



Proposed Strategic Housing Development at Dunshaughlin East, Co. Meath

Client: Rockture1 Ltd

Stage 1-2 Quality Audit



**PROPOSED STRATEGIC HOUSING DEVELOPMENT AT
DUNSHAUGHLIN EAST, CO. MEATH**

Description:

Stage 1-2 Quality Audit

Author:

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Audit Brief Submitted By:

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Distribution:

Joseph O'Reilly Consulting Civil & Structural Engineers



1 AUDIT INFORMATION

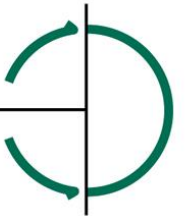
- 1.1 Title** **QUALITY AUDIT DUNSHAUGHLIN S1-2**
- 1.2 Audit Reference Number** **QUALITY AUDIT DUNSHAUGHLIN S1-2 KS 290**
- 1.3 Project Code** **DUNSGEMTIA**
- 1.4 Date Audit Completed** **4th December 2018**
- 1.5 Audit Attended By** **Ken Swaby**
Mark Andrews
- 1.6 Audit Team**
 - Team Leader** **Ken Swaby, ILTP**
 - Team Member** **Mark Andrews, ILTP**
- 1.7 Information Received**

ITEM		Supplied	Comments
A	Plans	Yes	<p><u>Received from Joseph O'Reilly Consulting Civil & Structural Engineers</u></p> <p>Joseph O'Reilly Consulting Civil & Structural Engineers Drawings:</p> <ol style="list-style-type: none"> 1. <i>Road Layout Sheet 1 of 2, ref. 030, rev. 3</i> 2. <i>Road Layout Sheet 2 of 2, ref. 031, rev. 3</i> 3. <i>Road Signage & Markings Layout Plan Sheet 1 of 3, ref. 032, rev. 3</i> 4. <i>Road Signage & Markings Layout Plan Sheet 2 of 3, ref. 033, rev. 3</i> 5. <i>Road Signage & Markings Layout Plan Sheet 3 of 3, ref. 034, rev. 3</i> 6. <i>Site Services: Stormwater Drainage Layout Sheet 1, ref. 012, rev. 1</i> 7. <i>Site Services: Stormwater Drainage Layout Sheet 2, ref. 013, rev. 1</i> 8. <i>Autotrack Simulations Sheet 1 of 2, ref. 047, rev. 1</i> 9. <i>Autotrack Simulations Sheet 2 of 2, ref. 048, rev. 1</i> <p>McElligott Consulting Engineers Drawings:</p> <ol style="list-style-type: none"> 10. <i>SHD Public Lighting Layout, ref. E004 SHD, rev. B</i> <i>SHD Virgin Media Services Layout, ref. E003 SHD, rev. E</i>
B	Traffic Count Data	No	
C	Speed Count Data	No	
D	Accident Data	No	
E	Design Standards	No	
F	Design Brief	No	
G	Other Data	Yes	<p><u>Received from Joseph O'Reilly Consulting Civil & Structural Engineers</u></p> <ol style="list-style-type: none"> 1. <i>An Bord Pleanála Notice of Pre-Application Consultation Opinion, dated 27th April 2018</i> 2. <i>Inspector's Report on Recommended Opinion ABP-301099-18, dated 25th April 2018</i> 3. <i>Meath County Council Planning Authority Opinion and Section 247 Consultation on Proposed Strategic Housing Development, Dublin Road, Dunshaughlin, dated 28th March 2018</i>



2 INTRODUCTION

- 2.1.1 This is a Stage 1-2 Quality Audit which examines the accessibility of a proposed Strategic Housing Development (SHD) at Dunshaughlin East, Co. Meath, and its connection to the existing road network.
- 2.1.2 This Stage 1-2 Quality Audit includes a Road Safety Audit, Access Audit, Cycle Audit and Walking Audit. The Road Safety Audit is included under separate cover. Where problems are considered to relate to both documents they have been repeated.
- 2.1.3 The Quality Audit including Road Safety Audit has been carried out in accordance with the Design Manual for Urban Roads and Streets (DMURS).
- 2.1.4 The Feedback Form for this Stage 1-2 Quality Audit is included in **Appendix A** of this report.
- 2.1.5 This Stage 1-2 Quality Audit is based upon drawings provided to the design team, as included under paragraph 1.7, and also appended to the separate Stage 1 Road Safety Audit report.
- 2.1.6 The extent of the Stage 1-2 Quality Audit is shown on the drawings listed in paragraph 1.7 above. This includes the part of the proposed Distributor / Outer Relief Road within the subject lands, but excluding the section of this road constructed under the previously permitted Phase 1a residential development to the south.
- 2.1.7 The Quality Audit including Road Safety Audit has been carried out in accordance with the Design Manual for Urban Roads and Streets (DMURS).
- 2.1.8 Site visits were carried out on Friday 8th June 2018 in daylight conditions, at approximately 14:30hrs, and on 10th August 2018, at approximately 17:00hrs. The weather was fine and dry during both site visits.
- 2.1.9 This Stage 1-2 Quality Audit specifically examines the accessibility aspects of the proposed development. It is not an appraisal of policy or strategic issues associated with the planning of the development and it does not examine or verify the compliance of the design to any other design criteria or guidelines. The designer and all concerned stakeholders must therefore defend all actions taken on the basis that such care was taken, as was in all circumstances reasonably required, to ensure that the roadway was not unsafe or inaccessible for road users. It is important, therefore that where possible the recommendations in this report are acted upon.
- 2.1.10 Landscaping details have not been provided as part of this audit, and so have not been audited. Landscaping details will need to be audited at detailed design stage.
- 2.1.11 Under Podium parking layouts and lighting details have not been provided as part of this audit, so have not been audited. These details will need to be audited at detailed design stage.



3 ITEMS RESULTING FROM PREVIOUS QUALITY AUDITS

The audit team are not aware of these proposals having been previously audited.



4 ITEMS RESULTING FROM STAGE 1-2 QUALITY AUDIT

4.1 Walking & Cycling

Walking

The proposed residential development is to be well connected to the wider pedestrian network with direct footway links to proposed Distributor / Outer Relief Road and existing R147 footpath facilities.

The proposed development includes both formal pedestrian crossing facilities in the form of signalised Toucan crossings and informal crossing facilities by way of tactile paving and dropped kerbs.

It is noted that pedestrian links are proposed through the permitted Phase 1a development to the south, which would enhance pedestrian access to and from the proposed development.

It is also noted that a pedestrian link to an existing residential development to the north appears to be proposed on the drawings submitted for audit, however this is not clearly indicated on the drawings.

The proposals include shared surface Homezone streets for many residential streets which should afford greater priority to pedestrians over motorised traffic.

It is noted that off-road walking and cycling routes remote from motorised traffic are also proposed within the development, including an east-west route in the direction of Dunshaughlin town centre and a perimeter route along the western and northern site boundary.

Cycling

The proposals include a network of cycle tracks throughout the development. These include off-road cycle tracks adjacent to the vehicular carriageway along the proposed Distributor / Outer Relief Road and the proposed north-south link street to the east of the proposed creche and retail facilities.

It is noted that off-road walking and cycling routes remote from motorised traffic are also proposed within the development, including an east-west route in the direction of Dunshaughlin town centre and a perimeter route along the western and northern site boundary.

The proposed development also includes signalised pedestrian / cyclist Toucan crossings at key points in addition to shared pedestrian / cyclist areas.

It is noted that cycle links are proposed through the permitted Phase 1a development to the south, which would enhance cyclist access to and from the proposed development.

It is also noted that a ped / cycle link to an existing residential development to the north appears to be proposed on the drawings submitted for audit, however this is not clearly indicated on the drawings.

The proposals include shared Homezone streets for many residential streets which should afford greater priority to both cyclists and pedestrians over motorised traffic.

It is noted that no details of cycle parking facilities have been provided for audit. It is noted however that cycle parking for the housing units is likely to be predominantly within the curtilage of each unit, this will enhance the security of the cycles and allow road users greater confidence in own a cycle.



Problem 4.1.1

The drawings provided for audit do not show pedestrian and cycle crossing facilities on the proposed Distributor / Outer Relief Road between the R147 and the most southerly development access road proposed as part of the current proposals. Inappropriate or insufficient pedestrian / cycle crossing facilities along desire lines in this area may restrict accessibility and potentially lead to such users entering the carriageway at an inappropriate location or time and coming into conflict with motorised traffic.

Recommendation 4.1.1

It is recommended that the design team ensures that appropriate pedestrian and cycle crossing facilities are provided along the anticipated desire lines.

Problem 4.1.2

The drawings provided for audit indicate an Open Space area to the northwest of the proposals, but do not appear to include pedestrian access facilities in this area, such as footpaths adjoining the surrounding streets (refer Figure 4.1). Inappropriate or insufficient pedestrian facilities linking the proposed Open Space area and adjoining road network may potentially lead to non-motorised users entering the carriageway at an inappropriate location or time and coming into conflict with motorised traffic.

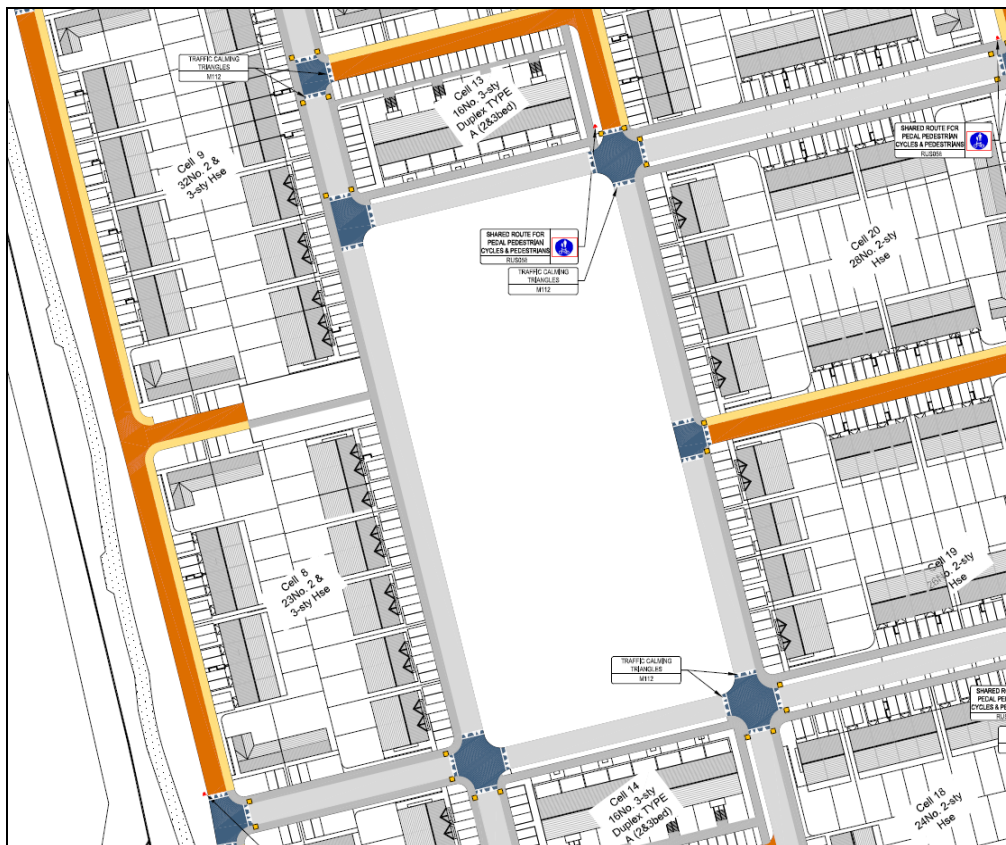


Figure 4.1: Proposed Open Space Area and Adjoining Road Network (Source: JOR Drawing Road Signage & Markings Layout Plan Sheet 1 of 3, ref. 032, rev. 3)



Recommendation 4.1.2

It is recommended that the design team ensures that appropriate pedestrian facilities are provided within and around the proposed Open Space area.

Problem 4.1.3

The drawings provided for audit include a street linking the permitted Phase 1a and currently proposed Phase 1b developments (refer Figure 4.2). This street includes cycle tracks on both sides of the carriageway to the northern end, but only appears to include a one-way cycle track on the western side to the southern end near the interface with the Phase 1a development with no corresponding cycle track proposed on the opposite side of the road. This may lead to cyclists opting to travel southbound along this street using the currently proposed northbound one-way cycle track, possibly due to perceived advantages in terms of safety and / or convenience, in lieu of travelling on-line along the southbound carriageway. This presents a potential risk of conflict with other road users who may not anticipate or expect cyclists to be travelling southbound along the northbound cycle track.



Figure 4.2: Proposed Street Linking Permitted Phase 1a and Proposed Phase 1b Developments (Source: JOR Drawing Road Signage & Markings Layout Plan Sheet 2 of 3, ref. 033, rev. 3)

**Recommendation 4.1.3**

It is recommended that the design team ensures that appropriate on-line or off-line cycle facilities are provided to serve the anticipated need in both directions of travel.

Problem 4.1.4

The information provided for audit does not show how the proposed footways and cycle tracks to the immediate west of the proposed creche and retail units will connect beyond the southern boundary of the proposed development to the wider network within the permitted Phase 1a development. Without appropriate connections vulnerable road users may be confused as to how or where to continue their journey safely, potentially leading to conflict with other road users.

Recommendation 4.1.4

It is recommended that the design team ensures that the proposed cycle and footway facilities connect to the wider network and that where they terminate appropriate provision is made to inform the road user of how they should continue their journey safely.

Problem 4.1.5

The information provided for audit does not show how the proposed east-west greenway (off-road ped / cycle track) will connect beyond the western boundary of the proposed development to the wider network linking to Dunshaughlin town centre. Without appropriate connections vulnerable road users may be confused as to how or where to continue their journey safely, potentially leading to conflict with other road users.

Recommendation 4.1.5

It is recommended that the design team ensures that the proposed cycle and footway facilities connect to the wider network and that where they terminate appropriate provision is made to inform the road user of how they should continue their journey safely.

Problem 4.1.6

The drawings provided for audit do not show the location of cycle parking facilities for the apartments and non-residential elements of the proposed development.

Recommendation 4.1.6

It is recommended that the design team ensures that the cycle parking facilities are appropriately located and near the relevant associated land use areas within the development.

It is further recommended that the design team ensures that a sufficient number of clearly visible visitor cycle parking spaces are appropriately located at ground level to satisfy the anticipated need of the development when fully occupied.



4.2 General Access

The site, at this stage, appears to be generally conducive to access from non-motorised users.

It is noted that the drawings submitted for audit do not show allocation for visitor and disabled access car parking.

Problem 4.2.1

It is unclear from the information provided for audit if there is appropriate space for the relevant emergency vehicles to safely navigate the relevant areas of the site and perform turnabout manoeuvres within the confines of the carriageway.

Recommendation 4.2.1

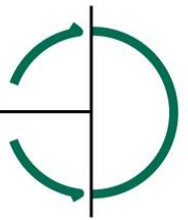
It is recommended that the design team ensures that the facilities provided are appropriate for all relevant vehicles to safely manoeuvre within the site.

Problem 4.2.2

The information provided for audit does not include sufficient detail to determine if the proposed cul-de-sac's throughout the development are appropriately configured to allow vehicles, including delivery vehicles, to safely perform turnabout manoeuvres. Inappropriate turnabout facilities may present a potential risk of vehicle / pedestrian conflicts, particularly when performing reversing manoeuvres.

Recommendation 4.2.2

It is recommended that the design team ensures that the facilities proposed are appropriate for all relevant vehicles to safely perform turnabout manoeuvres at the relevant areas within the site.



5 COMMENTS

It is recommended that the full proposals are subject to a standalone Stage 2 Quality / Accessibility Audit at detailed design stage and prior to commencement of the development on site.



6 CONCLUSIONS

It is considered that the site, as currently proposed, is generally conducive to safe access and egress by all forms of road user. It is recommended however that the specific issues raised in this report be taken into account and that appropriate measures be put in place where practicable to mitigate the concerns raised.



7 QUALITY AUDIT TEAM STATEMENT

7.1 Statement

We certify that the drawings and documents provided with the Audit Brief have been examined. The examination has been carried out with the sole purpose of identifying any features of the scheme that could be improved or modified in order to improve the safety of the scheme. The problems that we have identified have been noted in the report, together with suggestions for improvement, which we recommend should be considered for implementation.

7.2 Signatures

7.2.1 Audit Team Leader Signature

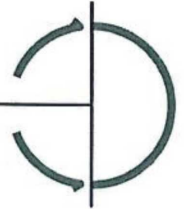
Name: Ken Swaby
Position: Transport Engineer
Date: 4 / 12 / 2018
Organisation: ILTP Consulting

Signed:

7.2.2 Audit Team Member Signature

Name: Mark Andrews
Position: Transport Engineer
Date: 4 / 12 / 2018
Organisation: ILTP Consulting

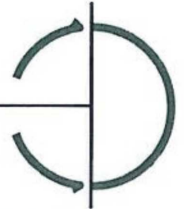
Signed:



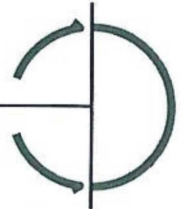
APPENDIX A QUALITY AUDIT FEEDBACK FORM

Quality Audit Reference QUALITY AUDIT DUNSHAUGHLIN S1-2 KS 290
Audit Stage Stage 1-2
Date Quality Audit Completed 4th December 2018

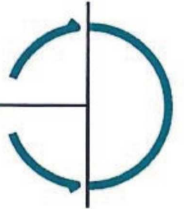
Para No. in Report	Problem Accepted (Y/N)	Recommendation Accepted (Y/N)	Comments / Alternative Measures (Describe)	Alternative Measures Accepted by Auditor? (Y/N)
4.1.1	Y	Y	The design team agree with the recommendations. The precise location of pedestrian/ cycle crossing facilities on the Distributor/ Outer relief road between the R147 and most southerly developed access road will be agreed with Meath Co. Council.	Y
4.1.2	Y	Y	The design team agree with the recommendations. Pedestrian facilities linking the proposed open space area and adjoining road network will be incorporated in the scheme.	Y
4.1.3	Y	Y	The design team agree with the recommendations. A two way cycle track on the western side at this location is proposed. The design team will ensure that appropriate cycle track markings and signage will be included.	Y
4.1.4	Y	Y	The design team agree with the recommendations. Cyclists can travel south via: - A two way cycle track on the western side of the Central Boulevard link street to the proposed transport hub	Y



Para No. in Report	Problem Accepted (Y/N)	Recommendation Accepted (Y/N)	Comments / Alternative Measures (Describe)	Alternative Measures Accepted by Auditor? (Y/N)
			<p>on the R147 or alternatively travel along the</p> <ul style="list-style-type: none"> - East-west greenway to link to the R147 <p>Pedestrian footways are proposed both sides of the Central Boulevard link street providing access to the wider network within the permitted Phase 1a, 1b and 1c development or alternatively pedestrians can travel along the east-west greenway to link to the R147.</p>	
4.1.5	Y	Y	The design team agree with the recommendations. The proposed east-west greenway will navigate along the western side of the Phase 1C development towards the R147 allowing pedestrians/ cyclists connect to the wider network and linking to Dunshaughlin town centre.	Y
4.1.6	Y	Y	The design team agree with the recommendations. An appropriate provision and location of cycle parking facilities will be provided in agreement with Meath Co. Council.	Y
4.2.1	Y	Y	The design team agree with the recommendations. An initial assessment to illustrate that both emergency vehicles and refuse trucks can safely navigate all areas of the site (or otherwise noted) and perform turnabout manoeuvres within the confines of the carriageway has been undertaken.	Y



Para No. in Report	Problem Accepted (Y/N)	Recommendation Accepted (Y/N)	Comments / Alternative Measures (Describe)	Alternative Measures Accepted by Auditor? (Y/N)
4.2.2	Y	Y	<p>The design team agree with the recommendations. An initial assessment to illustrate that both emergency vehicles and refuse trucks can safely navigate all areas of the site (or otherwise noted) and perform turnabout manoeuvres within the confines of the carriageway has been undertaken.</p> <p>The design team consider that cul de sacs to road 11 and road 13 require hammer heads.</p>	Y



Signed

Design Team Leader

Date 11/14/18

(Please Complete and return to the Auditor)

Safety Audit Signed Off;

Audit Team Leader

Date 12/12/2018

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