

INFRASTRUCTURE

# Clonburris T3

## Compliance Report

CLB-T3-ZZZ-SW-DTM-RP-DBFL-CE-0006



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DBFL CONSULTING ENGINEERS





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## 1 Introduction

Planning Permission was initially granted for the proposed development, Clonburris T3 (Planning Ref. SDZ22A/0017) on 16 May 2023 with a list of planning conditions, including condition 11 below.

### Compliance Condition 11 SuDS

- a) Prior to commencement of development, the applicant shall submit a drawing and report to show what the discharge rate in litres/second is from proposed site. The applicant shall show how and where discharge rate of surface water is proposed for the development.*
- b) Prior to commencement of development, the applicant shall submit a revised drawing showing the surface water layout that includes the location and method of discharge rate from proposed site. Show what the discharge rate for proposed site is. The applicant shall show on the drawing what surface water attenuation is provided in m3 and where surface water attenuation is provided.*
- c) Prior to the commencement of development, the applicant shall provide a revised layout / landscaping plan that indicated additional e SuDS (Sustainable Drainage Systems) in proposed development such as a Green Roof, Swales, permeable paving and other such SuDS. Examples of SuDS can be found in the SDCC SuDS Guide at: [sdcc-sustainable-drainage-explanatory-design-and-evaluation-guide.pdf](#). The applicant shall provide additional details including details of filter strips, road edge detail showing how water accesses the swales/tree pits and bioretention areas, further detail on Tree pits. The applicant shall also demonstrate the amenity and biodiversity value of SuDS measures.*
- d) The applicant shall contact water services and the Public Realm Department in SDCC to discuss above issues before resubmitting above documents and drawing. REASON: In the interests of public health, the proper planning and sustainable development of the area and in order to ensure adequate water supply and drainage provision*

A compliance submission addressing all compliance items, including Condition 11, was then lodged on 26 July 2023. This included updated drainage drawings and a letter addressing each item in Condition 11.

After submitting this information a notification of non-compliance was received for Condition 11. This document and enclosed supporting drawings are intended as updated compliance information to respond to the items raised.



## Item no. 1

Water Services are not satisfied that Condition 11 of SDZ22A/0017 is compliant. The proposed development shows road gullies in front of tree pits which stops surface water reaching the tree pits. This contradicts SuDS requirements for the site. In order to address SuDS requirement for the site, submit a revised drawing in plan and cross-section view showing surface water layout such that surface water can enter tree pits and not have road gullies stopping surface water entering the tree pits. Examples of SuDS can be found on SDCC website at <https://www.sdcc.ie/en/services/environment/environmental-health/water-services/sustainable-drainage-systems/>

## DBFL Response

The general drainage layout and gully locations for the proposed development have been revised as per the enclosed drawing CLB-T3-94-SW-DTM-DR-DBFL-CE-1311. Several gullies have now been removed in order to maximise the surface water runoff from the roads which is to be diverted to tree pits and other SuDS features. Refer to drawing CLB-T3-95-SW-DTM-DR-DBFL-CE-1211 which shows the locations of kerb inlets along the road edges, allowing surface water to enter SuDS features such as tree pits.

The tree pit details have also been revised to better align with the recently issued "Sustainable Drainage Explanatory Design & Evaluation Guide 2022". See enclosed drawing CLB-T3-94-SW-XXX-DR-DBFL-CE-5304 for the revised tree pit details. Note the significant amount of "Type 2" tree pits on the enclosed drainage layout, which allows surface water runoff from the roads to discharge directly to tree pit/bioretenion surface and infiltrate.

It is also noted that in Type 1 tree pits gullies do intercept water initially however they direct discharge to tree pit structure for infiltration and plant uptake with only a high level overflow to the surface water network as shown in Figure 1 below. Refer to details provided on drawing CLB-T3-94-SW-XXX-DR-DBFL-CE-5304 for all SuDS tree pit details.

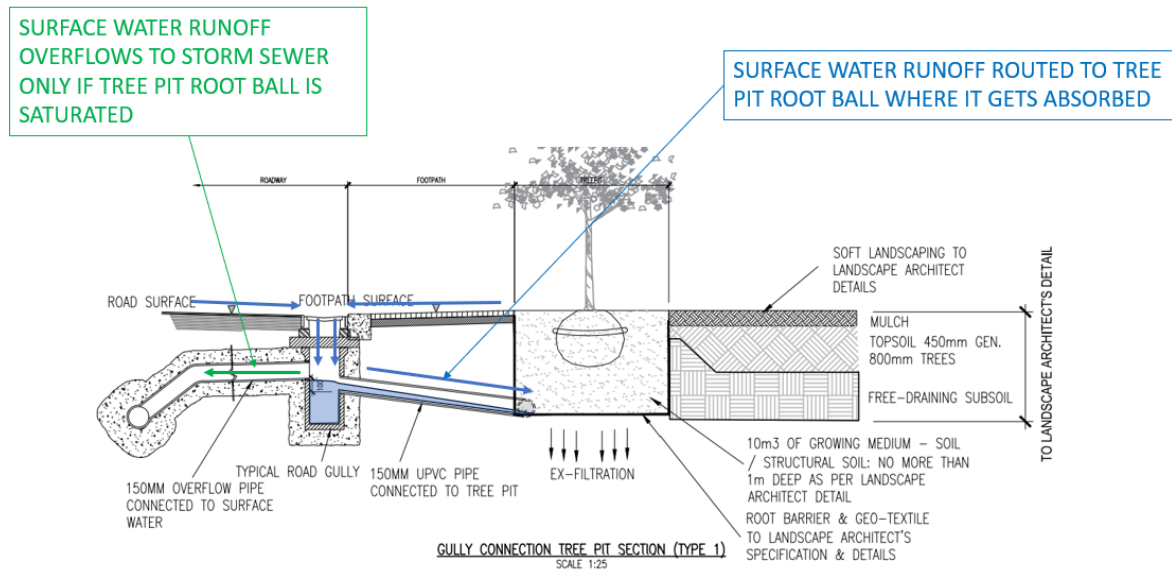


Figure 1 – Type 1 Tree Pit Surface Water Flow

While drainage to tree pits has been prioritised it is noted that there are extremely low infiltration rates on site and certain low points that are not adjacent to SuDS features so a suitable overflow gully provision will inevitably be required.

## Item no. 2

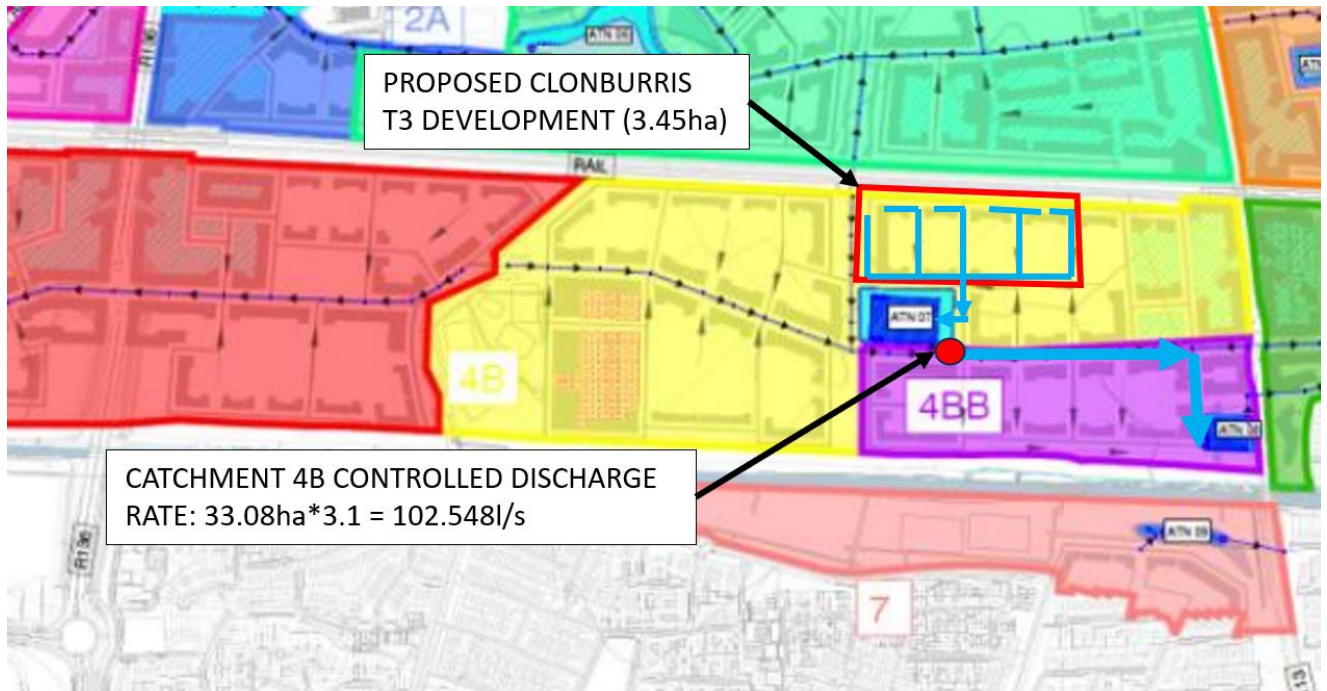
It is unclear how 450.2 l/s discharge rate relates to pre designed rates for Clonburris in Surface Water Management Plan 2020. Submit a report and drawing that shows the discharge rate from proposed in litres per second per hectare and in litres per second. The discharge rate shall be in line with pre-designed surface water discharge rates for Clonburris as per Surface Water Management Plan 2020.

## DBFL Response

The 450.2l/s discharge rate referred to in the previous Compliance submission is the peak discharge rate from the proposed development. However, The surface water runoff is attenuated and the flow is controlled to 3.1l/s/ha further downstream before leaving the surface water catchment as required by the Surface Water Management Plan.

As detailed in the information submitted for Planning and the request for Further Information, there is no detention basin as part of the proposals in this application as the subject development falls within surface water sub-catchment 4B of the Clonburris SDZ. This catchment is attenuated regionally (ATN07) as required by the Surface Water Management Plan. The regional attenuation

basin ATN07 is currently being constructed as part of the adjacent Clonburriss Joint Infrastructure Works (planning ref SDZ20A/0021) where the surface water discharge will be controlled to 3.1l/s/ha as shown in Figure 2.



*Figure 2 - Extract from the Surface Water Management Plan Dr 190113-DBFL-SW-ST-DR-C-1101 (Catchment Plan)*

As previously detailed in the Infrastructure Design Report, Section 3.4.1 issued for Planning, the attenuation volumes required for the proposed Clonburriss T3 are fully allowed for within the Regional Attenuation Basin ATN07 where the flow from the catchment is controlled to 3.1l/s/ha. Refer to section 3.4.1 of the Infrastructure Design Report issued for Planning for further information on how attenuation for the proposed Clonburriss T3 development is allowed for within the regional attenuation basins.

### **Item no. 3**

Prior to submission of revised drawings and report contact Water Services and Public Realm to discuss outstanding issues.

### **DBFL Response**

DBFL met with SDCC drainage department on 27/09/2023 to agree on all responses to all compliance items in this report.







**DBFL** CONSULTING ENGINEERS

**Registered Office**

Ormond House  
Upper Ormond Quay  
Dublin 7 Ireland D07 W704

+ 353 1 400 4000  
[info@dbfl.ie](mailto:info@dbfl.ie)  
[www.dbfl.ie](http://www.dbfl.ie)

**Cork Office**

14 South Mall  
Cork T12 CT91

+ 353 21 202 4538  
[info@dbfl.ie](mailto:info@dbfl.ie)  
[www.dbfl.ie](http://www.dbfl.ie)

**Waterford Office**

Suite 8b The Atrium  
Maritona Gate, Canada St  
Waterford X91 W028

+ 353 51 309 500  
[info@dbfl.ie](mailto:info@dbfl.ie)  
[www.dbfl.ie](http://www.dbfl.ie)