
Appendix A21.1
Mitigation and Monitoring:
Methodology for Works Affecting
Sensitive and Historic Features

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1. APPENDIX A21.1: MITIGATION AND MONITORING: METHODOLOGY FOR WORKS AFFECTING SENSITIVE AND HISTORIC STRUCTURES

1.1 Introduction

Buildings or structures of Architectural interest, be they recorded monuments, protected structures, buildings in architectural conservation areas or conservation areas, buildings which are recognized through inclusion in the NIAH, DCIHR or other county based vernacular and industrial heritage inventories, or unprotected structures of built-heritage interest, are a unique and irreplaceable resource which often demonstrate a high level of craftsmanship. They may be of architectural, historic, archaeological, artistic, cultural, scientific, social, or technical interest.

Consequently, proposed works must respect the setting of architectural heritage buildings, and the character of the street or area (DELG, 2002).

Railway works including land takes and electrification and other large-scale infrastructural developments adjacent or within architectural conservation areas, areas with an historic or architectural character, or within the setting of protected structures have the potential to impact on the architectural heritage and character of the areas in question (DAHG, 2011). Any alteration of the historic built environment must be carefully considered to maintain the visual and historic integrity of the local area, whether it is an urban, suburban, or rural locality.

1.1.1 General Principles

Where works to features are required as a result of the construction of the Proposed Development it will be carried out by the Contractor in accordance with the principles of the International Council on Monuments and Sites (ICOMOS) Venice Charter (ICOMOS 1964) and Burra Charter produced by ICOMOS Australia in 1979 and amended in 1981, 1988, 1999 and 2013 (Australia/ICOMOS 2013). The Contractor will also adhere to the conservation principles set out in the Department of Arts Heritage and the Gaeltacht's Architectural Heritage Protection Guidelines for Planning Authorities (DAHG, 2011a) and the Departments advice series publications on various elements. Conservation work will be based on an understanding of the historic built environment and its development as described in Chapter 21 (Architectural Heritage) in Volume 2 of this EIA.

Conservation Principles and the principle of 'minimal intervention', have informed the design of the Proposed Development as follows:

- Intervention should be avoided where possible. (DCC, 2014, DAHG, 2011a).
- A range of alternative engineering and design solutions have been considered during the design of the Proposed Development to avoid or mitigate works that will detract from the special character of, or cause damage to, elements that contribute to the character of architectural conservation areas, areas of historic or architectural character or the setting of protected structures (DCC, 2014). The design and location of any proposed alterations to bridges or viaducts or station buildings has been considered in this regard.
- All features and materials of importance to maintain the character of the historic built environment should be retained including features of all ages. (DCC, 2014, DELG, 2002).

- Where intervention is required the proposed changes should be kept to a minimum (McLoughlin, DAHG, 2015).
- The philosophy of doing ‘as little as possible and as much as necessary’ applies. Any necessary intervention to an architectural heritage feature will be reversible where possible, both in the materials used and methods employed.
- Where possible repairs should be carried out rather than replacing materials (DELG, 2002).
- Repairs will be carried out without an attempt to disguise, or artificial ageing and new repairs should be discernible without detracting from the structure.
- Unsatisfactory alterations that disfigure earlier work of greater merit should be reversed, where feasible. Where new work is required, processes that are reversible should be used (DAHG, 2011a).
- All efforts will be taken to ensure that necessary new work on historic structures looks appropriate and is in keeping with the fabric, materials, and style of the original work.

1.1.2 Survey

Architectural heritage buildings, bridges and other structures, boundary etc. have been identified, with a view to retaining sensitive fabric where possible.

A comprehensive inventory of architectural heritage buildings, and structures has been compiled and is provided in Chapter 21 (Architectural Heritage), Section 21.5 in Volume 2 of this EIAR.

1.1.3 Architectural Heritage Buildings and Structures

The majority of architectural heritage buildings, including recorded monuments, protected structures, buildings within architectural conservation areas, and other buildings or structures which are not protected but which are of architectural heritage interest, that are located within the receiving environment, will not be directly impacted by the Proposed Development.

There are a few exceptions, however. These include works to bridges and within the vicinity of protected station buildings, both of which are identified in Chapter 21 (Architectural Heritage) in Volume 2 of this EIAR.

1.1.3.1 Protection During Works

Some architectural heritage features will require protection during the course of works, where works are proposed in close proximity to them. These works are identified in Chapter 21 (Architectural Heritage) in Volume 2 of this EIAR.

It is proposed to replace OBB81, the pedestrian footbridge in Drogheda Station (BH-146). It is also proposed to alter the canopy on the south platform. The erection of OHLE infrastructure, excavation and stabling works and construction compounds in the grounds all have the potential to indirectly impact the station buildings, particularly the station building and the stairs to the bridge. Mitigation to offset the risk of damage will include recording, protection, and monitoring of the sensitive fabric prior to, and for the duration of the Construction Phase. Protection during the course of works will include cordoning off or the provision of protective wrapping or temporary hoardings or boxing off as appropriate. Recording, overseeing of protective measures and monitoring is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor.

1.1.4 Iron Bridges and Viaducts

OHLE support works are to be carried out on the UBB36, Rogerstown Viaduct (BH-61), on the UBB56, Balbriggan Railway Viaduct (BH-101), and UBB72, Laytown Railway Viaduct (BH-129).

Mitigation includes recording the existing fabric in position prior to the works, labelling the affected masonry and fabric. The Bridges, together with any affected ironwork and piers, and historic masonry have been recorded in detail in both photographic form and on drawings by the scheme engineers and the architectural heritage specialist.

At UBB36, Rogerstown Viaduct (BH-61), the end piers, which are of heritage interest will require alteration and partial reconstruction. The affected masonry is to be labelled before being carefully disassembled. The masonry is to be salvaged for reuse in the reconstructed portions of the end piers. The architectural heritage specialist will oversee any labelling, taking down and reinstatement of the affected masonry.

UBB72, Laytown Railway Viaduct (BH-129), is a protected structure of medium sensitivity. It is proposed to extend the girders on the deck and to add struts to provide more support for the OHLE masts. Most of the direct impact will be on the girders to the deck which are modern. Only where the struts are proposed is there a likely impact on the 19th century bridge piers. The proposed alterations have been designed to minimise direct impact on the bridge piers. The proposed struts are to be affixed to the piers using existing rivet holes. The struts and extended girders are to be painted to match the rest of the bridge so that they blend in and are inconspicuous.

1.1.5 Minor Alterations to Bridges

Parapet modifications have been proposed at OBB35 at Beaverstown Golf Club (BH-60), the access bridge to Rogerstown Lane Road Bridge OBB 38 (BH-64), the bridge at OBB41 at Horestown Road, Lusk Co. Dublin (BH-69), the Road Bridge L1285 Road, Ballykea, Loughshinny (BH-76), the bridge at OBB47 at Drumlattery, Piercetown, Skerries (BH-77), OBB49 at Skerries Golf Club Hacketstown Skerries (BH-81). The proposed works include the addition of a steel plate or steel mesh to the parapet which is to be bolted to the existing parapets and will require the drilling of holes and application of mortar. Most of these bridges have been heavily modified previously but retain abutments of historic interest. Mitigation is recording the existing masonry in position prior to the works and protection of the surrounding fabric for the duration of works.

The access bridge to Rogerstown Lane Road Bridge OBB 38 (BH-64) and the bridge at OBB47 at Drumlattery, Piercetown, Skerries (BH-77) are largely intact. The parapet walls are therefore of historic interest. The proposed works will predominantly affect the coping. The bridges are to be protected for the duration of works to avoid damage to fabric.

1.1.6 Canopy at Drogheda Station

The canopy over the south platform in Drogheda MacBride Station (BH-146, LH DB 195, 055, 396-9) is to be altered to accommodate the proposed overhead wires. This will involve the shortening of some the iron trusses which are part of the historic fabric of the canopy. The affected trusses are identified on drawings prepared by the scheme engineers. The canopy is to be recorded in situ on drawings. Survey photographs have already been taken. The fabric is to be labelled before disassembly. The glass is to be boxed for reuse and securely stored. The affected iron supports are

to be modified per the engineer's drawings. Conservation works are to be carried out on the modified trusses and the remaining iron trusses cast iron brackets and other elements prior to reassembly. The conservation works are to be carried out in accordance with the Department of Environment, Heritage and Local Government's Advice Series, specifically 'Iron: The repair of wrought and cast ironwork' (DEHLG, 2009). The canopy is to be reassembled following conservation works to the iron elements. The architectural heritage specialist will oversee any labelling, taking down and reinstatement of the affected fabric.

1.1.7 References

Australis/ICOMOS (2013). The Burra Charter.

International Council on Monuments and Sites (ICOMOS) (1964). The Venice Charter for the Conservation and Restoration of Monuments and Sites.

Department of Arts Heritage and the Gaeltacht (DAHG) (2011). Architectural Heritage Protection Guidelines for Planning Authorities.

Department of Environment, Heritage and Local Government (DEHLG) (2009). Iron: The repair of wrought and cast ironwork.

Department of the Environment and Local Government (DELG) (2002) Conservation Guidelines PL. 9: Paving and Street Furniture.