



## **New Fire Station at Manorhamilton, Co Leitrim**

### **Stage 1 Road Safety Audit Report**

Prepared By:

**CST Group** Chartered Consulting Engineers  
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On behalf of **Leitrim County Council**

**February 2022**

**Civil**  
**Structural**  
**Traffic**

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## Document History

<b>Revision</b>	R0	R0								
<b>Purpose of Issue:</b> P=Preliminary PG=Progress C=Comment I=Information PL=Planning T=Tender CN=Construction	C	PL								
<b>Date:</b>	20 12 21	11 02 22								
<b>Originator:</b>	FF	FF								
<b>Checked By:</b>	PJG	PJG								
<b>Approved By:</b>	FF	FF								

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## 1. Introduction

1.1. This report describes a Stage 1 Road Safety Audit carried out on behalf of Leitrim County Council on a proposed new fire station at Cloneen Td, Manorhamilton, Co Leitrim.

1.2. The audit was carried out between 9<sup>th</sup> and 10<sup>th</sup> December 2021.

1.3. The audit team were as follows:

***Team Leader:***

Francis Fidgeon, Chartered Engineer, BE CEng MIEI  
Certificate of Competency in Road Safety Audits (UCD, 2013)  
TII Auditor Ref. FF74289

***Team Member:***

PJ Gallagher. BEng M.Inst.A.E.A. MITAI  
TII Auditor Ref. PG3425716

1.4. The audit comprised an examination of the drawings relating to the scheme supplied by the design office. A site visit was carried out by both Audit Team members together on 9<sup>th</sup> December 2021 between the hours of 11am and 12pm. Weather conditions during the inspection were wet and the road surface was wet. Photographs were taken during the inspection.

1.5. This Stage 1 audit has been carried out in accordance with the relevant sections of the Transport Infrastructure Ireland (TII) Publication (Standard) GE-STY-01024 (Dec 2017) 'Road Safety Audit'. The audit team has examined only those issues within the design relating to the road safety implications of the scheme and has therefore not examined or verified the compliance of the design to any other criteria.

1.6. Appendix A describes the documents examined by the Audit Team.

1.7. All of the problems described in this report are considered by the audit team to require action in order to improve the safety of the scheme and minimise accident occurrence.

## 2. Items Resulting from Previous Stage 1 Audit

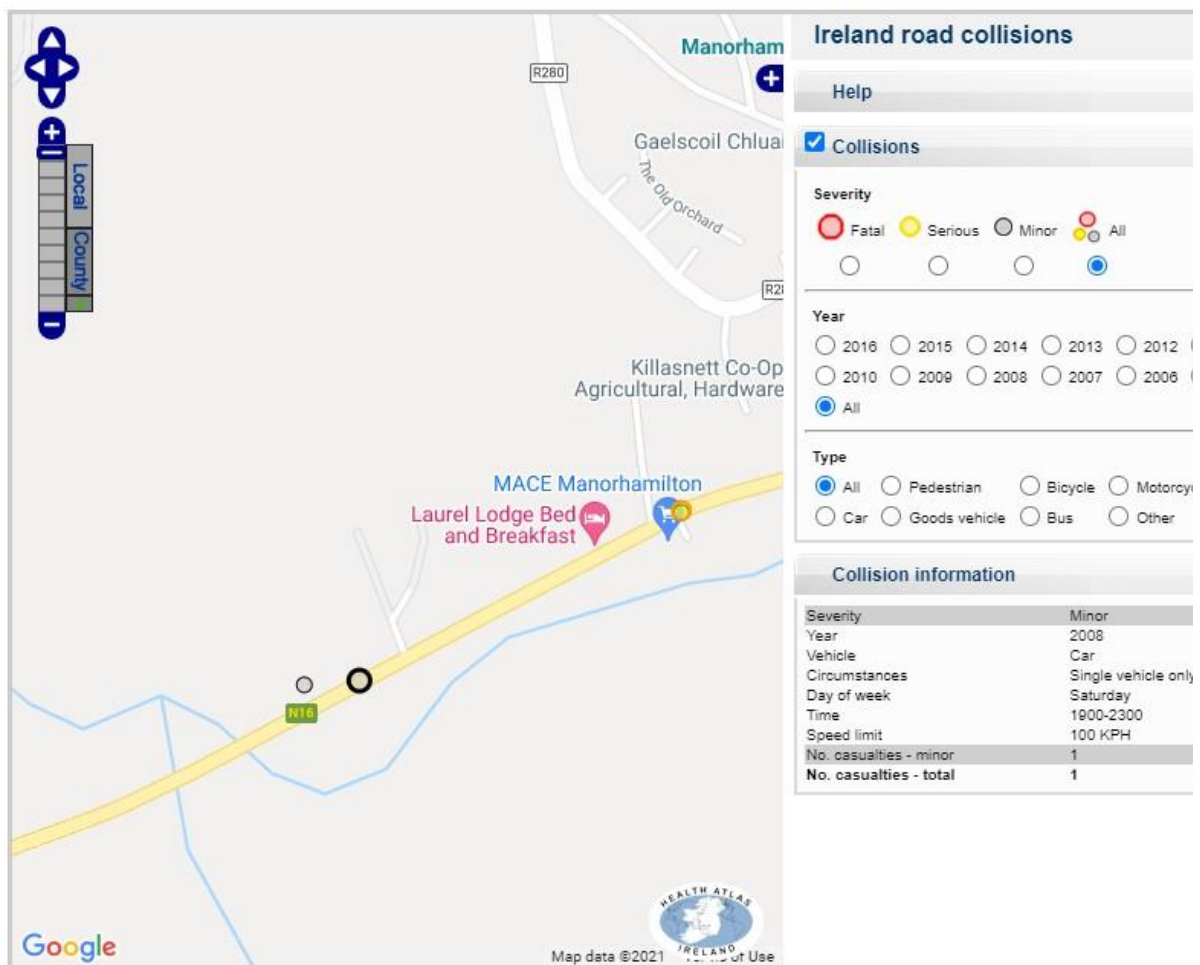
Not applicable.

### 3. Items Resulting from This Stage 1 Audit

#### 3.1 Collision Data

Collision data has not been supplied with this scheme.

Road Collision Data available on the Road Safety Authority Database, within the period 2005 to 2016, recorded 1 minor collision in the immediate vicinity of the proposed site.



## 3.2 General Problems / Problems at Multiple Locations

### 3.2.1 Multiple Junctions with the N16

**Problem:** The proposal results in multiple junctions/accesses with the N16 in very close proximity.

**Hazard:** Motorists exiting from an access may see an approaching vehicle on the N16 with their indicator on and presume they are turning left off the N16 into the access they are exiting whereas they may be proceeding to the next access and a T-bone collision may result.

**Recommendation:** Group the accesses into one junction combined with the access to the treatment plant/recycling centre.

### 3.2.2 Signage

**Problem:** No warning signage is shown on the N16 for the fire station access

**Hazard:** N16 motorists may approach too fast and collide with emerging fire wagons.

**Recommendation:** Provide warning signage.

## 3.3 Problems at Specific Locations

### 3.3.1 Steep Access

**Problem:** Further to recommendation 3.2.1 the existing access to the treatment plant/recycling is steep with an inadequate dwell area at the N16.

**Hazard:** Vehicles exiting the access may errantly roll into the path of oncoming N16 traffic resulting in T-bone collisions.

**Recommendation:** Provide an appropriate dwell area at the mouth of the access.

### 3.3.2 Sightline

**Problem:** Further to recommendation 3.2.1 sightline to the left towards Manorhamilton is restricted due to advertising/hedging.

**Hazard:** Exiting traffic may proceed into the path of oncoming traffic resulting in evasive action by N16 motorists and rear-end collisions.

**Recommendation:** Ensure adequate visibility is provided.

### 3.3.3 Speedlimit

**Problem:** The proposed accesses are near/in the 80kph speedlimit zone.

**Hazard:** Multiple movements, particularly those associated with the emergency of attending a fire, in conjunction with faster moving traffic on the N16 may result in late braking and T-bone or rear-end collision.

**Recommendation:** Extend the 60kph zone sufficiently beyond the development.

### 3.3.4 Overtaking

**Problem:** Overtaking on the N16 is permitted in the vicinity of the development.

**Hazard:** Traffic exiting the development, particularly those associated with the emergency of a fire, may pull out into the path of an overtaking vehicle and result in head-on collision.

**Recommendation:** Prevent overtaking in this area.

### 3.3.5 Lighting

**Problem:** Whilst there is a light at the access to the treatment plant/recycling centre the general lighting in Manorhamilton does not extend out to the development.

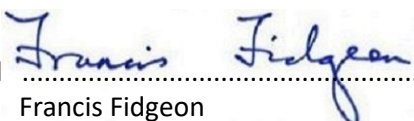
**Hazard:** Motorists approaching from the Sligo direction may travel at inappropriate speeds towards past the development at night not as they focus their attention on slowing for the lit-up area and T-bone/rear-end collision with fire station traffic may result.

**Recommendation:** Extend the lighting past the development.



#### 4. Audit Team Statement

We certify that we have examined the drawings and other information listed in Appendix A. This examination has been carried out with the sole purpose of identifying any features of the design that could be removed or modified 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 studied for implementation. No one in the audit team has been involved with the scheme design as shown in Appendix A.

Signed   
Francis Fidgeon  
Chartered Engineer  
Audit Team Leader

Date *10 December 2021*

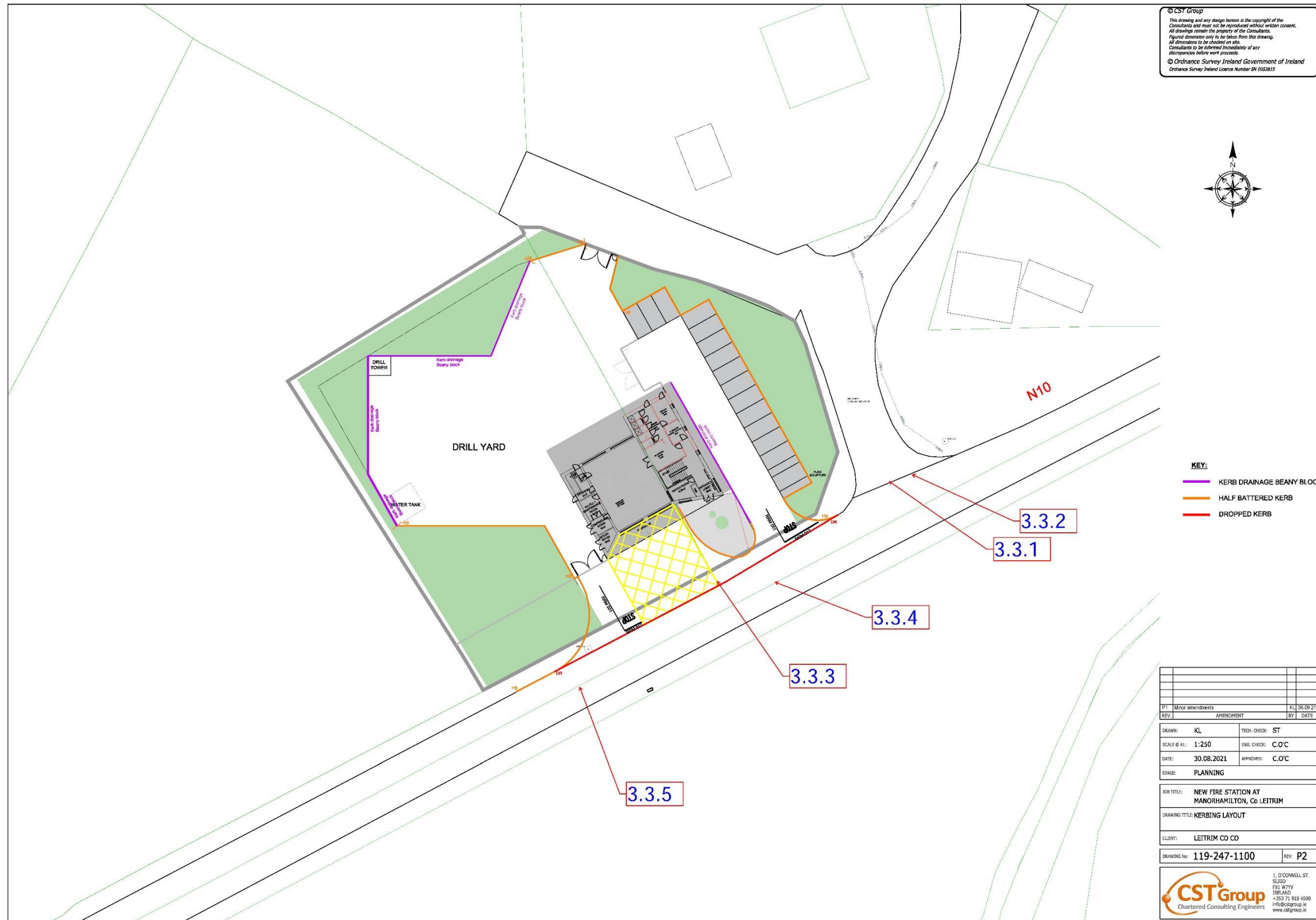
Signed   
PJ Gallagher  
Audit Team Member

Date *10 December 2021*

## Appendix A List of Documents Examined

DOCUMENT REF / NAME:	RECEIVED FROM:	DATE:
119247 500 P2 Storm Water Drainage	CST Group	09/12/2021
119247 1100 P2 Kerbing Layout	CST Group	09/12/2021

**Appendix B Problem Location Plan**



## Appendix C TII Approval of RSA Team

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**From:** TII Systems Notification <[noreply@tii.systems](mailto:noreply@tii.systems)>  
**Sent:** 23 December 2021 11:30  
**To:** Michael Gallagher <[mgallagher@leitrimcoco.ie](mailto:mgallagher@leitrimcoco.ie)>  
**Cc:** [roadsafetyaudits@nra.ie](mailto:roadsafetyaudits@nra.ie); [Fiona.Bohane@corkrdo.ie](mailto:Fiona.Bohane@corkrdo.ie); [Alastair.DeBeer@TII.ie](mailto:Alastair.DeBeer@TII.ie); [Bryan.kennedy@TII.ie](mailto:Bryan.kennedy@TII.ie); [LCurtis@Kerrycoco.ie](mailto:LCurtis@Kerrycoco.ie); [ffidgeon@cstgroup.ie](mailto:ffidgeon@cstgroup.ie); [pjgallagher20@hotmail.com](mailto:pjgallagher20@hotmail.com)  
**Subject:** RSAAS - Road Safety Audit Approvals System - Audit Approval 22267242/24119/Stage 1  
**Importance:** High

*Michael Gallagher  
Aras an Chontae  
Carrick on Shannon  
Co. Leitrim*

Date: 23/12/2021

Our Ref: 22267242/24119/Stage 1

**re: N16 Access off N16 at Clooneen Td Manorhamilton**

**APPROVAL OF ROAD SAFETY AUDIT TEAM, Stage 1**

Dear Michael Gallagher,

The following members of the proposed road safety audit team are approved to carry out the Stage 1 road safety audit of N16 Access off N16 at Clooneen Td Manorhamilton.

1. Francis Fidgeon - CST Group Consulting Engineers - Leader
2. PJ Gallagher - CST Consulting Engineers - Member

A copy of all audit reports, design team response and exception reports must be uploaded through RSAAS. Successful upload of these reports and completion of the audit approval process is necessary for any further audit approval on this scheme.

Yours sincerely,

Lucy Curtis

*Regional Road Safety Engineer*  
[roadsafetyaudits@tii.ie](mailto:roadsafetyaudits@tii.ie)

## Appendix D      RSA Feedback Form

# ROAD SAFETY AUDIT FEEDBACK FORM

CST Group Chartered Consulting Engineers  
1, O'Connell Street, Sligo, F91 W7YV, Ireland

Scheme: New Fire Station at Manorhamilton Co Leitrim on behalf of Leitrim County Council


Audit Stage: 1 Date Audit Completed: 10/12/2021 Route No. N16 Our Ref :119247|R0

TO BE COMPLETED BY DESIGNER				TO BE COMPLETED BY AUDIT TEAM LEADER
Paragraph No. in Safety Audit Report	Problem accepted (Yes/No)	Recommended measure accepted (Yes/No)	Describe alternative measure(s). Give reasons for not accepting recommended measure. Only complete if recommended measure is not accepted.	Alternative measures or reasons accepted by Auditors (Yes/No)
3.2.1	Yes	No	Due to the use of the building (Fire Station), direct access to the N16 is required for to access and exit the Garage and staff carpark for emergency situations. The client notes that due to the location of the recycling bins on the access road adjacent, often there are several cars parked on this road. Grouping emergency traffic with the public access to the sewage treatment plant and recycling centre could lead to accidents and/or delays in deploying the fire service in an emergency situation. The Design Team have reconfigured the site layout to allow for an <i>exit only</i> gate from the staff carparking to reduce traffic to the N16. The client notes that the no. of call outs from this fire station is likely to be 1-2 times a week with staff training happening one evening a fortnight, i.e there is no continuous traffic to/from this station envisaged. This option has been discussed with Michael Gallagher, Senior Executive Engineer, Roads Department, Leitrim County Council.	Yes
3.2.2	Yes	Yes	Warning Signage noting ' <i>Caution Fire Station Access</i> ' proposed in both directions on N16.	
3.3.1	No	No	As discussed with Michael Gallagher, Senior Executive Engineer, Roads Department, Leitrim County Council, we believe there is no issue with the current dwell area of the access road.	Yes. We may have noted a potential issue on site if the layout was redesigned following Recommendation 3.2.1 where fire trucks would also be using the existing access
3.3.2	No	No	As discussed with Michael Gallagher, Senior Executive Engineer, Roads	Yes

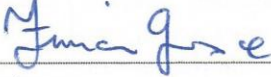
# ROAD SAFETY AUDIT FEEDBACK FORM

CST Group Chartered Consulting Engineers  
1, O'Connell Street, Sligo, F91 W7YV, Ireland

TO BE COMPLETED BY DESIGNER				TO BE COMPLETED BY AUDIT TEAM LEADER
Paragraph No. in Safety Audit Report	Problem accepted (Yes/No)	Recommended measure accepted (Yes/No)	Describe alternative measure(s). Give reasons for not accepting recommended measure. Only complete if recommended measure is not accepted.	Alternative measures or reasons accepted by Auditors (Yes/No)
			Department, Leitrim County Council, we believe there is no issue with the current sightline from the access road.	
3.3.3	Yes	Yes	As discussed with Michael Gallagher, Senior Executive Engineer, Roads Department, Leitrim County Council. We wish to move the existing speed limit sign to align with the site boundary. We note that this may be subject to the TII National Speed Limit Review.	
3.3.4	Yes	Yes	We wish to have a solid line 'no overtaking' zone along the stretch of road at the proposed Fire Station and access road.	
3.3.5	Yes	No	As discussed with Michael Gallagher, Senior Executive Engineer, Roads Department, Leitrim County Council. We do not see the need to extend the public lighting from Mace shop (c.200m away). We have added 3 no. additional site lighting poles to the front of the site which will light both the entrance area and part of the Fire Station Site. We note there is 1 no. existing lighting pole to the rhs of the entrance to the access road.	Yes. The recommendation is to ensure the N16 is adequately lit at the proposed development so that traffic arriving from the Sligo direction does not perceive they only need to slow/proceed with caution from the Mace shop on

Signed:  Designer Date: 10/2/22  
Ian Pudney  
Rhatigan Architects

Signed:  Audit Team Leader Date: 09/02/2022  
Francis Fidgeon  
CST Group Chartered Consulting Engineers

Signed:  Employer Date: 9/2/2022  
Finian Joyce  
Chief Fire Officer  
Leitrim County Council