



**Luas Cross City
Northbound Dawson Stop Scheme
Draft EIS Scoping Report**

DOCUMENT HISTORY LOG

Doc. No.	Doc. Status	Issue Date	Description	Prepared	Reviewed	Approved
RPA-LCC-0001-01	Draft	April 2014	Luas Cross City – Northbound Dawson Stop Draft EIS Scoping Report for Consultation	SB	MF and MOH	MF and CB

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1.0 INTRODUCTION

An Bord Pleanála granted a Railway Order for Luas Cross City ((LCC), formerly Luas Broombridge (Line BXD)), on 2nd August 2012. As part of the granted Railway Order, Condition 1 states that:

“The northbound Dawson Stop shall not be constructed as proposed. The southbound stop on Dawson Street is confirmed. The tracks shall be realigned on Dawson Street to take account of this modification. Details of the revised track alignment (including traffic markings etc.) shall be agreed with the planning authority prior to commencement of construction.”

Representations have been made by Dawson Street property owners to the National Transport Authority (NTA) and the Railway Procurement Agency (RPA) since 2012 for the reinstatement of a northbound stop and a detailed study was undertaken by LeighFisher on behalf of NTA to assess the feasibility of this proposal.

A range of alternatives for relocating the stop was considered by LeighFisher. The key finding of this assessment was that the western side of Dawson Street, between Duke Street and Nassau Street, has been identified as the preferred location for a northbound Luas stop.

As part of the application process for providing for the new Dawson Stop, an Environmental Impact Assessment (EIA) will be undertaken and an Environmental Impact Statement (EIS) will be prepared and submitted to An Bord Pleanála for a Railway Order approval. As a preliminary step in the EIA process, this Draft EIS Scoping Report has been prepared. This document sets out the proposed content (scope) of the report, the environmental issues to be investigated and the methodology for assessment of the environmental issues.

This document refers to the scoping of the northbound Dawson Stop only (as the rest of the LCC scheme has been given statutory approval and indeed construction works have commenced) and for the remainder of the report, the northbound Dawson Stop will be referred to as “the proposed scheme”.

1.1 Legal context

The Transport (Railway Infrastructure) Act 2001 as amended by the Planning and Development (Strategic Infrastructure) Act 2006 sets out the process under which statutory authority for new railway projects is to be granted. This process involves an application being made for a Railway Order for the construction, operation and maintenance of railway

infrastructure. A fundamental requirement of the Railway Order application for the proposed scheme, and a key component of the decision making process, is an EIA.

The application for a Railway Order must be accompanied by a draft of the order being sought, a plan of the works to be carried out under it, a list of any properties shown on the plan of the works and the purported owners and occupiers of those properties (known as a Book of Reference) affected by the application and an EIS. The relevant parts of the Planning and Development (Strategic Infrastructure) Act 2006 came into force in early 2007, when the power to grant or refuse a Railway Order application was transferred from the Minister for Transport to An Bord Pleanála.

1.2 Purpose of the scoping study

The environmental scoping study is a key element of the EIA process. Even though it is not a legislative requirement, it is considered best practice.

The main purpose of the scoping study is to:

- Identify environmental issues which may arise during the construction and operation of the proposed scheme and which should therefore be addressed in more detail as part of the EIA
- Examine potential environmental issues and determine whether any may be partially or wholly omitted from the EIA (scoped out). This ensures that resources and time are focused on the key issues
- Identify mitigation and enhancement measures at an early stage in the design process (i.e. iterative design process), thereby minimising the need for subsequent design amendments and ensuring that environmental protection and sustainability are key factors in the project design
- Outline proposed methodologies for undertaking the EIA
- Outline the likely contents of the EIS
- Form a basis of common reference for consultation about the scope and methodology for the EIA

It must be noted that scoping of issues is reversible; as the proposed scheme design develops and it becomes apparent that a significant impact may arise, the environmental issues will be readmitted to the EIA process as appropriate.

The EIA process requires a multi-disciplinary approach due to the many varied environmental topics (Landscape and Visual, Human Beings: Noise, etc.) that may be affected.

Once the EIA methodologies outlined in this Draft EIS Scoping Report have been applied, it will be reported in an EIS to accompany the Railway Order application. The EIS will describe the proposed scheme and the existing environment, as well as identify all likely significant environmental effects, measures proposed to mitigate these effects, residual impacts and any remedial measures and/or monitoring required for the life of the proposed scheme.

The EIS is being prepared in accordance with the following:

- Guidelines on the information to be contained in Environmental Impact Statements (Environmental Protection Agency (EPA), 2002)
http://www.epa.ie/pubs/advice/ea/guidelines/EPA_Guidelines_EIS_2002.pdf
- Advice Notes on Current Practice in the preparation of Environmental Impact Statements (EPA, 2003)
http://www.epa.ie/pubs/advice/ea/guidelines/EPA_advice_on_EIS_2003.pdf
- Assessment guidelines relevant to the specialist area
- Relevant existing and/or emerging national and European legislation
- Best practice

and with reference to the following:

- Luas Broombridge, St. Stephen's Green to Broombridge (Line BXD) EIS available at
[http://www.dublinluasbroombridge.ie/#Environmental_Impact_Statement_\(EIS\)](http://www.dublinluasbroombridge.ie/#Environmental_Impact_Statement_(EIS))
- Luas Broombridge, St. Stephen's Green to Brookbridge (Line BXD) Railway Order available at
<http://www.pleanala.ie/casenum/NA0004.htm>

1.3 The scoping process

Figure 1.1 illustrates the three stages in the scoping process.

It is not the purpose of this report to undertake detailed measurement, calculation or assessment of potential impacts.

Development of this information signifies the beginning of the EIA process for production of an EIS for the proposed scheme. The output of the environmental scoping study will feed into and inform the ongoing scheme design.

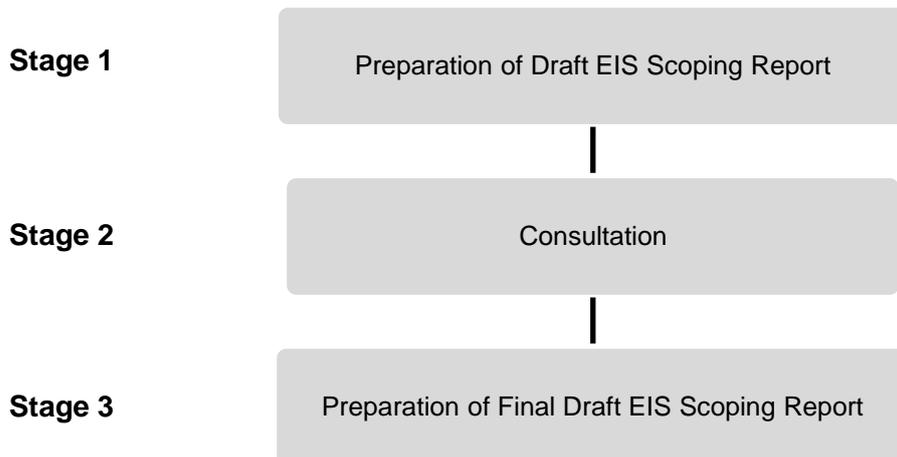


Figure 1.1 Environmental scoping process

1.4 Consultation

Consultation with statutory and non-statutory bodies is an essential part of any scoping process. Consultation in relation to this Draft EIS Scoping Report will take place to ensure that the EIS for the proposed scheme covers the relevant concerns of those consulted, that the necessary studies have been undertaken and that the EIA is appropriate to particular local circumstances and the scale of the proposed scheme.

This consultation is seeking views in relation to environmental topics such as Human Beings: Noise, Human Beings: Vibration, Human Beings: Traffic and Landscape and Visual.

Consultation on this Draft EIS Scoping Report is for a three week period. A Final Draft EIS Scoping Report will then be prepared following review of comments received.

All responses and feedback in relation to consultation on this Draft EIS Scoping Report will be incorporated into the Final Draft EIS Scoping Report. The Final Draft EIS Scoping Report will also be made available on the RPA website (www.rpa.ie).

In addition to consultation on the scoping element of the EIS, consultation with statutory and/or non-statutory consultees will be undertaken where appropriate to ensure that all

relevant issues are included in their respective assessments. A list of consultees which has been identified at this stage is provided in Addendum A.

1.5 Proposed scheme description

The proposed scheme involves the construction, operation and maintenance of a northbound stop on Dawson Street to support the operability of LCC. As there is already permission for a southbound stop on Dawson Street and associated light railway infrastructure, i.e. rails, Overhead Conductor System (OCS), etc. as outlined in Section 1.1, the proposed scheme allows for the construction of a northbound platform only in the area between Duke Street and Nassau Street. There are also some other minor works including the realignment of kerbs including the construction of a layby to provide for two bus stops on Dawson Street (relocated from the area of the proposed stop) to the area between Anne Street South and Duke Street and the provision of three pedestrian crossings in the Dawson Street/Nassau Street area.

In line with the other approved stop platforms for LCC, the proposed scheme stop platform will be 53m in length. It will generally be located opposite the southbound stop on Dawson Street. The stop will have a ramp length of 6m from each end of the platform down to footpath level to facilitate access on to the platform for persons with impaired mobility. The following infrastructural facilities and changes to the streetscape will be provided as part of the proposed scheme:

At platform level:

- Passenger information displays (PIDs)
- Stop name signage
- Two ticket vending machines (TVMs)
- Pole mounted luminaire, closed circuit television (CCTV) camera and public address (PA) speaker
- Four smart card validators
- Stop drum (totem) with space for advertising, where appropriate

Other:

- Removal of two existing bus stops between Duke Street and Nassau Street
- Provision of two alternative bus stop facilities further south on Dawson Street between South Anne Street and Duke Street

- Removal of three trees in the immediate vicinity of the proposed scheme (adjacent to Nos. 60–63 Dawson Street)
- Realignment of the existing kerbs at the junction of Dawson Street and Nassau Street
- Provision of three pedestrian crossings

There is no permanent landtake required for the proposed scheme. The area of the proposed Dawson Stop is approximately 228m² (during the operational phase of the proposed scheme) and is located wholly within an urban streetscape environment. There will be no requirement for temporary landtake as the construction of the proposed scheme will be undertaken concurrently with LCC construction activities and the mitigation proposed in the Luas Broombridge EIS will be implemented during construction of the proposed scheme.

2.0 SCOPING

The environmental topics for consideration in this Draft EIS Scoping Report and those which were scoped out (and the justification for doing so) are presented in Table 2.1. The scoping process identifies the issues and emphasis that are likely to be important during the EIA and eliminates those that are not. Although some topics have been scoped out during the Draft EIS Scoping Report, these may be scoped back in following consultations with stakeholders and during development of the design. Further details are provided in Table 2.1.

Table 2.1 Environmental topics for consideration

Environmental Topic	Scoped In/ Scoped Out	Comment
Human Health	Scoped out	<p>The potential for LCC to have an impact on Human Health during the construction and operational phases in the Dawson Street area was previously assessed as part of the Luas Broombridge EIS. The findings of the EIS in relation to Human Health noted the following:</p> <ul style="list-style-type: none"> - Given the defined time period of the construction phase, no adverse human health impacts are predicted - Once mitigation measures described in the Human Beings: Noise impact assessment chapter of this EIS are in place, no ongoing adverse noise affecting human health is predicted during the operational phase - The overall impact of the proposed scheme in the operational phase on psychosocial health is considered to be beneficial - There are potentially great benefits for society, including therefore general health and wellbeing benefits, with the development of the proposed scheme, particularly for people living along the route <p>The EIA undertaken by An Bord Pleanála and in particular the Inspector's Report dated September 2011, agreed with the findings of the EIS and concluded the following in relation to human health, "I am satisfied with the conclusions in the EIS of no significant impacts arising and that, in general, the proposed scheme would likely generate positive impacts".</p> <p>On this basis and given that the construction of the proposed scheme will be undertaken concurrently with LCC construction activities on Dawson Street and the mitigation proposed in the EIS will be implemented during the construction and operation of the proposed scheme, no additional likely significant impacts are predicted and therefore this topic is scoped out of the proposed scheme's EIA.</p>

Environmental Topic	Scoped In/ Scoped Out	Comment
Human Beings: Landuse	Scoped out	<p>The potential for LCC to have an impact on Human Beings: Landuse during the construction and operational phases in the Dawson Street area was previously assessed as part of the Luas Broombridge EIS. The findings of the EIS in relation to Human Beings: Landuse were as follows:</p> <ul style="list-style-type: none"> - There are no residual landuse construction impacts in Area 29 as short-term or temporary landtake required to facilitate the construction of the alignment, stops and associated features can be successfully mitigated by restoring the areas post construction - There are no residual landuse operation impacts in Area 29 as no permanent landtake (land taken from a particular landuse) was required for the Dawson Street area <p>The EIA undertaken by An Bord Pleanála and in particular the Inspector's Report dated September 2011 agreed with the findings of the EIS and concluded the following in relation to landuse, "I am satisfied that the principal significant negative impacts are those identified and that the mitigation measures proposed are appropriate". The Inspector's Report also concluded the following in relation to the Dawson Street northbound platform, "I consider that the proposed northbound platform for the Dawson Stop would have a profound and negative impact on the operation of the Fitzers/Marco Pierre White Restaurant and that this can be suitably mitigated through relocation of the platform to an alternative stop location at the north end of the street. This adverse impact is not identified in the EIS."</p> <p>As the proposed scheme now allows for the provision of a stop at the north end of the street, in accordance with the Inspector recommendation, it is assessed that there will be no likely significant impacts on landuse as a result of the scheme. There will be no requirement for temporary landtake as the construction of the proposed scheme will be undertaken concurrently with LCC construction activities and the mitigation proposed in the Luas Broombridge EIS will be implemented during construction of the</p>

Environmental Topic	Scoped In/ Scoped Out	Comment
		proposed scheme. There will be no additional likely significant impacts predicted and therefore this topic is scoped out of the proposed scheme's EIA.
Human Beings: Socio-economic	Scoped in	<p>The potential for LCC to have an impact on Human Beings: Socio-economic during the construction and operational phases in the Dawson Street area was previously assessed as part of the Luas Broombridge EIS. The findings of the EIS in relation to Human Beings: Socio-economic noted the following:</p> <ul style="list-style-type: none"> - On employment levels: the construction phase of the proposed scheme will lead to both the direct employment of construction workers and indirect employment creation through construction workers' wage expenditure and purchase of materials - On businesses: the construction phase will lead to temporary pedestrian/traffic diversions, which may decrease footfall in some areas close to the construction works. There may be a similar effect on tourist attractions close to the proposed scheme, with the additional visual impact of construction fencing and the obstruction or short-term relocation of well-known landmarks. The construction phase will have a negative effect of moderate significance on businesses. Mitigation measures to reduce the significance of this effect include the development of a Construction Traffic Management Strategy (CTMS) dealing with all road user categories to ensure that access to businesses is maintained. After mitigation measures have been implemented, the significance of the impact on businesses is deemed to be slight - All other negative construction impacts on tourism are deemed to be slight and thus no mitigation measures are proposed - Operational impacts are long-term impacts associated with the proposed scheme. All socio-economic impacts as a result of the proposed scheme are positive; there are therefore no specific mitigation measures <p>The EIA carried out by An Bord Pleanála and in particular the Inspector's Report dated September 2011 agreed with the findings</p>

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>of the EIS and concluded the following in relation to socio-economic, "I am satisfied that the principal potential negative significant impacts are those identified and that the mitigation measures proposed are appropriate and should ensure that no adverse environmental effects occur.</p> <p>The primary concern under this heading, and that was raised extensively in observer submissions, is the potential impact of the construction of the proposed scheme on business in the city centre... When the proposed scheme is operational the conclusions in the EIS are that the impact would be positive by reference to all the parameters examined, including employment, business, tourism, regeneration/social improvement and community/social facilities. I am satisfied that this would be the case and this is also reflected in the near unanimous support for the proposed scheme in the observer submissions received. The only exception is the case of the impact on the Fitzers/Marco Pierre White Restaurant".</p> <p>On this basis and given that the construction of the proposed scheme will be undertaken concurrently with LCC construction activities on Dawson Street and the mitigation proposed in the EIS will be implemented during the construction and operation of the proposed stop, no additional likely significant impacts are predicted on Human Beings: Socio-economic with respect to employment, tourism, retail, regeneration and social improvement and improving access to commuting and social facilities. However, in light of the findings of the Inspector's Report relating to the Fitzers/Marco Pierre White Restaurant, an assessment will be undertaken to determine if there are likely significant impacts on the business community within the city centre.</p>
Human Beings: Noise and Vibration	Scoped in	<p>The potential for LCC to have an impact on Human Beings: Noise and Vibration during the construction and operational phases in the Dawson Street area was previously assessed as part of the Luas Broombridge EIS. The findings of the EIS in relation to Human Beings: Noise and Vibration noted the following:</p> <ul style="list-style-type: none"> - Residual construction noise impacts, from both utility diversions and main infrastructure construction activities should only

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>be imperceptible or slight. It should be noted that the existing noise levels within the city centre area are relatively high so any additional construction noise would have less impact than in a quieter area. Also, humans are less sensitive to short-term noise impacts, such as during construction, and therefore temporary higher noise levels are more acceptable than long-term lower noise levels</p> <ul style="list-style-type: none"> - Residual operational noise impacts, which occur from both operational tram noise and permanent traffic diversions, should have no more than a moderate significance - Residual construction vibration impacts, from both utility diversions and main infrastructure construction should only be imperceptible or slight for humans, buildings and sensitive equipment. It should also be noted that humans are less sensitive to short-term vibration impacts, such as during construction, and therefore temporary higher vibration levels are more acceptable than long-term lower vibration levels - Residual operational vibration impacts range from imperceptible to slight vibration impacts on humans and buildings during operation <p>The EIA carried out by An Bord Pleanála and in particular the Inspector’s Report dated September 2011 agreed with the findings of the EIS and concluded the following in relation to noise and vibration, “I am satisfied that the principal significant negative impacts are those identified and that the mitigation measures proposed are appropriate and should ensure that no adverse environmental effects occur. In relation to Vibration I am satisfied that the principal significant negative impacts are those identified and that the mitigation measures proposed are appropriate and should ensure that no adverse environmental effects occur”.</p> <p>On this basis and given that the construction of the proposed scheme will be undertaken concurrently with LCC construction activities on Dawson Street and the mitigation proposed in the EIS will be implemented during the construction and operation of</p>

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>the proposed scheme, and in accordance with the requirements of granted Railway Order dated July 2012 (in relation to construction noise and vibration monitoring locations, construction noise limits, operational façade noise levels at residential properties), no additional likely significant impacts are predicted on Human Beings: Noise and Vibration with respect to construction and operational impacts (from Light Rail Vehicles (LRVs), etc).</p> <p>However, in light of the interrelationship between Human Beings: Noise and Vibration and Human Beings: Traffic (refer to the Human Beings: Traffic section of this table), changes to traffic during the construction and operation of the proposed scheme are probable and may result in likely significant impacts within the city centre. The proposed scheme will require changes in the allocation of street space, particularly in relation to usable space for pedestrian, bus and taxi movements. Relocated road traffic may result in significant and adverse operational noise impacts. In addition, the servicing of the proposed stop by LRVs may result in additional localised noise and vibration related impacts which may be significant and adverse. Therefore, this topic is scoped into the proposed scheme's EIA.</p>
Human Beings: Radiation and Stray Current	Scoped out	<p>The potential for LCC to have an impact on receptors from radiation and stray current during the construction and operational phases in the Dawson Street area was previously assessed as part of the Luas Broombridge EIS. The findings of the EIS in relation to Human Beings: Radiation and Stray Current noted the following:</p> <ul style="list-style-type: none"> - There are no radiation and stray current impacts anticipated for the construction of the scheme. Therefore, there are no specific mitigation measures required during the construction phase of the proposed scheme - Potential levels of electromagnetic interference (EMI) and stray current during the testing and commissioning of the trams and traction power supply system are expected to be within those provided for the operational phase - The potential for significant impacts to occur due to stray current is considered to be low provided the mitigation measures

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>are put in place. The technical design of the proposed scheme conforms to current best practice. During normal scheme operations, the expected electromagnetic (EM) effects have been evaluated and were found to be less than 50% of the field strength of the Earth's natural magnetic field. In the majority of instances these levels are unlikely to pose a threat to the normal operation of receptors such as EM equipment located along the alignment. The described impacts can thus be regarded of low significance and do not present any significant risk</p> <p>The EIA carried out by An Bord Pleanála and in particular the Inspector's Report dated September 2011 agreed with the findings of the EIS and concluded the following in relation to Radiation and Stray Current, "I am satisfied that the principal significant negative impacts are those identified and that the mitigation measures proposed are appropriate and should ensure that no adverse environmental effects occur".</p> <p>On this basis and given that the construction of the proposed scheme will be undertaken concurrently with LCC construction activities on Dawson Street and the mitigation proposed in the EIS will be implemented during the construction and operation of the proposed scheme, no additional likely significant impacts are predicted and therefore this topic is scoped out of the proposed scheme's EIA.</p>
Human Beings: Traffic	Scoped in	<p>The potential for LCC to have an impact on traffic during the construction and operational phases in the Dawson Street area was previously assessed as part of the Luas Broombridge EIS. The findings of the EIS in relation to Human Beings: Traffic noted the following:</p> <ul style="list-style-type: none"> - During the construction of the proposed scheme within the city centre (Area 29) there will be a requirement to temporarily occupy road space for construction works resulting in lane closures, turn bans and associated traffic diversions. In this context, the importance of maintaining accessibility to the city centre during the construction works for servicing and

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>deliveries to premises, access to city centre car parks, pedestrian access and access to public transport (including bus and coach tours) is recognised</p> <ul style="list-style-type: none"> - For the operation of the proposed scheme, a variety of traffic management measures will be required due to the reductions in road space resulting from implementation of the scheme. Furthermore, as there are some areas of shared running with other road traffic, it will be necessary to reduce traffic volumes to ensure reliability of the system. The traffic management measures proposed include turning restrictions, diversions, conversion of streets to one-way flow, removal/relocation of kerbside facilities such as loading bays, on-street parking and taxi ranks - The presence of the proposed scheme and associated stops will result in a requirement to relocate bus stops and bus layover facilities; however, diversion of services would be limited - The impact of the traffic management measures required for the operation of the proposed scheme in the city centre (i.e. Area 29) has a local negative impact but will not significantly impact the operation of the city centre road network. The proposed scheme is considered to have a local negative impact on bus services but in the context of the current bus network review which, in association with the planned new public transport bridge over the River Liffey on the Marlborough–Hawkins axis, opportunities for mitigation are presented with potential for development of new routing structures in the core city centre area <p>The EIA carried out by An Bord Pleanála and in particular the Inspector’s Report dated September 2011 agreed with the findings of the EIS and concluded the following in relation to Human Beings: Traffic, “I am satisfied, given the evolving nature of the traffic management process in the city, that there is a sufficient level of detail provided for the purposes of EIA. I am satisfied that the CTMS (Construction Traffic Management Strategy) is developed to a sufficient level of detail to be confident that the construction traffic impacts arising can be management effectively and without adverse environmental effects. In the longer</p>

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>term, when the scheme is operational, and in conjunction with the traffic management measures proposed, I am satisfied that the traffic environment within the city centre will generally be improved mainly as a result of decreased traffic volumes overall in the core city centre area. The indirect impacts, being primarily associated with some increased traffic volumes in adjacent areas being the recipients of traffic displaced from the core city centre, are not likely to be significant or adverse”.</p> <p>The granted Railway Order dated July 2012 did refuse the construction and operation of the northbound Dawson Stop as “It is considered that the character and attractiveness of Dawson Street would be unduly compromised by this stop, which, taken in conjunction with the existing bus stops on this pavement, would also create an excessive level of pedestrian congestion to the detriment of the street’s commercial viability”.</p> <p>On this basis and given that the construction of the proposed scheme will be undertaken concurrently with LCC construction activities on Dawson Street and the mitigation proposed in the EIS, e.g. the development of the CTMS to develop detailed traffic management plans will be implemented during the construction and operation of the proposed scheme, no additional likely significant impacts are predicted on Human Beings: Traffic with respect to car parking, public transport – rail, public transport – taxi and cyclists. However, in light of the findings of the Inspector’s Report and the granted Railway Order, a traffic impact assessment will be undertaken to determine if there are likely significant impacts on transportation within the city centre particularly impacts on roads (as a result of relocated road traffic), pedestrian (i.e. congestion), public transport: bus (as a result of relocating bus stops), servicing and access (as a result of removal of loading facilities) which may result in likely significant impacts.</p>
Flora and Fauna	Scoped out	The potential for LCC to have an impact on Flora and Fauna during the construction and operational phases in the Dawson Street area was previously assessed as part of the Luas Broombridge EIS. The findings of the EIS in relation to the Flora and

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>Fauna noted the following:</p> <ul style="list-style-type: none"> - The proposed scheme will involve temporary loss of predominantly urban habitat (buildings and artificial surfaces) along the alignment, which will be reinstated following construction - No protected species will be impacted upon and no specific mitigation or licensing is required for the removal of structures or trees. Some temporary disturbance to a range of common fauna species will occur. No significant impacts on habitats or species are predicted as a result of the proposed alignment - The construction of the proposed scheme in the city centre (i.e. Area 29) will result in the loss of a number of trees along the alignment resulting in a slight/minor negative impact. Following mitigation and the reinstatement of trees the slight/negative impact will diminish over time and become an imperceptible/neutral residual impact - There will be no residual impacts associated with the operation of the proposed scheme <p>The EIA carried out by An Bord Pleanála and in particular the Inspector’s Report dated September 2011 agreed with the findings of the EIS and concluded the following in relation to Flora and Fauna, “I am satisfied that the principal negative significant impacts are those identified in the EIS and that the mitigation measures set out in the EIS are appropriate and should ensure that no adverse environmental effects occur”.</p> <p>Furthermore, the granted Railway Order dated July 2012, noted that “The Board completed a screening exercise in relation to the potential impacts of the scheme on sites forming part of the ‘Natura 2000’ network of ecological areas, taking into consideration the content of the EIS, the submissions made in the course of the application (including at the oral hearing) and the reports of the Inspector. The Board was satisfied that no ‘appropriate assessment’ issues arise, and it was not considered that the proposed development would be likely to have a significant effect individually or in combination with other plans or</p>

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>projects on a European site”.</p> <p>The location of the proposed Dawson Stop is within the city centre (i.e. Area 29); an urban area where the dominant habitat type is buildings, artificial surfaces and treelines. On this basis and given that the construction of the proposed scheme will be undertaken concurrently with LCC construction activities on Dawson Street and the mitigation proposed in the EIS will be implemented during the construction and operation of the proposed scheme, no additional likely significant impacts are predicted and therefore this topic is scoped out of the proposed scheme’s EIA. Impacts on treelines/trees and impacts from lighting is dealt with under the landscape and visual topic detailed further on in this table.</p>
Soil, Geology and Waste	Scoped out	<p>The potential for LCC to have an impact on soil, geology and waste during the construction and operational phases in the Dawson Street area was previously assessed as part of the Luas Broombridge EIS. The findings of the EIS in relation to Soil, Geology and Waste noted the following:</p> <ul style="list-style-type: none"> - The principal construction impact of the proposed scheme on the soil and geology environment is the potential increase in soil and/or subsoil erosion by surface water runoff. During the construction phase, a surface water management system will be implemented in order to minimise erosion and limit the concentration of particulate material in surface water runoff. Hardcore materials will also be placed over bare soil and/or subsoil to minimise erosion and rutting by site traffic. The implementation of these measures will ensure that soil and subsoil erosion should only be minor, and possibly almost unnoticeable - Excavation and handling of any existing soil or subsoil during construction may result in mobilisation of existing contaminants in the ground, increasing the extent or the degree of contamination in surrounding ground. Measures will be implemented during the construction phase to minimise these impacts

Environmental Topic	Scoped In/ Scoped Out	Comment
		<ul style="list-style-type: none"> - The storage and handling of fuels and lubricants and solid or liquid wastes during the construction phase increases the potential risk of localised soil or subsoil contamination as a result of an accident, spill or leak. Measures will be implemented during the construction phase to control the storage and handling of fuels, lubricants and waste. Implementation of these measures will reduce potential pollution risks to acceptable levels and should ensure that only minor environmental impacts will arise during construction - The export of road foundation and/or excess earthworks material off-site during construction has the potential to degrade soil and/or subsoil at off-site locations. This indirect impact is controlled by ensuring that all materials removed off-site are only forwarded to licensed or permitted waste sites where adequate environmental protection measures are in place to ensure that no contamination of soil or water will result - A Waste Management Plan will be developed in accordance with the Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects (Department of the Environment, Heritage and Local Government (DoEHLG)) as part of the construction environmental management plan to ensure that all construction waste is managed, stored and disposed of in an appropriate manner by appropriate contractors in accordance with all relevant waste legislation - When operational, surface water runoff from the proposed scheme has the potential to cause long-term erosion of soil and/or subsoil. This impact will essentially be eliminated by installing and maintaining a surface water drainage system along the rail track - Operation and maintenance activities and or accidental leakages have the potential to cause some slight contamination of soil or subsoil. These risks will be effectively eliminated by installing and maintaining a surface water drainage system along the rail track

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>The EIA undertaken by An Bord Pleanála and in particular the Inspector's Report dated September 2011 agreed with the findings of the EIS and concluded the following in relation to Soil and Geology, "I am satisfied that the principal potential negative significant impacts are those identified in the EIS and that the mitigation measures set out in the EIS are appropriate. With the implementation of the mitigation measures, and having regard to the preliminary Construction, Demolition and Operational Waste Management Plans, I am satisfied that there are not likely to be any significant adverse effects on the soil, or geology, environment as a result of the proposed scheme".</p> <p>The location of the proposed Dawson Stop is within the city centre (i.e. Area 29); an urban area where the dominant soil and subsoil environment consists of made ground and limestone bedrock at a depth of 7m underneath (Calp/Lucan Formation). There are no features of geological importance or sensitivity within the proposed scheme study area. Ground investigation data, gathered during the Luas Broombridge EIS preparation, indicates that there is a very low risk of encountering contaminated Made Ground. As no undisturbed organic soil cover exists across the area of the proposed scheme, there is no risk of erosion or degradation of soil due to compaction by construction plant. Construction works associated with the proposed scheme will only involve excavation to a maximum depth of 2m. Therefore, there will be no impact on the underlying bedrock.</p> <p>On this basis and given that the construction of the proposed scheme will be undertaken concurrently with LCC construction activities on Dawson Street and the mitigation in the Luas Broombridge EIS will be implemented during the construction and operation of the proposed scheme, no additional likely significant impacts are predicted and therefore this topic is scoped out of the proposed scheme's EIA.</p>
Groundwater	Scoped out	The potential for LCC to have an impact on groundwater during the construction and operational phases in the Dawson Street area was previously assessed as part of the Luas Broombridge EIS. The findings of the EIS in relation to Groundwater noted the

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>following:</p> <ul style="list-style-type: none"> - The groundwater baseline assessment indicated that the underlying groundwater environment in the area along the proposed scheme is not highly sensitive with regards to potential impacts from the construction and operation of the proposed scheme - During the construction phase, various activities have the potential to pollute the groundwater environment in the city centre (i.e. Area 29) and Area 30. These potential pollutants can originate from: <ul style="list-style-type: none"> - Leakages or spillages of fuels from construction vehicles - Oil or other chemical spillages during refuelling or maintenance of construction vehicles - Leakages or spillages from fuel or chemical storage areas or the inappropriate disposal of chemicals on site - Suspended solids or chemicals from overburden soils which have been exposed to erosion during construction activities - A range of impact mitigation measures will be implemented at all work areas during the construction phase including the appropriate handling, use and storage of all fuels or chemicals required on-site, the control and appropriate disposal of all concrete washwaters, the storage of potential polluting materials within bunded areas, and the assignment of designated refuelling areas for construction vehicles. Spill kits and hydrocarbon adsorbent packs will be stored in the designated refuelling area and in the cab of each vehicle, and operators will be trained in their use - During the operational phase, the likelihood of groundwater contamination from the operation of the proposed scheme in Area 29 (and Area 30) is considered low as the scheme is electrically powered and there will be no discharge to groundwater from the proposed scheme <p>The EIA carried out by An Bord Pleanála and in particular the Inspector's Report dated September 2011 agreed with the findings</p>

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>of the EIS and concluded the following in relation to water, “I am satisfied that the principal potential significant negative impacts are those identified in the EIS and that the mitigation measures set out in the EIS are appropriate and should ensure that no adverse environmental effects occur”.</p> <p>The location of the proposed Dawson Stop is within the city centre (i.e. Area 29); an urban area where the groundwater vulnerability is high to low, the aquifer classification is locally important, there are no groundwater wells or Source Protection Zones within the proposed scheme study area. Ground investigations undertaken during the Metro North EIS preparation recorded depths in the area of Dawson Street to Trinity College Dublin (TCD) in the range 3.00–5.15m below ground level from July 2007 to February 2008. The construction of the proposed scheme will involve excavations to a maximum depth of 2m.</p> <p>On this basis, and given that the construction of the proposed scheme will be undertaken concurrently with LCC construction activities on Dawson Street and the mitigation proposed in the Luas Broombridge EIS will be implemented during the construction and operation of the proposed scheme, no additional likely significant impacts are predicted and therefore this topic is scoped out of the proposed scheme’s EIA.</p>
Surface Water	Scoped out	<p>The potential for LCC to have an impact on Surface Water during the construction and operational phases in the Dawson Street area was previously assessed as part of the Luas Broombridge EIS. The findings of the EIS in relation to Surface Water noted the following:</p> <ul style="list-style-type: none"> - During the construction phase, various activities have the potential to result in changes to drainage patterns and could lead to potential flooding. These include the construction of temporary compounds or uncontrolled discharge of sediment-laden runoff to surface water or foul drains - Providing the mitigation measures specified are implemented, residual impacts due to construction activities are assessed

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>as being of very low magnitude and the significance of impacts has been assessed as slight</p> <ul style="list-style-type: none"> - A Flood Risk Identification Stage 1 report was undertaken for LCC in accordance with the guidelines produced by the DoEHLG/Office of Public Works (OPW) – The Planning System and Flood Risk Management Guidelines for Planning Authorities, November, 2009. The assessment concluded that for LCC (i) the risk of flooding from groundwater sources is not anticipated (ii) there is no apparent pluvial flood risk to the development, (iii) the stop is not located in a fluvial flood risk area, (iv) the floodplain storage will not be reduced by the stop and (v) the stop will not increase the flood risk in the catchments through which it traverses <p>The EIA carried out by An Bord Pleanála and in particular the Inspector’s Report dated September 2011 agreed with the findings of the EIS and concluded the following in relation to water, “I am satisfied that the principal potential significant negative impacts are those identified in the EIS and that the mitigation measures set out in the EIS are appropriate and should ensure that no adverse environmental effects occur”.</p> <p>Furthermore, the granted Railway Order dated July 2012, noted that “Water supply and drainage arrangements, including disposal of surface water, shall comply with the requirements of the planning authority for such works and services. Such arrangements shall be implemented as part of the railway works”.</p> <p>The location of the proposed Dawson Stop is within the city centre (i.e. Area 29); an urban area, consisting of made ground where the nearest surface water body, the St. Stephen’s Green ponds, are located approximately 250m from the proposed scheme. Given this distance, these ponds will not be impacted by the construction of the proposed scheme. There will be no increase in the amount of hard standing in the location of the proposed scheme and therefore the proposed scheme will not result in increased surface water runoff and sediment loading during the operation phase.</p>

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>On this basis, and given that the construction of the proposed scheme will be undertaken concurrently with LCC construction activities on Dawson Street and the mitigation in the Luas Broombridge EIS will be implemented during the construction and operation of the proposed scheme, no additional likely significant impacts are predicted and therefore this topic is scoped out of the proposed scheme's EIA.</p>
Air and Climatic Factors	Scoped out	<p>The potential for LCC to have an impact on Air and Climatic Factors (including dust, vehicle emissions, microclimate and climate change) during the construction and operational phases in the Dawson Street area was previously assessed as part of the Luas Broombridge EIS. The findings of the EIS in relation to Air and Climatic Factors noted the following:</p> <ul style="list-style-type: none"> - The construction phase of the proposed scheme will have a greater impact on air quality than the operational phase for two reasons. Firstly, construction activities have the potential to generate dust emissions and secondly, the changes to road traffic flows on the wider road network are greater for periods when traffic restrictions are in place than would be the case when it becomes operational - Although the construction of the proposed scheme will give rise to dust the residual impact is assessed as no greater than moderate. A similar assessment is concluded in relation to the residual impacts in air quality from vehicle emissions. No impacts are anticipated in relation to microclimate and additional vehicle movements and construction plant is assessed as not contributing to the long-term effects on climate change - The residual impacts on air quality in the city centre (i.e. Area 29) after mitigation measures are implemented is slight along Merrion Street, Merrion Row, Nassau Street and positive in all other locations. The residual impacts on climate change is assessed as a profound positive impact <p>The EIA carried out by An Bord Pleanála and in particular the Inspector's Report dated September 2011 agreed with the findings</p>

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>of the EIS and concluded the following in relation to Air and Climatic Factors, "I am satisfied that the principal potential significant impacts are those identified in the EIS and that the mitigation measures, where relevant, as set out in the EIS are appropriate and should ensure that no adverse environmental effects occur. I also note the positive effects in terms of air quality that are likely to arise as a result of the indirect effect of the proposed scheme in reducing vehicular traffic and associated emissions".</p> <p>The location of the proposed Dawson Stop is within the city centre (i.e. Area 29); an urban area, consisting of mixed use including residential as well as offices and commercial premises.</p> <p>On this basis, and given that the construction of the proposed scheme will be undertaken concurrently with LCC construction activities on Dawson Street and the mitigation proposed in the Luas Broombridge EIS will be implemented during the construction and operation of the proposed scheme, no additional likely significant impacts are predicted and therefore this topic is scoped out of the proposed scheme's EIA.</p>
Landscape and Visual	Scoped in	<p>The potential for LCC to have an impact on the Landscape and Visual environment during the construction and operational phases in the Dawson Street area was previously assessed as part of the Luas Broombridge EIS. The findings of the EIS in relation to Landscape and Visual noted the following:</p> <ul style="list-style-type: none"> - Given the nature of construction works the landscape and visual impact will normally be negative but the impact will be short-term and cease on the completion of the works - The magnitude of change affecting landscape or visual receptors depends on the nature, scale and duration of the particular change that is envisaged, the location in which it is proposed, and the overall effect on a particular view. In a landscape/streetscape, the magnitude of change will depend on the loss or change in any important feature, or change in

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>the backdrop to, or outlook from, a streetscape/urban landscape. The landscape and visual impact in Area 29 will generally be positive with the proposed scheme seen as an integral part of the city centre's transport system</p> <p>The EIA carried out by An Bord Pleanála and in particular the Inspector's Report dated September 2011 agreed with the findings of the EIS and concluded the following in relation to Landscape and Visual, "I am satisfied that the principal significant impacts are those identified and that the mitigation measures where relevant, as set out in the EIS, are appropriate and should ensure that no adverse environmental effects occur".</p> <p>In relation to the Architectural Design Strategy, the Inspector noted, "I consider that the strategy is well thought out and takes full cognisance of the extremely high architectural heritage value and urban design quality of the proposed route alignment through the city centre. I am satisfied that, on completion, the proposed scheme would have a permanent and long term positive effects on the landscape environment of the city. While some of the direct effects, such as the OCS, including support poles and building fixings, may be considered negative (but not significantly so, in my view), this is more than compensated for by the renaming positive direct effects, such as pavement reinstatement and the trams themselves, and the positive indirect effects being the visual impact of the operational scheme".</p> <p>The location of the proposed Dawson Stop is within the city centre (i.e. Area 29); an urban area, consisting of a number of local landscape character areas (LLCA2–LLCA6). The construction and operation of the proposed scheme will alter the extent of the public realm and have a direct impact on the landscape character of the street. There will be some tree removal in this streetscape, which is an integral component of the local landscape character area and public realm environment. The location of the proposed Dawson Stop on Dawson Street is also prominent in terms of vehicular traffic as well as local pedestrian movement due to its proximity to TCD and Grafton Street.</p>

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>On this basis, and given the interrelationship between the landscape and visual environment and important and sensitive trees within a streetscape public realm, the construction and operation of the proposed scheme may result in likely significant landscape and visual impacts within the city centre.</p>
<p>Material Assets: Archaeological, Architectural and Cultural Heritage</p>	<p>Scoped out</p>	<p>The potential for LCC to have an impact on the Material Assets: Archaeological and Cultural Heritage and Material Assets: Architectural Heritage environment during the construction and operational phases in the Dawson Street area was previously assessed as part of the Luas Broombridge EIS. The findings of the EIS in relation to Archaeological, Architectural and Cultural Heritage noted the following:</p> <ul style="list-style-type: none"> - There will be construction impacts on archaeology with a significance level of significant, moderate and slight - The proposed mitigation measures for construction impacts on the archaeology and cultural heritage baseline environment (which generally comprises test excavation and/or monitoring of construction following by archaeological excavation) will be further developed and detailed by RPA project archaeologist in consultation with the DoEHLG (now the Department of Arts, Heritage and the Gaeltacht (DoAHG)) - The proposed scheme has been designed to minimise visual impacts during the operational phases on upstanding features within the archaeological and cultural heritage baseline environment - In relation to operational impacts on archaeology and cultural heritage, there will be impacts with a significance level of significant, moderate and slight - Impacts on Architectural Heritage include visual impacts on Architectural Conservation Areas (ACAs), Conservation Areas (CAs) and Residential CAs arising from the installation of the proposed scheme and its associated street furniture, impacts on architectural heritage due to building fixings as part of the OCS, potential impact to basements/cellars of architectural

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>heritage buildings due to construction works (utility diversions works and main infrastructure construction) and impacts on statues and monuments and other elements of architectural heritage due to the construction works and permanent landtake associated with installation of the proposed scheme, etc. Residual impacts on the city centre (i.e. Area 29) relating to architectural heritage range from very slight to moderate</p> <p>The EIA carried out by An Bord Pleanála and in particular the Inspector’s Report dated September 2011 agreed with the findings of the EIS and concluded the following in relation to Material Assets: Archaeological, Architectural and Cultural Heritage, “I am satisfied that the principal potential negative significant impacts are those identified and the mitigation measures proposed are appropriate and should ensure that no adverse environmental effects occur. In relation to Architectural Heritage I am satisfied that the principal significant impacts are those identified and that the mitigation measures, where relevant, as set out in the EIS, are appropriate and should ensure that no adverse environmental effects occur. The overall design approach for the proposed scheme is set out in the Architecture Design Strategy. I consider that the strategy is well thought out and takes full cognisance of the extremely high architectural heritage value and urban design quality of the proposed route alignment through the city centre. I am satisfied that, on completion, the proposed scheme would have permanent and long term positive effects on the architectural heritage of the city as a result of the introduction of a high quality public transport system. While some of the direct effects, such as the OCS, including support poles and building fixings, may be considered negative (but not significantly so, in my view), this is more than compensated for by the remaining positive direct effects, such as the tram themselves and public realm improvements, and the positive indirect effects, being the visual impact of the operational scheme”.</p> <p>In addition, the granted Railway Order dated July 2012, concluded “having considered the report of the Inspector appointed by the Board, including his addendum report in relation to the further information received, it is considered that, subject to</p>

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>compliance with the conditions set out below, the development of LUAS BXD, as modified by this Order would not adversely affect the character or architectural heritage value of the city centre, of any protected structures or national monument to an unacceptable degree”</p> <p>The proposed scheme is located close to Nos. 52–58 Dawson Street, which have been identified as structures of architectural heritage merit in the Luas Broombridge EIS (AH76–81). Of these structures. Nos. 53, 55, 57 and 58 Dawson Street are Protected Structures (RPS 2280, RPS 2281 and RPS 2282). Impacts on architectural heritage due to building fixings were identified for Nos. 52 (AH76), 53 (AH77) and 55 (AH78) Dawson Street and assessed as part of the Luas Broombridge EIS and there are no additional architectural heritage impacts from the OCS associated with the installation of the proposed scheme. No direct permanent impacts on cellars associated with these Protected Structures were identified in the Luas Broombridge EIS. However, the EIS (to allow for the uncertainty surrounding extents of basements) adopted a conservative approach by referencing the owners/occupiers of all buildings including the structures in the vicinity of the proposed Dawson Stop for the presence of basements attached to buildings. Investigative slit trenching carried out in the area of the proposed Dawson Stop as part of the LCC Investigation and Treatment of Cellars Contract did not identify any cellars associated with these buildings which would require infilling for LCC.</p> <p>The potential for the proposed scheme to have an impact on archaeological, architectural and cultural heritage of the surrounding environment during the operational phase is likely to be confined to indirect visual impacts on upstanding elements of architectural heritage. The buildings along the west side of Dawson Street adjacent to the proposed Dawson Stop (AH76–AH81) were assessed as buildings of architectural heritage merit and the potential for visual impacts on the streetscape will be assessed under the Landscape and Visual chapter of the EIS.</p>

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>On this basis, and given that the construction of the proposed scheme will be undertaken concurrently with LCC construction activities on Dawson Street and the mitigation proposed in the EIS will be implemented during the construction and operation of the proposed scheme, no additional likely significant impacts are predicted and therefore this topic is scoped out of the proposed scheme's EIA.</p>
Material Assets: Property	Scoped out	<p>The potential for LCC to have an impact on Material Assets: Property during the construction and operational phases in the Dawson Street area was previously assessed as part of the Luas Broombridge EIS. The findings of the EIS in relation to the property in the Dawson Street area noted the following:</p> <ul style="list-style-type: none"> - The impact on basements in Area 29 is dependent upon the degree to which the diversion of utilities and implementation of the proposed scheme will impact on these structures. As outlined in the "Difficulties encountered" section of the baseline assessment, the full extent of underground basements attached to structures is not known and the final position of utility diversions will depend upon confirmation of the location of utilities upon excavation works. As such, the potential impact on basements will vary from low significance where the basements are in poor condition and/or not in use to very high where the basements are in use and this use cannot continue as a consequence of the potential acquisition - The residual impacts after mitigation vary from imperceptible to moderate in the case of private basement acquisitions, "private landings" and amenity space <p>The proposed scheme will not impact on property on Dawson Street during the construction of the scheme, i.e. there will be no acquisition of properties on a temporary basis, no demolition (in whole or part) of properties and no acquisition of properties on a permanent basis. It is not anticipated that the proposed scheme will require the acquisition of cellars as investigative slit trenching carried out in the area of the proposed scheme as part of the LCC Investigation and Treatment of Cellars Contract did</p>

Environmental Topic	Scoped In/ Scoped Out	Comment
		<p>not identify any cellars associated with adjacent buildings which would require infilling for either LCC or the proposed scheme. Furthermore, the operation of the proposed scheme will not impact on property.</p> <p>On this basis, and given that the construction of the proposed scheme will be undertaken concurrently with LCC construction activities on Dawson Street and the mitigation proposed in the Luas Broombridge EIS will be implemented during the construction and operation of the proposed scheme, no additional likely significant impacts are predicted and therefore this topic is scoped out of the proposed scheme's EIA.</p>
Material Assets: Utilities	Scoped out	<p>The potential for LCC to have an impact on Material Assets: Utilities during the construction and operational phases in the Dawson Street area was previously assessed as part of the Luas Broombridge EIS. The findings of the EIS in relation to the property noted the following:</p> <ul style="list-style-type: none"> - A summary schedule of proposed utility diversions has been prepared which identifies infrastructure requiring diversion and includes information on the type and size of each utility. This schedule also identifies the necessary mitigation measures required by the utility company and the contractor to facilitate the implementation of works - The residual construction phase impacts in the city centre (i.e. Area 29) are assessed as moderate - The operation of the proposed scheme will not impact on utility services <p>The proposed scheme will not impact on any additional utilities on Dawson Street during the construction of the scheme over and above those already being impacted upon (i.e. decommissioned, diverted or protected) as part of the original granted Railway Order. Furthermore, the operation of the proposed scheme will not impact on utilities.</p> <p>On this basis, and given that the construction of the proposed scheme will be undertaken concurrently with LCC construction activities on Dawson Street and the mitigation proposed in the EIS will be implemented during the construction and operation of</p>

Environmental Topic	Scoped In/ Scoped Out	Comment
		the proposed scheme, no additional likely significant impacts are predicted and therefore this topic is scoped out of the proposed scheme's EIA.

3.0 PROPOSED METHODOLOGIES FOR THE ASSESSMENT OF IMPACTS

This section details the environmental topics that will be assessed and the likely significant impacts associated with the proposed scheme which will be described within the EIS. The likely potential impacts in relation to construction and operation of the proposed scheme have been identified. Such impacts may occur during the construction phase or the operational phase (or both) including impacts that may be temporary, short, medium, long term or permanent, as well as those that may also be positive, neutral or negative. As construction works on LCC commenced in 2013, the baseline environment is currently in a state of flux. It is proposed for the purposes of this assessment that the baseline environment will be described and categorised on the environment that will be in place during year 1 of operation, i.e. 2017; the do-minimum scenario in the absence of the northbound stop. An overview of the assessment methodologies for each environmental topic is provided so that this can be communicated effectively to stakeholders and the general public.

3.1 Human Beings

The potential impacts on human beings are also addressed under other environmental topics, such as planning and policy, socio-economic noise and vibration, and traffic.

3.1.1 Planning and Policy

The Planning and Policy Context chapter of the EIS will assess all national, regional and local policies and objectives relevant to the proposed scheme including:

- Capacity of land for development
- Existing community and other landuses in proximity to the proposed scheme
- Landuse trends in proximity to the proposed scheme
- Policy changes that could influence landuse
- Recent planning decisions by Dublin City Council (DCC) and An Bord Pleanála in proximity to the proposed scheme
- Potential for permitted/proposed and future development to be located in the vicinity of the proposed scheme

The proposed scheme will be assessed for compliance against relevant local, regional and national planning policy documents. The strategic planning context will include reference to current national and strategic policies and objectives.

The statutory development plan context will include reference to statutory landuse planning and development policies and objectives as adopted by DCC.

A review of potential proposed developments and recent land developments will also be undertaken along and in the general vicinity of the proposed scheme.

Environmental topic specific objectives and policies will also be referenced.

3.1.2 Human Beings: Socio-economic

3.1.2.1 Scope

A demographic profile of the area around the proposed scheme will provide the socio-economic context within which impacts may be assessed.

3.1.2.2 Likely significant impacts

- The construction stage has the potential to disrupt businesses in the area
- Creation of excessive levels of pedestrian congestion to the detriment of the street's commercial viability

3.1.2.3 Assessment methodology

A desktop study of the baseline environment will be conducted.

Potential construction and operational business impacts will be outlined and appropriate mitigation measures indicated where relevant.

3.1.3 Human Beings: Noise and Vibration

3.1.3.1 Scope

The noise and vibration assessment takes into consideration available national and international guidance. Assessment of likely significant impacts will be undertaken for the construction and operational phases of the proposed scheme.

3.1.3.2 Likely significant impacts

- LCC LRV operations, including wheel/track interaction, wheel squeal and operations of vehicle horn and chimes
- Increased traffic movements and associated traffic noise in certain areas due to the relocation of road traffic (including bus, taxis, etc.)
- Stop activities including public address announcements

3.1.3.3 Assessment methodology

The assessment will examine the impact of the addition of airborne noise from the construction and operation of the proposed scheme, evaluated by reference to noise sensitive receptors in the area.

A baseline noise survey will be undertaken to determine the ambient noise environment adjacent to the proposed scheme. Day, evening and night time measurements will be taken.

The baseline environment in relation to vibration will be described and categorised and an impact assessment of the construction and operational phases of the proposed scheme will be carried out.

Construction and operational noise will be predicted and assessed against recognised standards for impacts.

The EIS will also identify measures to attenuate noise and vibration to as low as reasonably practicable during construction and operation of the proposed scheme and will assess residual impacts.

3.1.4 Human Beings: Traffic

3.1.4.1 Scope

The Human Beings: Traffic chapter of the EIS will evaluate the impact of the proposed scheme on all road users including general traffic, public transport, Heavy Goods Vehicles (HGVs), pedestrians and cyclists.

The design will aim to integrate the proposed scheme into the existing street environment and accommodate all other road users seeking to minimise the effect on these other road users by:

- Minimising the impact on bus services throughout construction and operation
- Maintaining accessibility for pedestrians and cyclists
- Taking account of future road and public transport proposals
- Developing appropriate traffic management measures
- Consulting with relevant stakeholders

3.1.4.2 Likely significant impacts – construction

- Some traffic disruption during construction is likely which may include traffic diversions and reallocation of existing road space

- Construction will also require movements of HGVs to import fill material, plant, equipment and materials and also to remove construction and demolition waste

3.1.4.3 Likely significant impacts – operation

- Modal shift from other modes of transport is likely to reduce the number of car journeys on the road network overall in future years. Impacts will include localised increases and decreases in traffic volumes and may result in traffic delays at junctions adjacent and at the depot entrance
- Reallocation of existing road space to cater for the proposed scheme and any new junctions
- Alteration to the extent of the public realm
- Creation of new pedestrian desire lines and changes to existing desire lines
- Relocation of existing kerbside facilities along the street/reallocation of existing road space to cater for the proposed scheme

3.1.4.4 Assessment methodology

The proposed scheme will not have any impacts on strategic traffic movements and the impacts will relate to local impacts on the street. To assist in the quantification of the local impacts, vehicular and pedestrian modelling will be undertaken using dynamic modelling software. The assessment will cover impacts on all road users, specifically including:

- Traffic queuing and delay
- Relocation of pedestrian facilities and changes to pedestrians movements and desire lines
- Changes to bus lanes and cycle lanes, and consequent re-routing of bus services and bicycle flows
- Changes to kerbside facilities i.e. loading bays, taxi ranks and on-street parking

The following standards and guidelines will be consulted as part of the traffic assessment:

- Institution of Highways and Transportation Guidelines on Traffic Impact Assessment (1994)
- Design Manual for Roads and Bridges (National Roads Authority (NRA), 2013)
- Design Manual for Urban Roads and Streets (Department of Transport, Tourism and Sport, 2013)
- Traffic Management Guidelines (Department of Transport (DoT), 2003)

- Traffic and Transport Assessment Guidelines (NRA, 2007)

Pedestrian activity at stops will be linked to the proposed scheme patronage data and changes in traffic levels on individual roads will feed into assessment of noise and local air quality impacts.

3.2 Landscape and Visual

3.2.1 Scope

Landscape and visual impacts will be assessed for the construction and operational phases of the proposed scheme. Likely significant impacts include the following:

- Construction of the proposed scheme may have potential temporary negative impacts on landscape and visual aspects of the receiving environment. Such impacts include construction traffic and associated haulage routes, construction lighting, plant and machinery, hoarding and works sites
- The proposed scheme will generate permanent effects on landscape and visual aspects of the environment due to the changes to the character of the study area and in the visual environment caused by the infrastructure associated with the proposed scheme
- Alteration to the extent and configuration of the public realm
- Impacts from lighting may also occur
- Impact on street trees due to tree removal

3.2.2 Assessment methodology

The study area used in this assessment refers to the proposed scheme location itself and its wider landscape context in the study of the physical landscape, landscape character and viewshed. This may extend outside of the immediate scheme area in order to achieve an understanding of the overall landscape.

The assessment will include the following:

- Desktop and site survey of the proposed scheme, protected views, maps, aerial photography and other information relevant to the study area
- Assessment of the likely significant impacts of the proposed scheme to determine the main impacting features, the degree to which these elements would be visible in relation to observations made during the field survey. In determining visibility, the views to and from the proposed scheme will be considered

- Assessment of the likely significant impacts in terms of lighting during both construction and operation will be carried out
- Assessment of the impact on the pedestrian realm and the quality of the existing streetscape
- Impact on street trees.
- The identification of mitigation measures including specific landscape measures (SLMs)

4.0 ENVIRONMENTAL IMPACT STATEMENT STRUCTURE AND CONTENTS

The EIS will be submitted to An Bord Pleanála as part of the Railway Order application for the project. The structure of the EIS will be in accordance with EPA Guidelines on the information to be contained in Environmental Impact Statements (2002) and Advice Notes on Current Practice in the preparation of Environmental Impact Statements (EPA, 2003). The EIS will comprise a number of sections.

An introductory section will outline the planning and environmental legislative requirements in relation to the proposed scheme, together with a description of the requirement for an EIA, the structure of the EIS and the environment project team. A description of the needs and objectives of the proposed scheme will also be provided.

The overall approach to the EIA process will be detailed including a description of how the scope of the EIA was defined and the issues relating to the consultation process undertaken by RPA.

It is likely that the EIS will be presented in one book.

4.1 Planning context

The planning context for the proposed scheme, including national, regional and local policy guidance will be detailed.

A description of difficulties encountered and any limitations that were experienced by the project team will be provided.

4.2 Alternatives

This section will describe and appraise the alternatives that were considered during the design of the proposed scheme and during the EIA process. Consultation that was undertaken with regard to the design of the proposed scheme will also be discussed.

4.3 Project description

A description of the proposed scheme including the design principles, risk analysis, safety issues, construction methodology and programme will be provided.

4.4 Existing environment

A description of the baseline environment of the proposed scheme will be provided for each environmental topic considered.

4.5 Impacts associated with the proposed stop and mitigation measures

A description of the likely significant impacts that will occur during the construction and operational phase of the proposed scheme will be provided for each environmental topic considered. The likelihood, extent, magnitude, duration and significance of impacts will be described.

Mitigation measures will be provided to avoid, reduce or remedy the impacts or to provide for enhancement. The mitigation measures to be put in place to mitigate the likely negative significant impacts will be described and the residual impacts that will persist after mitigation has been put in place will also be detailed. If residual impacts are deemed to be significant, then the level of significance will be explained in the EIS.

4.6 Interrelationships, Interactions and Cumulative Impacts

A chapter within the EIS will detail the interrelationships, interactions and cumulative impacts between the various environmental topics. The key interrelationships that exist between the various affected environmental topics will be described. Cumulative impacts associated with the proposed scheme and LCC will also be considered. Cumulative or combined impacts due to the combination of the proposed scheme and other projects in the same area will be examined. This will include cumulative impacts (impacts which cumulate over space and time to generate a larger overall impact) and other impact interaction.

4.7 Non-Technical Summary

A Non-Technical Summary (NTS) will provide a summary of the main findings from the EIS.

The NTS will be laid out in a similar, but condensed, format to the EIS, i.e. describing the proposed scheme, existing environment, impacts, mitigation measures and residual impacts.

Railway Procurement Agency

Title: Luas Cross City Dawson Stop Scheme Draft EIS Scoping Report

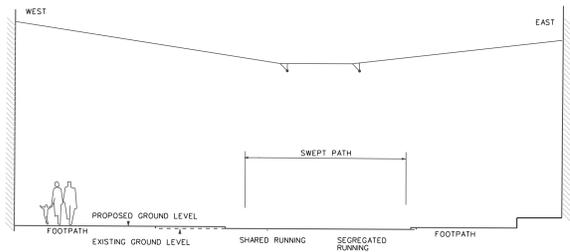
It is the intention of RPA that the EIS will be clear, proportionate, representative and of an appropriate standard to reflect the nature and scale of the proposed scheme. The EIS will be made widely available.

ADDENDUM A – MAP OF PROPOSED SCHEME



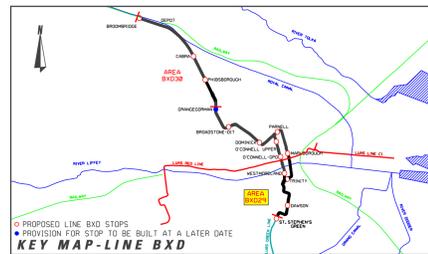
PLAN

SCALE 1:500



CROSS SECTION 29-01
SCALE 1:100

DRAFT FOR CONSULTATION



DRAWING LEGEND	
	D.H.L.E. BUILDING FIXING
	PROPOSED OVER HEAD LINE EQUIPMENT
	POSITIONS OF POLES AND FIXINGS
	ANTICIPATED TRAFFIC FLOW
	PROPOSED REMOVAL OF TREES
	EXISTING TREES
	LRT STOP PLATFORM
	NEW EDGE OF TRAFFIC LANE
	EXISTING KERB TO BE REMOVED
	LRT RAIL TRACKS
	SHARED RUNNING WITH ROAD TRAFFIC
	SEGREGATED RUNNING OR PROTECTED RUNNING
	NEW EDGE OF TRAFFIC LANE

REVISION	DATE	MODIFICATION	STATUS	CHECKED/APPROVED

RPA
Railway Procurement Agency

LUAS

RAILWAY WORKS
LINE BxD - ALIGNMENT DETAILS
DAWSON STREET TO NASSAU STREET.

PREPARED: RPA OFFICE	CHECKED: JIM KILFEATHER
SCALE: 1:500, 1:100	APPROVED: MICHAEL SHEEDY
DATE: FEB.1014	

AREA NO. 29	PLAN NO. BxD-RO 29 02-03	SUBJECT. RAIL ORDER
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INTERNAL DOCUMENT NUMBER	STAGE	LINE	CONTRACT	ELEMENT	DRW NO	DRW REV
	L	BxD	000	GA	29007	A

ADDENDUM B – LIST OF ENVIRONMENTAL CONSULTEES

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Environmental Topic	Stakeholders		
EIA Scoping and Consultation (includes consultees relevant to environmental aspects listed below)	An Comhairle Ealaíon An Óige An Taisce Aurora Telecoms Badgerwatch Ireland Bat Conservation Ireland BirdWatch Ireland Bord Gáis Bord na Móna BT Ireland Cable and Wireless Coillte Comhar Commission for Communications Regulation (ComReg) Eircom Enterprise Ireland Environmental Protection Agency ESB Fáilte Ireland FÁS Forfás Friends of the Earth, Ireland Geological Survey of Ireland Health and Safety	Commission for Energy Regulation Crann Department of Agriculture, Food and the Marine Department of Arts, Heritage and the Gaeltacht Department of Children and Youth Affairs Department of Communications, Energy and Natural Resources Department of the Environment, Community and Local Government Department of Foreign Affairs and Trade Department of Health Department of Jobs, Enterprise and Innovation Department of Justice and Equality Mid-East Regional Authority Irish Congress of Trade Unions Irish Landscape Institute Irish Orienteering Association Irish Planning Institute Irish Tourist Industry	Department of Transport, Tourism and Sport Department of Social Protection Dublin Airport Authority Dublin Chamber of Commerce Dublin Cycling Campaign Dublin City Council Dublin City Development Board Dublin City Enterprise Board Dublin Docklands Development Authority Dublin Fire Brigade Dublin Naturalists' Field Club Dublin Regional Authority Dublin Port Company National Disability Authority National Museum of Ireland Office of Public Works

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Title: Luas Cross City Dawson Stop Scheme Draft EIS Scoping Report

Environmental Topic	Stakeholders		
	Authority Health Service Executive Heritage Council Irish Architectural Archive Irish Aviation Authority Irish Business and Employers' Confederation (IBEC) Irish Council for Social Housing Irish Farming Association Irish Georgian Society	Confederation Irish Wildlife Trust Met Éireann Muintir na Tíre National Association of Regional Games Councils National Body for Residents Associations National Building Agency National Construction and Demolition Waste Council National Parks and Wildlife Service National Roads Authority National Women's Council of Ireland National Youth Council of Ireland	National Transport Authority Inland Fisheries Ireland O2 Royal Institute of Architects of Ireland Royal Irish Academy Sustainable Energy Authority of Ireland Tree Council of Ireland UPC/NTL Verizon Vodafone Ireland Waterways Ireland
Human Beings: Socioeconomic			
Human Beings: Noise and Vibration	Dublin City Council	Environmental Protection Agency	
Human Beings: Traffic	Department of Transport, Tourism and Sport National Transport Authority Dublin City Council	National Roads Authority	CIÉ Dublin Bus Bus Éireann
Landscape and Visual Amenity	Dublin City County Council Parks Department		

