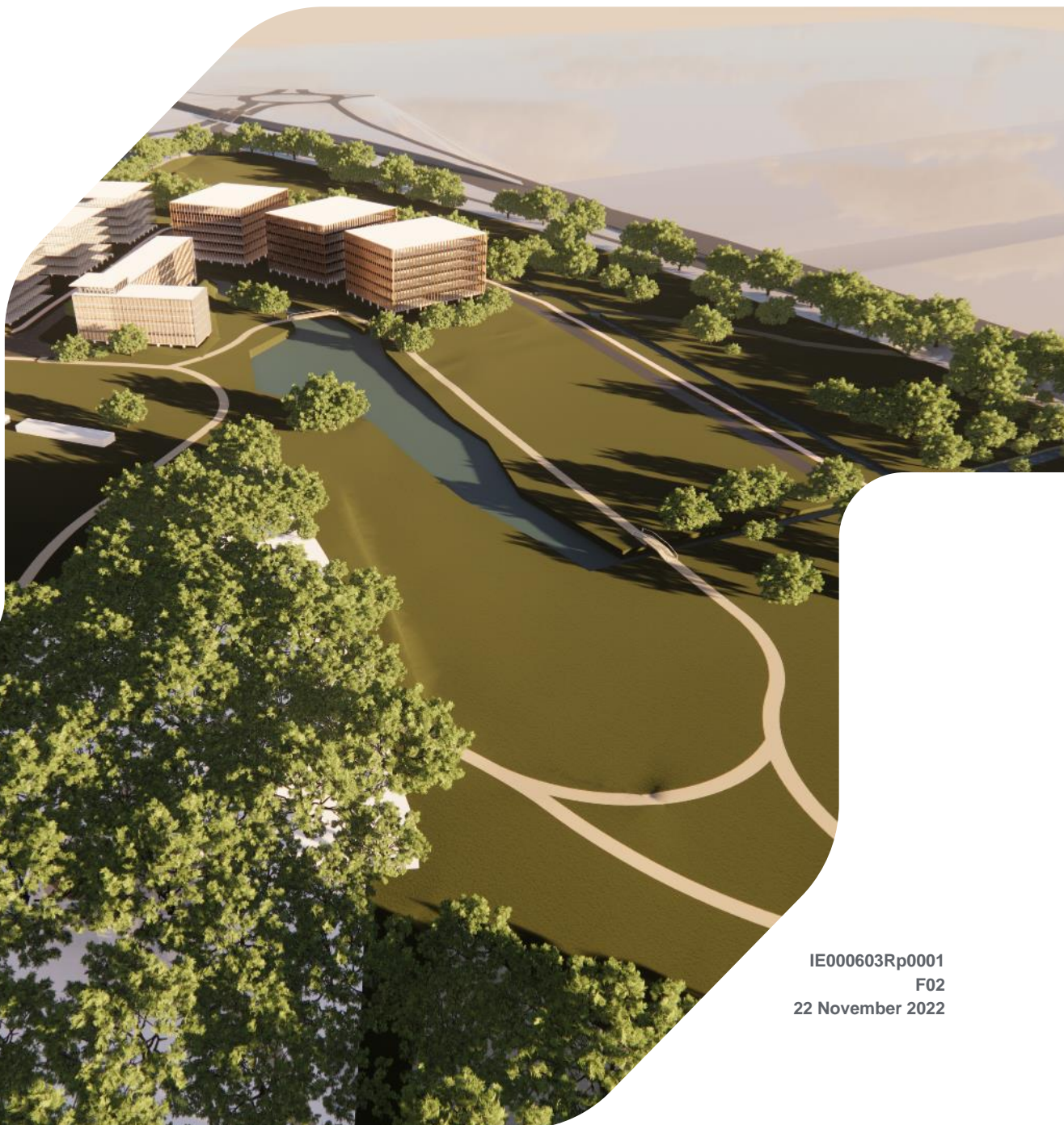
**\* Screening for SEA with regard to the criteria set out in Schedule 2A of S.I. 436 of 2004, as amended by S.I. 201 of 2011.**

Having regard to the characteristics of the plan; and the characteristics of the effects and of the area likely to be affected; the Proposed Amendments are not likely to give rise to significant effects on the environment.

## **Appendix 2 Amended SFRA Document**

# DRAFT LISSENHALL EAST LAP

## Strategic Flood Risk Assessment



IE000603Rp0001  
F02  
22 November 2022



**STRATEGIC FLOOD RISK ASSESSMENT**

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BB	22 November 2022

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## STRATEGIC FLOOD RISK ASSESSMENT

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# Contents

<b>1</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1	Background .....	1
1.1	Report Objectives.....	1
1.2	Report Structure .....	1
<b>2</b>	<b>STUDY AREA .....</b>	<b>2</b>
2.1	Location.....	2
2.2	Existing Site.....	3
2.3	Proposed Development.....	4
2.4	Subsequent Development Areas .....	4
<b>3</b>	<b>THE PLANNING SYSTEM AND FLOOD RISK MANAGEMENT GUIDELINES .....</b>	<b>5</b>
3.1	Introduction.....	5
3.2	Flood Risk Assessment.....	5
3.2.1	Flood Risk Assessment Approach.....	5
3.2.2	Flood Risk .....	5
3.3	Flood Zones .....	6
3.4	Strategic Flood Risk Assessment .....	6
3.5	Sequential Approach And Justification Test .....	7
3.5.1	Overview .....	7
3.5.2	Development Management Justification Test.....	7
3.5.3	Development Plan Justification Test .....	8
3.6	FCC CDP SFRA 2017-2023 .....	9
3.7	FCC Draft CDP SFRA 2023-2029 .....	9
<b>4</b>	<b>FLOOD RISK IDENTIFICATION .....</b>	<b>10</b>
4.1	Historical Flooding.....	10
4.2	Flood Studies Information .....	10
4.2.1	Preliminary Flood Risk Assessment Indicative Fluvial Flood Maps .....	10
4.2.2	Fingal East Meath Catchment Flood Risk Assessment and Management Study .....	11
4.2.3	National Coastal Flood Hazard Mapping 2021 .....	12
4.2.4	Climate Change Sensitivity .....	13
4.3	Pluvial Flooding.....	14
4.4	Groundwater Flooding.....	14
4.5	Sources of Flooding Review .....	15
<b>5</b>	<b>INITIAL FLOOD RISK ASSESSMENT .....</b>	<b>17</b>
5.1	Introduction.....	17
5.2	Fluvial Flooding .....	17
5.2.1	FEMFRAM Study .....	17
5.2.2	Hydrology.....	18
5.2.3	Joint Probability.....	18
5.2.4	Climate Change Scenarios .....	19
5.2.5	Hydraulic Modelling .....	20
5.3	Tidal Flooding.....	24
5.3.1	FEMFRAM study.....	24
5.3.2	Preliminary Design Hydraulic Modelling .....	24
5.4	Flood Zones .....	27
5.5	Pluvial Flooding.....	28
5.6	<i>Residual Risk</i> .....	29
<b>6</b>	<b>SUMMARY AND CONCLUSION.....</b>	<b>30</b>

## STRATEGIC FLOOD RISK ASSESSMENT

---

### Tables

Table 3-1 Flood Event Probabilities.....	5
Table 3-2 Matrix of vulnerability versus flood zone to illustrate appropriate development and that required to meet the Justification Test .....	7
Table 3-3 Justification Test for Development Management .....	8
Table 3-4 Justification Test for Development Plans .....	8
Table 4-1 Summary of flood risk identification .....	15
Table 4-2 Flood Risk Identification Matrix for the Development Site .....	15
Table 5-1 Combinations of individual return periods necessary to produce design event.....	19
Table 5-2 Fluvial flows and tidal boundary conditions.....	19
Table 5-3 Fluvial flows and tidal boundary conditions with allowances for climate change.....	19
Table 5-4 Manning's n values.....	20
Table 5-5 Comparison of flows and levels.....	20
Table 5-6 Flood Volumes.....	20

### Figures

Figure 2-1 FCC Extent and Watercourses .....	2
Figure 2-2 Lissenhall East Land Use Zoning ( <i>Fingal Development Plan 2017 – 2023</i> ) .....	3
Figure 2-3 Existing Land Uses .....	3
Figure 2-4 Lissenhall East LAP Development Framework.....	4
Figure 3-1 Sequential approach principles in flood risk management .....	7
Figure 4-1 - Historical flooding in the surrounding area .....	10
Figure 4-2 - PFRA Flood Extents Mapping Broadmeadow Estuary .....	11
Figure 4-3 Fluvial Flood Extents .....	12
Figure 4-4 Coastal Flood Extents .....	12
Figure 4-5 Flood Extents for Existing Scenario National Coastal Flood Hazard Mapping 2021 .....	13
Figure 4-6 Flood Extents for Mid-Range Future Scenario National Coastal Flood Hazard Mapping 2021 .....	14
Figure 5-1 FEMFRAM Existing Fluvial Flood Extents .....	17
Figure 5-2 Culvert under the M1 on the LAP Lands .....	18
Figure 5-3 Culvert under the M1 modelled in HEC RAS .....	18
Figure 5-4 HEC-RAS Model Space .....	21
Figure 5-5 HEC-RAS Model Geometry .....	21
Figure 5-6 Preliminary Design Existing Fluvial Flood Extents .....	22
Figure 5-7 Preliminary Design Climate Change Scenario Fluvial Flood Extents .....	23
Figure 5-8 FEMFRAM Existing Coastal Flood Extents .....	24
Figure 5-9 Preliminary Design Existing Tidal Flood Extents .....	25
Figure 5-10 Preliminary Design Climate Change Tidal Flood Extents .....	26
Figure 5-11 Preliminary Design Flood Zones.....	27
Figure 5-12 Proposed layout for the Development Area .....	28

### Appendices

Appendix A Justification Test
Appendix B Flood Zone Map

## STRATEGIC FLOOD RISK ASSESSMENT

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# 1 INTRODUCTION

## 1.1 Background

Fingal County Council (FCC) has prepared a Draft Local Area Plan (LAP) for lands at Lissenhall East, Swords. FCC commissioned RPS Consulting Engineers to carry out a Strategic Flood Risk Assessment (SFRA) to support the preparation of the Draft LAP. The SFRA has been prepared in accordance with the requirements of The Planning System and Flood Risk Assessment Guidelines for Planning Authorities (2009) and Circular PL02/2014 (August 2014) referred to hereafter as 'The Guidelines'.

The SFRA has used information from the following studies:

- Fingal East Meath Catchment Flood Risk Assessment and Management Study Reports and Mapping, Office of Public Works (OPW) 2014;
- Preliminary Flood Risk Assessment Indicative Fluvial Flood Maps, OPW 2011;
- 1289-1 WP/RG Flood Risk Assessment for Lands at Lissenhall Swords, Molony Millar June 2017;
- Irish Coastal Protection Strategy Study Phase 3 - North East Coast, OPW 2010;
- Irish Coastal Wave and Water Level Modelling Study, OPW 2018;
- National Coastal Flood Hazard Mapping Project, OPW 2021;
- FCC County Development Plan 2017-2023 Strategic Flood Risk Assessment; and
- FCC Draft County Development Plan 2023-2029 Strategic Flood Risk Assessment;

## 1.1 Report Objectives

The objective of this report is to prepare a SFRA for the Draft Lissenhall East LAP. This SFRA Report contains an assessment of all sources of flooding at the development site to assist FCC in making informed strategic land-use planning decisions and formulate flood risk policies. A review of existing flood risk information was undertaken to identify any potential future flooding or surface water management issues related to the development site. Areas at risk of flooding and flood zones for the lands at Lissenhall East were identified and incorporated into this SFRA in order to supplement the LAP. The report is strategic in nature. Where Site Specific Flood Risk Assessments (SSFRA) are required, additional topographical surveys and drainage assessments may be required.

## 1.2 Report Structure

The extent of the Lissenhall East LAP land and its primary catchment area is detailed in **Section 2**. **Section 3** outlines a summary of the Guidelines as they apply to this SFRA and the requirements for SFRA as specified in the FCC SFRA for the County Development Plan 2017-2023. **Section 4** details the Flood Risk Identification. **Section 5** outlines the Initial Flood Assessment and lastly **Section 6** provides a summary.

STRATEGIC FLOOD RISK ASSESSMENT

## 2 STUDY AREA

### 2.1 Location

The Lissenhall East LAP is located in North County Dublin immediately adjacent to the town of Swords in the administrative county of Fingal. The study area is strategically located between the R132 Regional Belfast Road and the M1 Motorway connection at Exit 4. The extents and location of the study area lands, approximately 0.29 km<sup>2</sup>, are shown in **Figure 2-1** and **Figure 2-2**.

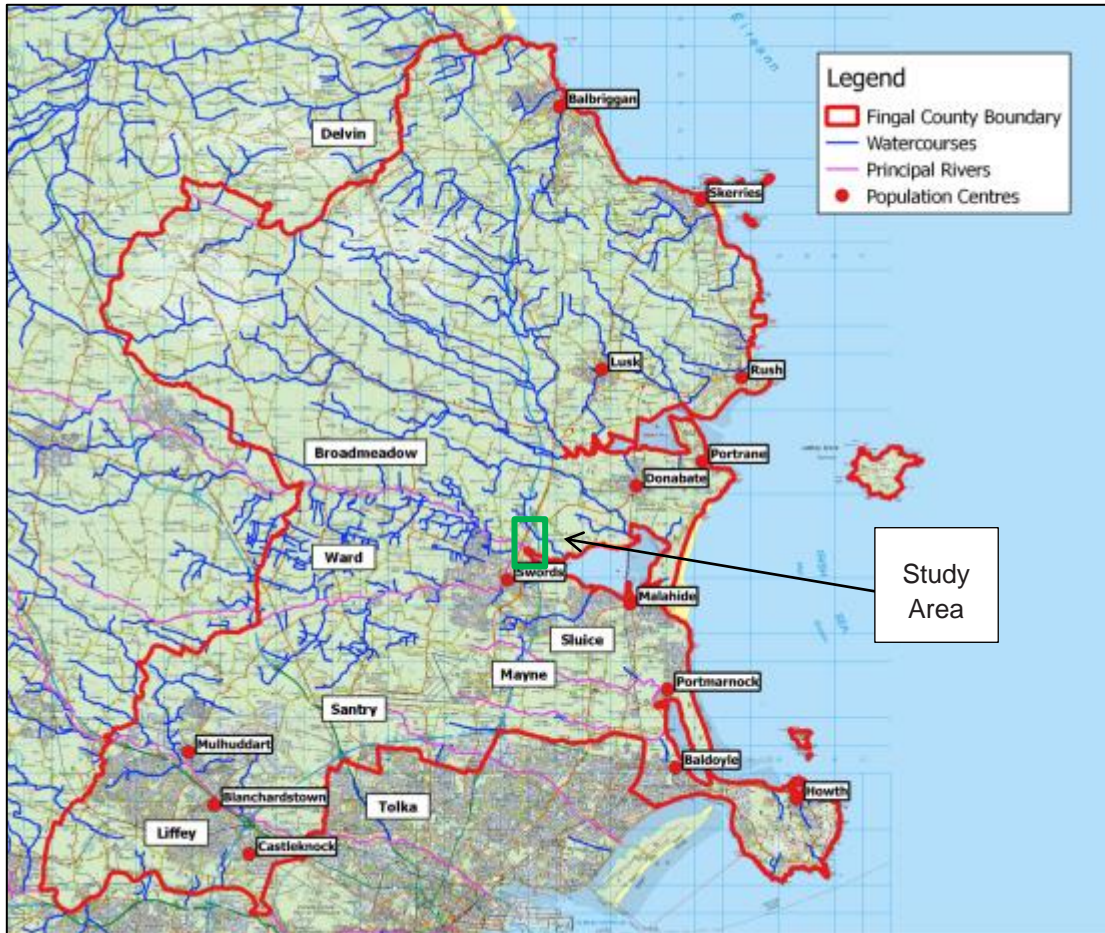


Figure 2-1 FCC Extent and Watercourses

STRATEGIC FLOOD RISK ASSESSMENT

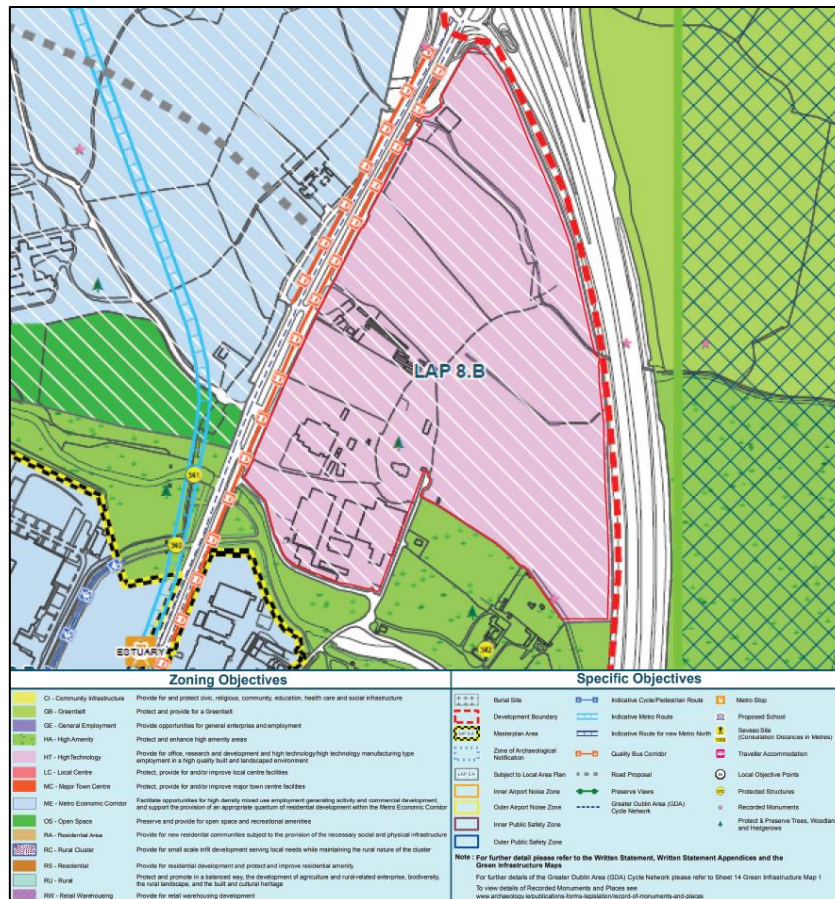


Figure 2-2 Lissenhall East Land Use Zoning (Fingal Development Plan 2017 – 2023)

## 2.2 Existing Site

The land is currently a mixture of agricultural land and commercial development (approximately 25%), as shown in **Figure 2-3**. The primary watercourse in the LAP is the Lissenhall stream which flows in a south-easterly direction through the site before discharging into the Broadmeadow Estuary. The catchment area of this stream is approximately 3.5 km<sup>2</sup>. The Lissenhall Stream has its source south of Belinstown near Lissenhall Little. The Broadmeadow River flows in an easterly direction along the southern boundary of the study area before discharging to the Broadmeadow Estuary. A review of historical Ordnance Survey Ireland (OSI) mapping and topographical mapping indicates that the majority of the site drains towards the Lissenhall stream with minor areas of the site draining south to the Broadmeadow. The Lissenhall Stream is flapped at the outfall to the Broadmeadow Estuary. There is no gauging station on the Lissenhall Stream.

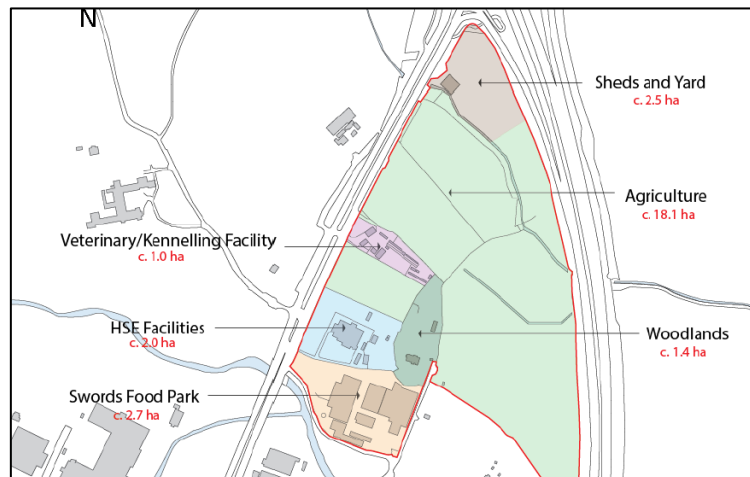


Figure 2-3 Existing Land Uses

## STRATEGIC FLOOD RISK ASSESSMENT

### 2.3 Proposed Development

The LAP lands are zoned in the Fingal County Development Plan 2017-2023 for High Technology which provides for enterprise and employment development. The development (**Figure 2-4**) will focus on the western boundary and central area and comprise hotel and office use. The development includes a central open space and attenuation pond / water feature and other necessary infrastructure.

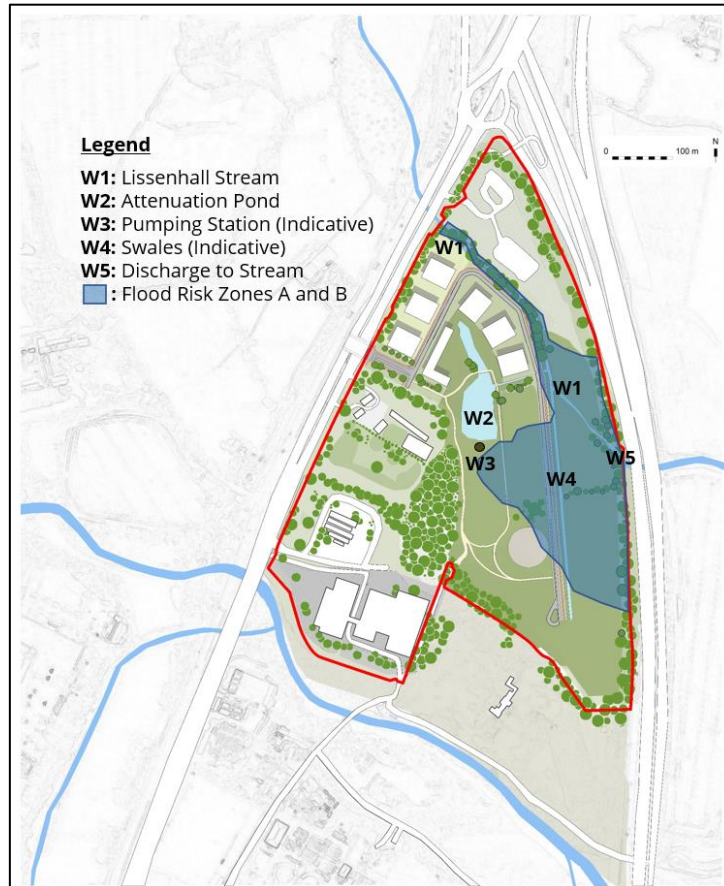


Figure 2-4 Lissenhall East LAP Development Framework

### 2.4 Subsequent Development Areas

A LAP is valid for six years from the date of adoption by the Council. Its validity may be extended, in year 5 of the LAP for a further 5 years, if deemed appropriate by a resolution of the Council. This LAP's focus for new development during its' duration will be on the western boundary and central area of the overall LAP lands. This area is considered best placed to bring forward new development, establish the location for strategic employment, and is logical in terms of initial servicing and the extension of same.

However, the LAP also provides policy context for potential future development within the site in anticipation of the development of the MetroLink Project (anticipated in 2035). It is acknowledged that any future additional development on the Lissenhall East LAP lands beyond what is currently specified in the Development Framework is indicative only and that any such potential future development will only occur having regard to all relevant environmental, transport, flood risk and planning assessment requirements. Any proposals for future development within a flood zone shall include an appropriately detailed site specific flood risk assessment (SSFRA).

## 3 THE PLANNING SYSTEM AND FLOOD RISK MANAGEMENT GUIDELINES

### 3.1 Introduction

In 2009 the Department of Environment, Heritage and Local Government in conjunction with the OPW published The Planning System and Flood Risk Management: Guidelines for Planning Authorities. The Guidelines recommend that Flood Risk Assessments (FRA) be carried out to identify the risk of flood to land, property and people. FRAs should be carried out at different scales by government organisations, local authorities and for proposed developments appropriate to the level of information required. The applicable scale of FRA for this project is a **Strategic Flood Risk Assessment (SFRA)**. This involves an assessment of all types of flood risk informing land use planning decisions. This will enable the FCC to allocate appropriate sites for development, whilst identifying opportunities for reducing flood risk. The SFRA will include flood risk identification, an initial flood risk assessment, based on the identification of Flood Zones and where the initial flood risk assessment highlights the potential for a significant level of flood risk, or there is conflict with the proposed vulnerability of development, then a SSFRA will be recommended, which will necessitate a more detailed flood risk assessment.

### 3.2 Flood Risk Assessment

#### 3.2.1 Flood Risk Assessment Approach

The Guidelines recommend that FRAs should be carried out using the following staged approach;

- **Stage 1 Flood Risk Identification** – to identify whether there may be any flooding or surface water management issues related to either the area of regional planning guidelines, development plans and LAP's or a proposed development site that may warrant further investigation at the appropriate lower level plan or planning application levels.
- **Stage 2 Initial Flood Risk Assessment** – to confirm sources of flooding that may affect a plan area or proposed development site, to appraise the adequacy of existing information and to scope the extent of the risk of flooding which may involve preparing indicative flood zone maps. Where hydraulic models exist, the potential impact of a development on flooding elsewhere and of the scope of possible mitigation measures can be assessed. In addition, the requirements of the detailed assessment should be scoped.
- **Stage 3 Detailed Flood Risk Assessment** – to assess flood risk issues in sufficient detail and to provide a quantitative appraisal of potential flood risk to a proposed or existing development or land to be zoned, of its potential impact on flood risk elsewhere and of the effectiveness of any proposed mitigation measures.

#### 3.2.2 Flood Risk

The Guidelines state flood risk is a combination of the likelihood of flooding and the potential consequences arising. The Guidelines define the likelihood of flooding as the percentage probability of a flood of a given magnitude as occurring or being exceeded in any given year. A 1% probability indicates the severity of a flood that is expected to be exceeded on average once in 100 years, i.e. it has a 1 in 100 (1%) chance of occurring in any one year. **Table 3-1** shows flood event probabilities used in flood risk management.

**Table 3-1 Flood Event Probabilities**

Annual Exceedance Probability (%)	Return Period (Years)
50	2
10	1
1	100
0.5	200
0.1	1000



## STRATEGIC FLOOD RISK ASSESSMENT

### 3.3 Flood Zones

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

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

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

### 3.4 Strategic Flood Risk Assessment

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

- Identifying principal rivers, sources of flooding and produce flood zone maps for across the local authority area and in key development areas;
- Appraising the availability and adequacy of the existing information;
- Assessing potential impacts of climate change to demonstrate the sensitivity of an area to increased flows or sea levels. Where mathematical models are not available climate change flood extents can be assessed by using the Flood Zone B outline as a surrogate for Flood Zone A with allowance for the possible impacts of climate change;
- Identifying the location of any flood risk management infrastructure and the areas protected by it and the coverage of flood-warning systems;
- Consider, where additional development in Flood Zone A and B is planned within or adjacent to an existing community at risk, the implications of flood risk on critical infrastructure and services across a wider community-based area and how the emergency planning needs of existing and new development will be managed;
- Identifying areas of natural floodplain, which could merit protection to maintain their flood risk management function as well as for reasons of amenity and biodiversity;
- Assessing the current condition of flood-defence infrastructure and of likely future policy with regard to its maintenance and upgrade;
- Assessing the probability and consequences of overtopping or failure of flood risk management infrastructure, including an appropriate allowance for climate change;
- Assessing, in broad terms, the potential impact of additional development on flood risk elsewhere and how any loss of floodplain could be compensated for;
- Assessing the risks to the proposed development and its occupants using a range of extreme flood or tidal events;
- Identifying areas where site-specific FRA will be required for new development or redevelopment;
- Identifying drainage catchments where surface water or pluvial flooding could be exacerbated by new development and develop strategies for its management in areas of significant change;
- Identifying where an integrated and area based provision of SUDS and green infrastructure are appropriate in order to avoid reliance on individual site by site solutions; and,

**STRATEGIC FLOOD RISK ASSESSMENT**

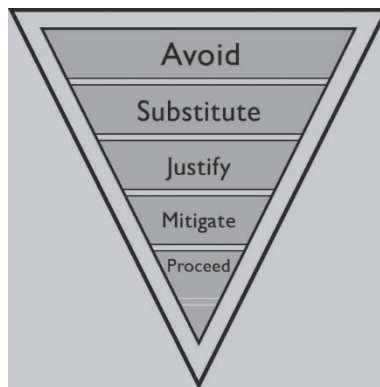
- Providing guidance on appropriate development management criteria for zones and sites.

**3.5 Sequential Approach And Justification Test**

**3.5.1 Overview**

The Guidelines recommend using a sequential approach to planning to avoid development in flood risks areas. If the proposed development cannot be avoided or substituted, a Justification Test must be applied and appropriate sustainable flood risk management proposals should be incorporated into the development proposal. **Figure 3-1** shows the sequential approach principles in flood risk management.

**Table 3-2** outline recommendations from the Guidelines for the types of development that would be appropriate to each flood zone and those that would be required to meet the Justification Test.



**Figure 3-1 Sequential approach principles in flood risk management**

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

	<b>Flood Zone A</b>	<b>Flood Zone B</b>	<b>Flood Zone C</b>
Highly vulnerable development	Justification Test	Justification Test	Appropriate
Less vulnerable development	Justification Test	Appropriate	Appropriate
Water compatible development	Appropriate	Appropriate	Appropriate

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

**3.5.2 Development Management Justification Test**

All development in flood risk areas should be supported by an appropriately detailed Flood Risk Assessment (FRA). The level of detail within the FRA will depend on the risks identified and the proposed land use. Applications should demonstrate the use of the sequential approach in terms of the site layout and design and, in satisfying the Justification Test (where required), the proposal will demonstrate that appropriate mitigation and management measures are put in place. For any development areas that meet the Development Plan Justification Test, a Development Management Justification Test must then be applied. Development must satisfy all of the criteria of the Development Management Justification Test as per **Table 3-3** below.

## STRATEGIC FLOOD RISK ASSESSMENT

**Table 3-3 Justification Test for Development Management**

### Justification Test for Development Management

1. The subject lands have been zoned or otherwise designated for the particular use or form of development in an operative development plan, which has been adopted or varied taking account of these Guidelines.
2. The proposal has been subject to an appropriate flood risk assessment that demonstrates:
  - i. The development proposed will not increase flood risk elsewhere and, if practicable, will reduce overall flood risk;
  - ii. The development proposal includes measures to minimise flood risk to people, property, the economy and the environment as far as reasonably possible;
  - iii. The development proposed includes measures to ensure that residual risks to the area and/or development can be managed to an acceptable level as regards the adequacy of existing flood protection measures or the design, implementation and funding of any future flood risk management measures and provisions for emergency services access; and
  - iv. The development proposed addresses the above in a manner that is also compatible with the achievement of wider planning objectives in relation to development of good urban design and vibrant and active streetscapes.

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

### 3.5.3 Development Plan Justification Test

The Development Plan Justification Test (or Plan-making Justification Test) should be carried out as part of County Development Plan SFRAs using mapped flood zones. It applies where land zonings have been reviewed with respect to the need for development of areas at a high or moderate risk of flooding for uses which are vulnerable to flooding and which would generally be inappropriate, as set out in

**Table 3-2**, and where avoidance or substitution is not appropriate. Where land use zoning objectives are being proposed in flood risk areas they must satisfy all of the following criteria as per **Table 3-4**.

**Table 3-4 Justification Test for Development Plans**

### Justification Test for Development Plans

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;
  - 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.
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.

## STRATEGIC FLOOD RISK ASSESSMENT

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### 3.6 FCC CDP SFRA 2017-2023

FCC undertook an SFRA as part of the County Development Plan (CDP) 2017-2023. The SFRA identified flood zones on the development site using the flood extent information from the Fingal East Meath Catchment Flood Risk Assessment and Management (FEM FRAM) Study (see **section 4.2.2**) for more information on this study). The SFRA undertook and passed a Development Plan Justification Test for the zonings and development lands in the Lissenhall East area. The Justification outlined that “a further FRA will also take place as part of the LAP process” and that a site-specific FRA should be undertaken for development lands in the Lissenhall East area.

The FRAs should address the following:

- A sequential approach should be applied through site planning and should avoid encroachment onto, or loss of, the flood plain.
- Highly Vulnerable Development shall not be permitted in Flood Zone A or B.
- Development in Flood Zone A should be either open space or water compatible.
- FRA should address residual risk of culvert blockage (where applicable), increased flood extents under climate change scenarios and pluvial risk which should be aimed at setting finished floor levels.
- Compensatory storage for development that results in a loss of floodplain must be provided on a level for level basis.

The Lissenhall East LAP is zoned for industrial development which in accordance the Guidelines would be classified as Less Vulnerable Development. Therefore Section 4.4.4 of the County Development Plan 2017-2023 SFRA applies and it states “Less Vulnerable Development proposals should not be considered in Flood Zone A area unless supplemented by an appropriately detailed FRA and meets the criteria of the Development Management Justification Test. The minimum finished floor level for less vulnerable development should be above the Flood Zone A level plus suitable freeboard.” (Recommended levels of freeboard include 500 mm for fluvial flood levels and 750mm for coastal flood levels).

### 3.7 FCC Draft CDP SFRA 2023-2029

The Draft Fingal Development Plan 2023 – 2029 was published in February 2022. While it is not expected that the Draft Plan will be adopted before the adoption of this LAP. All future planning permissions must satisfy any updated Development Management and Flood Risk Management policies and objectives from the FCC CDP 2023-2029 following its final adoption by FCC.

## STRATEGIC FLOOD RISK ASSESSMENT

## 4 FLOOD RISK IDENTIFICATION

This section identifies any flooding issues related to the LAPs lands by assessing available flood risk information.

### 4.1 Historical Flooding

Figure 4-1 below shows historical flooding locations from <https://www.floodinfo.ie/map/floodmaps/> in the vicinity of the development. The data does not show any historical flooding within the planning application boundary but it does show flooding locations in the surrounding area of the of the development site. The main sources of flooding are fluvial and tidal along the Broadmeadow River.

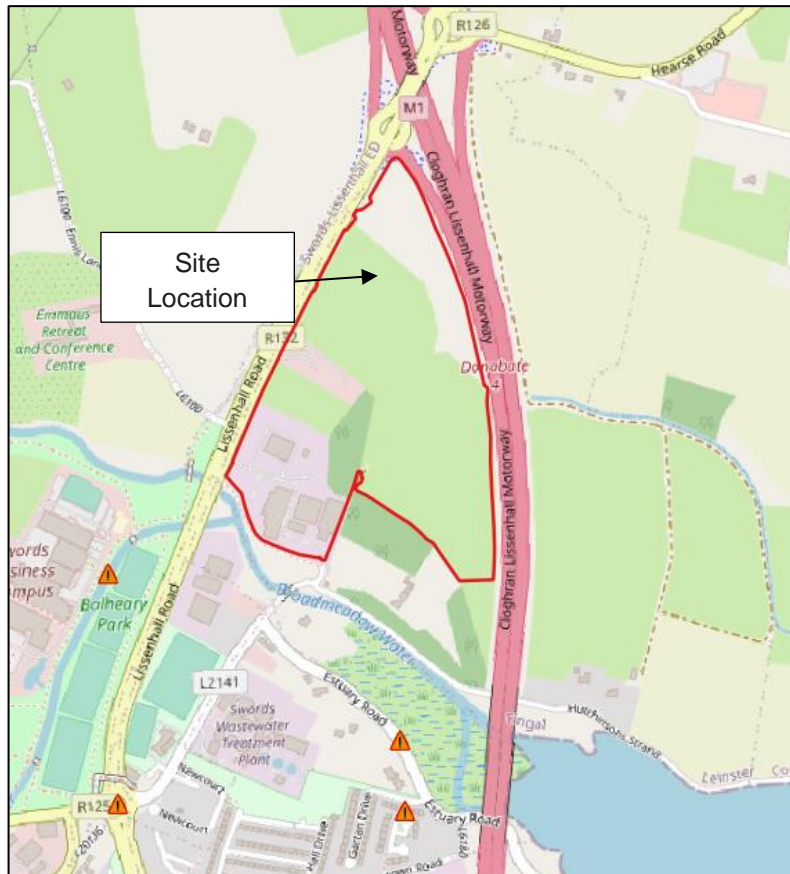


Figure 4-1 - Historical flooding in the surrounding area

### 4.2 Flood Studies Information

#### 4.2.1 Preliminary Flood Risk Assessment Indicative Fluvial Flood Maps

The Preliminary Flood Risk Assessment (PFRA) is a national screening exercise completed by the OPW in 2012 based on available and readily-deliverable information. The PFRA aimed at identifying areas where there may be a significant risk associated with flooding. **Indicative fluvial flood maps were produced to help identify these areas. The mapping did not account for flood defences, channel structures or channel works. Areas where the risks associated with flooding might be significant were identified and are referred to as Areas for Further Assessment, or "AFAs". The PFRA flood zone map indicates that within the site boundary is affected by fluvial and coastal flooding. Due to the indicative nature of the PFRA mapping the flood extents in these areas should be treated with caution.** The purpose of the PFRA flood zone mapping is to be provided for the information purposes to help identify areas where flood risk should be explored in greater detail. **Figure 4-2 shows the PFRA mapping for the areas around the Lissenhall East LAP development area. Fluvial flood mapping from the PFRA is superseded by the**

## STRATEGIC FLOOD RISK ASSESSMENT

*more detailed Fingal East Meath Catchment Flood Risk Assessment and Management Study, but still provided relevant indicative flood mapping from pluvial and groundwater flood sources.*

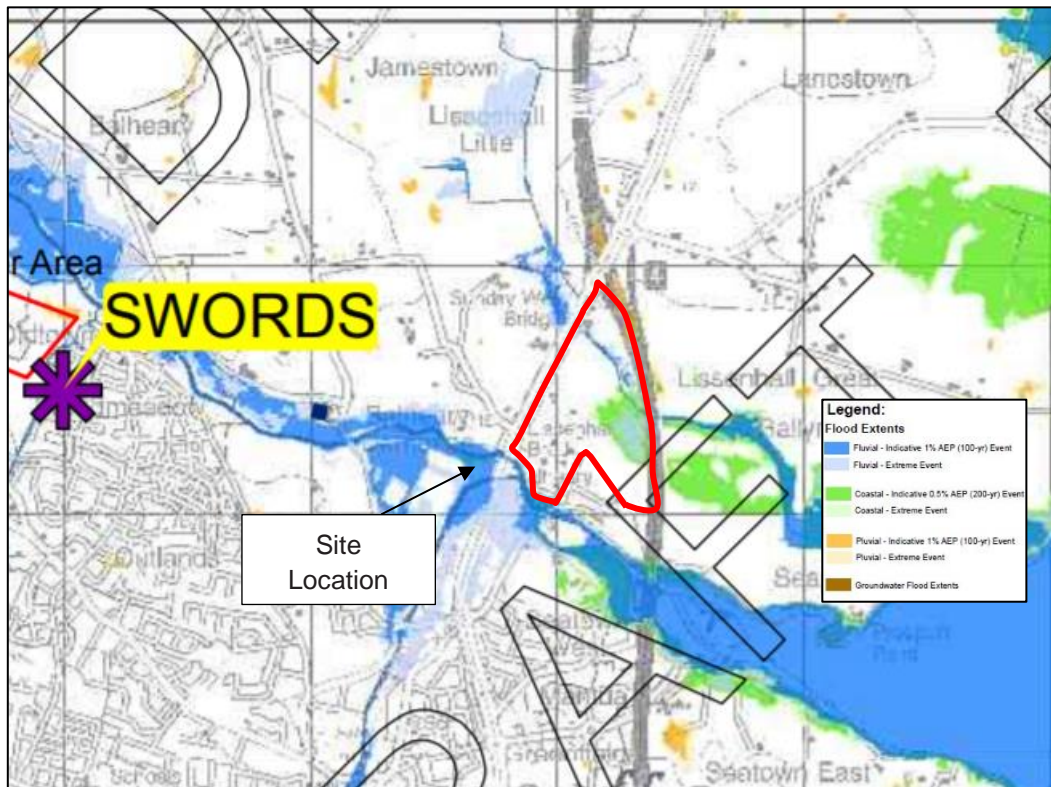


Figure 4-2 - PFRA Flood Extents Mapping Broadmeadow Estuary

#### 4.2.2 Fingal East Meath Catchment Flood Risk Assessment and Management Study

More detailed assessment of the AFA's identified in the PFRA Study were undertaken through the Catchment Flood Risk Assessment and Management (CFRAM) Studies to more accurately assess the extent and degree of flood risk and where the risk is significant, to develop where possible measures to manage and reduce the risk. The flood hazard areas had been identified as being potentially at risk from significant flooding, including areas that have experienced significant flooding in the past. They also take into account issues such as climate change, land use practices and future development. These studies were developed to meet the requirements of the EU directive on the assessment and management of flood risks (the Floods Directive). The Floods Directive was transposed into Irish law by SI 112 of 2010 "European Communities (assessment and Management of Flood Risks) Regulations 2010". The Lissenhall East LAP falls within the Fingal East Meath Catchment Flood Risk Assessment and Management (FEM FRAM) Study.

This study produced fluvial and coastal flood maps which are shown in **Figure 4-3** and **Figure 4-4** respectively. The maps indicate modelled flood extents for flood events for a range of annual exceedance probabilities (AEP). **Figure 4-3** indicates that the Lissenhall Stream has out of bank flooding in the LAP area for the 1% and 0.1% AEP events. **Figure 4-4** indicates that development area is affected by both the 0.5% and 0.1 % AEP tidal flood event stemming from the Irish Sea to the east of the site.

STRATEGIC FLOOD RISK ASSESSMENT

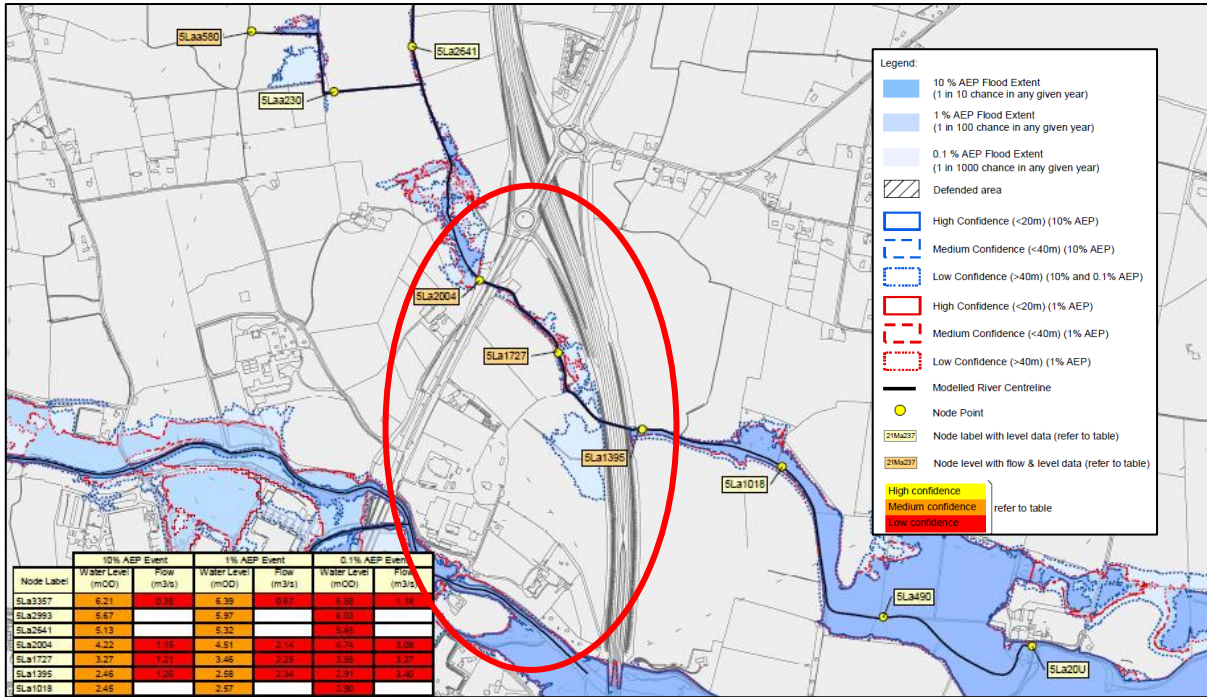


Figure 4-3 Fluvial Flood Extents

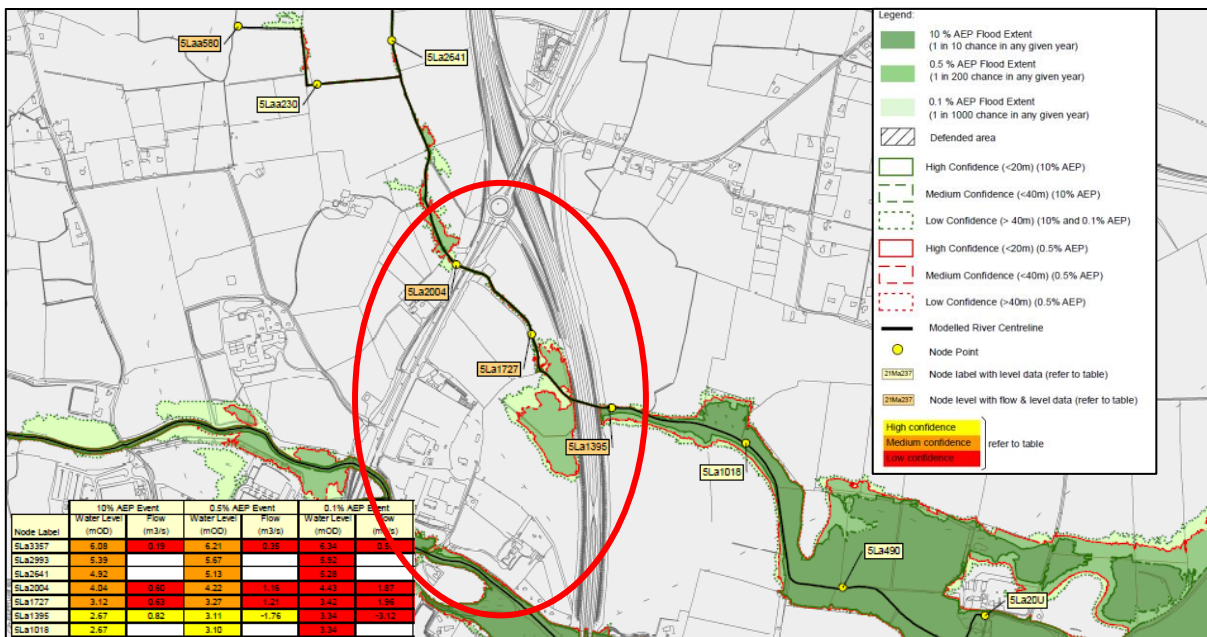


Figure 4-4 Coastal Flood Extents

4.2.3 National Coastal Flood Hazard Mapping 2021

This report was prepared by the OPW Coastal and Flood Risk with the aim of the project is to produce national scale coastal flood extent and depth maps for a series of Exceedance Probabilities (AEPs) for the present day and climate change scenarios. It was an update to the Irish Coastal Protection Strategy Study Phase 3 - North East Coast 2010 and utilised data from the Irish Coastal Wave and Water Level Modelling Study 2018. **Figure 4-5** shows the flooding extents for the existing scenario within the Study Area.

## STRATEGIC FLOOD RISK ASSESSMENT

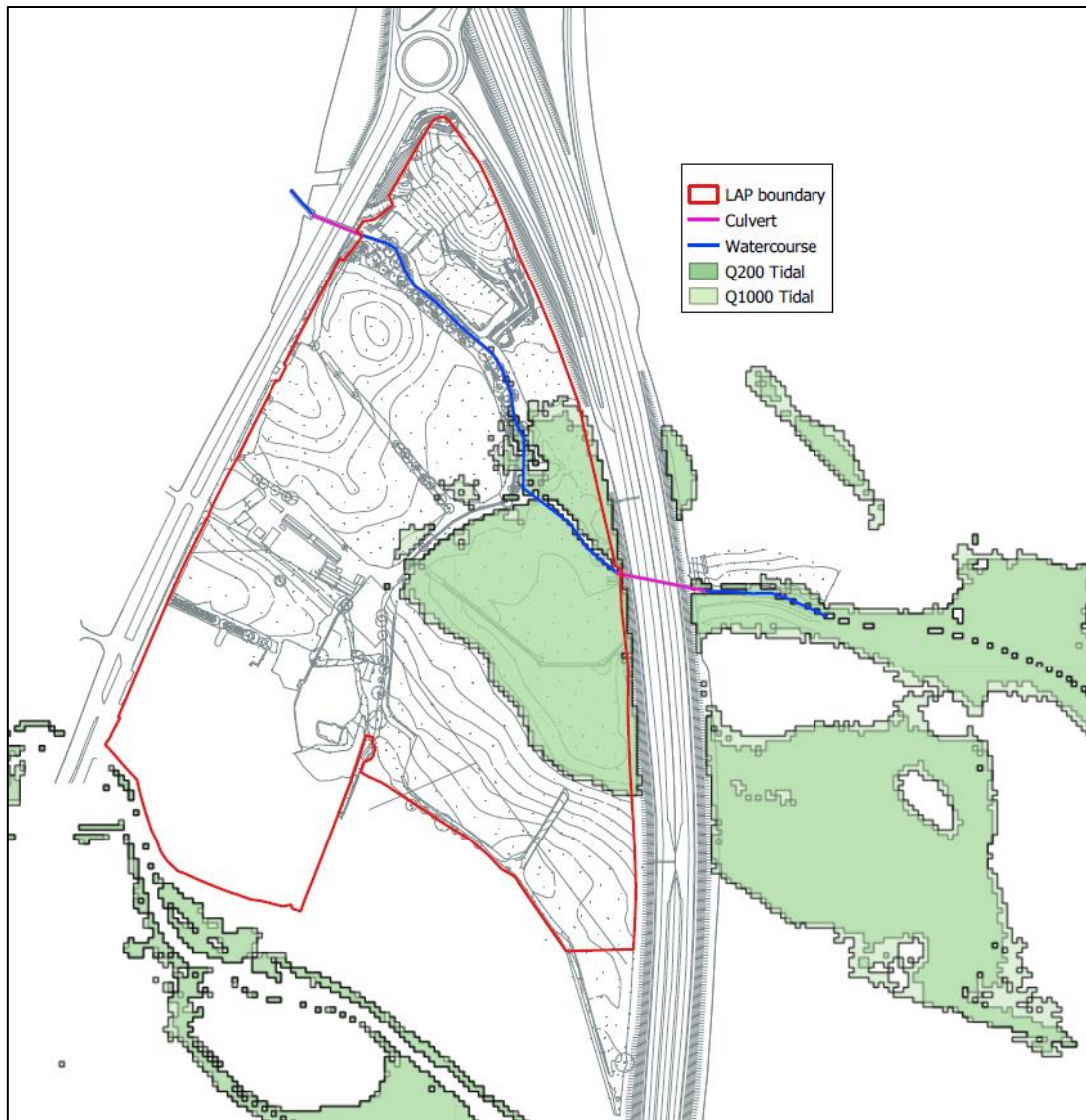


Figure 4-5 Flood Extents for Existing Scenario National Coastal Flood Hazard Mapping 2021

#### 4.2.4 Climate Change Sensitivity

A review of the SFRA for the Fingal Development Plan 2017-2023 states that the Lissenhall stream is susceptible to increased flooding from climate change scenarios. The most significant increase in water levels is at the downstream extent of the river at Ballymadrough and Seapoint where the river bed slope is flatter. However there is also increased flooding just upstream from the M1 culvert, where the constriction of the structure creates a significant head loss and backwater effect. The National Coastal Flood Hazard Mapping 2021 also generated climate change scenario mapping with **Figure 4-6** showing the Mid-Range Future Scenario Mapping indicating increases in extents within the Study Area.



## STRATEGIC FLOOD RISK ASSESSMENT

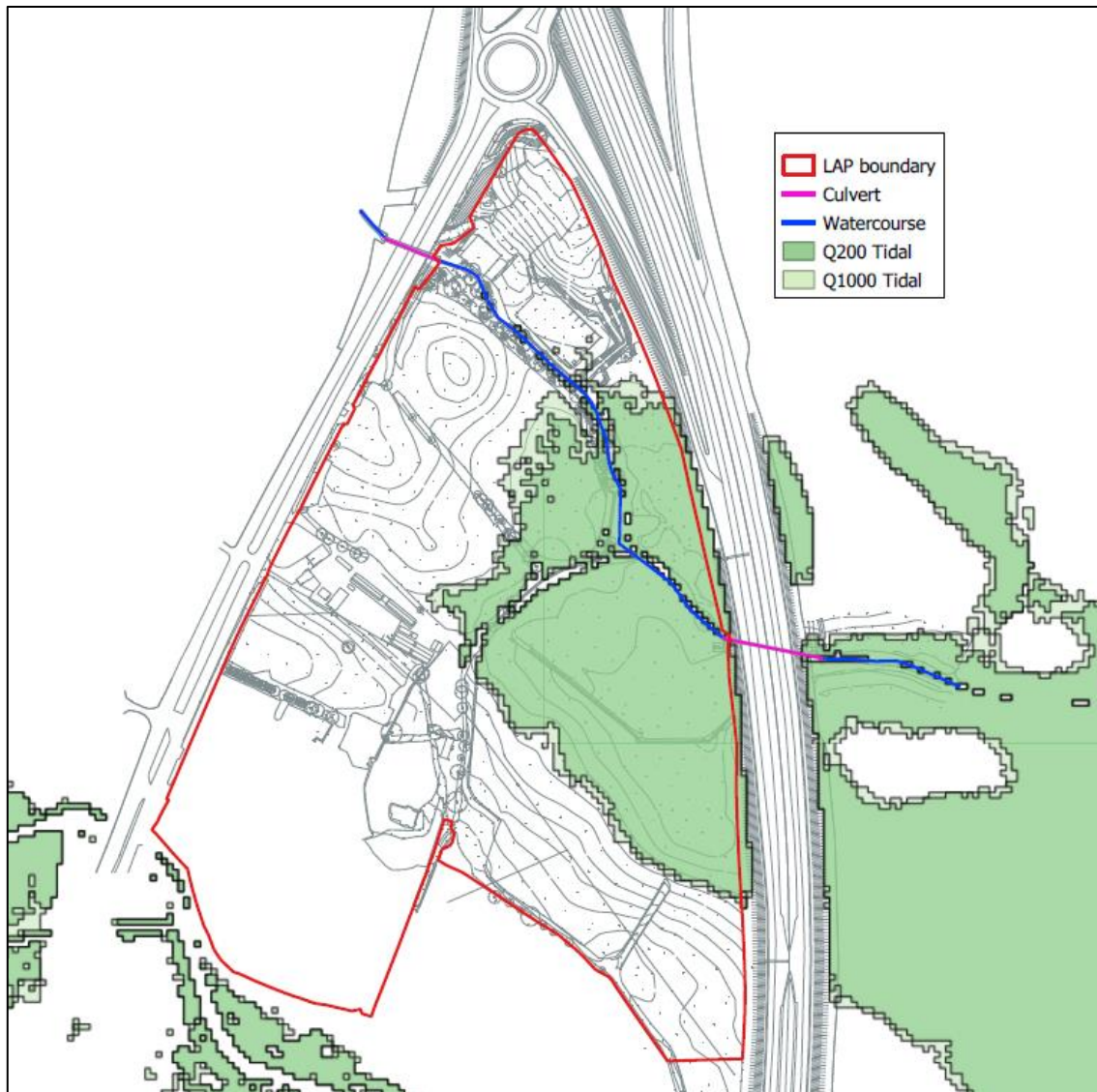


Figure 4-6 Flood Extents for Mid-Range Future Scenario National Coastal Flood Hazard Mapping 2021

### 4.3 Pluvial Flooding

The PFRA mapping shown in **Figure 4-2** above does not indicate any pluvial flooding for the site. *It is recognised that the PFRA mapping was developed through a national scale level and is therefore only indicative of potential areas of pluvial flooding. However,* The natural site drainage *is as described in Section 2.2. The site and the lands surrounding it are mostly flat so and topography of the site is unlikely to be subject to any overland flow paths such that pluvial flooding is unlikely to occur. The LAP area is naturally draining towards the south-east corner of the site and the Lissenhall Stream. The southern part of the site is higher and slopes towards the Lissenhall stream but* Adequately designed drainage systems should reduce any risk overland flow.

### 4.4 Groundwater Flooding

A groundwater flood hazard assessment was undertaken as part of the FEMFRAM. A desk study reviewed all the available data on groundwater to produce an assessment of the groundwater flood risk in the FEM FRAM study area to investigate the necessity of groundwater monitoring in the study area and possibly recommend groundwater monitoring locations if required. The study also investigated the mechanisms by which groundwater flooding can occur in the area and their possible remedial measures. The hydro-geological conditions in the FEM FRAM study area together with all other available information indicated that

**STRATEGIC FLOOD RISK ASSESSMENT**

the conditions do not exist for groundwater flooding; therefore groundwater flooding is not a significant risk within the FEM FRAM study area.

Similarly the OPW PFRA carried out a national scale Groundwater Flooding Report which concludes that groundwater flooding is largely confined to the West Coast of Ireland due to the hydrogeology of the area. The PFRA mapping shown in **Figure 4-2** above does not indicate any groundwater flooding for the site.

*Probabilistic and historic groundwater flood maps 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 focussed 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 project did not identify any groundwater flooding within the LAP area.*

An assessment of potential flooding from groundwater should still be carried for development if they are proposing basements or deep excavations. For developments such as this, boreholes should be carried out and the installation of a piezometer to establish the depth of the groundwater table in relation to the base of the excavation should be undertaken. If the water table is within 1 meter of the ground level then the development needs to be conditioned to ensure that the basement is adequately sealed / tanked. All basements must be properly designed in accordance with British Standard BS8102:2009.

**4.5 Sources of Flooding Review**

**Table 4-1** and

Table 4-2 present a summary of the initial flood risk assessment. The primary risks to the site are from coastal and fluvial flooding therefore a more detailed appraisal of these flooding mechanism should be undertaken, refer to **Section 5** for the further assessment. If deemed necessary mitigation measures should be identified to reduce the risk of flooding.

**Table 4-1 Summary of flood risk identification**

Flooding Source	Comments	Risk (low/medium/high)
Fluvial	The flood maps shows that parts of the site adjacent to the Lissenhall stream are vulnerable to fluvial flooding. The Broadmeadow River does not inundate the site along the southern boundary. More detailed hydraulic modelling should be carried out to further investigate flooding to the site.	High
Pluvial	The risk of pluvial flooding is low. A surface water An adequately designed drainage system should mitigate against any risk of pluvial flooding.	Low
Groundwater	Groundwater flooding is not identified as a significant risk. No further assessment required for this FRA however if basements or deep foundations are proposed as part of the development an assessment of groundwater flooding should be undertaken.	Low
Coastal	The flood maps shows that parts of the site adjacent to the Lissenhall stream are vulnerable to tidal flooding. The Broadmeadow River does not inundate the site along the southern boundary. More detailed hydraulic modelling should be carried out to further investigate flooding to the site.	High

**Table 4-2 Flood Risk Identification Matrix for the Development Site**

Flood Source	Pathway	Receptor	Likelihood	Consequence	Risk
Tidal	Overtop, breach	People / Property	Medium/high	Medium	Medium/high

## STRATEGIC FLOOD RISK ASSESSMENT

Fluvial	Overbank	People / Property	Medium/high	Medium	Medium/high
Surface water (pluvial)	Blockage Overflow	People / Property	Low	Low	Low
Groundwater	Raising Water Level	People / Property	Low	Low	Low
Human/Mechanical Error	Gates Remain Open/Do not close	People / Property	Low	Low	Low

STRATEGIC FLOOD RISK ASSESSMENT

# 5 INITIAL FLOOD RISK ASSESSMENT

## 5.1 Introduction

The Flood Risk Identification found that the site is primarily at risk from fluvial and coastal flooding with a low risk from pluvial flooding as detailed in

Table 4-2.

## 5.2 Fluvial Flooding

### 5.2.1 FEMFRAM Study

Figure 5-1 shows the FEMFRAM flood extents for the LAP study area. It shows that the site is primarily impacted by the 0.1% AEP event. The FEMFRAM hydraulic model was a 1D model with no 2D element. The FEMFRAM assessed that 2D was not required as the river passes through rural areas and its hydraulic behaviour can be accurately modelled using 1D modelling techniques. The Lissenhall Stream was modelled together with the Broadmeadow Estuary model, as the tidal boundary conditions were calculated at an offshore location near the mouth of the estuary.

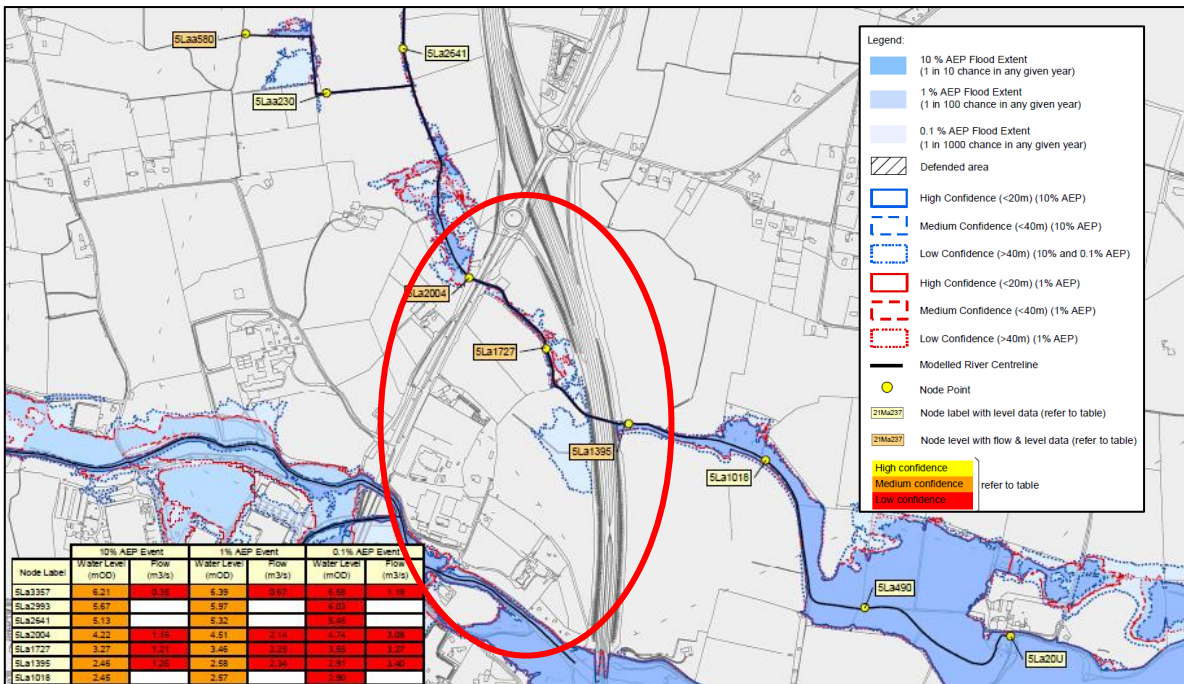


Figure 5-1 FEMFRAM Existing Fluvial Flood Extents

The main flooding in the FEMFRAM study is at lower reaches of the stream within the study area as the ground flattens and the M1 culvert (as shown in Figure 5-2 and Figure 5-3) causes backwater effects causing over bank flooding on both sides of the river. The FEMFRAM study also included a downstream tidal boundary to account for joint occurrence of tidal and fluvial flooding.

STRATEGIC FLOOD RISK ASSESSMENT



Figure 5-2 Culvert under the M1 on the LAP Lands

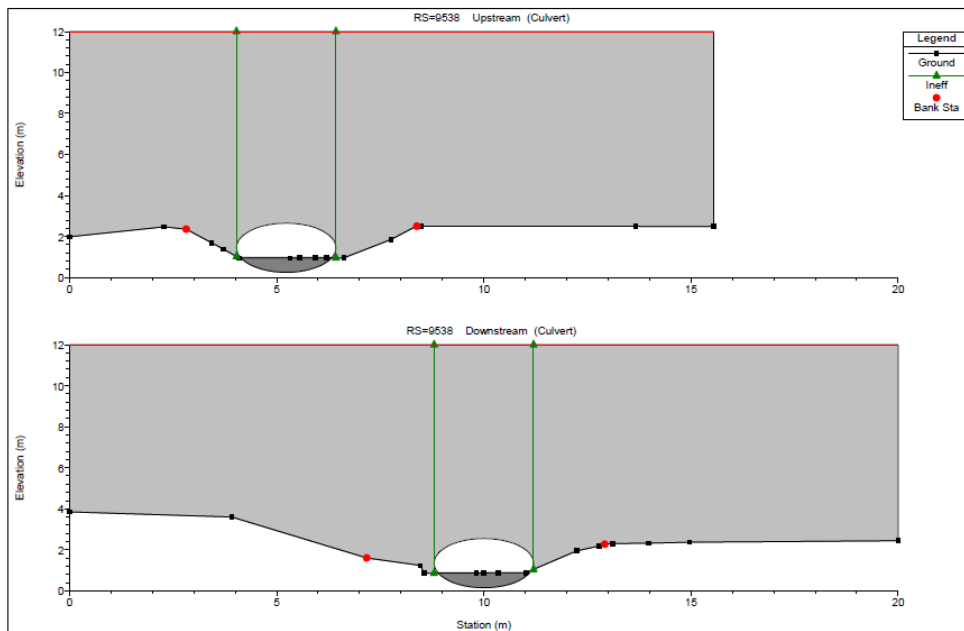


Figure 5-3 Culvert under the M1 modelled in HEC RAS

5.2.2 Hydrology

The model utilised the steady state analysis based on flows generated in the FEMFRAM Study, from node 5La1395 downstream of the site as shown in **Figure 5-1**, and included 20% increase for climate change.

5.2.3 Joint Probability

Additionally, to account for a joint occurrence of high tide and fluvial flooding, known as joint probability, a downstream tidal boundary condition was added to the model. The tidal boundary levels were derived from the FEMFRAM tidal node 5La1018 as shown in **Figure 5-8**. A detailed investigation of joint probability analysis was undertaken for the FEMFRAM Study and the joint probability scenarios used in that study were replicated in the hydraulic modelling. The joint probability scenarios are shown in **Table 5-1**. The applicable joint probability scenarios are a 1% AEP Fluvial Flood Event with a 20% AEP Tidal Flood Event and a 0.1% AEP Fluvial Flood Event with a 2% AEP Tidal Flood Event. The fluvial flows and tidal boundary conditions are shown in **Table 5-2** below.

## STRATEGIC FLOOD RISK ASSESSMENT

Table 5-1 Combinations of individual return periods necessary to produce design event

Joint Probability Scenario	Boundary return period	
	Fluvial	Tidal
50% (2 year)	50%	50%
20% (5 year)	20%	50%
20% (5 year)	50%	20%
10% (10 year)	10%	50%
10% (10 year)	50%	10%
4% (25 year)	4%	50%
4% (25 year)	50%	4%
2% (50 year)	2%	50%
2% (50 year)	50%	2%
1% (100 year)	1%	20%
1% (100 year)	20%	1%
0.5% (200 year)	1%	10%
0.5% (200 year)	10%	0.50%
0.1% (1000 year)	0%	2%
0.1% (1000 year)	2.0%	0.1%

### 5.2.4 Climate Change Scenarios

The fluvial flows and tidal boundary levels were increase by 20% and 0.5m respectively for a Mid-Range Future Scenario In line with the OPW's [Climate Change Adaptation Plan](#) [Flood Risk Management – Climate Change Sectorial Adaptation Plan](#) a Mid-Range Future. The fluvial flows and tidal boundary conditions are shown in **Table 5-3** below.

Table 5-2 Fluvial flows and tidal boundary conditions

Return Period (yrs)	2	5	10	25	50	100	200	1000
AEP %	50	20	10	4	2	1	0.5	0.1
FEM FRAMS Growth Factors	1	1.52	1.89	2.38	2.76	3.16	3.57	4.6
Node 5La1395 Fluvial Flow (m3/s)	0.67	1.01	1.26	1.76	2.04	2.34	2.64	3.4
Node 5La1018 Tidal Downstream levels (mOD)	2.409	2.546	2.650	2.787	2.891	2.995	3.099	3.341

Table 5-3 Fluvial flows and tidal boundary conditions with allowances for climate change

Return Period (yrs)	2	5	10	25	50	100	200	1000
AEP %	50	20	10	4	2	1	0.5	0.1
Node 5La1395 Fluvial Flow (m3/s) + 20%	0.80	1.22	1.51	2.11	2.45	2.80	3.17	4.08
Node 5La1018 Tidal Downstream levels (mOD) + 0.5m	2.91	3.05	3.15	3.29	3.39	3.50	3.60	3.84

## STRATEGIC FLOOD RISK ASSESSMENT

### 5.2.5 Hydraulic Modelling

Hydraulic modelling was undertaken by Molony Millar (on behalf of FCC) for the preliminary design of the LAP. A 1D model was developed in HEC-RAS (Version 5.0.6). The model geometry was built from a topographical survey procured by Molony Millar Consulting Engineers. The survey was completed by Precision Surveys in January 2017. A surface was built in AutoCAD Civil 3D and cross sections for every 20m of the river length were extracted from the surface using sample lines. These cross sections were exported to HEC-RAS and the downstream M1 culvert was added to the model. The upstream fluvial flows and downstream tidal boundaries were inputted into the model for each scenario. The HEC-RAS model extents are shown in **Figure 5-4** and **Figure 5-5**. The Manning's  $n$  coefficient, which is used in the HEC RAS model to represent roughness, was selected based on the site conditions. The values of Manning coefficient are shown in the **Table 5-4** below:

**Table 5-4 Manning's n values**

1D Manning's n values	
Main channel. Bank clean, straight, full stage, no rifts or deep pools,	0.030
Main channel. Bank slopes clean, winding, some pools and shoals,	0.040
Main channel. Bank slopes with gabions,	0.025
Culvert Manning's n for Top,	0.016
Culvert Manning's n for Bottom,	0.020

#### 5.2.5.1 Existing Scenario for Fluvial Flooding

**Figure 5-6** shows the modelled 1% AEP and 0.1% AEP events for the existing fluvial flooding scenario. Comparison of **Figure 5-1** and **Figure 5-6** shows similarities differences between the two. The 1% AEP is confined to the north side of the stream while the 0.1% AEP extends over a large area to the south of the stream. **Table 5-5** shows a similarity levels between the FEMFRAM and SFRA levels and flows for Node 5La13955. A more conservative flow was applied upstream for the SFRA model which is highlighted in **Table 5-5** as the SFRA levels and flows for the node 5La 1717 are higher than those of the FEMFRAM.

**Table 5-5 Comparison of flows and levels**

	5La1727		5La13955	
AEP %	1	0.1	1	0.1
FEM FRAMS Flows	2.25	3.27	2.34	3.4
FEM FRAMS Levels	3.46	3.55	2.58	2.91
SFRA Flows	2.34	3.4	2.34	3.4
SFRA Levels	4.26	4.39	2.55	2.88

Indicative Flood Volumes derived from Volume Stage curves were estimated for the Q100 and Q1000 event out of bank flooding are shown in **Table 5-6**.

**Table 5-6 Flood Volumes**

AEP %	1	0.1
Left Bank (m <sup>3</sup> )	616	659
Right Bank (m <sup>3</sup> )	0	3274
Total (m <sup>3</sup> )	616	3933

STRATEGIC FLOOD RISK ASSESSMENT



Figure 5-4 HEC-RAS Model Space

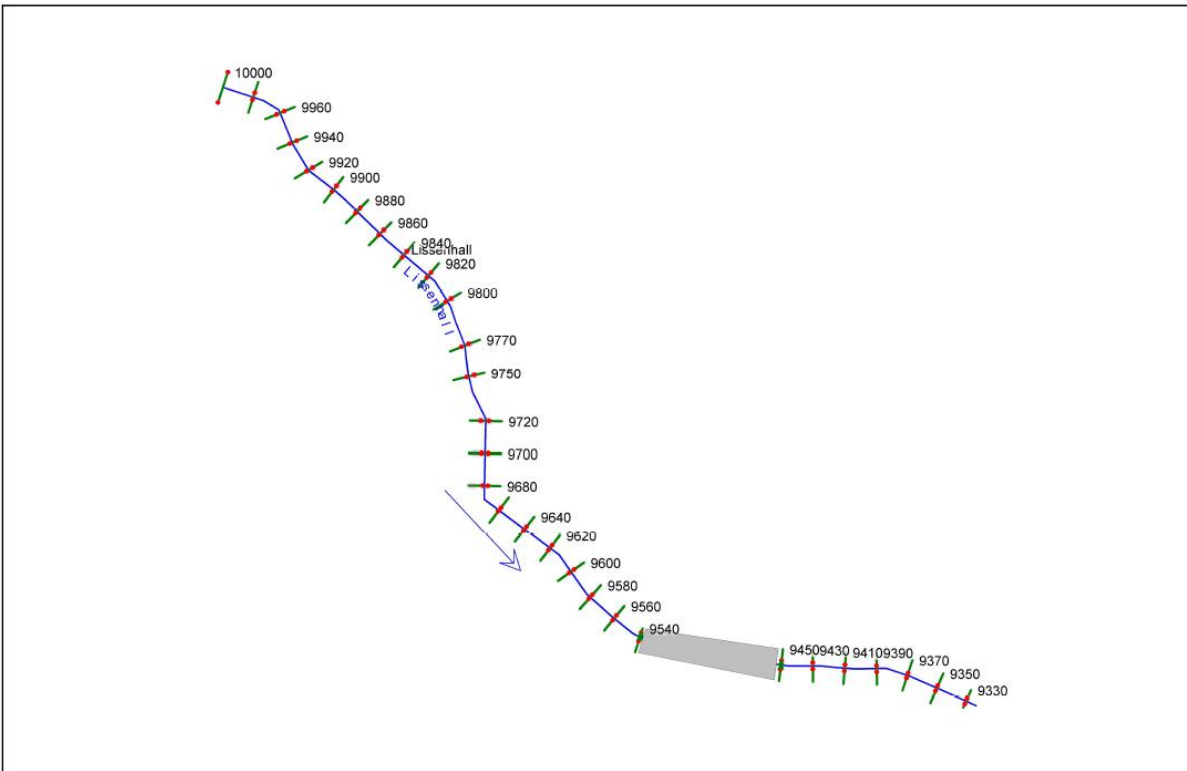


Figure 5-5 HEC-RAS Model Geometry



STRATEGIC FLOOD RISK ASSESSMENT

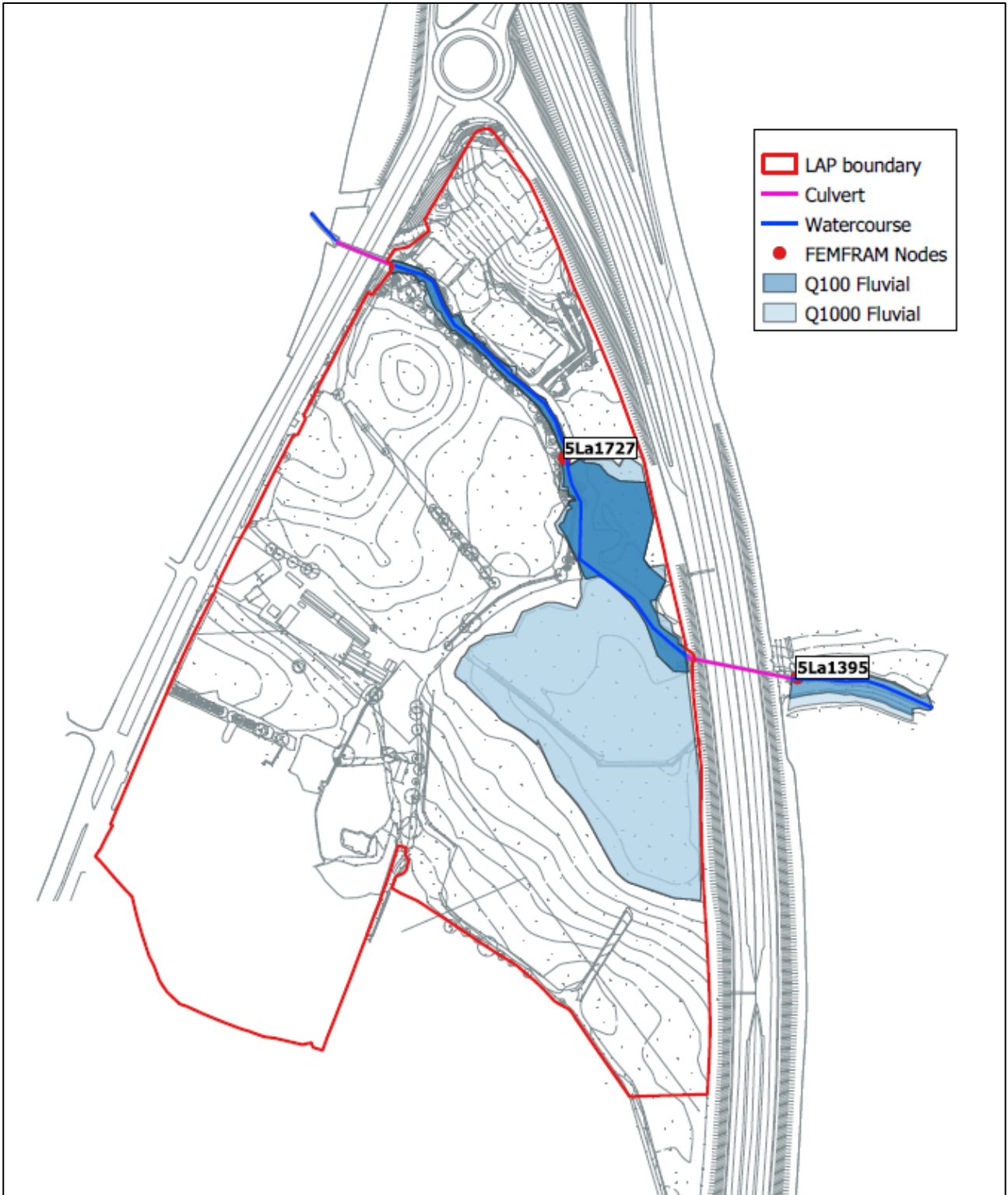


Figure 5-6 Preliminary Design Existing Fluvial Flood Extents

STRATEGIC FLOOD RISK ASSESSMENT

5.2.5.2 Climate Change Scenario for Fluvial Flooding

Figure 5-7 shows the modelled climate change fluvial flood extents for the 1% AEP and 0.1% AEP events. Comparison of Figure 5-6 and Figure 5-7 shows increases the 1% AEP event could expand to the existing 0.1% AEP event while the 0.1% AEP will increase in extents upstream.

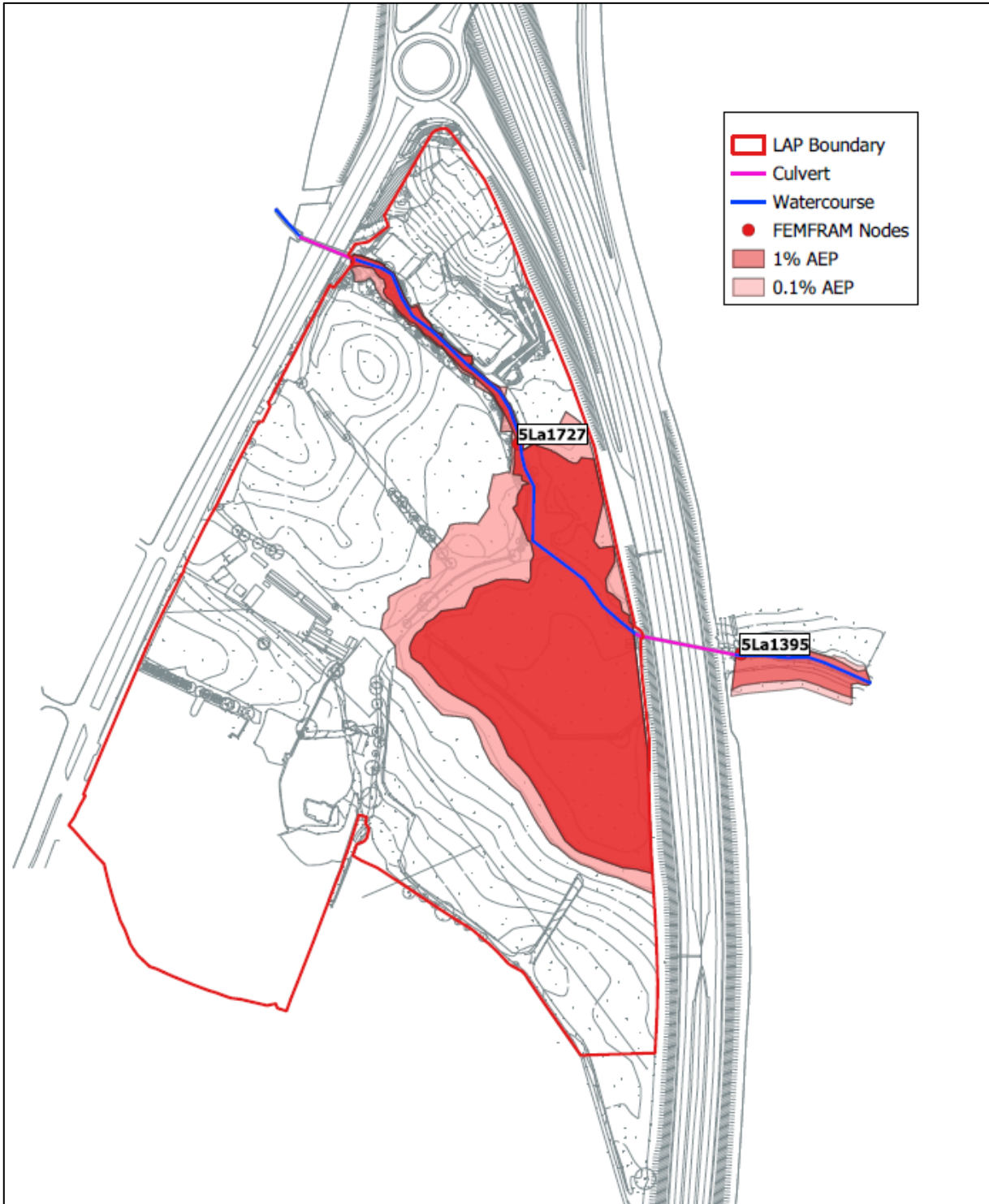


Figure 5-7 Preliminary Design Climate Change Scenario Fluvial Flood Extents

STRATEGIC FLOOD RISK ASSESSMENT

### 5.3 Tidal Flooding

#### 5.3.1 FEMFRAM study

The FEMFRAM study found that the flapped outfall located at the downstream extent of the Lissenhall Stream provides limited benefits in preventing the propagation of high tides and storm surges west of the outfall and was not considered an option for a flood defence. This is because high tides and storm surges can bypass this structure downstream of the outfall along the Broadmeadow estuary coastline. Therefore tidal flows impact on the water levels in the Lissenhall Stream upstream of the flapped outfall. **Figure 5-8** shows the FEMFRAM tidal flood extents for the LAP study area. It shows that the site is primarily impacted by the 0.5% and 0.1% AEP events. The main flooding in the FEMFRAM study is at lower reaches of the stream adjacent to the M1 culvert.

#### 5.3.2 Preliminary Design Hydraulic Modelling

The FEMFRAM tidal levels were applied across the site to match the flood level from the FEMFRAM study. **Figure 5-9** shows the tidal extents generated.

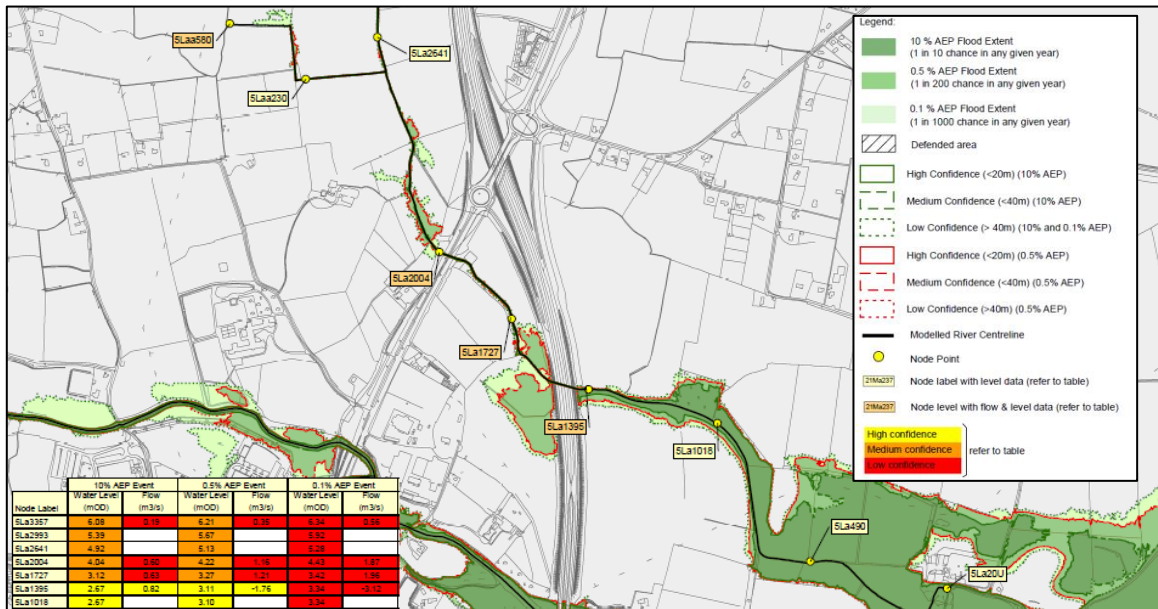


Figure 5-8 FEMFRAM Existing Coastal Flood Extents

Comparison of **Figure 5-8** and **Figure 5-9** shows that the tidal flooding extents are broadly similar.

STRATEGIC FLOOD RISK ASSESSMENT

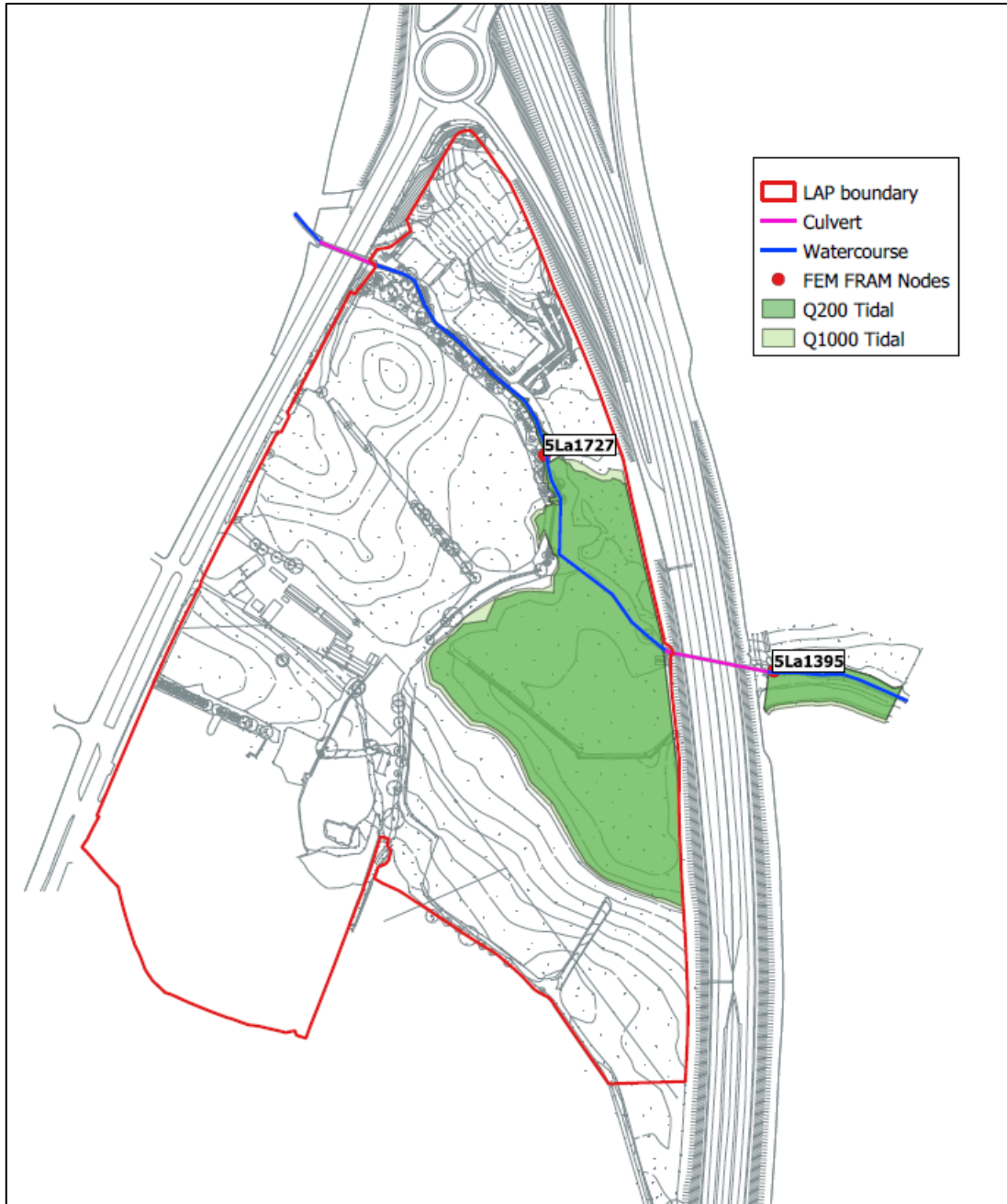


Figure 5-9 Preliminary Design Existing Tidal Flood Extents

STRATEGIC FLOOD RISK ASSESSMENT

5.3.2.1 Climate Change Scenario for Tidal Flooding

Figure 5-10 shows the climate change tidal flooding extents for the +0.5% AEP and 0.1% AEP events.

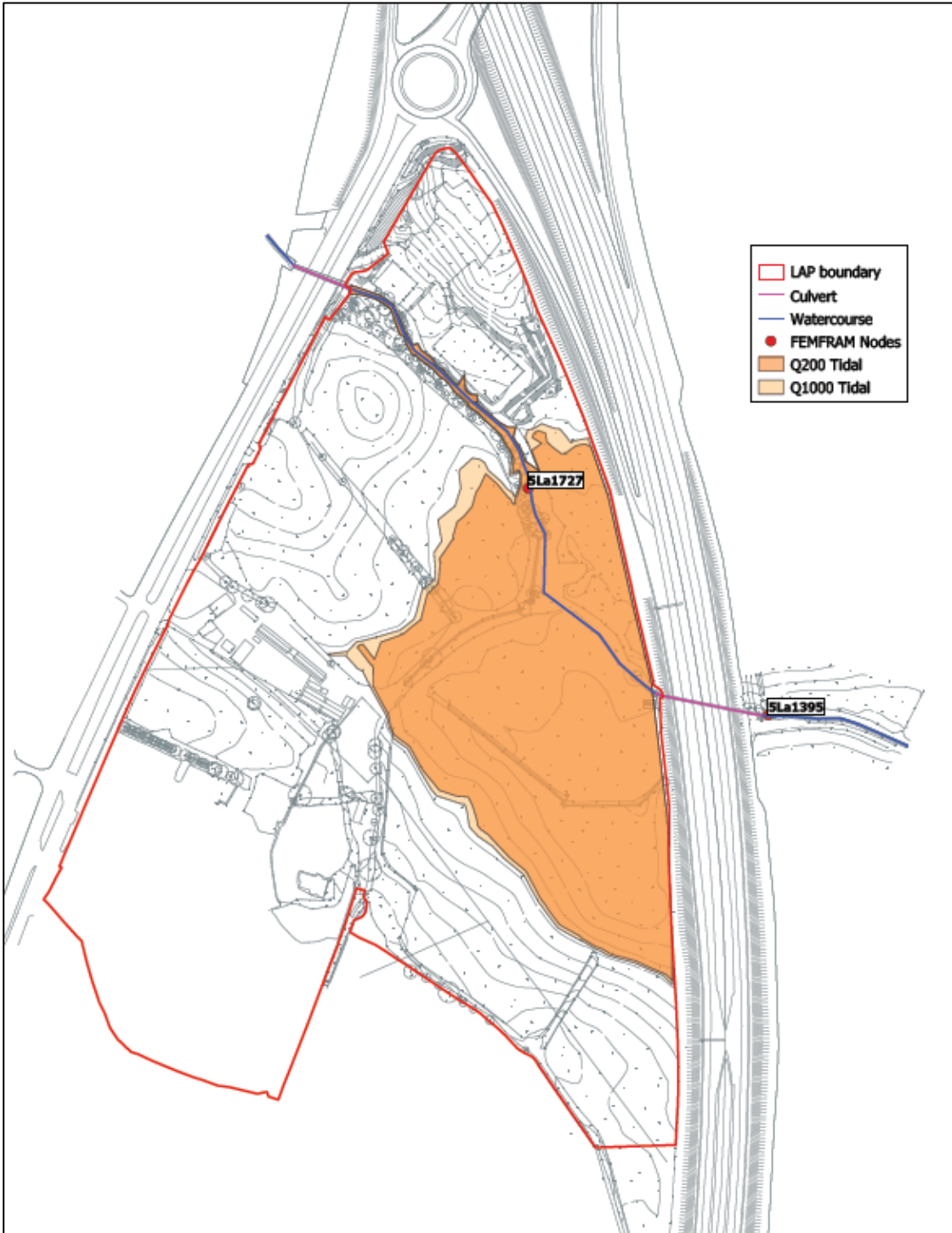


Figure 5-10 Preliminary Design Climate Change Tidal Flood Extents

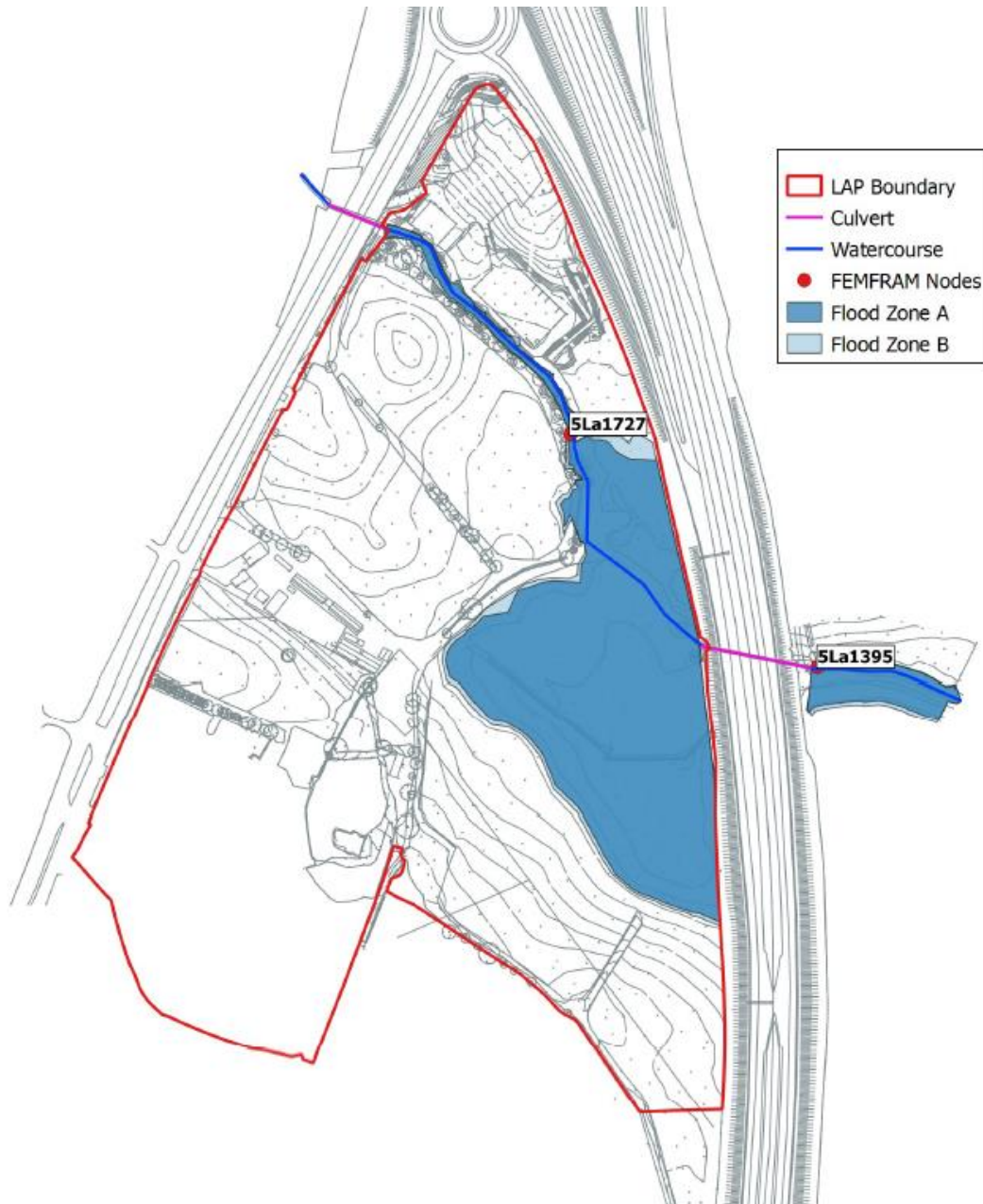
5.3.2.2 Comparison with National Coastal Flood Hazard Mapping 2021

Comparing Figure 5-9 with Figure 4-5 shows that for the existing scenario the flooding extents are very similar. The climate change scenarios as shown Figure 5-10 and Figure 4-6 indicate that the National Coastal Flood Hazard Mapping 2021 has larger extents however, the surface data used in that study is not as detailed for the SSFRA and any the SSFRA flood extents are more reflective of on-site conditions.

## STRATEGIC FLOOD RISK ASSESSMENT

## 5.4 Flood Zones

Flood Zones for the site were extracted as the worst case scenario flooding for the combined effects of the fluvial and tidal flooding without the inclusion of climate change. **Figure 5-11** shows the Flood Zones A and B.



**Figure 5-11 Preliminary Design Flood Zones**

**Figure 5-12** shows the proposed layout for the Development Area. The principal mitigation measure for the Development Area is avoidance with the development located in Flood Zone C. The flood zone areas have identified as open green space. Some areas of the development could be located in areas sensitive to increased flood extents due to climate change therefore their finished floor levels will be set at 0.5m above the flood zone levels.

## STRATEGIC FLOOD RISK ASSESSMENT

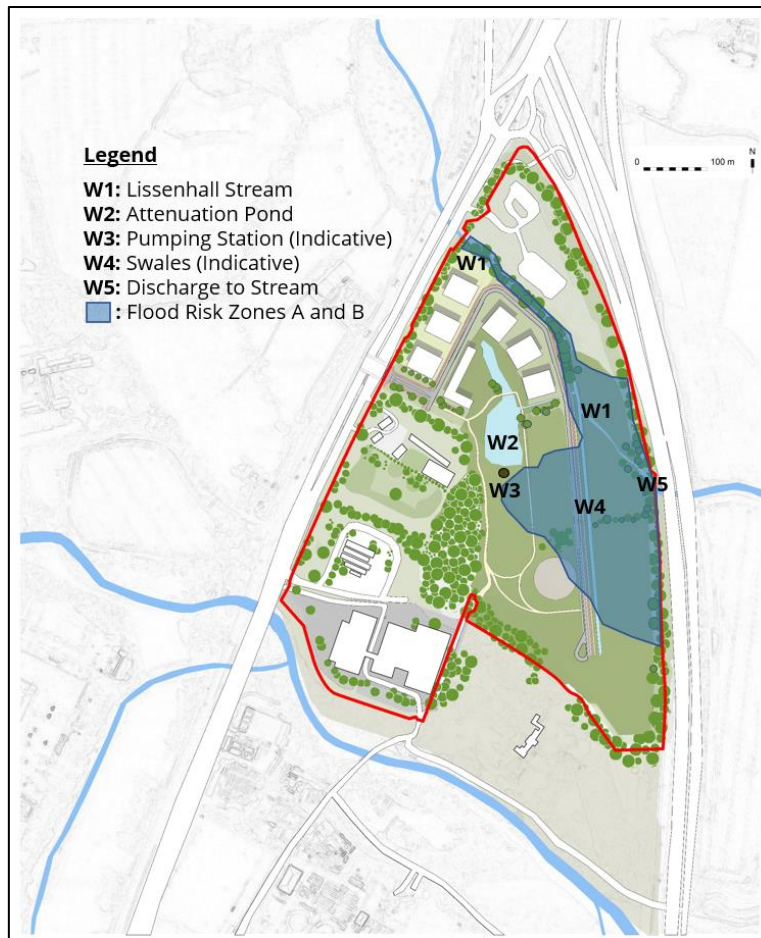


Figure 5-12 Proposed layout for the Development Area

### 5.5 Pluvial Flooding

As discussed in **Section 4** the risk of pluvial flooding is deemed to be low. However, a surface water assessment should be carried out for the proposed development to improve site drainage. All development must ensure that surface water runoff is managed to ensure that greenfield runoff rates are maintained and that there are no downstream impacts. FCC County Development Plan 2017-2023 requires that all “developments shall carry out a surface water and drainage assessment and shall be compliant with the Greater Dublin Strategic Drainage Study (GSDSDS) (2005) and the Greater Dublin Regional Code of Practice for Drainage Works (2012) to ensure that drainage from the site is managed sustainably.”

The outline surface water drainage strategy for the site has been developed for the LAP by Molony Millar in accordance with the recommendations and guidance from the FCC County Development Plan 2017-2023 and also the SuDS Strategy for the Lissenhall East LAP. The SuDS strategy outlined that:

- New surface water drainage networks will be required as part of developments within lands zoned for new office, research and development and high technology/high technology manufacturing type development. These networks should be designed in accordance with this SuDS Strategy, CIRIA C753 ‘The SuDS Manual’ and the Greater Dublin Strategic Drainage Systems (GSDSDS);
- SuDS measures will be required as part of these new developments to ensure quantity and quality of surface water runoff does not negatively impact the surrounding environment. The required infrastructure includes wetlands / ponds for Lissenhall;
- A variety of SuDS techniques have been assessed which are suitable for inclusion as part of the development of the LAP area; and
- Pond(s) should be constructed in the central eastern area close to the location of the culvert which drains under the M1. Attenuation volumes should be incorporated in the design of the pond(s).

## STRATEGIC FLOOD RISK ASSESSMENT

**Figure 5-12** shows the outline drainage proposals for the LAP which incorporates a variety of SuDs measures for the development including an attenuation pond, swales and landscaped areas. The main attenuation pond for the site is to be constructed for the Development Area in the centre of the LAP lands. This is an outline drainage strategy which should be advanced to include more details of attenuation sizing calculations as part of planning applications for the zoned lands. The drainage strategy for planning should examine these other following recommendations from the SuDS Strategy:

- Permeable Paving is recommended for use in all parking areas and landscaped areas,
- Any commercial and educational facilities should incorporate rainwater harvesting for use within the facility. These facilities should also examine the feasibility of green roofs and green walls,
- Subject to subsoil permeability, filter drains may be required to drain landscaped areas and other small green areas within the development. Runoff from green areas should, where possible, infiltrate directly to groundwater. It is recommended that swales are constructed adjacent to the proposed drainage route to provide conveyance and treatment of runoff from the carriageway. These swales can also be used to provide separation between footpaths / cycle tracks and the carriageway, and
- Runoff from each development upstream of ponds should be limited to existing greenfield runoff rates. Attenuation should be provided for the 1% AEP rainfall event + ~~10~~**20**% allowance for Climate Change.
- Attenuation ponds are to be located outside of Flood Zone A and B, with design volumes and discharge rates to include allowance for predicted coastal and fluvial flood levels at the outlet of the attenuation pond.

### 5.6 Residual Risk

Residual risks are those risks which remain after all risk avoidance, substitution and mitigation measures have been implemented, on the bases that such measures can only reduce risk, not eliminate it.

The key residual risks identified within the LAP area are blockage of the M1 culvert and uncertainty associated with predicted sea level rise.

- M1 Culvert blockage
  - The existing culvert under the M1 is an existing constraint on the hydraulic capacity of the Lissenhall Stream. The potential for blockage of this structure could further increase fluvial flood extents and water levels within the LAP area. Increasing the capacity of this culvert would increase coastal flood risk to the site and should therefore not be considered an option. Appropriate mitigation of the residual risk to fluvial flooding should therefore be achieved through the design and construction of a suitably sized inlet trash screen with an overflow structure to prevent an increase in water levels upstream of the structure.
- Sea Level Rise
  - As the site is shown to be sensitive to sea level rise within the MRFS and HEFS conditions, proposed site layout is cognisant of the potential increase in flood extents to avoid future food risk where possible. Proposed finished floor levels and safe access and egress is required to be assessed within a SSFRA with an appropriate freeboard allowance above the High-End Future Scenario. Where development cannot avoid future flood extents it must be shown within the SSFRA that there is no increase in flood risk either within or outside of the LAP area. As the primary source of flooding coastal, this SFRA is of appropriate detail to recommend that appropriate mitigation of this risk can be achieved.



## STRATEGIC FLOOD RISK ASSESSMENT

# 6 SUMMARY AND CONCLUSION

This SFRA report reviewed the available flood risk information for the site. The site contains both Flood Zone A and Flood Zone B and a “Less Vulnerable” type development which calls for a Justification Test together with appropriate mitigation measures before any developments proposals are allowed in or near the identified flood zones. The report contained a comparison of the extents of these flood zones as defined in the FEMFRAM and the preliminary design flood model for the LAP.

The LAP lands have been identified as lying predominantly within Flood Zone C. The Flood Zones A and B have been identified as open green space. The principal mitigation measure for the Development Area is avoidance with new development located in Flood Zone C. However, development proposals within the LAP lands shall still be subject to a SSFRA at planning application stage as the site contains Flood Zones A and B. A Justification Test based on the best available information has been provided in **Appendix A** detailing the mitigation measures required for SSFRAs. Some areas of the development could be located in areas sensitive to increases in flood extents due to climate change therefore their finished floor levels will be set at 0.5m above the flood zone levels with an allowance for climate change. A Flood Zone Map is shown in **Appendix B**.

Any proposals for development within the LAP land should include an appropriately detailed SSFRA. The SSFRAs shall be undertaken in accordance with:

- The Planning System and Flood Risk Assessment Guidelines for Planning Authorities (2009) and Circular PL02/2014 (August 2014); and
- The flood risk management policies outlined in the FCC CDP 2023-2029 (and subsequent updated CDP).

The SSFRAs should address (but not limited to) the following:

- All sources of flood risk to the site
- The sequential approach should be applied through site planning and should avoid encroachment onto, or loss of, the flood plain;
- If development cannot be avoided in the floodplain or not substituted for a less vulnerable type then a Justification Test for Development Management must be completed and all criteria of the test must be satisfied for development in a flood risk area to be permitted.
- Highly Vulnerable Development shall not be permitted in Flood Zone A or B;
- Less vulnerable development proposals should not be considered in Flood Zone A area unless it meets all the criteria of the Development Management Justification Test.
- Water Compatible land uses are appropriate for development in Flood Zone A, though should not increase flood risk within or outside of LAP lands.
- ~~Development in Flood Zone A should be water compatible and should not increase flood risk either within or outside of the LAP lands;~~
- Existing land uses which are water compatible that coincide with floodplains or adjacent to watercourses should be maintained to avoid vulnerable development in these areas.
- Due to the potential sensitivity of the site to predicted sea level rise and the M1 culvert constraint, the minimum finished floor level for Highly Vulnerable Development should be above the Flood Zone B (0.1% AEP) flood level with an allowance for climate change plus suitable freeboard. The recommended level of freeboard is 500 mm for fluvial and coastal flood levels whichever is greater.
- The minimum finished floor level for Less Vulnerable Development should be above the Flood Zone A (1% AEP fluvial or 0.5% AEP Coastal, whichever is greater) level with an allowance for climate change plus suitable freeboard. The recommended level of freeboard is 500 mm for fluvial and coastal flood levels
- Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas.

## STRATEGIC FLOOD RISK ASSESSMENT

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- Applications should outline the emergency procedures that will be applied in the event of a flood. Evacuation routes should be identified but if this is not possible then containment may be considered if it is considered safe and practical to do so.
- Compensatory storage for development that results in a loss of floodplain must be provided on a level for level basis, the lands should be in close proximity to the area that storage is being lost from, the land must be within the ownership of the developer and the land given to storage must be land which does not flood in the 1% AEP event. Also the compensatory storage area should be constructed before land is raised to facilitate development.
- *Should address residual risk of culvert blockage of the M1 culvert through the design of a trash inlet screen with an overflow to appropriately mitigate residual risk from blockage of this structure*
- *Should include an appropriate freeboard allowance for climate change such that finished floor levels and safe access and egress routes are provided with consideration of the predicted High End Future Scenario Coastal flood levels.*
- ~~*Should address residual risk of culvert blockage (where applicable), increased flood extents under climate change scenarios and pluvial risk which should be aimed at setting finished floor levels.*~~

*It is noted that any SSFRA is required to be accompanied by Section 50 consent from the Office of Public Works for the construction, replacement or alteration of bridges and culverts over any watercourse within the LAP area*

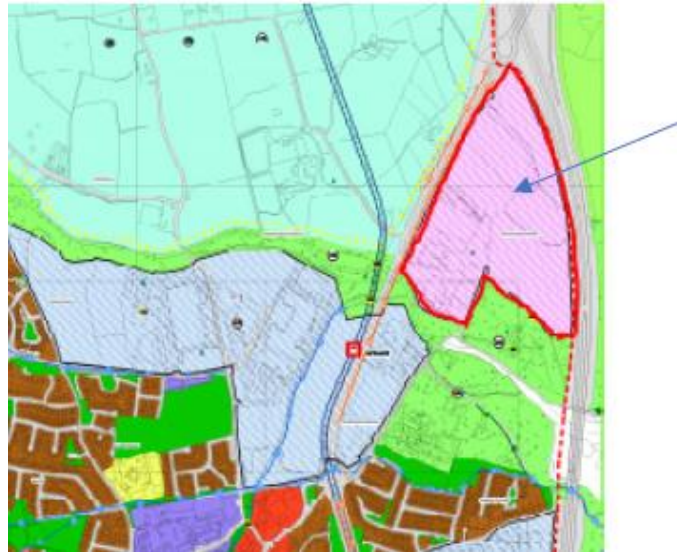
This LAP is valid for six years from the date of adoption by the Council. Its validity may be extended, in year 5 of the LAP for a further 5 years, if deemed appropriate by a resolution of the Council. This LAP's focus for new development during its' duration will be on the western boundary and central area of the overall LAP lands. However, the LAP also provides policy context for potential future development within the site in anticipation of the development of the MetroLink Project (anticipated in 2035). It is acknowledged that any future additional development on the Lissenhall East LAP lands beyond what is currently specified in the Development Framework is indicative only and that any such potential future development will only occur having regard to all relevant environmental, transport, flood risk and planning assessment requirements. Any proposals for future development within a flood zone shall include an appropriately detailed SSFRA.

# Appendix A

## Justification Test

STRATEGIC FLOOD RISK ASSESSMENT

Lissenhall East Local Area Plan



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.	Swords is a key location designated in the draft Regional and Economic Strategy (RSES) and the County Development Plan for large scale employment. The RSES also acknowledge the development potential of the LAP lands <i>“The development of a mixed-use urban district on the northern side of Swords at Lissenhall, has potential to deliver significant housing, along with high tech, research and development-based employment within a campus setting at Lissenhall East.”</i>
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:	The LAP lands are zoned “HT” High Technology in the <i>Fingal County Development Plan 2017 – 2023</i> , the stated objective of which is: <i>“Provide for office, research and development and high technology/high technology manufacturing type employment in a high quality built and landscaped environment.</i>
	(i) Is essential to facilitate regeneration and / or expansion of the centre of the urban settlement;	These are underutilised lands within the development boundary of Swords identified for development-based employment.
	(ii) Comprises significant previously developed and / or underutilized lands;	These are underutilised lands within the development boundary of Swords.
	(iii) Is within or adjoining the core of an established or designated urban settlement;	The lands are within the development boundary of Swords, one of the three Key Towns in the Dublin Metropolitan Area in the draft Regional Spatial & Economic Strategy for the Eastern and Midland Regional Assembly.

## STRATEGIC FLOOD RISK ASSESSMENT

	(iv) Will be essential in achieving compact and sustainable urban growth; and	The lands are within the development boundary of Swords adjacent to the planned MetroLink (and Metrolink Estuary Stop).
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	There are limited suitable lands within Fingal for large scale High Tech development. Alternatives are constrained in many cases by the absence of local planning policy, remoteness from existing and planned high capacity public transport and / or population centres. The Lissenhall East LAP lands by virtue of their proximity to Swords, served by the future MetroLink provide a potential opportunity to develop a high quality High Tech employment area within Fingal.
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	<p>A SFRA was undertaken for the site which identified that the LAP lands have been identified as lying predominantly within Flood Zone C. The Flood Zones A and B have been identified as open green space. The principal mitigation measure for the Development Area is avoidance with new development located in Flood Zone C.</p> <p><b><u>The SFRA identifies blockage of the M1 culvert as a likely source of residual risk to the LAP area as there is no alternative flow path for water to leave the site. It is therefore a requirement that development of the site includes an inlet screen to the culvert which is to be designed using best practice and in accordance with the relevant guidelines to appropriately mitigate the risk of blockage to the development.</u></b></p> <p>However, development proposals within the LAP lands shall still subject to a SSFRA. The following items that should be addressed in the SSFRA (but not limited to):</p> <ul style="list-style-type: none"> <li>– The sequential approach should be applied through site planning and should avoid encroachment onto, or loss of, the flood plain;</li> <li>– If development cannot be avoided in the floodplain or not substituted for a less vulnerable type then a Justification Test for Development Management must be completed and all criteria of the test must be satisfied for development in a flood risk area to be permitted.</li> <li>– Highly Vulnerable Development shall not be permitted in Flood Zone A or B;</li> <li>– Less vulnerable development proposals should not be considered in Flood Zone A area unless it meets all the criteria of the Development Management Justification Test.</li> <li>– <b><u>Water Compatible land uses are appropriate for development in Flood Zone A, though should not increase flood risk within or outside of LAP lands.</u></b></li> <li>– <b><u>Development in Flood Zone A should be water compatible and should not increase flood risk within or outside of the LAP lands;</u></b></li> </ul>

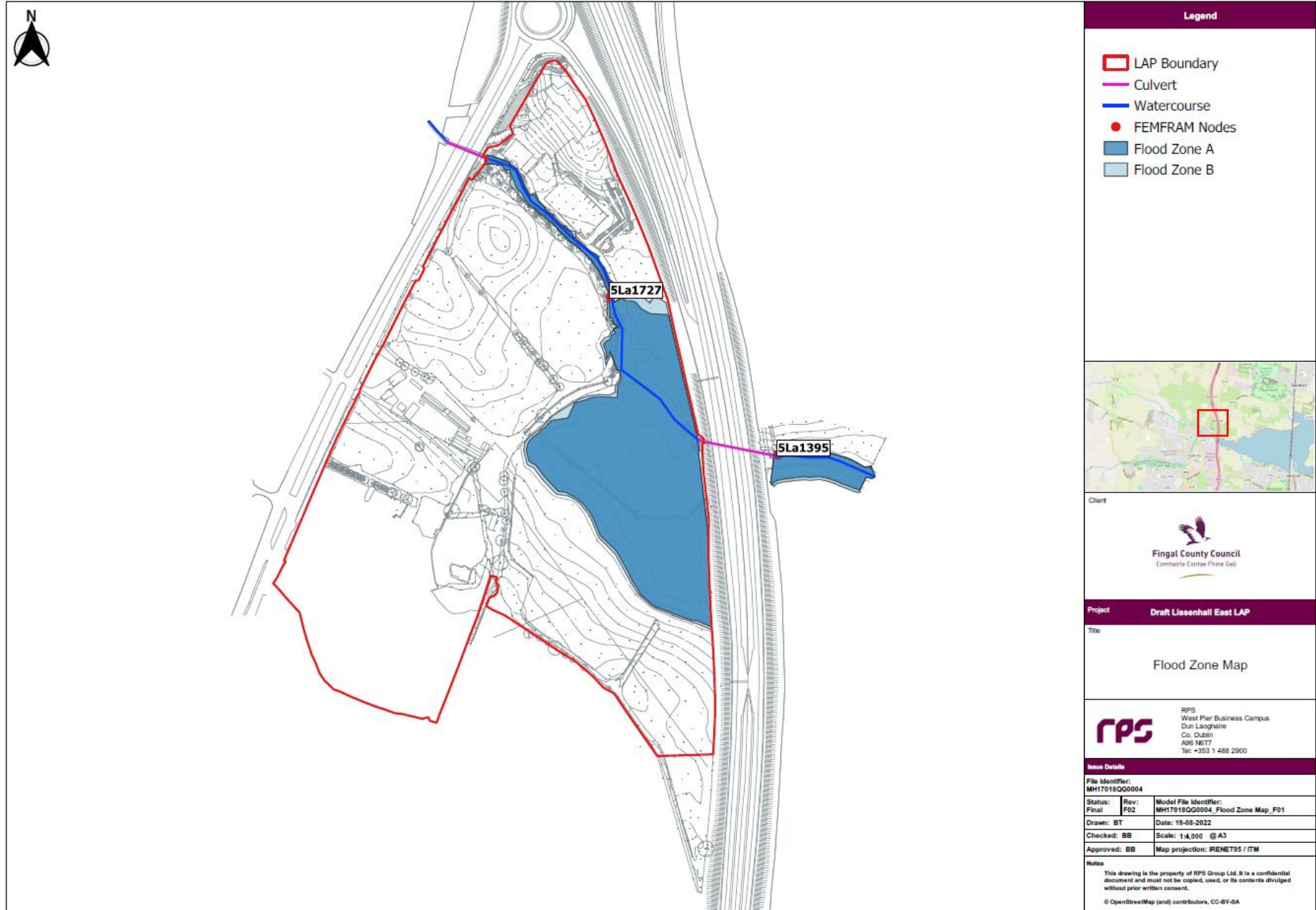
## STRATEGIC FLOOD RISK ASSESSMENT

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- Existing land uses which are water compatible that coincide with floodplains or adjacent to watercourses should be maintained to avoid vulnerable development in these areas.
  - The minimum finished floor level for Highly Vulnerable Development should be above the Flood Zone B (0.1% AEP) level plus suitable freeboard. The recommended level of freeboard is 500 mm for fluvial and coastal flood levels with an allowance for climate change;
  - The minimum finished floor level for Less Vulnerable Development should be above the Flood Zone A (1% AEP fluvial or 0.5% AEP coastal) level plus suitable freeboard. The recommended level of freeboard is 500 mm for fluvial and coastal flood levels with an allowance for climate change
  - Proposals should not impede existing flow paths or cause flood risk impacts to the surrounding areas.
  - Applications should outline the emergency procedures that will be applied in the event of a flood. Evacuation routes should be identified but if this is not possible then containment may be considered if it is considered safe and practical to do so.
  - Compensatory storage for development that results in a loss of floodplain must be provided on a level for level basis, the lands should be in close proximity to the area that storage is being lost from, the land must be within the ownership of the developer and the land given to storage must be land which does not flood in the 1% AEP event. Also the compensatory storage area should be constructed before land is raised to facilitate development.
  - Should address residual risk of culvert blockage of the M1 culvert though the design of a trash inlet screen with an overflow to appropriately mitigate residual risk from blockage of this structure (where applicable), increased flood extents under climate change scenarios and pluvial risk which should be aimed at setting finished floor levels.
  - Should include an appropriate freeboard allowance for climate change such that finished floor levels and safe access and egress routes are provided with consideration of the predicted High End Future Scenario Coastal flood levels.
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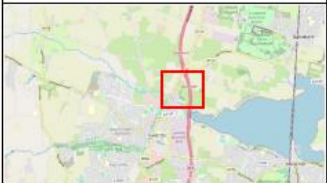
## Appendix B Flood Zone Map

STRATEGIC FLOOD RISK ASSESSMENT



**Legend**

- LAP Boundary
- Culvert
- Watercourse
- FEMFRAM Nodes
- Flood Zone A
- Flood Zone B



Client



**Fingal County Council**  
Comhairle Contae Fhionnuala

**Project** Draft Lissenhall East LAP

**Title**

Flood Zone Map



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**Issue Details**

File Identifier: MH17018QG004		
Status: Final	Rev: F02	Model File Identifier: MH17018QG004_Flood Zone Map_F01
Drawn: BT	Date: 19-08-2022	
Checked: BB	Scale: 1:4,000 @ A3	
Approved: BB	Map projection: IRENET95 / ITM	

**Notes**

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