

**Title: Combined Stage 1&2 Road Safety Audit
For;
Proposed Residential Development –
Caisleán Raithin, Ardrahan, Co. Galway.**

Client: McKenna Consulting Engineers/Galway County Council

Date: November 2021

Report reference: 1193R01

VERSION: FINAL (Dec 2022)

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1.0 Introduction

This report was prepared in response to a request from Mr. John Shannon, McKenna Consulting Engineers, for a Combined Stage 1&2 Road Safety Audit of the proposed residential development in Ardahan, on behalf of Galway County Council.

The Road Safety Team comprised of;

Team Leader: **Norman Bruton**, BE CEng FIEI, Cert Comp RSA

TII Auditor Approval no. NB 168446

Team Member: **Owen O'Reilly**, B.SC. Eng Dip Struct. Eng NCEA Civil Dip Civil. Eng CEng MIEI

TII Auditor Approval no. OO1291756

The Road Safety Audit comprised of an examination of drawings and other material provided. A site visit was carried out by the Audit Team, together on the 1st of November 2021. The weather at the time of the site visit was dry and the road surface was also dry.

This Stage 1&2 Road Safety Audit has been carried out in accordance with the requirements of TII Publication Number GE-STY-01024, dated December 2017.

The scheme has been examined and this report compiled in respect of the consideration of those matters that have an adverse effect on road safety. It has not been examined or verified for compliance with any other standards or criteria.

The problems identified in this report are considered to require action in order to improve the safety of the scheme for road users.

If any of the recommendations within this safety audit report are not accepted, a written response is required, stating reasons for non-acceptance. Comments made within the report under the heading of Observation are intended to be for information only. Written responses to Observations are not required.

The information supplied to the Audit Team is listed in **Appendix A**.

A feedback form for the Designer to complete is contained in **Appendix B**.

A plan drawing showing the problem locations is contained in **Appendix C**.

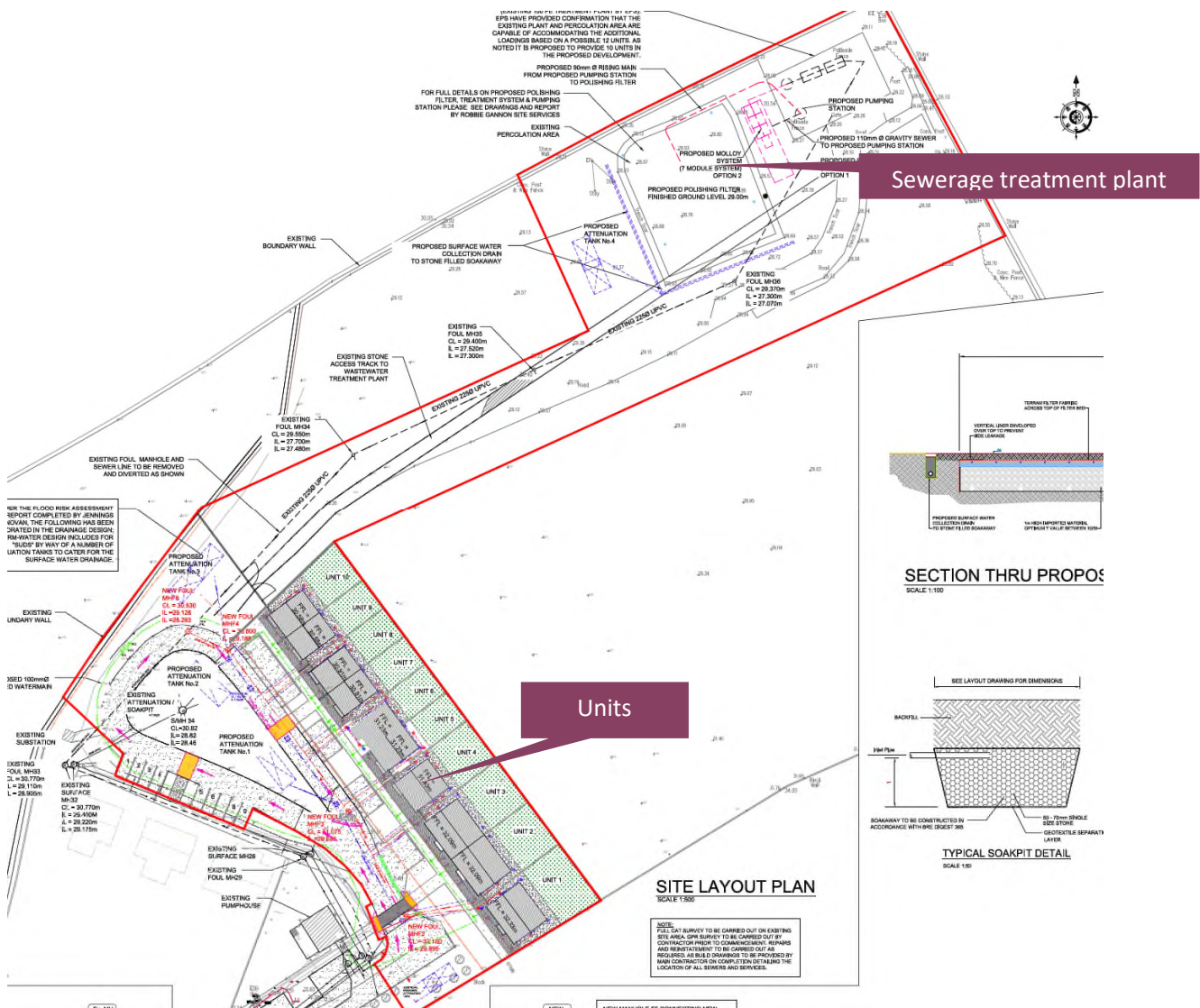
2.0 Background

It is proposed to construct 10 no. residential units at Ardrahan, Co. Galway. The development would be an extension of an existing housing estate known as Caisleán Raithlín.

The access will be the same as the existing estate with the internal road extended to provide a one-way loop system.

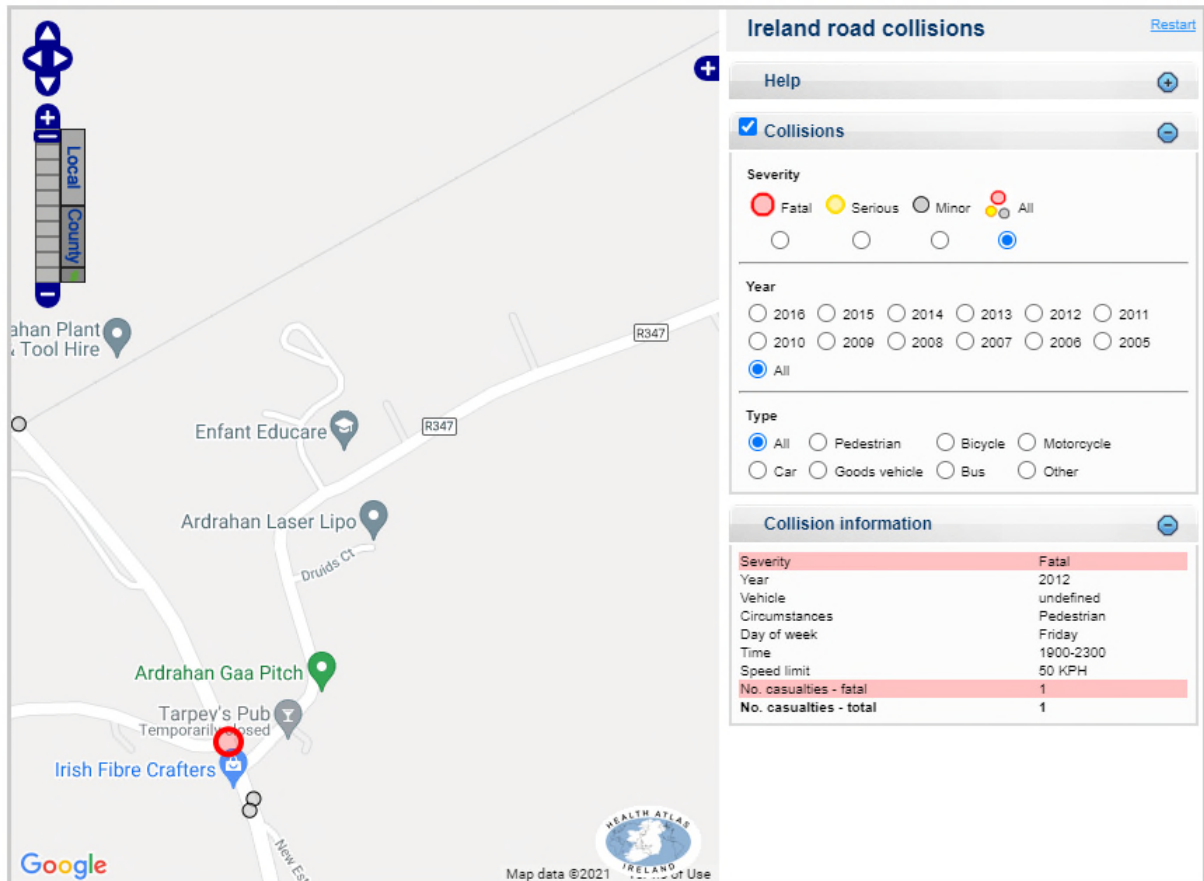
The main road infrastructure was in place at the time of the site visit.

The layout of the site is shown below.



2. 1 Collision History

The Road Safety Authority’s website shows that there were no recorded injury collisions adjacent to the site in the 12-year period 2005 to 2016. There as a fatal collision involving a pedestrian in Ardrahan village in 2012.



3.0 Issues Raised in this Road Safety Audit.

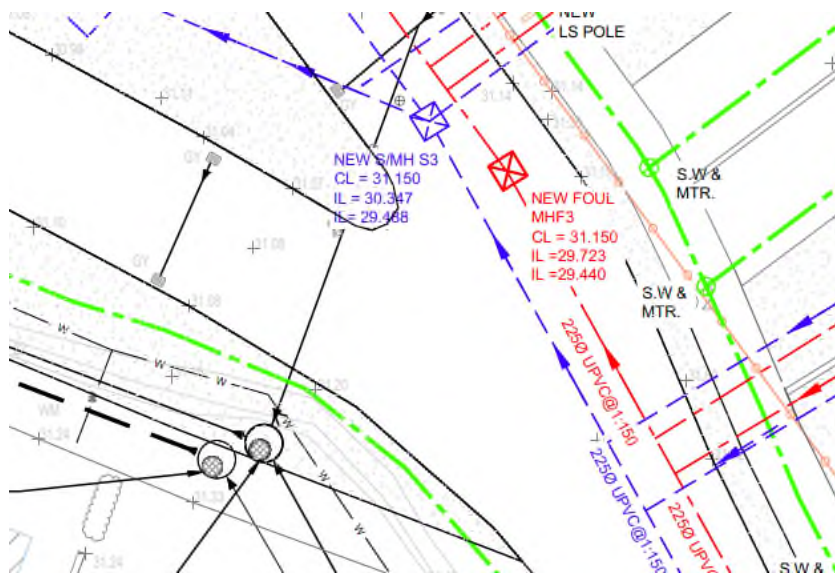
3.1 Problem

LOCATION

Drawing 18337/CE/004/PL, Site Layout Plan.

PROBLEM

The one-way system may not be clear to visitors to the estate. This could lead to head-on collisions.



RECOMMENDATION

It is recommended that some road markings be provided to show travel direction and priority at the merge point of the loop.

3.2 Problem

LOCATION

Site Observation.

PROBLEM

There are no speed limit signs within the existing estate. This may lead to excessive speed and hence high injury severity for vulnerable road users.

RECOMMENDATION

It is recommended that a 30km/hr residential area speed limit be provided for the entire estate.

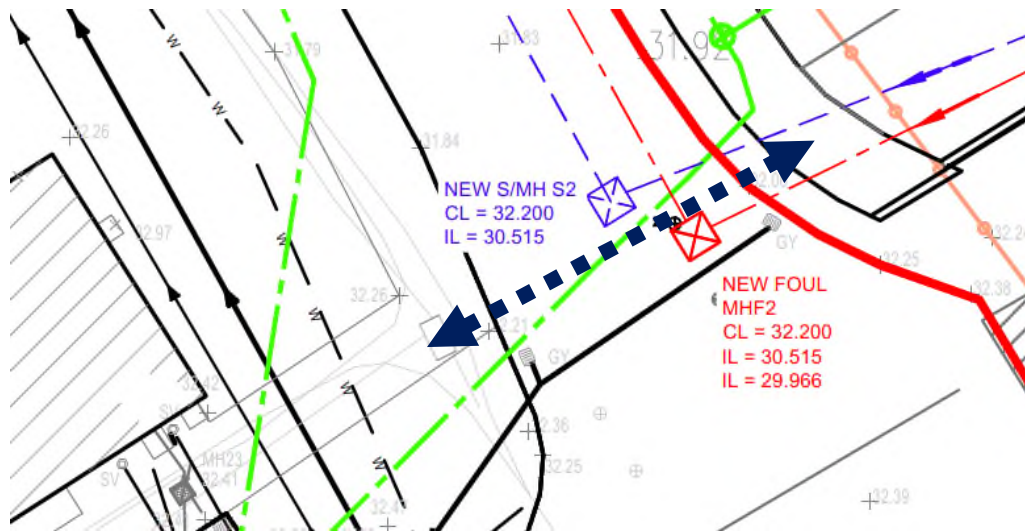
3.3 Problem

LOCATION

Drawing 18337/CE/004/PL, Site Layout Plan.

PROBLEM

There will be a pedestrian desire line across the access to the development to the proposed footpath outside unit no.2 which currently does not exist. Crossing the carriageway may lead to trips and falls.



RECOMMENDATION

It is recommended that an uncontrolled pedestrian crossing be provided with dropped kerbs and suitable tactile paving.

3.4 Problem

LOCATION

Drawing 18001/008 O'BFA, Part 8 Drawing.

PROBLEM

It is assumed that the green island area will be used as a play area for children. There is a risk that children will cross the carriageway at various locations and may not be seen by drivers reversing out of the on curtilage parking spaces.



RECOMMENDATION

It is recommended that dedicated crossing points be provided possible with raised tables to highlight their presence and to provide a courtesy crossing for children.

4.0 Audit Statement

We certify that we have examined the material provided. The examination has been carried out with the sole purpose of identifying any aspects of the design which could be added, removed or modified in order to improve the safety of the scheme.

The problems identified have been noted in this report together with associated safety improvement suggestions which we would recommend should be studied for implementation. The audit has been carried out by the persons named below who have not been involved in any design work on this scheme as a member of the Design Team.

Norman Bruton Signed: 
(Audit Team Leader) Dated: 7-12-2022

Owen O'Reilly Signed: 
(Audit Team Member) Dated: 7-12-2022

Appendix A

List of Material Supplied for this Audit;

- Drawing1835-OBFA-XX-XX-DR-A-001
- Drawing1835-OBFA-XX-XX-DR-A-002
- Drawing1835-OBFA-XX-XX-DR-A-003
- Drawing1835-OBFA-XX-XX-DR-A-004
- Drawing1835-OBFA-XX-XX-DR-A-008
- Drawing18337-CE-004_draft
- Drawing18337-CE-005_draft

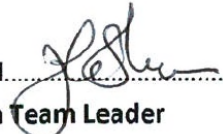
Appendix B

Feedback Form

ROAD SAFETY AUDIT FORM – FEEDBACK ON AUDIT REPORT

Scheme: Ardrahan, residential Scheme
 Stage: Stage 1&2 Road Safety Audit
 Date Audit (Site Visit) Completed: 1st November 2021

Paragraph No. in Quality Audit Report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measures (describe)	Alternative measures accepted by Auditors (Yes/No)
3.1	✓	✓		
3.2	✓	✓		
3.3	✓	✓		
3.4	✓	✓		

Signed 
Design Team Leader

Date 23/9/22

Signed 
Audit Team Leader

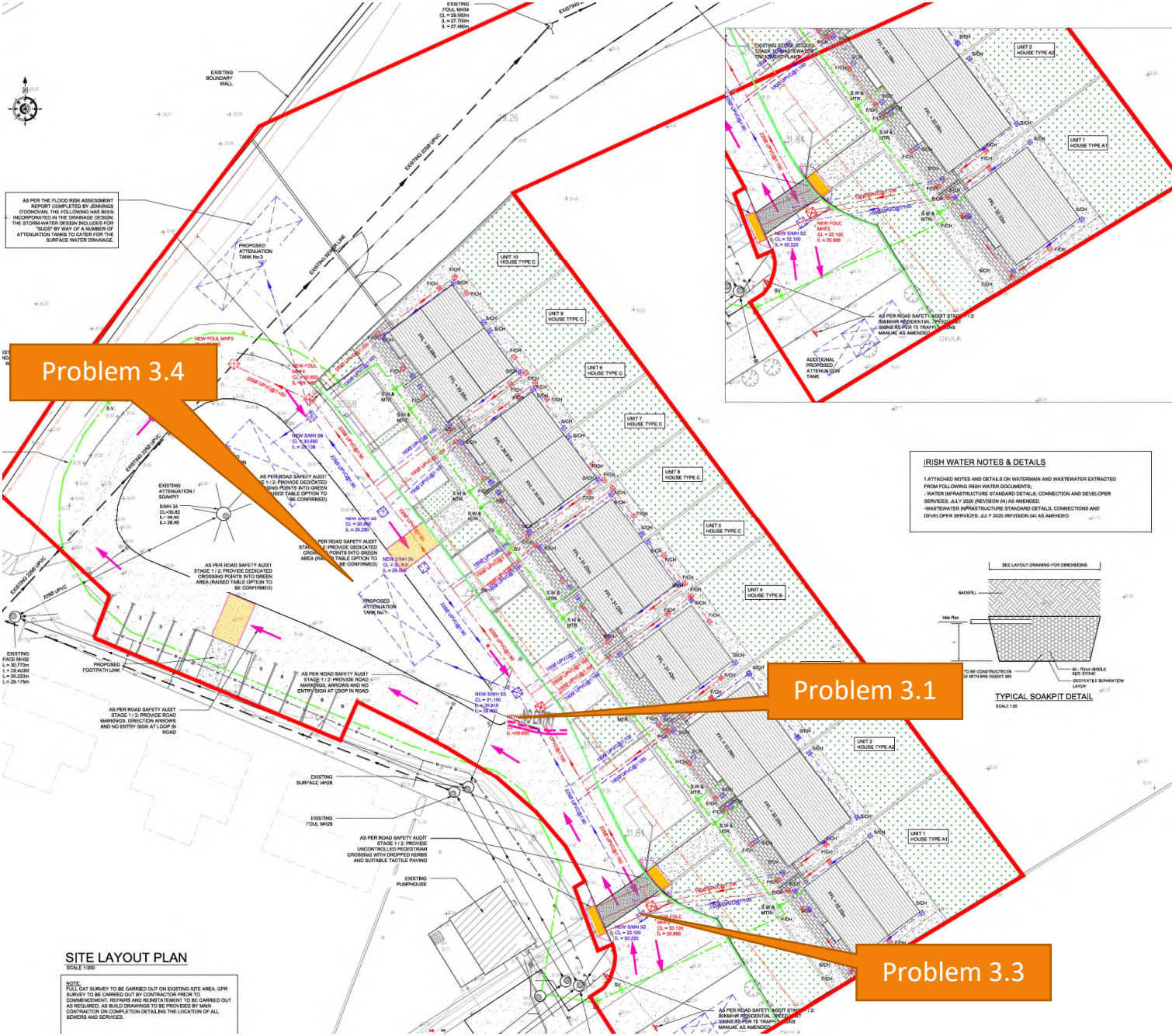
Date 7-12-2022

Signed
Employer/Developer

Date

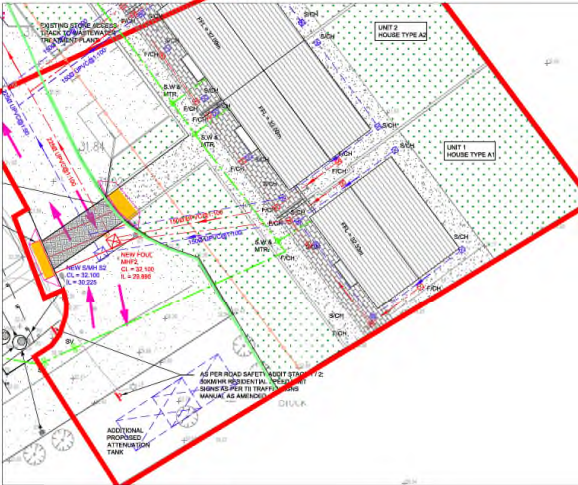
Appendix C

Problem Location Plan.



AS PER THE FLOOD RISK ASSESSMENT REPORT COMPLETED BY JENNINGS O'CONNOR, THE FOLLOWING HAS BEEN INCORPORATED IN THE DRAINAGE DESIGN: THE STORMWATER DESIGN INCLUDES FOR 'BUILT' BY WAY OF A NUMBER OF ATTENUATION TANKS TO CAPER FOR THE SURFACE WATER DRAINAGE.

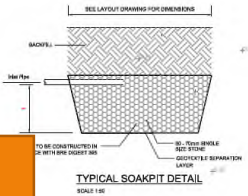
Problem 3.4



IRISH WATER NOTES & DETAILS

LATTACHED NOTES AND DETAILS ON WATERMAIN AND WASTEWATER EXTRACTED FROM FOLLOWING IRISH WATER DOCUMENTS:

- WATER INFRASTRUCTURE STANDARD DETAILS, CONNECTION AND DEVELOPER SERVICES, JULY 2020 (REVISION 04) AS AMENDED.
- WASTEWATER INFRASTRUCTURE STANDARD DETAILS, CONNECTIONS AND DEVELOPER SERVICES, JULY 2020 (REVISION 04) AS AMENDED.



Problem 3.1

Problem 3.3

SITE LAYOUT PLAN
SCALE: 1:500

NOTE:
FULL CAT SURVEY TO BE CARRIED OUT ON EXISTING SITE AREA. GPR SURVEY TO BE CARRIED OUT BY CONTRACTOR PRIOR TO COMMENCING ALL WORKS AND PERMITTED TO BE CARRIED OUT AS REQUIRED. ALL BUILT DRAWINGS TO BE PROVIDED BY MAIN CONTRACTOR ON COMPLETION DETAILING THE LOCATION OF ALL SERVICES AND SERVICES.