

Strategic Flood Risk Assessment

for

Proposed Variation

(No. 29)

of the

**Dublin City Development Plan
2016-2022**

1.1 Introduction

Dublin City Council has commenced the preparation of proposed variation no. 29 for lands at 5-6 Malahide Road, Dublin 17. See Figure 1 below.

The OPW is the lead agency for flood risk management in Ireland. The coordination and implementation of Government policy on the management of flood risk in Ireland is part of its responsibility.

The European Communities (Assessment and Management of Flood Risks) Regulations 2010 (S.I. No. 122) identifies the Commissioners of Public Works as the 'competent authority' with overall responsibility for implementation of the Floods Directive 2007/60/EC.

The Office of Public Works is the principal agency involved in the preparation of Flood Risk Assessment and Management studies (FRAMs).

As a variation to the Dublin City Development Plan 2016 – 2022, the preparation of the proposed variation no. 29 documentation includes a Strategic Environmental Assessment (SEA) Screening, an Appropriate Assessment (AA) Screening and this document, which represents the Strategic Flood Risk Assessment (SFRA) of the variation.

The SFRA which was prepared as part of the Dublin City Development Plan (CDP) 2016 – 2022 and informed the preparation of the CDP had regard to the DEHLG Guidelines for Planning Authorities (DEHLG & OPW, 2009) on '*The Planning System and Flood Risk Management*' as amended by Circular PI2/2014 together with Technical Appendices.

These Guidelines (the 2009 Guidelines) were issued under Section 28 of the Planning and Development Act 2000 as amended, and require Planning Authorities to introduce flood risk assessment as an integral and leading element of Spatial Planning.

The Strategic Flood Risk Assessment (SFRA) is Volume 7 of the CDP, with Chapter 9 (Sustainable Environmental Infrastructure) of Volume 1, the Written Statement, of the CDP citing policies and objectives relating to Flood Management. Any future planning application arising from this variation will be required to comply with the flood risk management provisions from the City Development Plan.

1.2 The Proposed Variation

It is proposed to vary the Dublin City Development Plan 2016-2022 by changing the zoning of the subject lands at 5-6 Malahide Road, Dublin 17.

From: Zoning Objective Z6 – To provide for the creation and protection of enterprise and facilitate opportunities for employment creation,

To: Zoning Objective Z1 - To protect, provide and improve residential amenities.

The proposed draft variation area is delineated on the attached map.

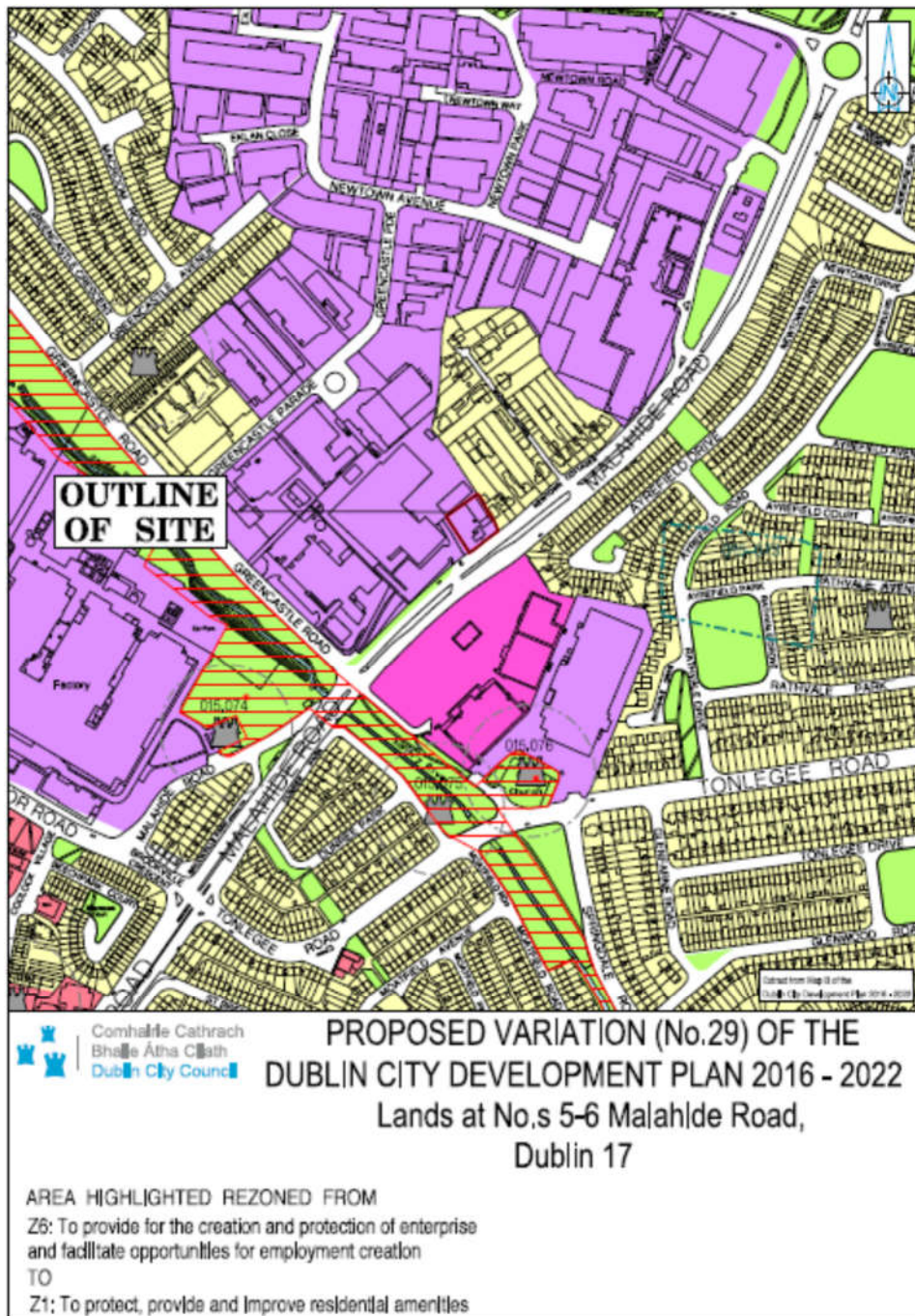


Figure 1 Location of proposed Variation No. 29

1.3 Purpose Of The Proposed Draft Variation

This site has an area of approximately 0.19 hectares and is located on the northern side of Malahide Road, between the Crown Paints Facility at nos. 1-3 Malahide Road and no. 1 Newtown Cottages. The site is occupied by two detached single storey dwellings and has two vehicular entrances and a pedestrian entrance onto Malahide Road.

The Planning Authority considers that it is appropriate to change the zoning of the subject lands from Z6 (Employment/Enterprise) to Z1 (Sustainable Residential Neighbourhoods). This Variation is required as a correction to the Z6 (Employment/Enterprise) zoning of these two houses which appear to have been zoned Z6 in error for the last three Development Plans and would be more appropriate to be zoned Z1 (Sustainable Residential Neighbourhoods), as the adjoining houses at Newtown Cottages are zoned.

The proposed rezoning of the site from Z6 to Z1 would both be more in keeping with the Z1 zoning of the adjoining dwellings at Newtown Cottages and would also allow for housing in this established residential suburb.

1.4 Planning Context

Under the *Dublin City Development Plan 2016-2022*, the 0.19ha site of the two dwellings is zoned Z6 Employment/Enterprise: 'To provide for the creation and protection of enterprise and facilitate opportunities for employment creation', similar to the Z6 Employment/Enterprise zoning on the adjoining site of the Crown Paints Facility to the north and west.

The adjoining site to the east at Newtown Cottages is zoned to Z1 Sustainable Residential Neighbourhoods: 'To protect, provide and improve residential amenities.'

The proposed variation to change the zoning of the subject lands from Z6 (Employment/Enterprise) to Z1 (Sustainable Residential Neighbourhoods) is required as a correction to the Z6 (Employment/Enterprise) zoning of these two houses which appear to have been zoned Z6 in error for the last three Development Plans and would be more appropriate to be zoned Z1 (Sustainable Residential Neighbourhoods), as the adjoining houses at Newtown Cottages are zoned.

Any planning application on the subject site will be required fully address its site specific flood risk requirements as part of a detailed planning application.

2.0 Flood Risk Guidance

The 2009 Guidelines recommend a staged approach to Flood Risk Assessment (pg 14):

Stage 1 – identify any flood risks issues

Stage 2 – where flood risk issues arise, identify the sources and access available mapping with flood risk extents

Stage 3 – detailed flood risk assessment

The CDP's SFRA provides a flood extents map for the entire are of the city. This comprises the three flood zone classifications identified in the Guidelines, Flood Zones A, B and C. Flood Zones A and B are described as being of high probability of flooding and moderate probability of flooding respectively and low probability of flooding for Flood Zone C (pg 24).

These are coloured coded (dark blue and lighter blue for Flood Zones A and B respectively) and where no colour is equivalent to Flood Zone C. Land-uses and types of development are accorded a vulnerability class, as set out in Table 3.1 of the Guidelines (pg 25). A matrix of what vulnerability class is appropriate for each flood zone has been provided in Table 3.2 of the Guidelines (pg 26).

The location of the Proposed Variation on the northern side of Malahide Road, between the Crown Paints Facility at nos. 1-3 Malahide Road and no. 1 Newtown Cottages is identified as lying in Flood Zone C – low probability of flooding. Dwelling houses are identified as highly vulnerable development under the classification of vulnerability of different types of development in the Guidelines. Table 3.2 of the Guidelines illustrates that highly vulnerable development, such as dwelling houses, are “appropriate” in areas identified as lying within Flood Zone C, which are areas with a low probability of flooding.

The lands are located in the catchment of the Santry River with Pluvial Flood Hazard & Pluvial Flood Depth (1% AEP Event): Low (0.0m to 0.2m).

The proposed variation forms part of a site that has been studied in closer detail under Appendix 3 Justification Test Tables of the Strategic Flood Risk Assessment of the Dublin City Development Plan 2016–2022, as set out below. This site is Site: 28. Santry River: DART Railway – Boundary and is described as follows: “Development in this area is mainly low to medium density Residential with some Commercial areas close to the river but current flood risk appears to be outside of existing development areas.”

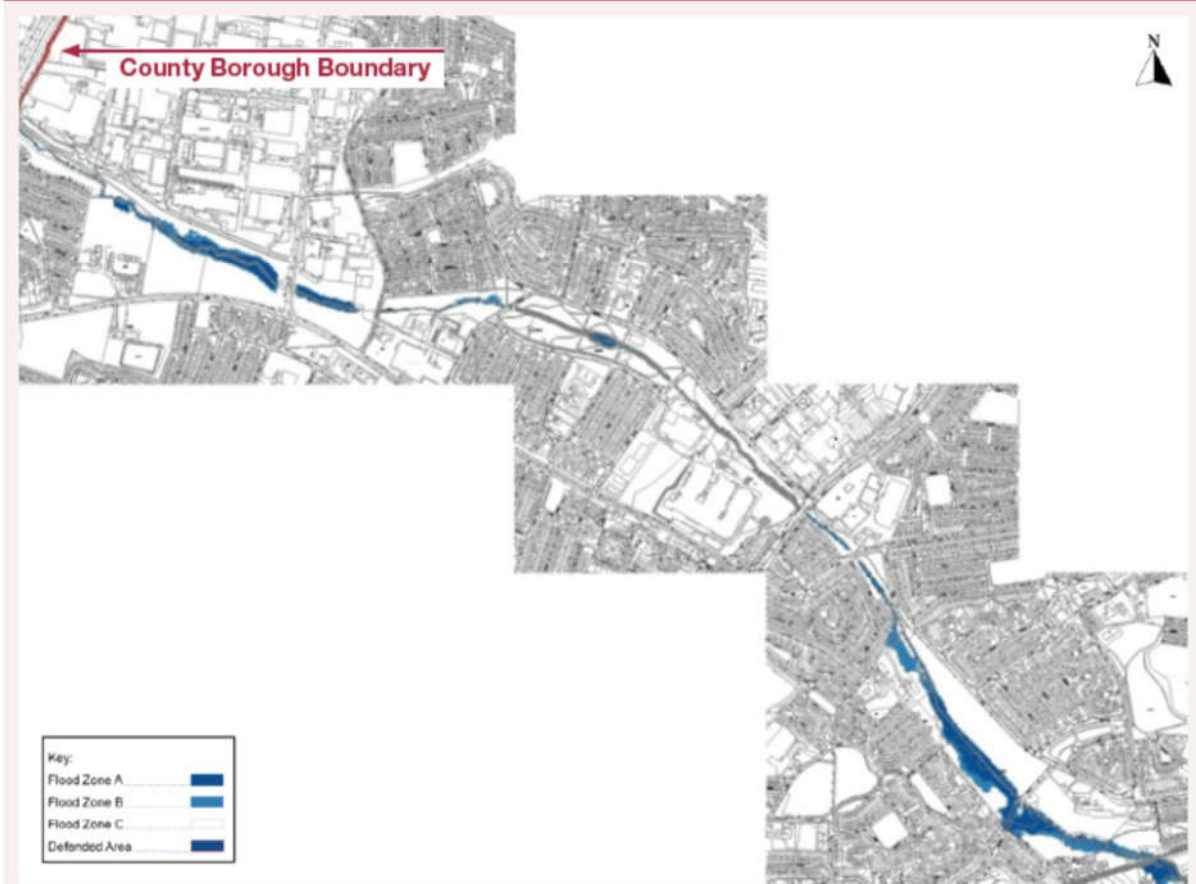


Figure 2 – extract from Appendix 3 Strategic Flood Risk Assessment of the Dublin City Development Plan 2016–2022

3.0 Conclusion

The Flood Risk Assessment for the Proposed Variation no. 29 at 5-6 Malahide Road has been undertaken in accordance with the requirements of Section 28 Guidelines for Planning Authorities: *'The Planning System and Flood Risk Management'*, 2009.

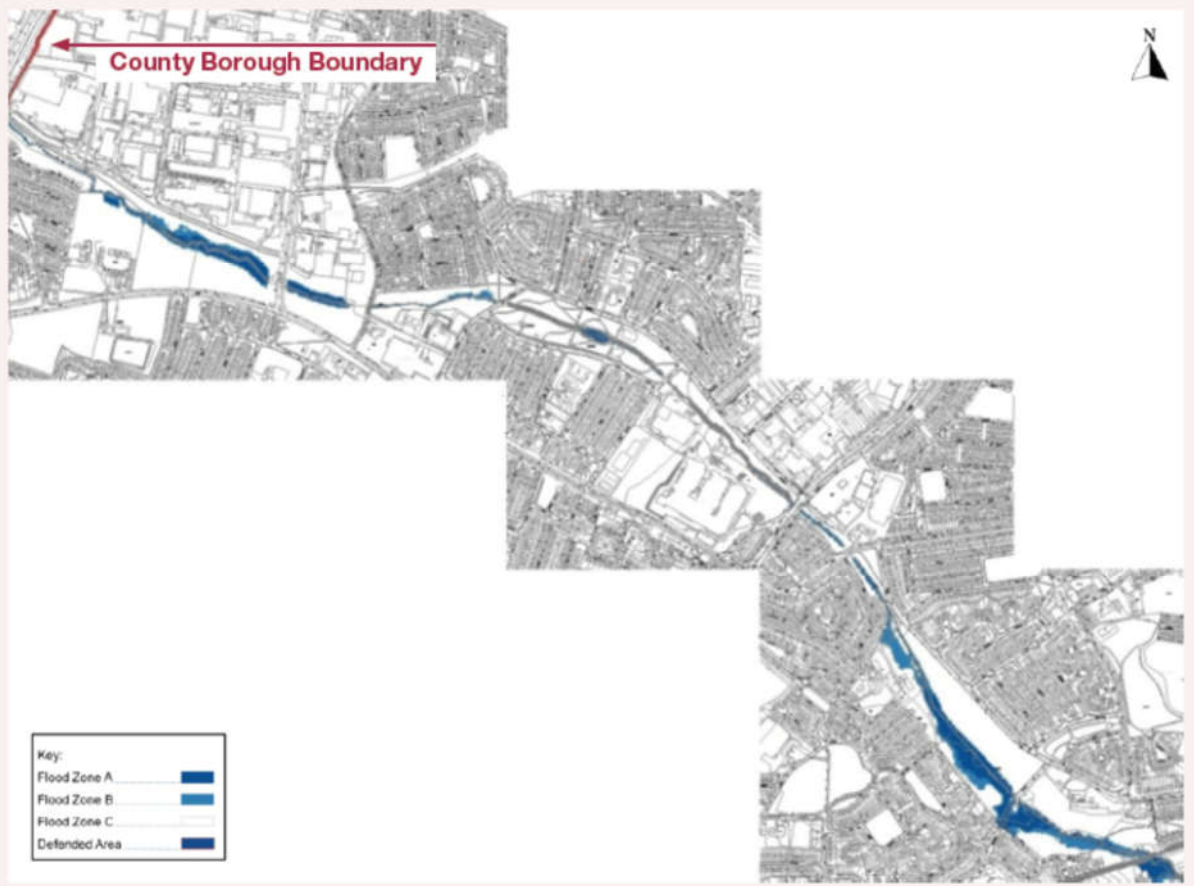
Any future planning proposal for development will be required to comply with the Greater Dublin Strategic Drainage Study for surface water management. Having carried out flood risk assessment in accordance with the above Guidelines the following has been determined:

The site is located within Flood Zone C where there is a low probability of flooding and any development of the site would be required to comply with Objective SIO8 of the Dublin City Development Plan 2017-2022 which requires all development proposals to carry out, to an appropriate level of detail, a Site-Specific Flood Risk Assessment. The proposed variation from Z6 (Employment/Enterprise) to Z1 (Sustainable Residential Neighbourhoods) would allow for highly vulnerable uses on the site, such as dwelling houses, which under the above Guidelines are considered "appropriate" in areas identified as lying within Flood Zone C (areas with a low probability of flooding).

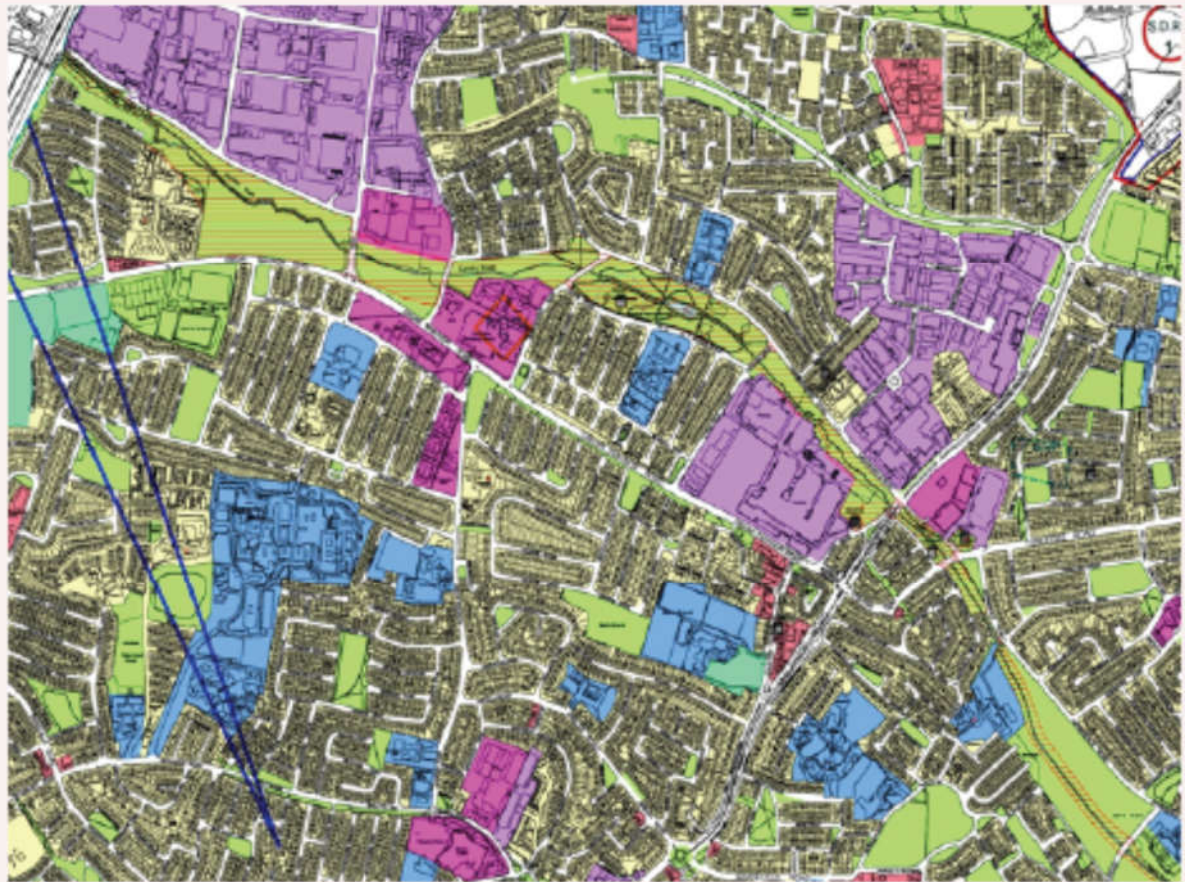
The proposed variation and any future planning application arising from same that adequately addresses through detailed design the flood risk requirement as part of the planning application process, is not likely to change flood risk in the area, upstream or downstream and as a use will not endanger the lives or livelihoods of persons.

Appendix A: Site 28. Santry River: DART Railway – Boundary: Appendix 3, Volume 7, Dublin City Development Plan 2016-2022

Site: 28. Santry River: DART Railway - Boundary



Site: 28. Santry River: DART Railway - Boundary



Dublin City Council Development Plan 2016–2022 (zoning map key at back of tables)

<p>Site Description</p>	<p>This area is upstream of the DART line and includes a park with small pedestrian bridge, which is a flood plain to Harmonstown Road which has a flood defence incorporated in it. It runs to the rear of Moatfield Road to Tonleage Road to the Malahide Road, to Barryscourt Road, Clonshaugh Road and south of Clonshaugh Industrial Estate to M50 boundary. Flood risk areas include green areas adjacent to river which act as flood plains.</p> <p>Development in this area is mainly low to medium density Residential with some Commercial areas close to the river but current flood risk appears to be outside of existing development areas.</p>
<p>Benefitting from Defences (flood relief scheme works)</p>	<p>This area of parkland downstream of Harmonstown Road to the DART line benefits from new flood defences up to the 100-year flood level. The rest of this area apart from bridge restrictions does not benefit from flood defences.</p>
<p>Sensitivity to Climate Change</p>	<p>Generally low – Flood Zones A and B show some difference in extent, but this is largely within open space and parkland so will not impact on existing development.</p>
<p>Residual Risk</p>	<p>There are no defences.</p>
<p>Historical Flooding</p>	<p>The flood maps attached are consistent with previous flooding of this section of the Santry River, pre and post new defence works.</p>

Site: 28. Santry River: DART Railway - Boundary

Storm (surface) water

At low portions of Moatfield Road high river flows combined with heavy rainfall have caused some backing up of the drainage network and largely pluvial flooding. All storm (surface) water in this area needs to be carefully managed and provision made for significant rainfall events during high river flows. Should development be permitted, best practice with regard to storm (surface) water management should be implemented across the development area and in the catchments of the Narikan and Santry Rivers which have some interlinkage, to limit storm (surface) water runoff at least to current values.

All Developments shall have regard to the Pluvial Flood Maps in their Site Specific Flood Risk Assessment, see Flood Resilient City Project, Volume 2 City Wide Pluvial Flood Risk Assessment at <http://www.dublincity.ie/main-menu-services-water-waste-and-environment-drains-sewers-and-waste-water/flood-prevention-plans>

Commentary on Flood Risk:

The flood extents indicate flow paths generally coming directly out of the river channel by over ground routes and then returning to the river the same way or via the existing drainage network.

The flood maps were produced based on the OPW CFRAM Study and checked against historic flooding in the area.

Development Options:

Most of the Flood Zones in this portion of the Santry Catchments are in green areas which should be maintained. Residential with some Commercial development (some infill) would be a natural extension of existing development in this portion of the Santry River.

Justification Test for Development Plans

- The areas located in Flood Zones A and B are primarily parkland, which is water compatible and should be retained. The Justification Test confirms that development in most of these areas is not justified.