

DMURS COMPLIANCE STATEMENT

**Residential Development at Bearna,
for Burkeway Homes Limited**

**PROJECT NO. B861
OCTOBER 2020**



OCSC

O'CONNOR | SUTTON | CRONIN

Multidisciplinary
Consulting Engineers



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for Burkeway Homes Limited**

**PROJECT NO. B861
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B861-OCSC-XX-XX-RP-C-0006-A1-C02

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TABLE OF CONTENTS	PAGE NO
1. INTRODUCTION	1
2. DMURS OBJECTIVE	4
2.1 SITE ENTRANCES	4
2.2 CYCLISTS	4
2.3 PEDESTRIANS	5
2.4 FIRE TENDER	6
2.5 SIGHTLINES	6
2.6 MULTIFUNCTIONAL STREETS	6
2.7 MULTIDISCIPLINARY APPROACH TO DESIGN	6
3. CONCLUSION	7

1. INTRODUCTION

O'Connor Sutton Cronin & Associates (OCSC) have been appointed by Burkeway Homes; to carry out civil and structural engineering design including transportation, roads, drainage, water utilities, and detailed design. The project includes 121 nr. unit residential development and 1nr. crèche at Bearna, Co. Galway. The exact site location can be seen in *Figure 1* below.



Figure 1: Site Location Map

The overall application site area is 5.38-hectares, the net site area is 3.47 hectares and is accessed through Cnoc Fraoigh residential estate road, with an approximate level of 16.1m AOD at the entrance. The site is quite steeply graded from the north (+24.0m AOD) to the southeast (+14.5m AOD), with levels along the western boundary typically +22.5m AOD to +15.1m AOD. The Trusky stream is immediately east of the site's boundary, which is similarly steeply graded, from north to south. The proposed site is currently a green field and is not in use.

The proposed development will consist of the construction of 121 nr. residential units, a crèche, and associated landscaping and infrastructure. The new residential units are to comprise:

- 52 nr. Houses;
- 36 nr. Duplexes;
- 33 nr. Apartments.

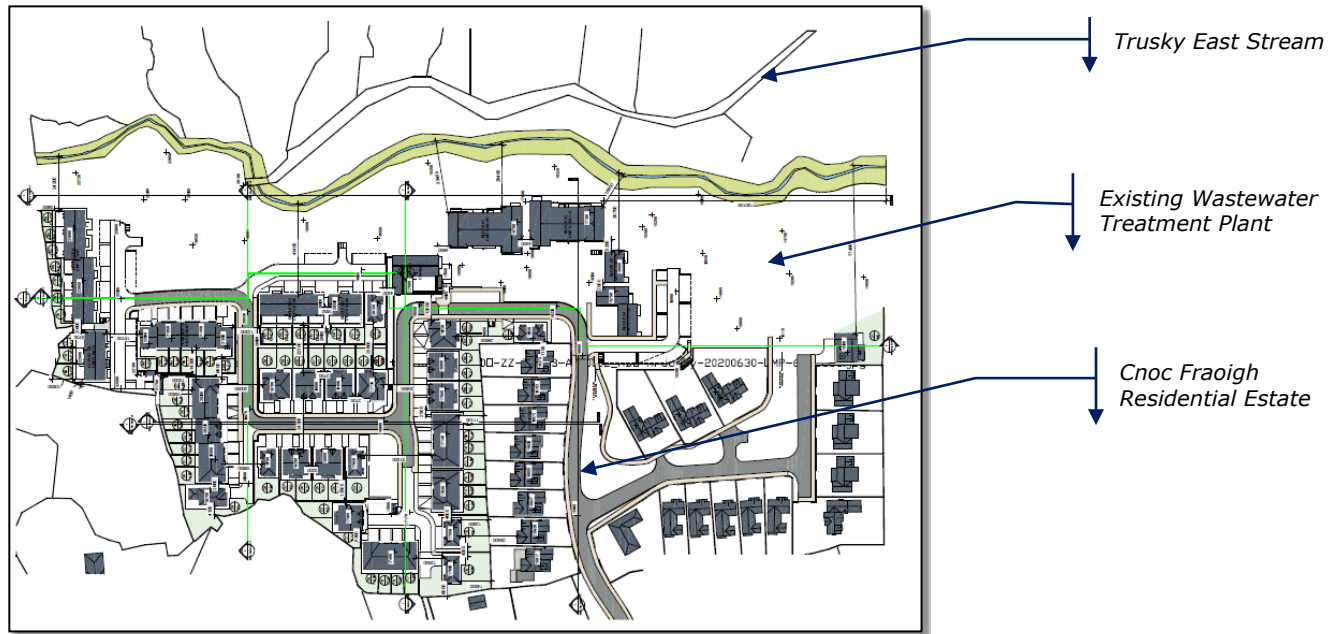


Figure 2: Proposed Site Layout

All aspects of the proposed roads design have been designed in accordance with the appropriate sections of the following:

- The Design Manual for Urban Roads & Streets (DMURS);
- The Traffic Signs Manual (TSM);
- National Cycle Manual;
- GE-STY-01024: Road Safety Audit;
- Variation No.2 (a) of the Galway County Development Plan 2015-2021.

The proposed roads layouts can be seen in the following drawings and reports:

- B861-OCSC-00-00-C-DR-0100-A1-C02 General Arrangement;
- B861-OCSC-00-00-C-DR-0101-A1-C02 Proposed Plan and Profile Public Footpath and Road;
- B861-OCSC-00-00-C-DR-0102-A1-C02 Cross Sections (BL15) Sheet 1 of 3 Public Footpath and Road;
- B861-OCSC-00-00-C-DR-0103-A1-C02 Cross Sections (BL15) Sheet 2 of 3 Public Footpath and Road;
- B861-OCSC-00-00-C-DR-0104-A1-C02 Cross Sections (BL15) Sheet 3 of 3 Public Footpath and Road;
- B861-OCSC-00-00-C-DR-0105-A1-C02 Typical Cross Sections (BL15) Public Footpath and Road;
- B861-OCSC-00-00-C-DR-0106-A1-C02 Proposed Levels;
- B861-OCSC-00-00-C-DR-0107-A1-C02 Proposed Longsection Sheet 1 of 2;
- B861-OCSC-00-00-C-DR-0108-A1-C02 Proposed Longsection Sheet 2 of 2;
- B861-OCSC-00-00-C-DR-0109-A1-C02 Swept Path Analysis Fire Tender;
- B861-OCSC-00-00-C-DR-0110-A1-C02 Swept Path Analysis Refuse Truck;
- B861-OCSC-00-00-C-DR-0700-A1-C02 Proposed Paving Layout;
- B861-OCSC-00-00-C-DR-0702-A1-C02 Typical Road Details;
- B861-OCSC-00-00-C-DR-0703-A1-C02 Typical Cross Sections;
- B861-OCSC-00-00-C-DR-2600-A1-C02 Standard Details;

2. DMURS OBJECTIVES

In terms of transportation, the key features of the proposed development are as follows:

2.1 SITE ENTRANCES

Reduced corner radii and carriage widths promote lower speeds throughout the development. These have been detailed with Corner Radii in accordance with DMURS.

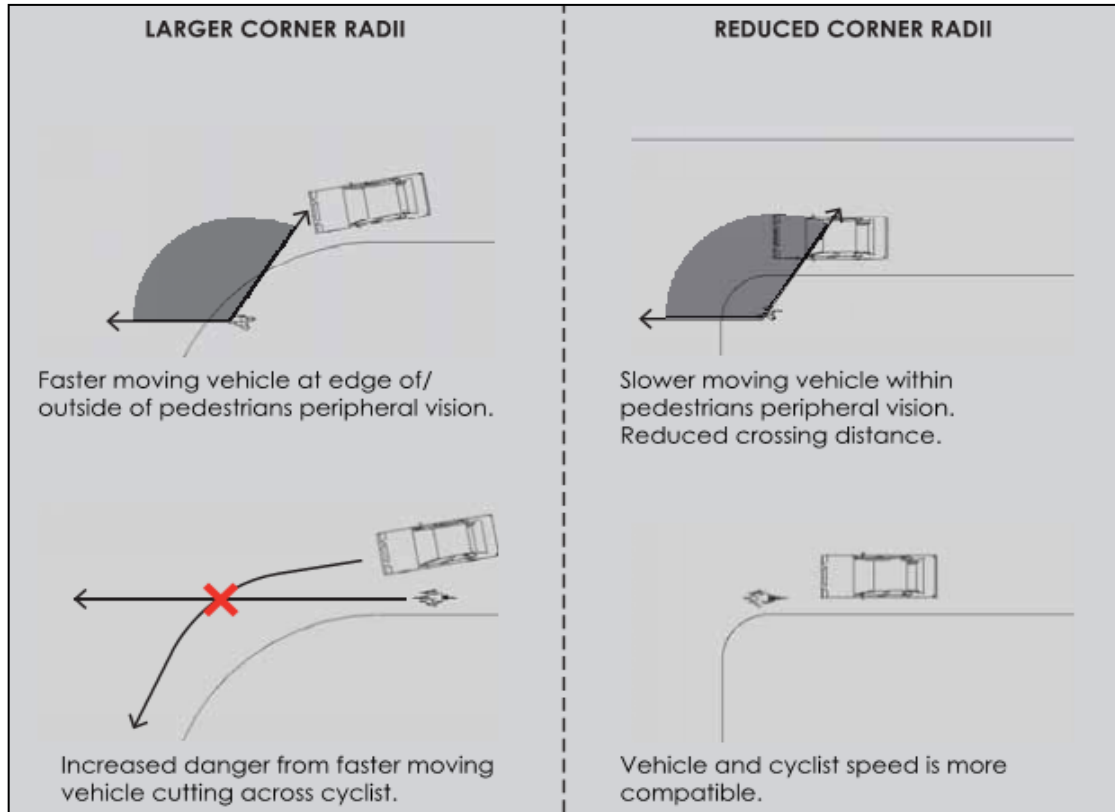


Figure 3: DMURS Extract on Benefits of Reduced Corner Radii

2.2 CYCLISTS

Cyclists will be sharing the road with vehicles due to anticipated light traffic and speed. We have included figure 4 from DMURS which shows that roads with a design speed of 30Km/Hr or less and with 10,000 Average Annual Daily Traffic volume shows that a shared street is acceptable

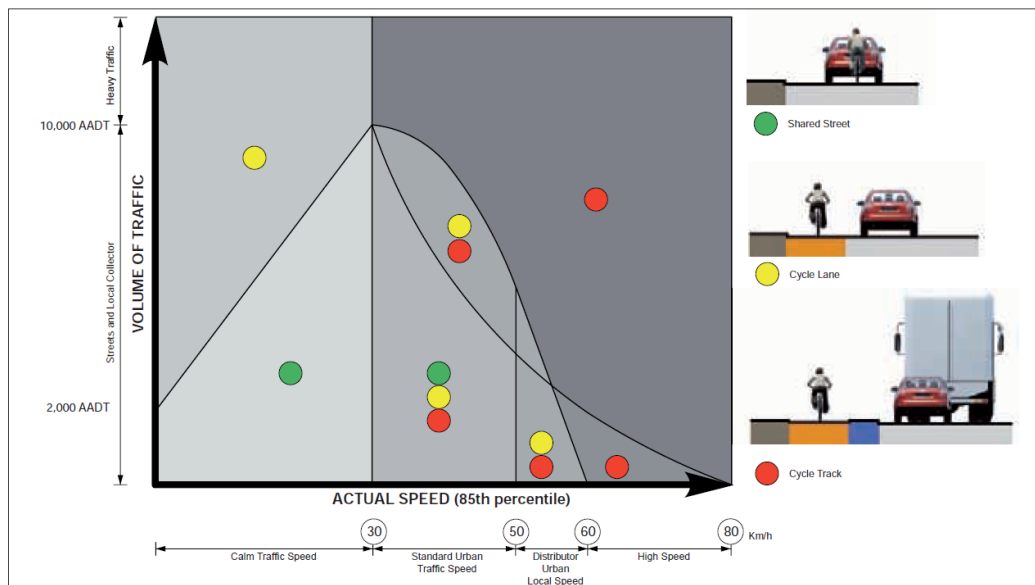


Figure 4: National Cycle Manual Guidance Graph

2.3 PEDESTRIANS

The width of the footpaths is determined by reference to DMURS Section 4.3.1 with a minimum required width of 1.8m based on the space needed for two wheelchairs to pass each other. However, in most cases a footpath width of 2m has been provided throughout the development. Refer to design drawing B861-OCSC-XX-XX-DR-C-0702 Typical Road Details.

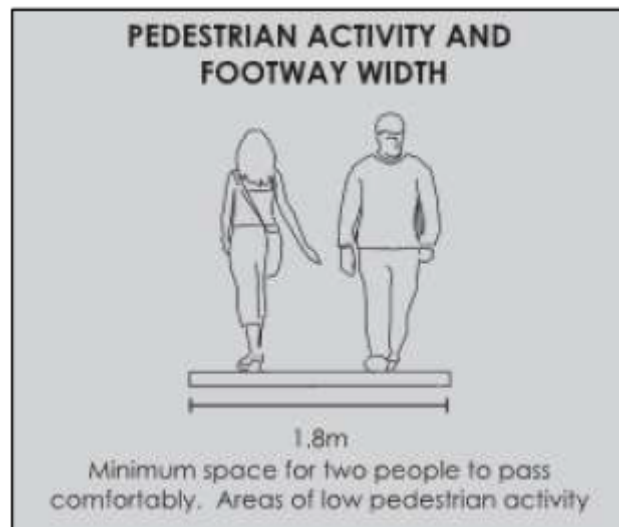


Figure 5: DMURBS Footway Width

A pedestrian link has been provided from the development to Bearna Village by the proposed new 1.8m wide footpath along the L1312 Local Road.

2.4 FIRE TENDER

Access for fire tender and other emergency vehicles is also catered with a swept path analysis having been carried out as per Drawing No. B861-OCSC-XX-XX-C-DR-0109-A1-C01 Swept Path Analysis Fire Tender, submitted separately in support of this application.

2.5 SIGHTLINES

The development is to be accessed via the existing Cnoc Fraoigh residential development as a continuation of an existing temporary Cul de Sac. Therefore, sightlines are not an issue.

2.6 MULTIFUNCTIONAL STREETS

The roads alignment design throughout the proposed development consists of short, curved stretches of roadway in order to slow traffic down. These features create a passive method for controlling the speed of the vehicular movements throughout the development.

The development has been designed to include car parking for both the apartment development, crèche and housing units.

2.7 MULTIDISCIPLINARY APPROACH TO DESIGN

The design of the proposed housing development for 121 units and crèche facility has been designed using a coordinated design team inclusive approach between architect, engineers, planning consultants and landscape designers taking into account considerations from all discipline specialists.

The design team have progressed through several iterations of the layout in line with comments received from each discipline to arrive at a solution which meets the guidance outlined in the DMURS. The resulting layout provides a development of high standard which incorporates spatial requirements and takes into account relevant plans and policies.

Therefore, we are satisfied that the now proposed design addresses all issues raised by the various disciplines and following integration of all authorities and design members meets the requirements / guidance of DMURS.

3. CONCLUSION

Taking the above into consideration, the proposed development has incorporated a series of design measures to promote more sustainable modes of transport and support vulnerable road users which is in line with the core principles of DMURS and all other relevant guidance.

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Civil Engineer

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