

Proposed Little Island Waste Recovery Facility

Stage 1 Road Safety Audit

18th April 2008

Produced for
PMCE

Prepared by
Aidan Cleary/Ronan Lyng
Road Safety Audit Team

2nd Floor Marina House
Clarence Street
Dun Laoghaire
County Dublin
Ireland

T +353 1 230 4400
F +353 1 230 4405
E aidan.cleary@mouchel.com

For inspection purposes only.
Copyright owner required for any other use.

Document Control Sheet

Project Title Proposed Little Island Waste Recovery Facility

Report Title Stage 1 Road Safety Audit

Revision 2

Status Final

Control Date 18th April 2008

Record of Issue

Issue	Status	Author	Date	Check	Date	Authorised	Date
1	Draft	R. Lyng	27/3/08	A. Cleary	27/3/08	A. Cleary	27/3/08
2	Final	R. Lyng	18/04/08	A. Cleary	18/04/08	A. Cleary	18/04/08

Distribution

Organisation	Contact	Copies
PMCE	Peter Monaghan	1

Contents

Document Control Sheet.....	i
Contents.....	ii
1 Introduction	1
2 General.....	2
2.1 Problem.....	2
2.2 Problem.....	2
2.3 Problem.....	2
2.4 Problem.....	3
2.5 Problem.....	3
2.6 Problem.....	3
2.7 Problem.....	3
2.8 Problem.....	4
2.9 Problem.....	4
2.10 Problem.....	4
3 ROAD SAFETY AUDIT TEAM STATEMENT	5
4 Appendix A	6
4.1 Drawings Inspected.....	6
5 Appendix B	7
5.1 Road Safety Audit Feedback Form.....	7

For inspection purposes only.
Consent of copyright owner required for any other use.

1 Introduction

This report results from a Stage 1 Road Safety Audit carried out on the proposals for Little Island Waste Recovery Facility. The development provides for the provision of a waste recovery facility at Little Island in Cork with an access provided onto the Regional Road R623.

The Audit took place in March 2008 in accordance with the audit brief for the scheme. The site visit was undertaken by Mr. Ronan Lyng on the 25th of March 2008. The weather was bright but wet.

The Audit Team consisted of:

Aidan Cleary,

Road Safety Audit Team Leader, Mouchel

Ronan Lyng,

Road Safety Audit Team Member, Mouchel

Terms of reference for the Audit are as NRA HD19/04 Road Safety Audits and NRA HA 42/04 - Road Safety Audit Guidelines, contained in Volume 5 of the National Roads Authority Design Manual for Roads and Bridges (DMRB). Accordingly the works have been inspected and reported on for the road safety implications. Absence of any comment should not be taken to imply compliance of the design with any other criteria

Appendix A describes the drawings/documents examined by the Audit Team.

Appendix B is the Road Safety Audit Feedback Form

2 General

2.1 Problem

No pedestrian routes have been provided into/out of/within the development. It is considered that, amongst others, a desire line is present for pedestrians between the parking bays and the recycling facilities. Failure to provide such routes may lead to drivers not being fully aware of the presence of pedestrians leading to increased conflicts between vehicles (particularly HGV's) and pedestrians.

Recommendation

The Design Team should provide pedestrian routes into/out of and within the development along all anticipated desire lines.

2.2 Problem

The Regional Road R623 to the east of the proposed development enters the village of Little Island where the existing road narrows and includes a constrained left-hand bend. It was also noted that there was a considerable volume of pedestrian and vehicular traffic present in the village. With a predicted increase in daily trip rate of 286 vehicles (272 HGV's), there may be an increased risk of conflict between vehicles and pedestrians in the village due to the constrained geometry at that location.

Recommendation

The Local authority should be made aware of the Audit Team's concerns at this location.

Additionally, all directional signage for the development should aim to promote the use of the N25/Jack Lynch Tunnel link to the R623 as a means of access/egress for the development thereby reducing the impact at the geometrically constrained bend within Littleisland.

2.3 Problem

The proposed access road has a width of 6.0m as does the two-way system within the development. It is unclear whether all anticipated HGV manoeuvres can be safely undertaken without the risk of conflict (including side swiping) between vehicles as they pass, particularly in areas where there are turning movements within the road geometry.

Recommendation

The Design Team should carry out a swept-path analysis of the access and the internal through-fares for the development to confirm that HGV's have comfortable passing and turning movements at all locations.

2.4 Problem

It is noted that the existing deep water adjacent to the development may be retained. It is unclear what boundary treatments are proposed for the development which may result in a potential water hazard to vehicles/pedestrians moving along the western side of the site.

It is unclear what form the 'bundled concrete apron' on the southern boundary of the development will take. It is considered that the hazard noted above may also be present at this location.

Recommendation

The Design Team should ensure that boundary details include for safety parapets or vehicular restraint systems where necessary. Warning signage should be located within the development to make pedestrians/drivers aware of the presence of such hazards.

2.5 Problem

It is unclear from the drawings provided, whether the desirable minimum stopping sight distance along the R623 is available to drivers wishing to turn right from the R623 into the proposed facility. Should this not be available, there may be an increased risk of head on collisions.

Recommendation

The Design Team should ensure that all forward and exiting sight-line requirements are met.

2.6 Problem

The proposed plastic/metal/wood skips are located in close proximity to the through-fare for HGV's and other vehicles using the facility and the two-way internal system. This may result in potential conflicts between vehicles/pedestrians using these skips and vehicles using the facility and/or the two-way system.

Recommendation

The Design Team should ensure that the location of these skips is appropriate given the anticipated use of the skips and the through traffic within the development.

2.7 Problem

It is unclear from the drawings provided how the two internal layout options tie-in to the proposed access for the development shown in Figure 3.1. This may result in alterations to the design which the audit team would be unable to assess.

Recommendation

The Design Team should ensure that the 2 no. options put forth tie appropriately into the proposed priority junction during the detailed design stage.

2.8 Problem

It is unclear from the drawings what colour is proposed for the tactile paving at the pedestrian crossing across the proposed priority junction. Inappropriate colouring of the tactile paving may create difficulty for partially sighted persons who may not appreciate the type of crossing present resulting in possible conflicts between pedestrians and vehicles.

Recommendation

It is assumed that this is an uncontrolled crossing and as such the tactile paving should be of buff colour. The Design team should ensure that appropriate tactile paving is proposed during the detailed design stage.

2.9 Problem

No drainage details have been provided to the Audit Team. As such, the Audit Team have been unable to assess the impact of the drainage regime on the safety of the proposed development.

Recommendation

The Design Team should clarify the drainage provisions during the detailed design stage. Care should be given to ensuring that gullies are not located within pedestrian routes/crossings.

2.10 Problem

It is unclear what proposals are in place to cater for the safe access/egress of disabled users, particularly wheelchair users, from/to the buildings within the development.

Recommendation

Ramps with a maximum gradient of 1:12 should be provided at all building accesses where it is anticipated that the use of steps to access the buildings is required. Appropriately sized disabled car-parking spaces should be provided as close to the buildings as possible and signed accordingly.

3 ROAD SAFETY 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 and 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.

Audit Team Leader

Aidan Cleary
Mouchel
2nd Floor Marina House
Clarence Street,
Dun Laoghaire,
Co. Dublin

Signed Aidan Cleary A Cleary
Date 18/04/08.....

Audit Team Member

Ronan Lyng
Mouchel
2nd Floor Marina House
Clarence Street,
Dun Laoghaire,
Co. Dublin

Signed Ronan Lyng R Lyng
Date 18/04/08.....

*For inspection purposes only.
Consent of copyright owner required for any other use.*

Audit Observer

Itziar Lasa
Mouchel
2nd Floor Marina House,
Clarence Street,
Dun Laoghaire,
Co. Dublin

4 Appendix A

4.1 Drawings Inspected

Drawing Number	Title
Figure 1.1	Location Map
Figure 3.1	Proposed Access from Site onto R623
Unreferenced	Internal Site Layout Option 1
Unreferenced	Internal Site Layout Option 2

*For inspection purposes only.
Consent of copyright owner required for any other use.*

Road Safety Audit Feedback Form

Scheme: Little Island CD&E Waste Recovery Facility

Audit Stage: 1 Date Audit Completed: 27th March 2008

Paragraph No. in Safety Audit Report	Problem Accepted (Yes/No)	Recommended Measure(s) Accepted (Yes/No)	Alternative Measure(s) (Describe)	Alternative Measures Accepted by Auditors (Yes/No)
2.1	Yes	Yes		
2.2	Yes	Yes		
2.3	Yes	Yes		
2.4	Yes	Yes	Protective measures at the interface with the lagoons will be reviewed during detailed design.	YES
2.5	No	No	The available sight distance at this location has been checked and meets the requirements for a 70kph design speed road.	YES
2.6	Yes	Yes		
2.7	Yes	Yes		
2.8	Yes	Yes		
2.9	Yes	Yes		
2.10	Yes	Yes		

Signed: Peter J. Monahan

Design Team Leader

Date: 17th April 2008

Please complete and return to safety auditor.

Safety Audit Signed Off: Aidan Cleary

Audit Team Leader

Date: 18 / April 08