

**Request for Further Information - Engineering Response
(South Dublin County Council Register Reference
SDZ22A/0006)**

Phase 2 Proposed Development at Tandy's Lane Village,
Adamstown, Co. Dublin

August 2022

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Document Reference: 21-058r.006
Project Number: 21-058

Quality Assurance – Approval Status

This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015)

Issue	Date	Prepared by	Checked by	Approved by
No. 1	Jul 22	M. Doyle	K. Owen	I Worrell

Comments

Disclaimer

This report has been prepared by Waterman Moylan, with all reasonable skill, care and diligence within the terms of the Contract with the Client, incorporation of our General Terms and Condition of Business and taking account of the resources devoted to us by agreement with the Client.

We disclaim any responsibility to the Client and others in respect of any matters outside the scope of the above.

This report is confidential to the Client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.

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1. Introduction

South Dublin County Council has requested **Further Information** in relation to the **Planning Application** under register reference **SDZ22A/0006** for a Phase 2 residential development at Tandy's Lane Village, located within the Adamstown Strategic Development Zone (ASDZ).

Waterman Moylan held meetings with the Roads Department within in South Dublin County Council on the following dates: 05/07/22 & 13/07/22. These meetings assisted Waterman Moylan with formulating responses to this request for Further Information.

This report sets out the civil engineering responses which are required from Waterman Moylan. This submission should be read in conjunction with the submission of Thornton O'Connor Planning Consultants, Mola Architects & Doyle and O'Troithigh Landscape Architect.

The Further Information items which are addressed in this report are as follows:

- Item No. 3 (a)
- Item No. 5 (a)
- Item No. 5 (b)
- Item No. 5 (c)
- Item No. 5 (d)
- Item No. 5 (e)
- Item No. 5 (f)
- Item No. 5 (g)
- Item No. 7 (b)

2. Response to Engineering Conditions

2.1 Response to Condition No. 3(a)

Condition 3(a)

The east-west link roads should be better provided for in the proposed development. While the northern east-west link is somewhat restricted by the permitted Phase 1, this should be facilitated in the subject site if provided for under Phase 3. The southern east-west link should be revised to provide better connectivity, in particular for pedestrians and cyclists.

Response:

The proposed site layout has been updated in order to improve east-west link provision, and in particular in respect of pedestrian and cycle connectivity. Whilst off-road cycle facilities are provided on the boulevard to the west, Tandy's Lane to the south, Adamstown Park to the East, and Adamstown Drive to the north, it is proposed that internal routes within the overall tile will be on road, in order to promote appropriate driver behaviour within the tile where lower operational speeds are desired and lower traffic volumes expected.

Whilst the SDZ scheme seeks to maximise east-west linkages, it is proposed that these be wholly provided for pedestrians and cyclists in a direct manner, and where possible along low car usage or car-free routes as per the Masterplan Route Overview seen in Figure 1 below to encourage the use of sustainable modes, whilst maintaining east-west links for private car use.

As set out above, the east-west links provide the cars with limited access to some streets, resulting in a quieter and safer environment for pedestrians and cyclists.

The provision of the northern east west link through the village centre site had been considered as part of the review, but it could not be accommodated as it was not feasible to provide a suitable connection. The layout as permitted under the Phase 1 scheme constrained the Phase 2 site with no roads or service connections allowed for. Furthermore, the provision of a through vehicular route through the village centre site would steralise a significant portion of the village centre site and make the site unviable, and restrict the ability to provide a SDZ compliant layout in the village area. In addition, the northern east-west link has been straightened in an effort to improve the desire line from the Boulevard to the future village centre and Phase 1. Furthermore, a pedestrian link at the southern east-west link to improve desired lines and permeability for pedestrians has been provided, but it was not feasible to amend the layout of that road as this area is constrained by existing service and access points which are built within the Boulevard and Phase 1 areas.

The existing and proposed linkages through the Phase 1 and Phase 2 areas are indicated on the plan extract below which facilitate car movements but prioritise pedestrian and cycle movements.

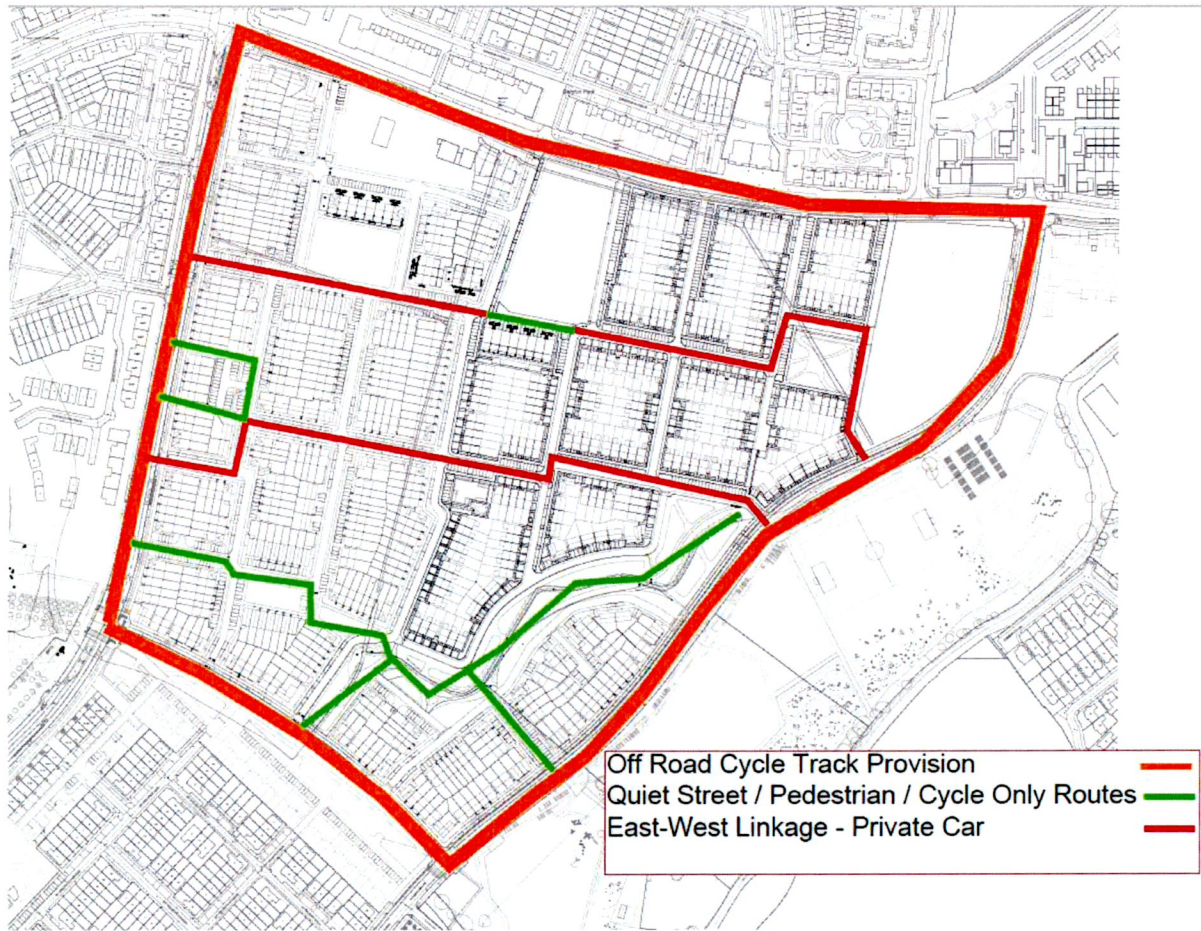


Figure 1: Masterplan – Route Overview

2.2 Response to Condition No. 5(a) – (g)

Condition 5(a)

The applicant is requested to submit the following in relation to roads: A revised plan layout showing all home zones with perpendicular parking having a turning length of 6.0m behind the parking spaces for safe access and egress from the parking bays.

Response:

Please see attached Waterman Moylan Layout No. 21-058-P1100-General Arrangement & Road Levels – Sheet 1 of 3, Layout No. 21-058-P1101-General Arrangement & Road Levels – Sheet 2 of 3 and No. 21-058-P1102-General Arrangement & Road Levels – Sheet 3 of 3. These layouts have been prepared to show that for all home zones with perpendicular parking there is 6.0m of a length behind the parking spaces for safe access and egress.

Condition 5(b)

The applicant is requested to submit the following in relation to roads: A revised plan layout showing the cross sections of the different road types, identifying footpath widths, cycle lanes and carriageway dimensions.

Response:

With reference to Waterman Moylan Layout No. 21-058-P1100 and No. 21-058-P1101 which indicates the location of the sections, please see attached Waterman Moylan Layout No. 21-058-P1125-Typical Road Cross Sections. This layout has been prepared to show the section of the different road types, identifying footpath widths, cycle lanes and carriageway.

Condition 5(c)

The applicant is requested to submit the following in relation to roads: Details of the layout of all access junctions particularly along the north.

Response:

Please see attached Waterman Moylan Layout No. 21-058-P1100-General Arrangement & Road Levels – Sheet 1 of 3, No. 21-058-P1101-General Arrangement & Road Levels – Sheet 2 of 3, No. 21-058-P1102-General Arrangement & Road Levels – Sheet 3 of 3, No. 21-058-P1190 - Typical Road Construction Details - Sheet 1 of 2 and 21-058-P1191 - Typical Road Construction Details - Sheet 2 of 2. These layouts have been prepared to show the details of all access junctions.

Condition 5(d)

The applicant is requested to submit the following in relation to roads: Details of compliance with the Transport Infrastructure Ireland request for road traffic audit and road safety audit.

Response:

Traffico were engaged to carry out a Stage 1 road safety audit for this proposed development for inclusion with the planning application. Please see attached completed Road Safety Audit 220018RPT001_RSA1_Rev_1 dated March 2022. The Road Safety Audit includes a Designer's response which has been reviewed and approved by Traffico. This audit has been completed in accordance with TII Standard GE-STY-21024. It is noted that minor changes have been made to the road layout which is not impacted by the audit comments. It is noted that a further Stage 2 Road Safety Audit will be carried out at detailed design stage should planning permission be granted. This will reflect on these minor changes and any other layout changes required as a result of planning conditions attached to the grant of planning.

Condition 5(e)

The applicant is requested to submit the following in relation to roads: Details of the in-curtilage parking spaces to be within the boundary of private areas.

Response:

Please see attached Waterman Moylan Layout No. 21-058-P1125 - Typical Road Cross Sections, 21-058-P1190 - Typical Road Construction Details - Sheet 1 of 2. These layouts have been prepared to show the details of the in-curtilage parking spaces that are within the boundary of private areas. Please see attached Waterman Moylan Layout No. 21-058-P1150 – Proposed Parking Layout Sheet 1 of 3, No. 21-058-P1151 – Proposed Parking Layout Sheet 2 of 3 and No. 21-058-P1152 – Proposed Parking Layout Sheet 3 of 3. These layouts have been prepared to show the location of the different parking types.

Condition 5(f)

The applicant is requested to submit the following in relation to roads: Accurate plans demonstrating the provision of a visibility splay in both directions from the entrance. Sightlines should be shown to the near side edge of the road to the right hand side of the entrance and to the centreline of the road to the left hand side of the entrance (when exiting).

Response:

The visibility splay in both directions from the entrance and the sightlines have been shown in drawings No. 21-058-P1120-Proposed Visibility Splays – Sheet 1 of 3, No. 21-058-P1121-Proposed Visibility Splays – Sheet 2 of 3 and No. 21-058-P1122-Proposed Visibility Splays – Sheet 3 of 3. This layout has been prepared to show the visibility splays as required.

Condition 5 (g)

The applicant is requested to submit the following in relation to roads: Revised layout of not less than 1:100 scale, showing a swept path analysis drawing (i.e. Autotrack or similar) demonstrating that fire tenders and large refuse vehicles can access/egress the site.

Response:

Please see attached Waterman Moylan Layout No. 21-058-P1130 - Proposed Fire Tender Swept Path Analysis - Sheet 1 of 4, No. 21-058-P1131 - Proposed Fire Tender Swept Path Analysis - Sheet 2 of 4, No. 21-058-P1132 - Proposed Fire Tender Swept Path Analysis - Sheet 3 of 4, No. 21-058-P1133 - Proposed Fire Tender Swept Path Analysis - Sheet 4 of 4 No. 21-058-P1140 - Proposed Refuse Swept Path Analysis - Sheet 1 of 4, No. 21-058-P1141 - Proposed Refuse Swept Path Analysis - Sheet 2 of 4, No. 21-058-P1142 - Proposed Refuse Swept Path Analysis - Sheet 3 of 4 and No. 21-058-P1143 - Proposed Refuse Swept Path Analysis - Sheet 4 of 4. These layouts have been prepared to show the swept path analysis for fire tenders and refuse vehicles within the development demonstrating how they can safely access and egress the site.

2.3 Response to Condition No. 7 (b)

Condition 7 (b)

The applicant is requested to submit revised landscaping and engineering proposals incorporating Sustainable Urban Drainage System (SUDS) measures including swales, permeable paving, tree pits, water butts etc., ensuring consistency with engineers drawings/proposals.

Response:

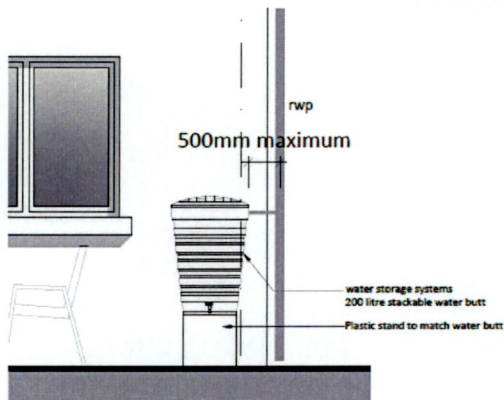
The revised engineering proposals have been updated and co-ordinated with the landscaping proposals and include a fully co-ordinated suds strategy.

Please see attached Waterman Moylan Drawing No. 21-058-P1200-Proposed Drainage Layout Sheet 1 of 3, No. 21-058-P1201-Proposed Drainage Layout Sheet 2 of 3 and No. 21-058-P1202-Proposed Drainage Layout Sheet 3 of 3. These layouts indicate the provision of the following suds measures proposed as part of the overall site works, including:

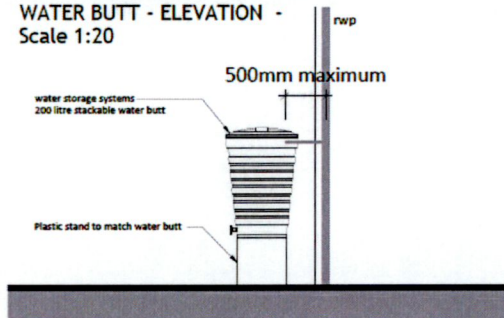
Water Butts

A water butt is a structure or barrel with the purpose of collecting surface water runoff from a unit's roof through the downpipes on the perimeter walls. It is proposed that a water butt be installed at each unit to collect the surface water runoff from the roofs as per the Quintain typical detail below.

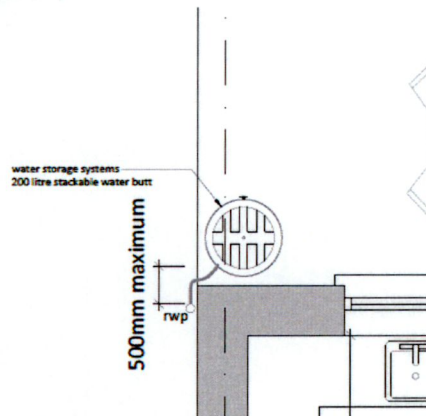
WATER BUTT



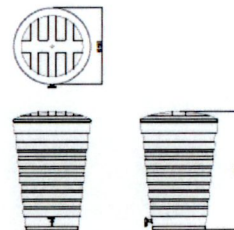
WATER BUTT - ELEVATION -
Scale 1:20



WATER BUTT - ELEVATION -



WATER BUTT - PLAN -
Scale 1:20



WATER BUTT - SPEC
Scale 1:20

FLORPLAST LIMITED (UK) LTD
SUDS WATER STORAGE SYSTEMS
200L STACKABLE WATER BUTT
40000

Bio-retention Tree Pit

These tree pits are engineered pits that allow for the drainage through and retention of water within the tree pit. In some cases, the tree pit is retained by a pre-cast concrete structure. In others, a polymer-based support structure within the root zone of the tree is used, which can also provide for additional aeration. Aeration of the subsoil and overflow drainage pipework within the pit is provided or an adjacent road gully, downstream of the inlet to the tree pit is used. It is proposed to incorporate tree pits throughout the development at strategic locations to ensure they capture the maximum amount of water from the development roads and footpaths. Please see attached Waterman Moylan Drawing No. 21-058-P232-Typical Bio-Retention Details for further information.

Swale

A swale is a shallow, landscaped depression, designed to store and/or convey run-off and remove pollutants. They may be used as conveyance structures to pass the run-off to the next stage of the treatment train and can be designed to promote infiltration where soil and groundwater conditions allow. Swales will be used for road surface water treatment, where possible, to treat water at the source before conveying it to a downstream attenuation system. Please see attached Waterman Moylan Drawing No. 21-058-P233-Typical Swale Details for further information.

Through the provision of these suds elements as part of the overall surface water drainage design, an appropriate suds strategy for the subject site is now proposed.

UK and Ireland Office Locations

