

STRATEGIC INFRASTRUCTURE DEVELOPMENT  
APPLICATION TO AN BORD PLEANÁLA  
(REG NO. PL04.PA0045)

ORAL HEARING

WASTE TO ENERGY FACILITY, RINGASKIDDY, COUNTY CORK

WITNESS STATEMENT OF DENIS CROWLEY

L2545 Road Upgrade

## **1. Qualifications and Experience**

My name is Denis Crowley I qualified from University College Cork with an honours degree (B.E.) in Civil Engineering in 1980.

I am a Chartered Engineer with Engineers Ireland since 1987.

I am a director with Ove Arup and Partners Ireland Limited and I am the director in charge of the Highways business in Ireland.

I have 35 years' experience working on various aspects of civil and structural engineering projects including roads and bridges. My experience covers the full range of project stages from initial concept design to detailed design to construction administration. Some of the relevant projects that I have worked on are:

- Project Engineer / Employer's Representative for the Grade Separation of Sarsfield Road and Bandon Road Interchanges
- Project Engineer for the Grade Separation of Kinsale Road Interchange
- Project Director for the M9 Phase 2 Motorway from Waterford to Knocktopher
- Project Engineer for the upgrading of the N25 Cork – Rosslare Road between Carrigtwohill and Midleton
- Project Engineer for Naas Outer Ring Road
- Project Engineer for University of Limerick Spine Road
- Project Engineer for Dunkettle Bridges
- Project Engineer for Bloomfield Bridge

## **2. Role in the Project**

I supervised the preparation of the design of the proposed L2545 road upgrade by a team of engineers under my management.

I have previous experience of the site having supervised the design of a possible L2545 road upgrade for Indaver's previous planning application for the site submitted in 2008.

In preparing this witness statement, I have considered each of the observations submitted to An Bord Pleanála by the various parties in relation to the design of the L2545 Road Upgrade aspect of the Ringaskiddy Resource Recovery Centre planning application.

### 3. Submissions and Responses

In preparing this witness statement, I have considered each of the observations submitted to An Bord Pleanála by various parties in relation to the design of the proposed L2545 road upgrade for the Ringaskiddy Resource Recovery Centre. I have addressed each of the key issues below. Issues pertaining to road drainage design and road flood risk are dealt with separately by my colleagues.

#### **Issue Number 1: L2545 Construction phasing**

Submission: Section 10.3 Cork County Council Planning Report, CCC internal technical reports – Area Engineer's office

In its submission Cork County Council states that the L2545 upgrade must be completed in advance of any further construction works.

Response:

We agree with Cork County Council's recommendation.

#### **Issue Number 2: Extension of proposed L2545 road upgrade to the future M28 tie-in and contribution for entire L2545 in absence of M28 scheme**

Submission: Section 10.3 Cork County Council Planning Report, CCC internal technical reports – Area Engineer's office and National Roads Office

In its submission Cork County Council states that the L2545 upgrade should be extended westwards to meet the future M28 tie-in and should match the cross section of the M28 scheme L2545 tie-in road. Details of the suggested extension have been requested pertaining to the tie-in to entrances at NMCI, Hammond Lane and other entrances. Full road construction to be applied to the extended section. Cork County Council have further recommended that consideration to be given to a new full depth of pavement over the entire length of the L2545 by way of a contribution should the M28 not go ahead.

Response:

The proposed road upgrade, circa 184m in length, including the new dedicated surface water drainage and attenuation system has been designed to provide the necessary protection to the road against tidal and pluvial flooding.

Extending this road upgrade westwards will not provide any additional protection against flooding and we therefore have not prepared details showing the additional road extension or tie-ins to the entrances to NMCI and Hammond Lane.

We propose that Indaver are conditioned to agree tie-in details with Cork County Council prior to construction.

**Issue Number 3: Impact on utilities**

Submission: Cork County Council internal technical reports – Area Engineer's office

Possible conflict with utilities due to full depth road construction.

Response:

This has been considered in the design of the road upgrade and utility providers have been consulted. A number of diversions will be required. Refer to sections 5.3.2, 5.12.5 and 15.5.4 of the EIS.

**Issue Number 4: Full road construction specification and extent**

Submission: Cork County Council internal technical reports – Area Engineer's office

CCC request that full depth road construction be provided from the future M28 tie-in to Gobby Beach as per specification on drawings C-000-002.

Response:

The road specification as detailed on drawing number C-000-002 will be provided for the circa.185m length of the L2545 proposed to be upgraded.

**Issue Number 5: Reduced holding area for Emergency Vehicles**

Submission: Health Service Executive

HSE are of the view that raising the L2545 will prevent road flooding but will reduce the area for emergency service vehicles to hold as there will be ditches either side of the new raised road. It may also lead to ponding on the southern ditch and/or leaching into the sea.

Response

The proposed L2545 upgrade works will include raising a 185m section of the road to a maximum height of 3.45m OD between the Gobby Beach car park and the eastern end of the Hammond Lane Metal Company. This is approximately 1.0m above the existing road level. In addition, the proposed L2545 road drainage network upgrade will extend along the entire northern boundary of the Indaver site.

The proposed road cross section width will generally match the existing road cross section. The proposed road cross section will consist of an 8m wide paved road with a 2m wide footpath to the north and a 2m wide grass verge to the south. Reference should be made to planning drawings C-000-001, C-000-004, C-000-007, C-000-013 and C-000-014 and also EIS Figures 11.5.1 and 11.5.2.

There will be no reduction in potential storage area for the emergency services on the reconstructed road.

As the road will be kerbed on both sides, all road surface water will be collected by the new gullies to be installed and discharged to sea via the upgraded surface water drainage network. Therefore raising the road will not lead to ponding on the southern road verge.

#### 4. CONDITIONS RECOMMENDED BY CORK COUNTY COUNCIL

Cork County Council has recommended the attachment of a number of indicative conditions which are contained in its Report to the Board dated 05<sup>th</sup> April 2016

Suggested Condition 7

*'The proposed upgrade works to the L2545 shall be completed in full to the satisfaction of the Planning Authority prior to the commencement of any further construction works.'*

#### **Applicant Response**

No objection subject to response to condition 8 outlined below.

Suggested Condition 8

*'The proposed tie shown on Drawing C-000-004 shall be extended westwards to tie into the proposed M28 to the satisfaction of the Planning Authority. In this regard any works proposed to the L2545 shall incorporate the cross section for the tie-in road (L2545) at the eastern end of the M28 Scheme'*

#### **Applicant Response**

See response to Issue Number 2.

## **5. Conclusion**

In summary, I wish to state that the key criteria for the road design was developed from the flood risk assessment. The cross section chosen strikes the best balance between the existing road cross section and any future upgrade. Due consideration has been given to the construction of the road from an impact on existing utilities. The development of the solutions to raise the L2545 public road has been carried out in consultation with the relevant technical staff in Cork County Council.