



Senior Planner, Planning Department, Galway City Council, College Road, Galway, H91 X4K8.

7th April 2022

RE: Draft Galway City Development Plan 2023 - 2029

Dear Sir/Madam,

The Office of Public Works (OPW), as lead agency for flood risk management in Ireland, welcomes the opportunity to comment on the Draft Galway City Development Plan 2023 - 2029. This submission is made specifically regarding flood risk and the application of the Guidelines on the Planning System and Flood Risk Management (DECLG/OPW, 2009), hereafter referred to as the 'Guidelines'. Further submissions on the draft Plan may be made by the OPW regarding the estate portfolio, heritage and other areas of responsibility.

The OPW welcomes the acknowledgement of the Guidelines and the preparation of a Strategic Flood Risk Assessment (SFRA). In particular, the OPW welcomes:

- Commitments in policy 5.3 *Blue Spaces: Coast, Canals and Waterways* to require the facilitation of sustainable flood defence and coastal protection works, the protection and maintenance of undeveloped riparian zones and natural floodplains along the river Corrib and its tributaries, and to along with Policy 5.10 *Open Spaces: Agricultural Lands*, restrict development within 10m of the river Corrib in 'G' agricultural zoned lands
- Commitments in Policy 9.1 Flood Risk to:
 - Support the implementation of the Guidelines, the EU Flood Risk Directive, the Flood Risk Regulations
 - Ensure the recommendations of the SFRA are taken into consideration in the assessment of development in flood risk areas
 - Ensure flood risk is incorporated into the preparation of any future LAPs,
 Framework Plans and Masterplans in the city

The following comments highlight opportunities for the draft plan before it is finalised:

Flood Zone Mapping

It is noted that the only flood zone mapping that has been included for the consultation is a single low resolution Flood Zone Map that covers the entire plan area and the clipped flood map extents for each Justification Test.

As this mapping is low resolution, it is difficult to assess the zonings/sites at flood risk or if the sequential approach has been applied.

Flood Risk Assessments

Section 11.27 of the written statement requires that "In areas of identified flood risk, all developments including minor works and changes of use should include an appropriate level of FRA. This assessment must demonstrate that the development would not increase flood risk in the context of use, emergency access and infrastructure. Development should demonstrate principles of flood resilient design."

Point 3 of policy 9.1 sets out that SSFRAs are required "where appropriate". This wording might be amended to reflect the wording in section 11.27 that SSFRAs are required in all areas of identified flood risk.

Flood Relief Schemes

The OPW welcomes the support for the Coirib go Cósta Flood Relief Scheme in policies 2.2 and 9.1. It would be beneficial if policy wording were clarified to ensure zoning or development proposals support and do not impede or prevent the progression of these measures, and to reflect the commitment in section 11.27 of the written statement that "Proposed developments shall have regard to the the Coirib go Cósta Galway City Flood Relief Scheme".

Historic Flood Events & Pluvial Mapping

Table 4-1 in the SFRA references historic flood events from www.floodmaps.ie, and a footnote for discussion on pluvial flooding in section 4.2.4 of the SFRA references a national set of pluvial flood maps at www.cfram.ie/pfra. Please note that these websites are no longer available. Historic flood events are now available on www.floodinfo.ie.

Justification Tests

The OPW welcomes the inclusion of Plan-making Justification Tests supplied in the SFRA.

There are proposed land use zonings, some of which are classified as highly vulnerable development in the Guidelines which overlap with Flood Zones A and B, for which no commentary has been included to indicate that the Plan Making Justification Test has been applied and passed. Examples of these include lands zoned *Institutional & Community* (CI) which allows highly vulnerable development to the south of Dún Na Mara Drive, and highly vulnerable *Low Density Residential* (LDR) to the south of Coast Road near Curragreen.

For sites that are intended to be zoned for development following the application of a Justification Test where only a small proportion of the site is at risk of flooding, a policy objective might be attached to such zoning. Such an objective might require that the sequential approach be applied in the site planning, whereby to ensure no encroachment onto, or loss of the flood plain, or that only water compatible development such as *Open Space* would be permitted for the lands which are identified as being at risk of flooding within that site. Planning permission for these sites might then be subject to the sequential approach having been adopted and applied as above, following a detailed FRA.

National Indicative Fluvial Mapping (NIFM)

The OPW National Indicative Fluvial Mapping (NIFM) has been used as a dataset in producing the flood risk mapping.

While these maps are an improvement on PFRA mapping, they are still indicative maps and the same cautions and limitations as outlined in Circular PL 2/2014 for PFRA should be followed.

National Coastal Flood Hazard Mapping

It is noted that datasets listed in Table 4-1 which relate to coastal flooding have not included the National Coastal Flood Hazard Mapping. These flood maps, including those for potential future scenarios taking account of the possible impacts of climate change, may be obtained in GIS format from the OPW Flood Risk Management - Data Management Section via email (flood_data@opw.ie).

Construction, Replacement or Alteration of Bridges and Culverts over Watercourses

Section 4.6 of the written statement refers to the strategic orbital route, the N6 GCRR incorporating a new river crossing, and section 4.8 specific objectives 14 and 15 and 16 state: "Provide a pedestrian and cycle bridge crossing of the River Corrib adjacent to the Salmon Weir Bridge", "Provide a new pedestrian and cycle bridge on the piers of the Old Clifden Railway Line from the Headford Road Regeneration area to NUIG campus" and "Investigate the potential for the construction of a new pedestrian bridge from Gaol Road to Newtownsmyth" respectively. It should be noted that there are restrictions on the construction, replacement or alteration of bridges and culverts over any watercourse, and that appropriate consent from the Commissioners is required under Section 50 of the Arterial Drainage Act 1945.

Coastal Change

The OPW welcomes the commitment in policy 9.1 to protect the coastal area and foreshore and avoid inappropriate development in areas at risk of coastal erosion.

It should be noted that the Government has established an Inter-Departmental Group on Coastal Change Management to scope out an approach for the development of a national coordinated and integrated strategy to manage the projected impact of coastal change to our coastal communities, economies, heritage, culture and environment. The Inter-Departmental Group is jointly chaired by the Department of Housing, Planning and Local Government and the OPW and will bring forward options and recommendations for the Government to consider as soon as possible.

Mitigation Measures

The Flood Mitigation Measures at Site Design outlined in Section 5.10 of the SFRA are welcomed by the OPW and provide guidance on how residual flood risk can be managed to acceptable levels.

SuDS and Natural Water Retention Measures

The OPW welcomes the following:

- The commitment in policy 8.8 *Public Realm* to promote nature based SuDS in the public realm
- The commitment in policy 2.2, *Climate Action* to support the implementation of water management mechanisms such as SuDS
- Policy 9.4 Sustainable Drainage Systems (SuDS) which requires the use of SuDS 'wherever practical' in development, and promotes the use of green infrastructure such as green roofs, green walls, bioswales, planting and green spaces

- The commitments in policy 9.1 *Flood Risk* to:
 - Protect and promote sustainable management and uses of waterbodies and watercourses from inappropriate development including undeveloped riparian strips, wetlands and natural floodplains
 - o Protect and maintain 'where feasible' undeveloped riparian zones and natural floodplains along the river Corrib and its tributaries
- The commentary in section 11.19 of the written statement requiring new development to consider the use of features such as green roofs, walls and roof gardens
- The commentary in section 11.30 requiring scheme sustainability statements in support of all planning applications involving developments of over 25 homes or 500m² of gross retail demonstrating the SuDS strategy, use of green infrastructure, and how the four pillars of SuDS have been integrated

The Guidelines recommend that the SFRA provide guidance on the likely applicability of different SuDS techniques for managing surface water run-off at key development sites, and also that the SFRA identifies where integrated and area based provision of SuDS and green infrastructure are appropriate in order to avoid reliance on individual site by site solutions.

Applications for Development in Areas at Risk of Flooding

The OPW welcomes the guidance for all development proposals in Section 5.9 of the SFRA, which is provided in a clear and concise format, in the form of a checklist.

Mitigation Measures

The Flood Mitigation Measures at Site Design outlined in Section 5.10 of the SFRA are welcomed by the OPW and provide guidance on how residual flood risk can be managed to acceptable levels.

Consideration of Climate Change Impacts

The OPW welcomes the discussion on climate change in the SFRA and in particular: the consideration of future scenarios when assessing flood risk and the allowance for climate change in setting finished floor levels. However, this discussion is focused on incorporating climate change into development design, and the Draft Plan has not addressed how climate change has been considered in the production of this development plan. Planning authorities can consider climate change impacts in the Plan-making Stage, 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. It should be noted that the flood maps prepared under the CFRAM, NIFM, NCFHM and ICPSS Programmes include maps for two potential future scenarios taking account of different degrees of climate impact. Consideration might be given to policy objectives in relation to climate change and flood risk.

Planning Circular PL02/2014

Several of the flood risk assessments for specific areas in section 7 of the SFRA reference that justification tests are required "As required by the Planning Circular PL15/02". The Planning Circular should be corrected to PL02/2014. This planning circular should also be listed in Appendix 2 – Statement of Compliance with Ministerial Guidelines.

Comments on Specific Areas

Ceannt Station

The commentary on this area states that "Flood mitigation measures were incorporated in the site specific flood risk assessment of current development proposals". In order to pass Part 3 of the Plan Making Justification Test, structural or non structural measures must be outlined to demonstrate that flood risk can be mitigated to an acceptable level.

Sandy Road Regeneration Site

The commentary on this area in section 7.9 of the SFRA states that "To satisfy Part 3 of the Justification Test a more comprehensive assessment of risks will be Required" and "Until this study is complete, development within Flood Zone A and B should be limited to Minor Development (Section 5.28 of the Planning Guidelines)". If this area has not passed the Plan Making Justification Test, these restrictions should be incorporated into the discussion in the Written Statement, where the commentary on flood risk states that they only restriction on development in the flood risk areas of the regeneration site is the requirement for an SSFRA which will be required to have regard to the Coirib go Cósta Galway City Flood Relief Scheme project.

If further information or input is required, please do not hesitate to contact the OPW.

Yours sincerely,

PP Conor Galvin

Flood Relief and Risk Management Division