

This submission is made by Downey Planning, on behalf of our client Destrina Ltd, and is submitted to Offaly County Council in the context of the Draft Offaly County Development Plan 2021-2027 which is currently on public display. Our client, Destrina Ltd, owns land at Cloncollig, Portarlington Road, Tullamore, Co. Offaly. In the current Development Plan, the land is zoned "Mixed Use" under the current Development Plan pertaining to the area. Under the Draft Development Plan, the land is zoned "Open Space, Amenity and Recreation" and designated as a "constrained land use". Our client proposes to rezone the lands to "Enterprise/Employment", which is in line with the adjoining lands to the west and south and to remove the Flood Zone A designation from the lands. A copy of the detailed submission and flood risk report is attached.

October 2020

Development Plan Submission



**Draft Offaly Development Plan
2021-2027 (Stage 2)**

**Lands at Portarlinton Road, Cloncollig,
Tullamore**

On behalf of: Destrina Ltd



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Executive Summary

- This submission is made by Downey Planning, on behalf of our client Destrina Ltd, and is submitted to Offaly County Council in the context of the Draft Offaly County Development Plan 2021-2027 which is currently on public display.
- Our client, Destrina Ltd, owns land at Cloncollig, Portarlinton Road, Tullamore, Co. Offaly. The lands are on the northern side of the R420 Road and is generally bound by the new Aldi Supermarket to the west, greenfield land to the north and east and the R420/Applegreen and Tesco to the south. There are currently 2 no. derelict bungalows located on the lands.
- In the current Development Plan, the land is zoned “Mixed Use” under the current Development Plan pertaining to the area. Under the Draft Development Plan, the land is zoned “Open Space, Amenity and Recreation” and designated as a “constrained land use”.
- Our client proposes to rezone the lands to “Enterprise/Employment”, which is in line with the adjoining lands to the west and south.
- It is submitted that the basis for the lands being proposed as ‘Open space, amenity & recreation’ is due to them being identified within Flood Zone A under the Strategic Flood Risk Assessment prepared as part of the Draft Development Plan. However, our client has engaged JBA Consulting Engineers to prepare a site specific flood risk assessment, which is more up to date than the Development Plan’s SFRA and this confirms that the lands are not within Flood Zone A and as such would be suitable for a commercial land use.
- The rezoning of the subject lands to Enterprise and Employment use will facilitate further jobs growth within Tullamore, which is in accordance with the policies and objectives of the Development Plan and national and regional planning.
- It represents an opportunity for consolidation of this commercial area of the town rather than being left as an unsightly, derelict site. An open space designation would not be conducive to the established development in the area.

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<i>Downey Planning Document Control</i>			
	Name	Date	Version
Prepared by	Donal Duffy MIPI	2 nd October 2020	V_01_DRAFT
Prepared by	Donal Duffy MIPI	5 th October 2020	Final
Approved by	Eva Bridgeman MIPI	6 th October 2020	Final

1.0 Introduction

In accordance with Section 9, 10, 11 and 12 of the Planning and Development Act 2000 (as amended), Downey Planning, Chartered Town Planners, 1 Westland Square, Pearse Street, Dublin 2, on behalf of our client, Destrina Ltd., Marine House, Clanwilliam Court, Dublin 2, wish to make this submission to Offaly County Council regarding the Draft Offaly County Development Plan 2021-2027.

This written submission is made in response to an invitation for comments from interested parties by Offaly County Council. This submission is being made within the specified timeframe for submissions i.e. 7th October 2020, as set out on the Draft Development Plan's website.

The submission seeks the rezoning of approximately 1.01 hectares of our client's lands on the northern side of the R420 Portarlinton Road in Tullamore from 'Open space, amenity and recreation' to 'Enterprise and Employment' use.

2.0 Planning Legislation

Section 9 of the Planning and Development Act, 2000 (as amended) provides that, subject to the requirements set out in Section 9, 10, 11 and 12 of the Act, that a planning authority must adopt a new Development Plan every six years. The contents of the Development Plan are set out within Section 10 of the Planning and Development Act, 2000 (as amended) and must include a strategy for the proper planning and sustainable development of the area of the Development Plan and shall consist of a written statement and a plan or plans indicating the development objectives for the area in question. The process for the preparation of the Draft Development Plan is contained within Section 11 of the Planning and Development Act, 2000 (as amended) and the consultation process of the Draft Development Plan is contained within section 12 of the Planning and Development Act, 2000 (as amended), which states:

"12 - (1) Where the Draft Development Plan has been prepared in accordance with section 11, the planning authority shall within 2 weeks of the period referred to in section 11(5)(c)—
(a) send notice and a copy of the Draft Development Plan to the Minister, the Board, the relevant regional authority, the prescribed authorities, any town commissioners in the area and any city or county development boards in the area, and
(b) publish notice of the preparation of the draft in one or more newspapers circulating in its area.

(2) A notice under subsection (1) shall state that—
(a) a copy of the draft may be inspected at a stated place or places and at stated times during a stated period of not less than 10 weeks (and the copy shall be kept available for inspection accordingly), and
(b) written submissions or observations with respect to the draft made to the planning authority within the stated period will be taken into consideration before the making of the plan".

This submission to the draft of the Development Plan is being made in accordance with Section 12 (2) (b) of the Planning and Development Act, 2000 (as amended) and is being submitted within the

specified timeframe (7th October 2020) as set out on the website of the Offaly County Development Plan 2021-2027.

3.0 Site Location and Description

The subject lands, extending to approximately 1.01 hectares (2.5 acres), are located at Cloncollig, Portarlington Road, Tullamore, Co. Offaly. The lands are on the northern side of the R420 Road and is generally bound by the new Aldi Supermarket to the west, greenfield land to the north and east and the R420/Applegreen and Tesco to the south. There are currently 2 no. derelict bungalows located on the lands.

The surrounding area is very much commercial in nature with a large Tesco Extra and retail park to the south of the site and a new Aldi store to the west. The Portarlington Road serves a business/industrial park to the west and the Tullamore Leisure Centre (Aura) is also west of the site. The site enjoys excellent connectivity and accessibility given its location on the Portarlington Road and just off the N52 bypass of Tullamore.



Figure 1. Site Location (with subject lands outlined in red)



Figure 2. Aerial view of subject lands (outlined in red)

4.0 Planning History

Downey Planning have carried out a detailed examination of the planning history pertaining to the subject lands and surrounding area, which is summarised as follows:

No.	1
Application number	061041
Applicant name	Destrina Limited
Address	Cloncollig, Portarlinton Road, Tullamore
Description	Demolition of two no. Dwellings and for the construction of a retail warehouse (total gross floor area 3157 sq.m.) Comprising 3 no. Retail units, including associated signage of 163.50 sq.m., that is 4 no. Front fascia signs of 18.25 sq.m., 3 no. Signs to rear elevation of 9.66 sq.m. And a 3 faceted totem pole signage of 62.01 sq.m. Esb sub-station, 2 no. Waste compactors, 134 no. Surface car parking spaces, surface water attenuation, landscaping and ancillary site development works with vehicular access from portarlinton road, all on a 1 hectare site
Decision	Refused
Final Decision Date	30/08/2007

No.	2
Application number	1031
Applicant name	Myles Shortall & Ralph & Michael Parkes
Address	Cloncollig, Portarlinton Road, Tullamore, Co. Offaly
Description	Development which will consist of a retail warehouse and business/enterprise development with a total gross floor area of 8,274sq.m. Incorporating the following: a standalone diy/hardware unit with ancillary warehouse and staff accommodation (totalling 2,836sq.m.), associated outdoor garden centre and delivery compound; a single level, mixed use building (totalling 5,438sq.m.) Incorporating 5 no. Business/enterprise units and 2 no. Retail warehouse units and associated delivery compound. Permission is also sought for 262 no. Car parking spaces, esb substation, hard and soft landscaping including a pedestrian riverside walk, signage, bin storage and all ancillary site and development works. Vehicular and pedestrian access to the development is proposed from the portarlinton road via a new roundabout which is to be constructed under the current application. Site area 3.15 hectares
Decision	Refused
Final Decision Date	20/04/2010

No.	3
Application number	061024
Applicant name	Aldi Stores (Ireland) Ltd
Address	Cloncollog, Tullamore, co. Offaly
Description	Construction of extension of the existing single storey discount foodstore (as permitted under reg. Ref: 99/379) by 337 sq.m. The gross floor area of the store will increase from 1,144 sq.m. (net retail area of 760 sq.m.) To 1481 sqm (net retail area 1079 sqm) the extended store will be served by 191 car parking spaces. The proposed development includes all site development works on the 0.745 ha site.
Decision	Granted (conditional)
Final Decision Date	07/11/2006

No.	4
Application number	0997
Applicant name	Arkencourt Ltd
Address	Riverview Commercial Park, Cloncollig, Tullamore, Co. Offaly.
Description	Demolition of the existing NCT industrial building and the construction of a retail warehouse building with ancillary service yard and loading area, plant rooms, car park, drainage and all associated site development works. Access will be via the realigned road and roundabout, permitted under planning permission 08/55
Decision	Granted (conditional)
Final Decision Date	18/11/2009

No.	5
Application number	04254
Applicant name	Arkencourt Ltd
Address	Cloncollig, Tullamore, Co. Offaly
Description	Amendment of grant of permission 01/651 retail park (Tullamore retail park) to include (a) removal of condition 6 in relation to unit D to allow use as a catalogue retail store and in relation to unit H to allow use as a neighbourhood retail centre (b) alterations to size of unit F (from 720 sq m. To 900 sq m.), unit g (from 720 sq m to 1620 sq m) and unit H (from 1944 sq m. To 1296 sq m.), unit H will be sub divided to form 3 separate units of 360 sq m. Each, and mall area (non retail) of 216 sq m. And will include revised elevational treatment and roofline (c) increase in overall floor area of 432 sq. M (d) minor modifications to elevations of each unit including additional windows to unit a (e) alterations to site layout including revised car park and internal road layout construction of sprinkler pump house (14.9 sq m) and water tank, ESB substation and electrical plant room (28.7 sq m) refuse storage and recycling area and revised layout to DIY/garden centre layout at unit A.
Decision	Granted (conditional)
Final Decision Date	19/05/2004



Figure 3. Planning History Map (subject lands outlined in red)

5.0 Planning Context

Having set out the location and history of the subject lands, this submission shall now set out the planning context of the subject lands.

5.1 National Planning Context

Project Ireland 2040: National Planning Framework

The National Planning Framework (NPF) is *“the Governments high-level strategic plan for shaping the future growth and development of our country out to the year 2040”*. It is a Framework to guide public and private investment, to create and promote opportunities for our people, and to protect and enhance our environment- from our villages to our cities and everything in between. It is stated within the National Planning Framework that *“a major new policy emphasis on renewing and developing existing settlements will be required, rather than continual expansion and sprawl of cities and towns out into the countryside, at the expense of town centres and smaller villages”*.

The NPF recognises the strategic location of the Midlands and that this strategic, central location can be leveraged to enable significant strategic investment to a greater extent than is currently happening.

The NPF sets out a number of ‘Key future planning and development and place-making policy priorities for the Eastern and Midland Region’, including *“more effective strategic planning and coordination of the future development of nationally and regionally strategic locations at points that straddle between this and neighbouring regions”*. Tullamore would be an example of such a strategically important town.

In terms of economic prosperity and growth, National Policy Objective 5 of the NPF seeks to *“Develop cities and towns of sufficient scale and quality to compete internationally and to be drivers of national and regional growth, investment and prosperity”*.

National Policy Objective 11 states: *“in meeting urban development requirements, there will be a presumption in favour of development that can encourage more people and generate more jobs and activity within existing cities, towns and villages, subject to development meeting appropriate planning standards and achieving targeted growth”*. It is respectfully submitted that these subject lands would enable the economic and employment development of Tullamore in an appropriate manner within the existing urban envelope of the town.

5.2 Regional Planning Context

Eastern and Midlands Regional Spatial and Economic Strategy (2019)

The Regional Spatial and Economic Strategy (RSES) identifies Tullamore as a Key Town. The RSES describes a Key Town as *“large economically active service and/or county towns that provide employment for their surrounding areas and with high-quality transport links and the capacity to act as a growth driver to complement the Regional Growth Centres”*.

The RSES states that Tullamore acts as a Gateway to the south, west and northwest. It also stresses that Tullamore provides functions at a much higher level than the resident population level with regards to employment and services.

The RSES sets out a number of Regional Policy Objectives for Tullamore, including:

RPO 4.69: *“Support the role of Tullamore as a major employment centre with key assets being its existing positive jobs to resident employee ratio, excellent quality of life and future strategic development sites, with support for the provision of enabling and facilitative infrastructure development to complement this role”.*

RPO 4.70: *“To examine the need for complementary third level outreach educational facilities at Tullamore, particularly with regard to support for Tullamore Regional Hospital and where appropriate, its continued development as a Teacher/University Hospital, together with potential for linkages to existing and new med-tech businesses and research facilities”.*

It is respectfully submitted that the proposal in the Draft Plan to dezone the lands to open space, amenity and recreation prevents these objectives from being achieved. Therefore, the basis of this rezoning submission for the lands to be appropriately zoned ‘enterprise/employment’ is consistent with these objectives of the RSES.

5.3 Local Planning Context

Draft Offaly County Development Plan 2021-2027)

As stated, the Draft Development Plan and Tullamore Town Zoning Map proposes that the lands be rezoned to ‘Open Space, amenity and recreation’ and be designated as constrained within Flood Zone A.

Under this land use zoning objective, it is an objective of the Council to:

“Protect and improve the provision, attractiveness, accessibility and amenity value of public open space, amenity and recreation”.

The subject site does not meet any of the characteristics of this zoning objective given that there are two vacant dwellings on the site, and it is adjacent to a business park and two major roads – the R420 and N52. The lands are in private ownership and do not form part of any public open space or amenity space.

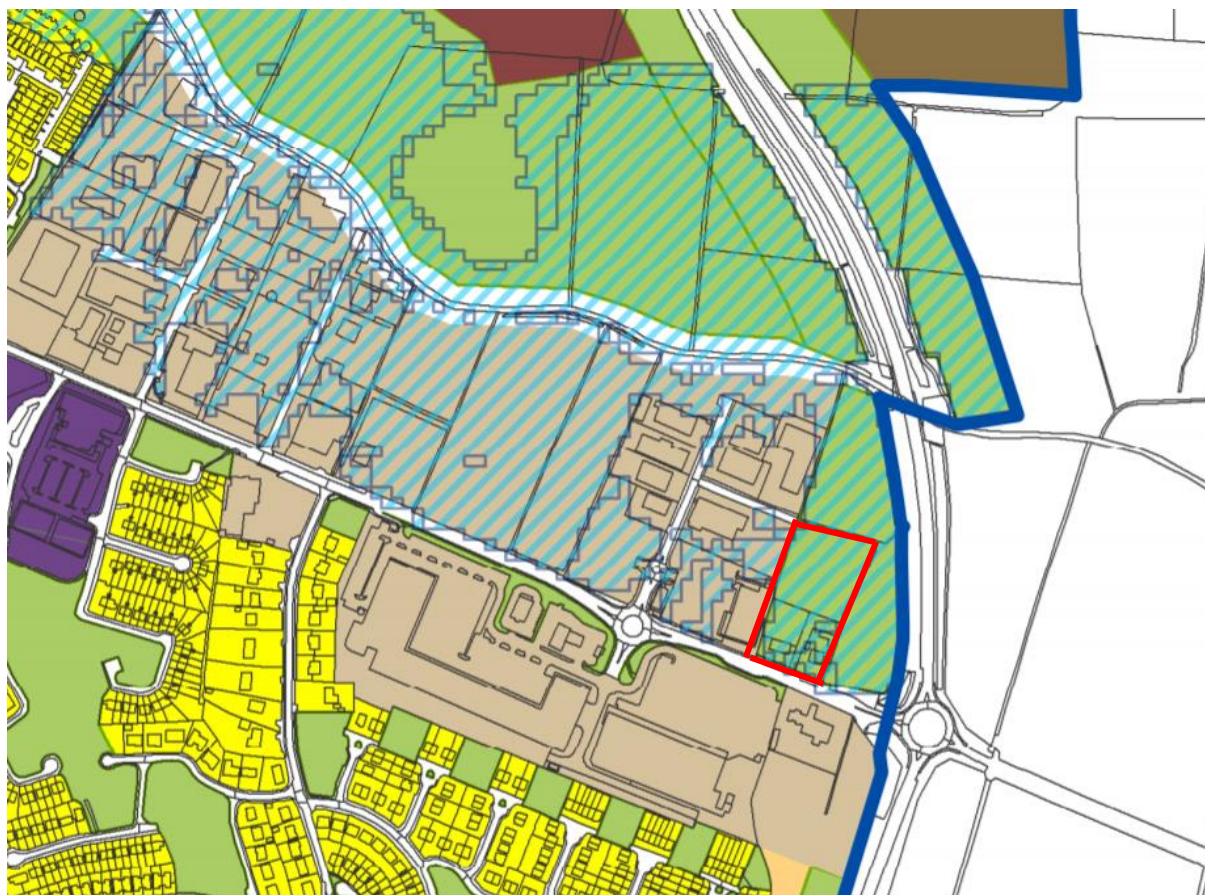


Figure 4. Land Use Zoning in the Draft Development Plan 2021-2027 (subject site outlined in red)

Tullamore is identified as ‘The Key Town’ in the Draft Development Plan, which is in keeping with its designation under the RSES (2019). Chapter 5.4.3 of the Draft Plan states that Tullamore is a “*major employment, retail and services centre with key assets being its existing jobs to resident works’ ratio, excellent quality of life and future strategic development sites known as ‘Strategic Employment Zones’*”. The Draft Plan sets out a number of policies that support economic growth within the County, including Tullamore and the rezoning of the subject lands for enterprise and employment, similar to the adjoining lands, would be consistent with these policies.

ENTP-02: *“It is Council policy to facilitate and work pro-actively with interest groups (both public and private sector) in the location of industry, business and enterprise in particular by zoning of lands for enterprise development and activity which can facilitate the provision of large-scale and small-scale development, as appropriate. This includes the identification and possible reservation of lands at suitable locations, which will accommodate, where appropriate - for example, business/technology activity, industry, enterprise and retail having regard to proper planning and sustainable development. The Council will protect zoned lands from inappropriate development that would undermine future economic activity or the unsustainable development of such areas”.*

The zoning of the subject site for ‘enterprise/employment’ use, as opposed to ‘open space, amenity & recreation’ is consistent with this policy and will facilitate economic growth and job creation on serviced and accessible lands within an existing commercial setting in the Key Town of Tullamore.

ENTP-07: *“It is Council policy to strengthen and channel development into Tullamore the primary driver for economic development within the county, which is designated as a Key Town in the Regional Spatial and Economic Strategy”.*

In this regard, the zoning of the subject lands in accordance with this submission will facilitate future development on the lands in a manner that is consistent with policy ENTP-07.

ENTO-03: *“It is an objective of the Council to facilitate the development of Tullamore, a Key Town under the Regional Spatial and Economic Strategy, in accordance with regional policy. This will include measures to seek to reserve lands within Tullamore to make provision for potential nationally and regionally significant activities and to attract specialist large-scale enterprise development within the county”.*

ENTO-04: *“It is an objective of the Council to identify and quantify suitable locations in Tullamore for strategic employment development, for large scale employment and enterprise activity”.*

It is respectfully submitted the zoning of these lands for ‘enterprise/employment purposes is consistent with objectives ENTO-03 and ENTO-04 of the Draft Development Plan.

6.0 Justification and Grounds of Rezoning Submission

This planning submission proposes a change to the zoning objective of the subject lands under the Draft Offaly County Development Plan 2021-2027 from “Open space, amenity and recreation (its draft land use zoning) to “Enterprise and Employment”. It is also seeking to remove the designation as “constrained land use” due to alleged flood risk. In doing so it seeks to support the creation of new opportunities for employment creation and appropriate development of this urban and serviced site.

Downey Planning have set out in Section 5 of this report how the proposed rezoning of the subject lands would be consistent with national, regional and local planning policy. Notwithstanding this, Downey Planning shall now set out further justification regarding the grounds of this rezoning submission.

6.1 Flood Risk Analysis

The Draft Development Plan has designated the subject site and surrounding area as being a ‘constrained land use’. Section 12.6.1 of the Draft Plan sets out that this designation will seek to limit new development and will require any proposals to be accompanied by a detailed Flood Risk Assessment. Proposals shall only be considered favourably where it is demonstrated to the satisfaction of the Planning Authority that they would not have adverse impacts or impede access to a watercourse, floodplain or flood protection and management facilities, or increase the risk of flooding to other locations. Specifically, under Objective LUZO-14, it is an objective of the Council to:

“Facilitate the appropriate management and sustainable use of flood risk areas designated as ‘Constrained Land Use’ on Settlement Plan zoning maps”.

Downey Planning, on behalf of our client, seek to have this designation removed from the subject site. This is being requested as a result of a more recent and site-specific flood risk assessment that has been carried out by JBA Consulting on behalf of our client in 2019 and updated 2020. The basis of the

current flooding designation on the lands appears to be from the Tullamore FRAM model, which was carried out in 2008 after flooding in Tullamore. However, JBA found a number of observations of interest with the 2008 study, which would suggest that some errors in the modelling may have occurred, such as no account being taken of drainage scheme works and also the use of a high 'Manning's N Value of 0.55 for channel roughness.

Following a very detailed and robust assessment, JBA identified that part of our client's site is actually outside a flood risk zone while the remainder (to the rear) is within Flood Zone B. This is a significant departure from the SFRA prepared as part of the current Draft Development Plan and would confirm that the subject site is suitable for commercial development.

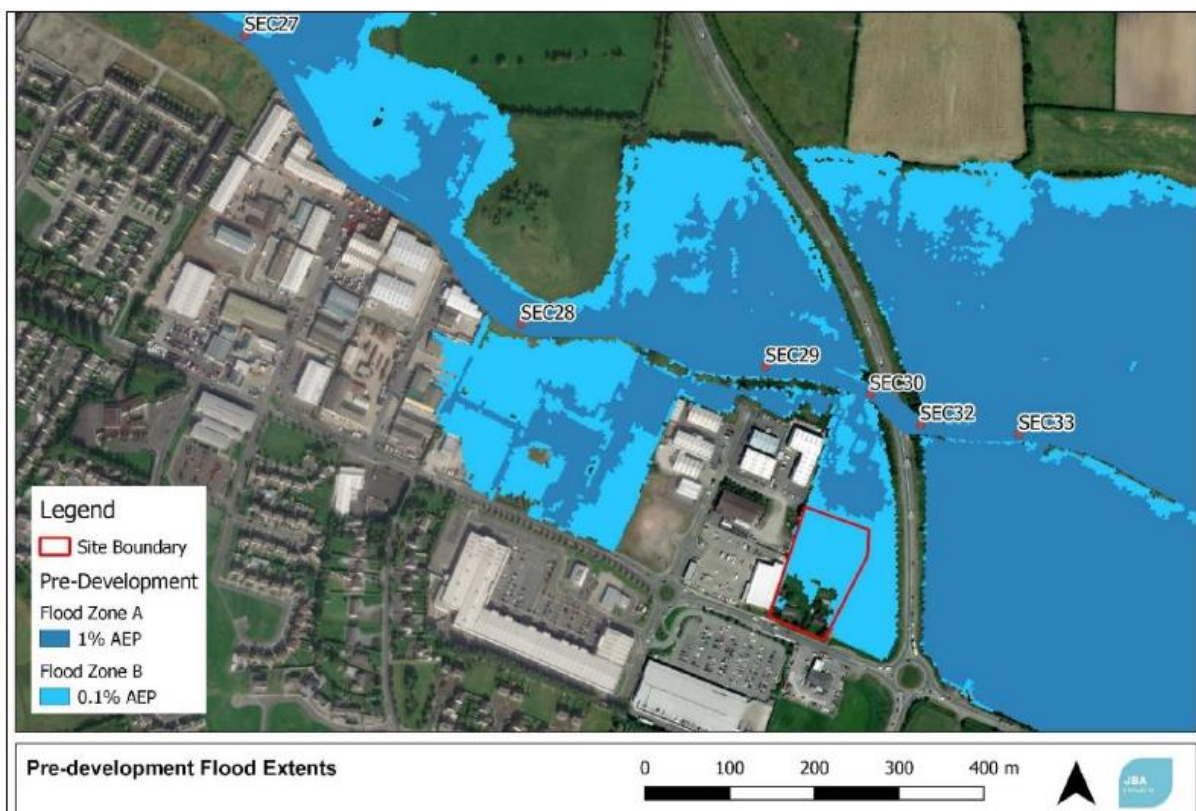


Figure 5. Pre-development flood extents with subject site outlined in red (Source: JBA Consulting)

As stated, the JBA site-specific flood risk assessment has confirmed that the subject site does not lie within a high-risk flood zone (flood zone A). Rather, it is partly in zone C and Zone B. The post-development assessment for the site also found that a commercial development, i.e. large warehousing/commercial block, which would be designed with a finished floor level above the 1% AEP flood plus allowing for climate change, would not give rise to the displacement of any waters to third party lands and would not result in increased flood risk elsewhere.

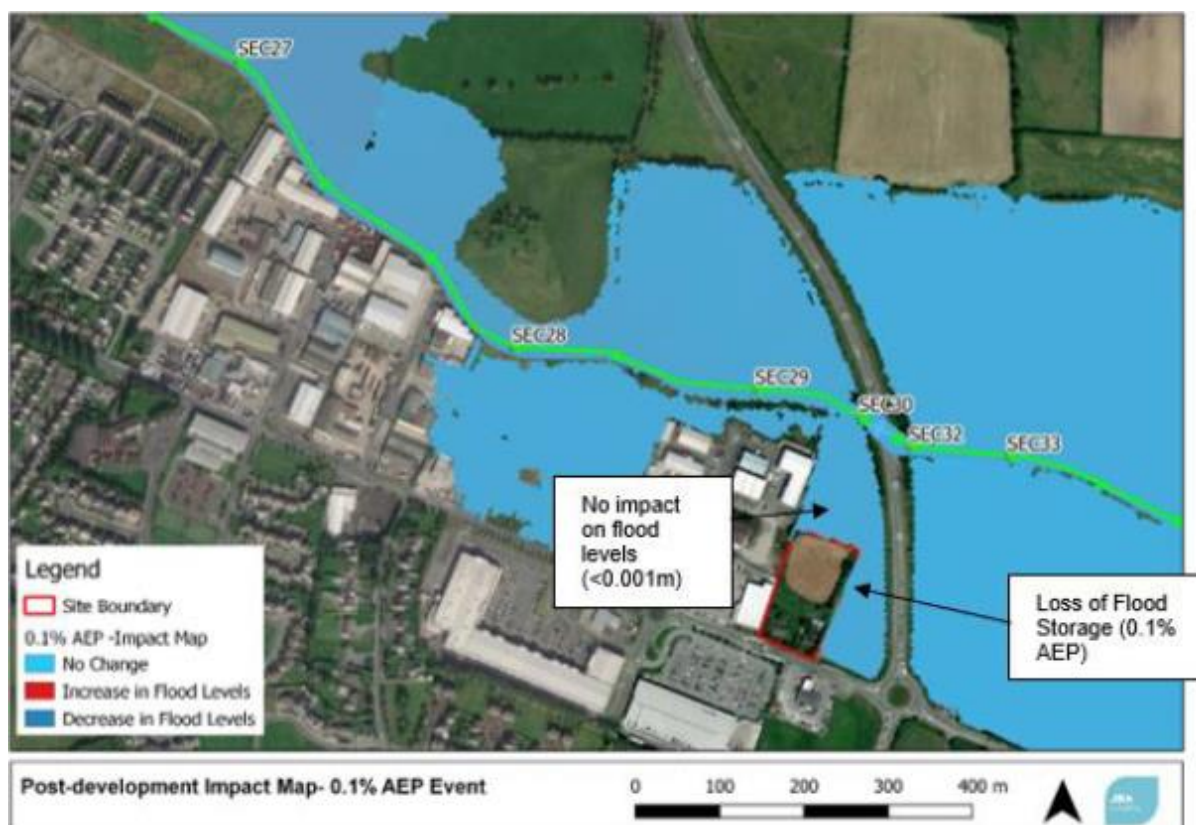


Figure 6. Potential post-development flood extents with subject site outlined in red (Source: JBA Consulting)

It is respectfully submitted that there is no rationale to have the subject lands designated as a flood zone A, which has a dramatic effect on the development potential of our clients lands which are within the existing urban area of Tullamore and are access and serviceable.

In light of this, Downey Planning respectfully request that the subject lands be removed from the Flood Zone A of the Development Plan's SFRA and that they be enabled for future commercial development, in accordance with the Planning System and Flood Risk Guidelines (2009).

6.2 Appropriate Location and Proximity to Supporting Services and Commercial Activities

The subject site is located on lands that are within the built-up area of Tullamore and specifically within the heart of the commercial and enterprise/employment area of Tullamore. As stated previously, Tullamore Retail Park and Tesco Extra is located directly to the south of the site and a business park is located to the west. The N52 bypass of Tullamore is located just east of the site and accessed via the Cloncollig Roundabout. The N52 provides excellent connectivity to the wider regional area, including the M6 motorway.

The subject site forms part of a wider cluster of commercial lands, which are outlined above, and it is important to note that they are currently zoned for commercial development purposes under the existing Development Plan pertaining to the area. In this regard, this submission does not seek to extend the development boundary of Tullamore into previous greenfield lands that are removed from

the necessary infrastructure. Rather, the proposal seeks to retain a commercial zoning on the lands, which are brownfield in nature given the existing buildings on the site.

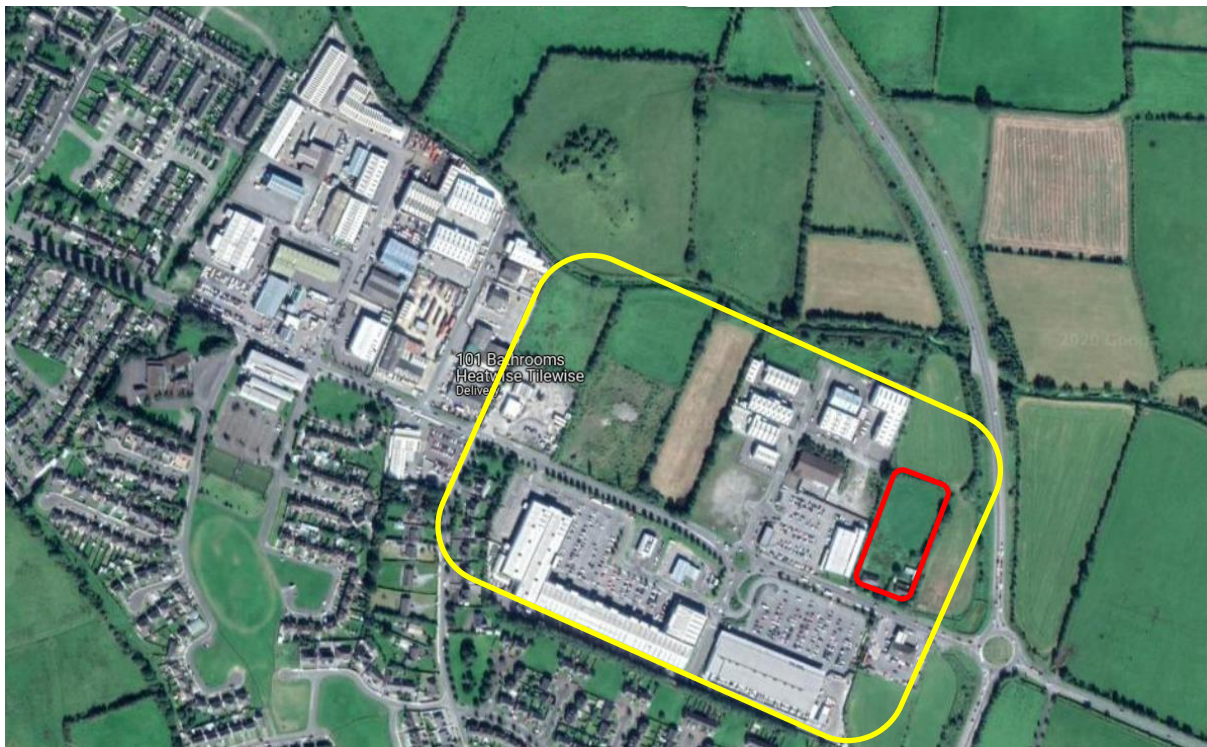


Figure 7. Commercial cluster (outlined in yellow and subject site outlined in red)

The retention of a commercial zoning on the lands will also prevent pressure on Tullamore to provide other commercial developments on peripheral lands that may not be as well served by infrastructure (roads, water services) and which would not have the same synergistic benefits that this site enjoys given its juxtaposition with other commercial and retail uses, which will promote sustainable transport. Placing a commercial land use zoning on the lands (enterprise and employment) would represent an opportunity for consolidation of this commercial area of the town rather than being left as an unsightly, derelict site. An open space designation would not be conducive to the established development in the area.

6.3 Transportation Considerations

The subject site is strategically located adjacent to major roads such as the N52, which ensures that any HGV's that may serve the site (at construction or operational phases) do not necessarily need to travel through to the town centre or residential areas, which can be constrained.

Furthermore, the site is within walking distance of residential areas of Tullamore, which would enable potential future employees the ability to walk or cycle safely to the site rather than having to travel by private car. This sustainable form of transport is supported within the Draft Development Plan.

7.0 Conclusion

This submission has been prepared by Downey Planning on behalf of our client, Destrina Ltd., Marine House, Clanwilliam Court, Dublin 2, wish to make this submission to Offaly County Council regarding the Draft Offaly County Development Plan 2021-2027.

Our client is seeking to have the Flood Zone A designation removed from the subject site as a site-specific flood risk assessment has determined that this does not apply to the site itself. It is also proposing that the lands be rezoned to “Enterprise/Employment”, which is in line with the adjoining lands to the west and south.

Section 5 of this submission has identified that the rezoning of the lands to residential use is in accordance with national, regional and local planning policy. Furthermore, the rezoning of the subject lands is justified on the following grounds:

- It is submitted that the basis for the lands being proposed as ‘Open space, amenity & recreation’ is due to them being identified within Flood Zone A under the Strategic Flood Risk Assessment prepared as part of the Draft Development Plan. However, JBA Consulting Engineers site-specific flood risk assessment, which is more up to date than the Development Plan’s SFRA and this confirms that the lands are not within Flood Zone A and as such would be suitable for a commercial land use.
- The rezoning of the subject lands to Enterprise and Employment use will facilitate further jobs growth within Tullamore, which is in accordance with the policies and objectives of the Development Plan and national and regional planning policies and objectives, including the NPF and RSES.
- The zoning of the site for commercial development (Enterprise and Employment) would facilitate sustainable modes of transport due to its proximity to existing residential and commercial areas and thus minimising the needs for people to travel to the site by private car.

In light of this, Downey Planning respectfully request that Offaly County Council amend the Draft Offaly County Development Plan 2021-2027 by changing the zoning objective for the subject lands from “open space, amenity and recreation” to “enterprise and employment” and to remove the Flood Zone A designation from the lands.

Appendix 1 – JBA Consultants Flood Risk Report

Flood risk review of development lands at Portarlinton Road, Cloncollig, Tullamore, County Offaly

Technical Report

October 20

2020s1353

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Revision History

Revision Ref / Date Issued	Amendments	Issued to
A3.C01/ 07/10/2020	Final Issue	MRP Land Ltd

Contract

This report describes work commissioned by Jonathan Mckenna, on behalf of MRP Lands Ltd, by correspondence dated 1st October 2020. Fiona Byrne of JBA Consulting carried out this work.

Prepared by Fiona Byrne BSc. MSc.
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Purpose

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Abbreviations

1D	One Dimensional (modelling)
2D	Two Dimensional (modelling)
AEP.....	Annual Exceedance Probability
CFRAM	Catchment Flood Risk Assessment and Management
DoEHLG.....	Department of the Environment, Heritage and Local Government
FFL.....	Finish Floor Levels
FRA.....	Flood Risk Assessment
FSR.....	Flood Studies Report
FSU	Flood Studies Update
OPW	Office of Public Works
PFRA	Preliminary Flood Risk Assessment
RR.....	Rainfall-Runoff
SFRA	Strategic Flood Risk Assessment
URBEXT	FEH index of fractional urban extent
WL.....	Water Level

1 Introduction

JBA Consulting was appointed by MRP Land Ltd. to prepare a consultation report regarding flooding for the subject site at Tullamore Retail Park, Co. Offaly. The review has been prepared as part of a submission for the Offaly Development Plan 2021-2027 as part of the public consultation process.

The purpose of the report is to support the retention of the current planning zoning at the site as the current Development Plan 2021-2027 draft proposals intend to rezone the subject lands as green space from the current commercial compatible zoning. The basis of the decision is the existing SFRA flood extents that place the site in Flood Zone A.

This review demonstrates how it is possible to apply the sequential approach to land zoning with the aim of targeting highly vulnerable development to the lowest risk areas of the site. The approach taken is in accordance with the Planning System and Flood Risk Management, and aims to follow the sequential approach without requiring the application of the Plan Making Justification Test.

The proposed site is a commercial development at the Tullamore retail park along Portarlington Road, Cloncollig, Co. Offaly. The site is located to the south of the Tullamore River as it flows into the town of Tullamore. There are existing developments at the site which extend into the floodplain of the Tullamore River.

1.1 Site and Watercourse Description

The site is located in Tullamore, approximately 2km east of the town centre. It is surrounded by commercial development, including Aldi and Costa Coffee. The R420 is the main access road that runs along the site's southern boundary. The site itself is predominantly a greenfield site although there are two derelict residential properties within the boundary. Farmland is located directly to the east and north of the site, while the N52 bypass is located approx. 50m east of the boundary. Review of the site topography indicates a shallow fall to the north towards the Tullamore River.

The Tullamore River is identified as the main watercourse in the area and runs approx. 150m north the site. The river rises approx. 11km east of the site and runs in a predominantly westerly direction through Tullamore town ultimately merging with the Clodagh River, approximately 7.5km to the west.

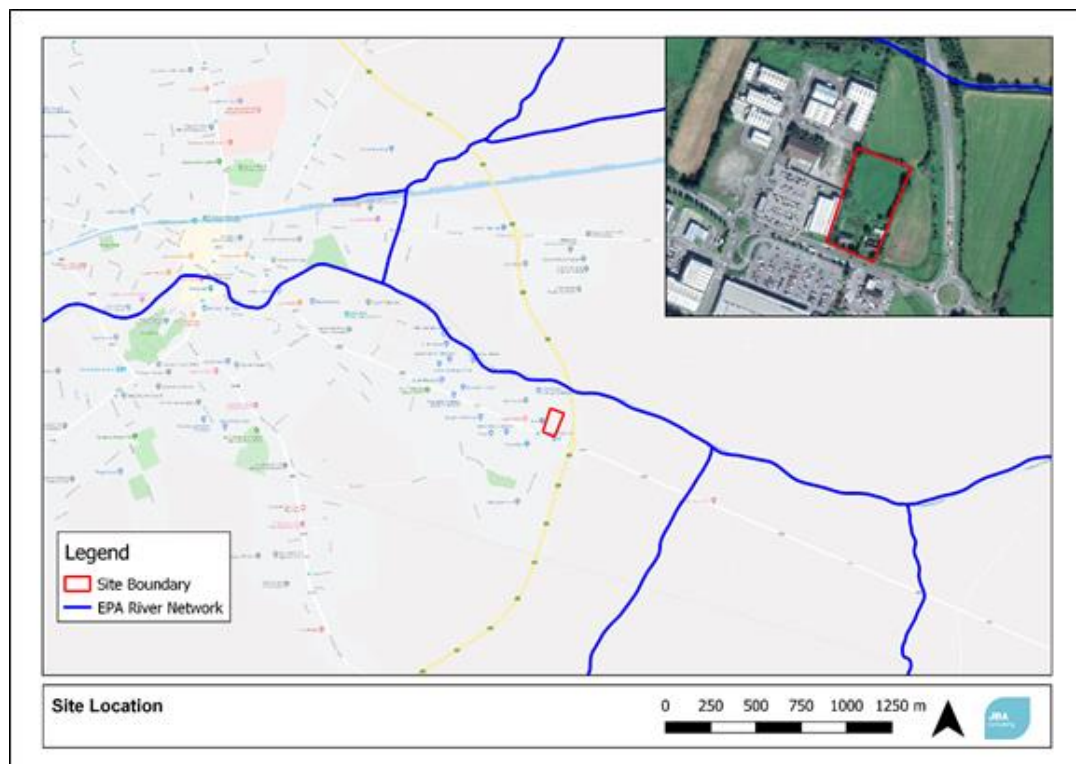


Figure 1-1 Site location and local watercourses (source: OSM maps, EPA and Esri Digital Globe)

2 Appraisal of Flood Risk

An assessment of the potential and scale of flood risk at the site was conducted using historical and predictive information. This identifies any sources of potential flood risk to the site and reviews historic flood information. The findings from the flood risk identification stage of the assessment are provided in the following sections. Further detail on the Planning Guidelines and technical concepts are provided in Appendix A.

2.1 Flood History

2.1.1 Floodmaps.ie

The OPW host a National Flood hazard mapping website, www.floodmaps.ie, which highlights areas at risk of flooding through the collection of recorded data and observed flood events. See Figure 2-1 for historic flood events in the area. A flood event (Cloncollog) has occurred in the vicinity of the site in November 2000. Although there was no recorded flooding directly at the site, several flood events were recorded along the Tullamore River in the vicinity of the development. The following flood events have been recorded in the surrounding area:

- November 2000-Cloncollog- Tullamore River overflows after heavy rainfall after heavy rain
- February 1990- overtopping of the Tullamore River following heavy rainfall,
- January 1993- overtopping of the Tullamore River following heavy rainfall,
- August 2008- overtopping of the Tullamore River following heavy rainfall.
- Recurring Flooding-low-lying area approximately 150m east of the site which floods every year after heavy rainfall.

Review of the available historic flood information confirms that overtopping of the Tullamore River has occurred within Tullamore town, up and downstream of the site.

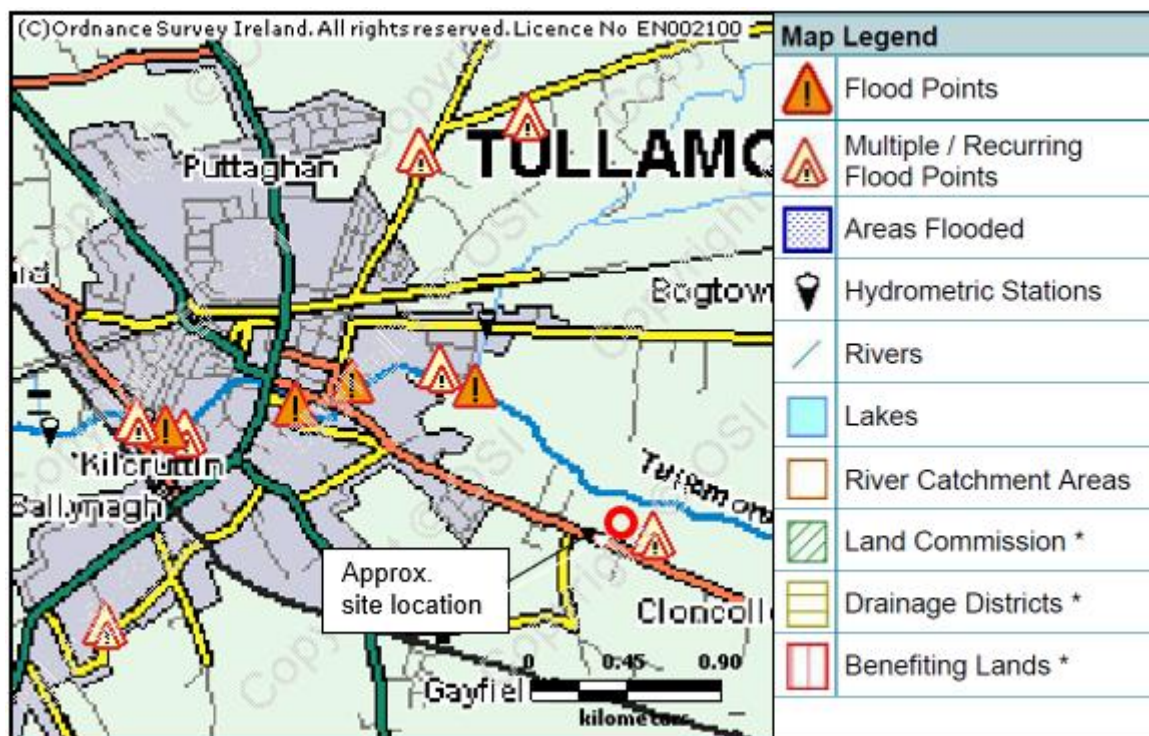


Figure 2-1 Historic Flood Events (source: Floodmaps.ie)

2.1.2 Internet Search

An internet search was conducted to gather information about whether or not the site was affected by flooding previously. There were no results for flooding directly affecting the site.

2.2 Predictive Flooding

The area has been subject to four predicative flood mapping or modelling studies:

- OPW Preliminary Flood Risk Analysis (PFRA)
- Tullamore Flood Risk Assessment and Management (FRAM) study (2008)
- Shannon Catchment Flood Risk Assessment and Management Study (CFRAM) (2018)
- Offaly County Development Plan 2014 - 2020 and Tullamore Town Environs Development Plan 2010-2016 (extended until 2020)

2.3 OPW Preliminary Flood Risk Analysis (PFRA)

The Preliminary Flood Risk Assessment (PFRA) is a requirement of the EU Flood Directive (2007/60/EC). One of the PFRA deliverables is flood probability mapping for various sources: pluvial (surface water), groundwater, fluvial and tidal. The PFRA is a preliminary or 'indicative' assessment and analysis has been undertaken to identify areas potentially prone to flooding. The fluvial and coastal data has largely been superseded by the latest CFRAM mapping however the PFRA flood maps still provide valuable information regarding pluvial, and groundwater flooding. See Figure 2-2 for OPW PFRA pluvial flood extents at the site and surrounding area.



Figure 2-2 OPW PFRA Flood Map (source: myplan.ie)

2.4 Tullamore Flood Risk Assessment and Management Study (2008)

The Tullamore Flood Risk Assessment and Management (FRAM) study was carried out after severe flooding in the town in 2008 and formed a pilot project for the CFRAM Study. The Tullamore FRAM model was, quite naturally, calibrated to the 2008 flood event. The FRAM model was reviewed at the commencement of an FRA undertaken by JBA in 2019, and the following observations can be made:

- At the time of this event, the William Waller Weir Sluice Gate was present and in a closed position. However, the weir structure was removed after the 2008 event and so exerts no influence on flood levels in the current scenario. Figure 2-3 shows images of where the weir was located and Figure 2-4 shows images taken during a detailed survey of the Tullamore River undertaken as part of this assessment.
- The FRAM Study does not account for the drainage scheme put in place after the 2008 event which has cleared the channel and reduced blockages.
- The FRAM Study used a relatively high Manning's N value, of 0.55, to represent channel roughness. No explanation for this value was found in the modelling report, and survey and site walkover showed no features or structures that would account for the value of roughness used; the channel is wide and has concreted sides for much of the course which also reduces the roughness.



Figure 2-3 Image of the former William Waller Weir location facing upstream



Figure 2-4 Images of the Tullamore River Channel

2.5 Shannon Catchment Flood Risk Assessment and Management Study (Shannon CFRAM)

In general, the OPW's Shannon CFRAM study is the most detailed predictive flood mapping that is publicly available for the Shannon catchment, with the modelling study being carried out between 2011 and 2016, when the flood maps were published.

However, in Shannon FRAM Study did not include remodelling of the Tullamore River, and instead relied on the flood extents produced under the 2008 study, with the inherent limitations as discussed above. This mapping also does not include any changes (by third party land owners) after the scheme was implemented. CFRAM mapping highlights the areas defended by the Tullamore Scheme but there have been a number of hydraulically significant changes within the immediate catchment that could serve to reduce water levels in and around the proposed development site. These have not been shown by the OPW CFRAM mapping (because they were not made by OPW) but they have been modelled by JBA in an FRA for a town centre site.

The final flood maps, produced under 2008 Tullamore Study and reproduced in the Shannon CFRAM, show predictive flooding across the majority of the site, see Figure 2-5. Review of Figure 2-5 confirms that the majority (approx. 55%) is located in Flood Zone A, while the remainder is located in Flood Zone B.

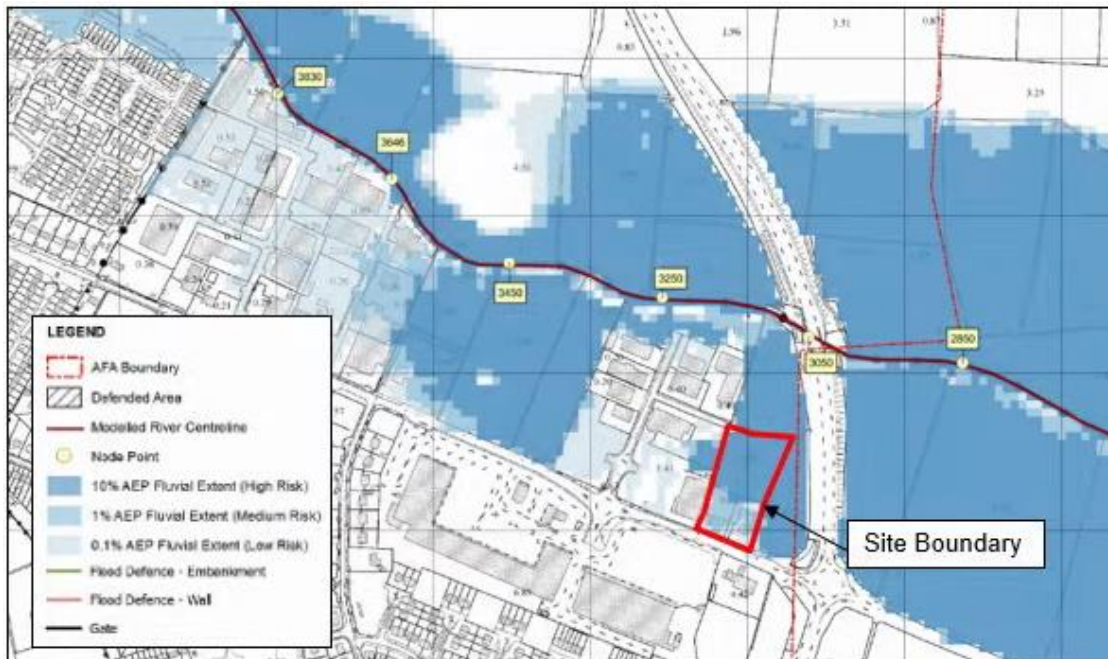


Figure 2-5 Shannon CFRAM Fluvial Flood Extent Map (source: CFRAM, OPW)

2.6 Offaly County Development Plan 2014 - 2020 and Tullamore Town Environs Development Plan 2010-2016 (extended until 2020)

The Offaly County Development Plan (CDP) is the overarching guidance document guiding development within the county. Specific development policies are outlined in the Tullamore Town Environs Development Plan 2010-2016. The proposed development site is currently zoned as 'Commercial' within the Tullamore Environs Dev. Plan.

Specific policies concerning stormwater management and flooding are contained within Section 7.2 of the Tullamore Development Plan. Refer to Appendix B for the stated development plan policies and objectives regarding Flood Risk and Surface Water Drainage.

As part of the Offaly County Development Plan a Strategic Flood Risk Assessment (SFRA) was undertaken. The primary aim of the SFRA was to identify flood risk in the study area and achieved the following objectives:

- Identify areas of natural floodplain to be safeguarded;
- Produce a suitably detailed flood risk assessment drawing on existing data and apply the sequential approach to development in areas identified at risk of flooding;
- Inform the application of the Justification Test;
- Define measures required to deal with flood risks to reduce the risks to an acceptable level while not increasing flood risk elsewhere; and,
- Produce guidance on mitigation measures on how surface water should be managed and appropriate criteria to be used in the review of site-specific flood risk assessments.

Regarding Tullamore town in the 2014 Offaly CDP Strategic Flood Risk Assessment (SFRA) the document does not discuss each site separately but gives general comments for the town which are:

"Sequential approach to be applied to avoid development in areas at risk of flooding through Development Management process. Justification test to be applied in appropriate cases during assessment of planning application and site-specific flood risk assessments required to determine appropriateness of development in areas at risk of flooding."

As with the CFRAM, the flood mapping utilised in the Tullamore Town Environs Development Plan was based on the Tullamore FRAM (2008) study.

2.7 Bespoke Modelling Study

As part of a flood risk assessment in 2019 by JBA Consulting, a hydrological assessment was undertaken using a linked 1D/2D model of the river catchment utilising the hydraulic modelling software TUFLOW/ESTRY. The 2D model was developed using the TUFLOW component to model the movement of water across the floodplain when out of bank flow occurs. The combined 1D-2D approach allows for an accurate depiction of floodwater conveyance through the river system and across the flood plain.

The baseline models have been developed using the 1% and 0.1% AEP design events as the inflow to the upstream end of the Tullamore River. Climate change was accounted for by increasing the relevant peak flows by 20%, which is based on the Mid-Range Future Scenario (MRFS) OPW guidance. Flows derived from the FSR method have been used as the design flows for the study. The peak flow used was 22.65m³/s for the 1% AEP event and 30.13m³/s for the 0.1% AEP event.

This section of the Tullamore River was also modelled as part of a pilot CFRAM study known as Tullamore FRAM, therefore the estimated JBA and Tullamore FRAM/CFRAM study flows can be compared. The hydrology data within the CFRAM hydrology report, presents the peak flows for each sub-catchment along the Tullamore River study area. The calculated the 1% and 0.1% AEP flow values were found to be 21.79m³/s and 26.88m³/s for the 1% and 0.1% AEP events respectively, which are slightly lower than JBA's flows and show a more conservative approach being undertaken in the FRA.

The modelled output is shown in Figure 2-6, and shows that the site is at risk of inundation only from the 0.1% AEP event and is not impacted by the 1% AEP event. This places the site in Flood Zone B, with the southernmost section along the R420 located in Flood Zone C. The flood level onsite during the 0.1% AEP event is 57.84mOD. The reason for the difference between the CFRAM and FRA outputs is, as outlined above, due to the changes in the catchment since the CFRAM model was built in 2008.

The mitigation measures for any commercial development within the site require, at a minimum, the Finish Floor Level (FFL) to be set above the 1% AEP flood level, plus allowance for climate change, and a freeboard allowance; the design flood level. Allowing for a freeboard of 300mm, this results in a minimum FFL of 58.05mOD at the site. At its simplest, this requires infilling of the existing site to a level above the design flood level. As the site is not within Flood Zone A, the Planning Guidelines do not require compensatory storage to be provided to balance the loss of floodplain. However, it is important to determine that the land raising will not increase flood risk elsewhere, either through displacement of water or blockage of flow paths. Therefore, post-development analysis of the flood risk to the site and impacts elsewhere in the catchment has been carried out.

To prevent any inundation within the site and simulate the raising of floor levels, the entire site has been raised above the 1% AEP plus MRFS flood level, which also places the site above the 0.1% AEP event. The post-development flood extents are presented in Figure 2-7 and show that although there is a loss of floodplain storage, there is no significant impact on any sites upstream or downstream of the site. Table 2-1 provides a comparison between the pre-development and post-development flood levels.

Table 2-1 Post -development Impact- Flood Levels (mOD)

Cross Section	Pre-Development 0.1% AEP	Post-Development 0.1% AEP	Impact
SEC33	57.92	57.92	0.0
SEC32	57.88	57.88	0.0
SEC30	57.86	57.86	0.0
SEC29 (a1)	57.82	57.82	0.0
SEC28 (b1)	57.76	57.76	0.0
SEC27 (b1)	57.66	57.66	0.0

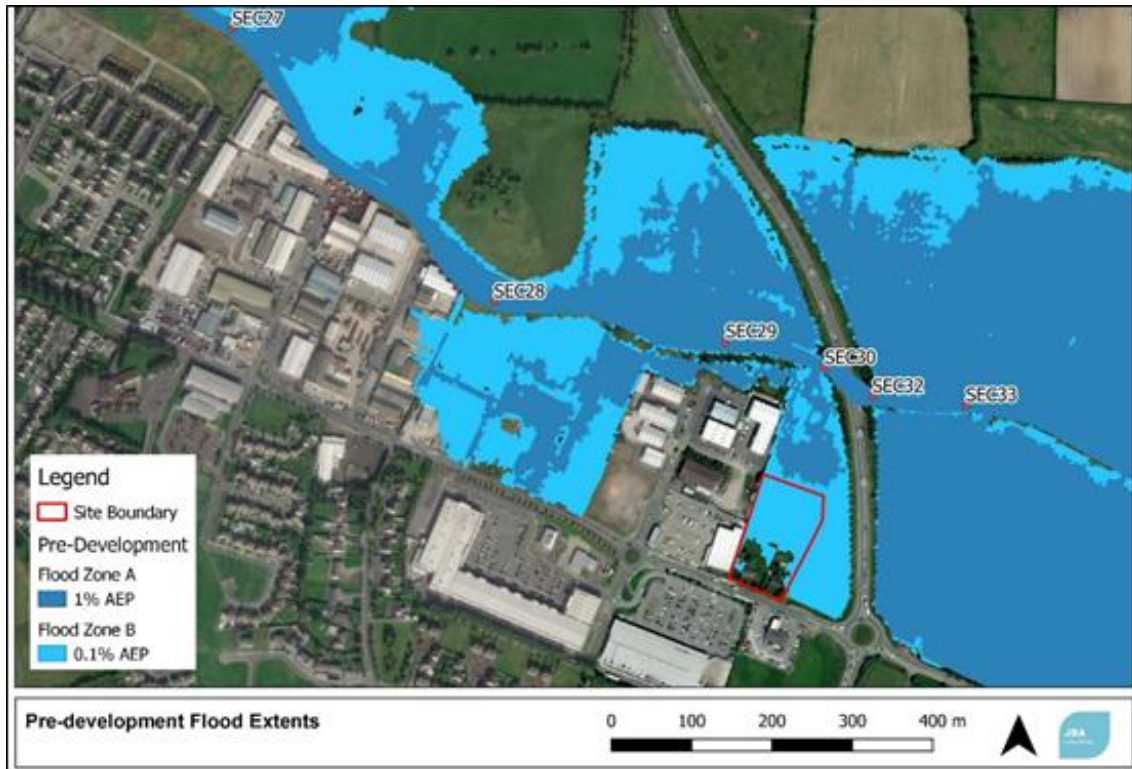


Figure 2-6 Pre-development Flood Extents

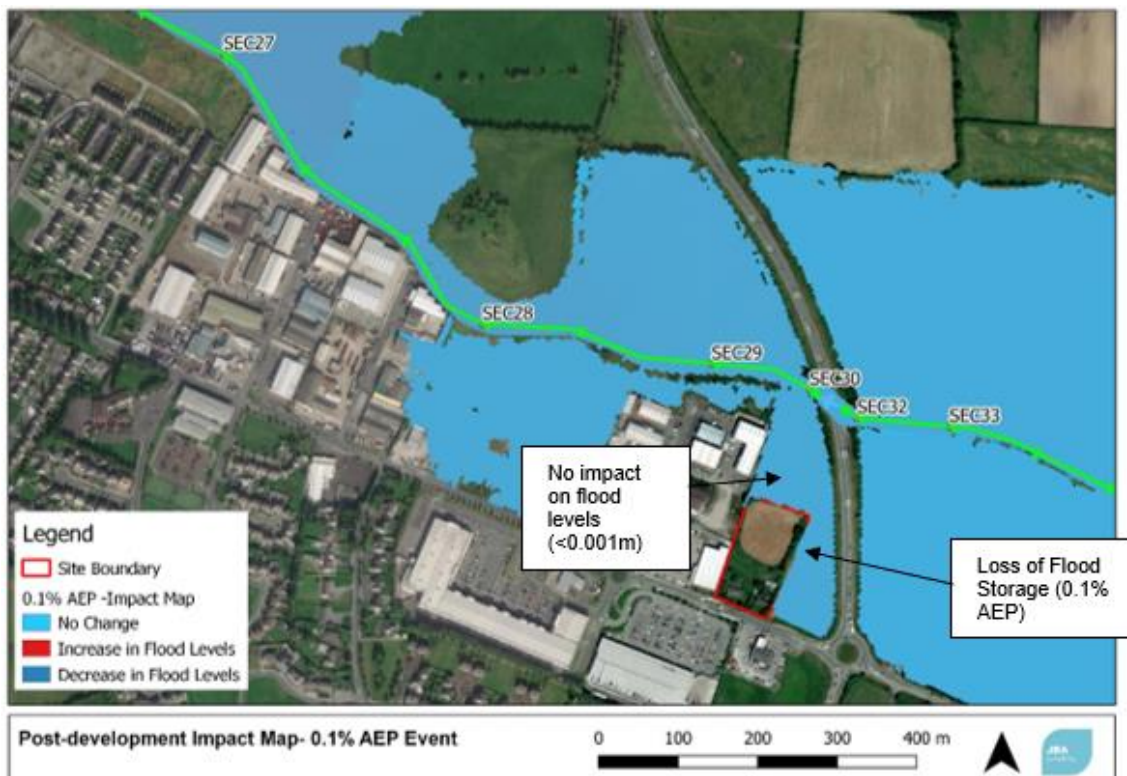


Figure 2-7 Post-development impact map - 0.1% AEP Event

Access to the development will be via the R420 which is located along the southern boundary of the site. The site access along Portarlinton Road, is located in Flood Zone C and therefore, at low risk of flooding. It is concluded that access to the site during a 1% AEP flood event can be maintained without presenting a flood risk to commercial traffic.

3 Summary and Conclusions

JBA Consulting has undertaken a flood risk review for a site in Portarlinton Road, Cloncollig, Tullamore, Co Offaly with a view to informing decisions made by Offaly County Council in relation to land zoning within the Offaly Development Plan 2021-2027.

The site is currently zoned as industrial/commercial. However, under the recently released draft Offaly Development Plan 2021-2027, it is proposed to re-zone the site as open space or similar.

Review of available sources of information show there is no historic flooding found at the site location.

Due to the flood risk identified in the Shannon CFRAM Study maps, a site specific hydraulic model of the Tullamore River was developed which included model simulations of the 1% AEP, 1% AEP MRFS and the 0.1% AEP flood events along the Tullamore River. The results show the development site is predominately located in Flood Zone B, while a section to the south of the site is within Flood Zone C.

This assessment has shown that:

- The site is within Flood Zone B and C, and not Flood Zone A as indicated by 2008 modelling.
- Zoning for industrial/commercial within Flood Zone B and C does not require application of the Justification Test and is considered appropriate under the Planning System and Flood Risk Management Guidelines.
- It is still necessary to demonstrate that flood risk to the site can be managed, and that there will be no off-site increase in flood risk.
- The initial appraisal on the impacts of infilling undertaken as part of a future commercial development or enterprise/employment zoning confirm that this results in no increased risk of inundation surrounding the site or further up or downstream. The site can therefore be developed without risk to itself or third-party lands.
- Access to the development will be via the R420 which is located along the southern boundary of the site and is in Flood Zone C.

The approach taken to this review is in accordance with the Planning System and Flood Risk Management Guidelines, and provides the required background to allow Offaly County Council to apply the Plan Making Justification Test. The review will not negate the need for a site-specific flood risk assessment, but it has outlined mitigation measures which are appropriate to facilitate development of the site. The scope of the site specific FRA would be determined based on a specific development proposal and should include consideration of residual risks and climate change.

Appendices

A Appendix - Understanding Flood Risk

Flood Risk is generally accepted to be a combination of the likelihood (or probability) of flooding and the potential consequences arising. Flood Risk can be expressed in terms of the following relationship:

Flood Risk = Probability of Flooding x Consequences of Flooding

A.1 Probability of Flooding

The likelihood or probability of a flood event (whether tidal or fluvial) is classified by its Annual Exceedance Probability (AEP) or return period years, a 1% AEP flood 1 in 100 chance of occurring in any given year. In this report, flood frequency will primarily be expressed in terms of AEP, which is the inverse of the return period, as shown in the table below and explained above. This can be helpful when presenting results to members of the public who may associate the concept of return period with a regular occurrence rather than an average recurrence interval and is the terminology which will be used throughout this report.

Table: Conversion between return periods and annual exceedance probabilities

• Return period (years)	• Annual exceedance probability (%)
2	50
10	10
50	2
100	1
200	0.5
1000	0.1

A.2 Flood Zones

Flood Zones are geographical areas illustrating the probability of flooding. For the purpose of the Planning Guidelines, there are 3 types of levels of flood zones, A, B and C.

Zone	Description
Flood Zone A	Where the probability of flooding is highest, greater than 1% (1 in 100) from river flooding or 0.5% (1 in 200) for coastal/ tidal Flooding
Flood Zone B	Moderate probability of flooding, between 1% and 0.1% from rivers and between 0.5% and 0.1% from coastal/ tidal.
Flood Zone C	Lowest probability of flooding, less than 0.1% from both rivers and coastal/ tidal.

It is important to note that the definition of the flood zones is based on an undefended scenario and does not take into account the presence of flood protection structures such as flood walls or embankments. This is to allow for the fact that there is a residual risk of flooding behind the defences will be maintained in perpetuity.



A.3 Consequences of Flooding

Consequences of flooding depend on the Hazards caused by flooding (depth of water, speed of flow. Rate of onset, duration, wave-action effects, water quality) and the vulnerability of receptors (type of development, nature, e.g. age-structure of the population, presence and reliability of mitigation measures etc.)

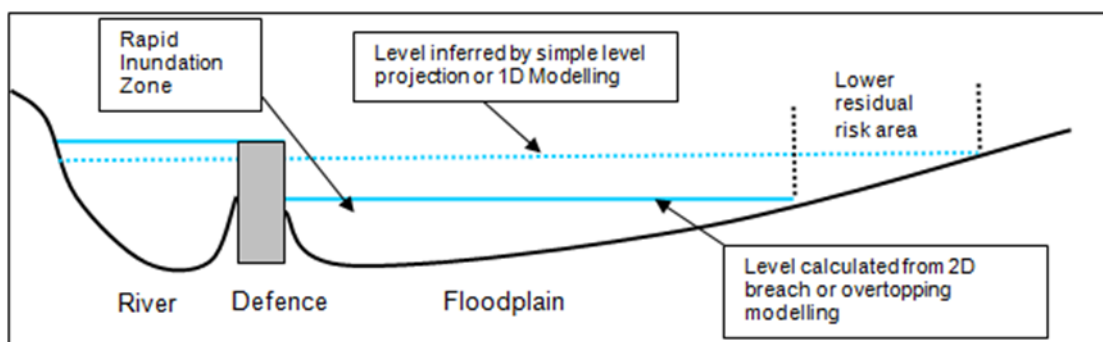
The 'Planning System and Flood Risk Management' provides three vulnerability categories, based on type of development, nature, which are detailed in Table X of the Guidelines, and are summarised as:

- **Highly vulnerable**, including residential properties, essential infrastructure and emergency service facilities
- **Less vulnerable**, such as retail and commercial and local transport infrastructure, such as changing rooms.

Water compatible, including open space, outdoor recreation and associated essential infrastructure, such as changing rooms.

A.4 Residual Risk

The presence of flood defences, by their very nature, hinder the movement of flood water across the floodplain and prevent flooding unless river levels rise above the defence crest level or a breach occurs. This known as residual risk:



The logo for JBA consulting, featuring the text "JBA" in a large, bold, white sans-serif font, with "consulting" in a smaller, white sans-serif font below it. The text is set against a light blue background that has a rounded top-left corner and a rounded bottom-right corner.

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