Appendix 1

York Street Interchange Project – Inspectors Report and Departmental Statement

Following the statutory public consultation, a Public Inquiry was held in November 2015. During the Public Inquiry, the Inspectors examined the benefits and drawbacks of the scheme and considered the representations made by Belfast City Council and by other members of the public.

Following an announcement by the Minister for Infrastructure on the 15 November 2016, the Inspectors Report and the Departmental Statement were published along with the Designation Order and the Notice to Proceed.

Outlined below are the Inspectors comments and recommendations and Dfl's response to Belfast City Councils representations. This is then followed by a range of mitigation measures put in place by Dfl to avoid adverse impacts related to the Proposed Scheme.

Inspectors Comments and Recommendations and the Departments Response

Strategic Advisory Group (SAG) was set up in January 2015 mainly to consider and advise on aesthetic aspects of the proposed YSI involving Council representatives.

Inspectors Comments

The Inspector states that it clear from initial correspondence between TNI and the Council that the council remain supportive of the YSI Interchange Project. The Council representatives gave clear and concise presentations at the Inquiry. The SAG has been a major positive step forward and due to this, a number of diverse stakeholders have become involved in the project and have made important contributions in terms of enhancements to the overall design of the project.

There is uncertainty as to whether TNI will obligate to implementing the recommendations of the SAG. It is understood that Scheme costs must be precise and all final decisions will be made by TNI; however, it is still anticipated that TNI will take into consideration and integrate any proposed changes or enhancements supported by the majority of the SAG.

Inspectors Recommendations

The Inspector recommends that TNI should continue to communicate with the Council during the design and construction phase to ensure that issues will be acknowledged and addressed as efficiently as possible. TNI should ensure to find the means and necessary resources to implement any proposed changes and improvements identified and supported by the SAG.

Departments Response

The Department acknowledges the inspectors comments with regards to this and will progress the project in line with the recommendations. The Department will make every effort to find the means and the necessary resources to incorporate any proposed changes and improvements identified and supported by the majority of the SAG.

Aesthetics and Design

Inspectors Recommendations

The inspector recommends that TNI should identify and implement appropriate existing infrastructure adjustments to help improve the treatment and aesthetics of underpasses and the steps adjacent to North Queen Street Bridge. TNI should explore the option of upgrading the basic paving material and finishes to high quality public realm features that would link to the planned Phase 3 Streets Ahead initiative. TNI should also integrate high quality landscaping through an inclusive street-scaping programme.

Departments Response

The Department acknowledges the Inspectors comments with regards to this and will progress the project in line with the recommendations.

Noise and Vibration

Inspectors Comments

During the operational phase, the Environmental Protection Unit (EPU) have requested a verification report be conducted to confirm and inform whether or not any properties meet eligibility criteria under the Noise Insulation Regulations (NI) 1995. It must show co-operation with Dfl and identify any required noise actions arising out of the duties under the Environmental Noise Directive. The Council have requested that they are consulted about the procedures managing noise and vibration during construction, including a protocol for compliance monitoring demonstrated in the Contractors CEMP (Construction Environmental Management Plan).

Inspectors Recommendations

The Inspectors recommend that TNI should prepare an operation phase Verification Report to confirm and inform Noise Insulation Regulations (NI) 1995 eligibility and identify any actions arising out of the duties under the Environmental Noise Directive. TNI should continue to work with the Council regarding procedures for managing noise and vibration during the construction phase. Close liaison with the Council should continue during which the final version of the CEMP would be agreed.

Departments Response

The Department acknowledges the Inspectors comments with regards to this and will progress the project in line with the recommendations.

Pedestrians, Cyclists and Community Effects

Inspectors Recommendations

The Inspector emphasises that residents must have an active voice during the design and construction phase and a meeting should take place with the key representatives to discuss a communications strategy.

It is important that the memorial of those who were killed in the bombing of McGurks Bar in 1971 will be relocated due to the widening of North Queen Street Bridge. TNI must work closely with the victim's representatives to ensure that the recreation of this significant memorial is carried out in accordance with their wishes and expectations.

TNI should identify and implement appropriate existing infrastructure adjustment solutions to the outstanding issues. TNI should re-examine their proposals for the roads at the boundaries of the Scheme to ensure anticipated cycling and other developments outside the footprint of the scheme are considered within the YSI project.

TNI should reconsider the new university and emerging cycling strategies on the scheme as it is hoped that this will progress the area surrounding York Street beyond recognition. TNI should examine mitigation measures to provide a degree of protection to cyclists and pedestrians from the wind and the rain on the York Street Bridge.

Departments Response

The Department acknowledges the Inspectors comments with regards to this and will progress the project in line with the recommendations.

Road Drainage and the Water Environment

Inspectors Recommendations

The Inspectors recommend that TNI should continue to work with the Council regarding future analytical results of any ground hydrogeological groundwater monitoring. TNI should produce a hydrogeological model in order to determine the impact of deep engineering structures on the surrounding water table.

Departments Response

The Department acknowledges the Inspectors comments with regards to this and will progress the project in line with the recommendations.

Geology and Soils

Inspectors Comments

With regard to contaminated land, the Council contacted URS on 14 October 2015 in order to seek further clarification on the risk of mobilising asbestos to the atmosphere, its control and also details of former land uses within the site. The Council have had response about these matters from TNI but TNI have not had time to incorporate them as part of their contribution to the Inquiry.

The Council are satisfied with TNIs management strategy towards ground contamination and towards mitigating the risk posed by contaminated land. The Council recommend that adjacent residents and site workers safety should be a prime priority.

The Council have noted that TNI/URS intend on generating a hydrogeological model to determine the impact of deep engineering structures on the surrounding water table which may have implications for contaminant mobilisation, ground gas generation and contaminant transport to offside receptors.

Inspectors Recommendations

The Inspector recommends that the Department should continue to liaise with the council regarding future analytical results of any made ground and hydrogeological groundwater monitoring in order to help to refine the conceptual site model for the development but it is recommended that adjacent residents and site workers safety should continue to be a prime consideration.

Departments Response

The Department acknowledges the Inspectors comments with regards to this and will progress the project in line with the recommendations.

Measures to Mitigate Adverse Effects

As part of the Environmental Impact Assessment, DfI have proposed a range of mitigation and improvement measures to avoid, offset or lessen adverse impacts related to the Proposed Scheme and these measures are outlined below.

Air Quality

A Dust Minimisation Plan will be arranged as part of the CEMP to include dampening of haul roads and stockpiles; keeping roads clean and using covers over construction lorry trailer units and locating stockpiles and dust generating activities away from sensitive areas.

An Air Quality Management Plan will be arranged as part of the CEMP to contain selection of plant and vehicles to lessen exhaust emission levels and to be well maintained. Traffic movements will be condensed throughout the site and the use of public roads will be restricted to essential movements only. Construction plant will be kept away from site boundaries and there will be effective waste management to avoid potential odour nuisance.

Dfl state that these mitigation measures will be functional before and during construction and would be monitored to ensure compliance with requirements and standards. Dfl will continue to consult with BCC's Environmental Protection Unit regarding the operational and construction plans for the proposed scheme.

Cultural Heritage

A sample-based mechanical or hand-evacuated trench or test pit based investigation will record the character of archaeological remains. Targeted investigations may also be suitable. Detailed evacuation would be carried out where archaeological remains are either known formerly or exposed during the course of the works.

A programme of sample recovery and analysis undertaken to investigate paleoe-environmental conditions and soil sediment development that may be applicable to the research of archaeological remains recovered within the vicinity. This would be attained through trial pit evacuations.

A programme of observation, investigation and recording of archaeological remains during construction earthwork activities where the presence of potential remains have been demonstrated but where detailed investigation previous to the main construction programme is unfounded and unfeasible due to safety or logistical considerations. Under Target Watching Brief, the contractor's preferred method of working would be controlled as necessary.

A programme of observation, investigation and recording during construction activities where remains have not been identified by assessment but where there remains a residual risk of archaeological discoveries. The contractors preferred method of working would not be controlled for archaeological purposes.

Ecology and Nature Conservation

The Contractor would appoint an Ecological Clerk of Works (ECoW). A Habitat Management Plan would also be prepared as part of the CEMP. The Contractor would be made aware of the Department's duty to further the conservation of biodiversity in accordance with the requirements of Article 1 of The Wildlife and Natural Environment Act (Northern Ireland) 2011.

A CEMP to be produced by the Contractor, which would address likely sources of pollution and sedimentation which could potentially reach Belfast Harbour and onward into Belfast Lough. A Pollution Incident Response Plan would also need to be put in place.

The overall landscape planting objectives would attempt to mitigate and compensate for the mosaic of seminatural and artificial habitats to be lost as part of the scheme

The ECoW would undertake further pre-construction surveys to identify locations of any non-native invasive species and to ensure that mitigation measures are carried out where required, and an Invasive Species Management Plan is developed. Great care would be taken when working close to the identified area of invasive species to prevent the spread of live plants or viable seeds, as per the requirements of Article 15 of the Wildlife (Northern Ireland) Order 1985 [as amended].

The ECoW would undertake pre-construction surveys on any semi-mature / mature trees to be felled and assess them for the likelihood of bat presence. Bat boxes would be provided at a suitable location around North Queen Street Bridge and the new Dock Street Overbridge. A variety of bird boxes would be provided around the site. A suitably experienced ecologist would advise on the exact type and positioning of the boxes. Planted areas would be used to replace the large areas of bare ground and brownfield, to provide locations for birds to forage. Insect-friendly features would be considered, and incorporated where feasible, such as log piles and insect boxes.

Landscape effects

The Department have put mitigation measures (where feasible) in place to overcome landscape effects and these are outlined below.

- The embankments behind the side/back gardens of North Queen Street and Little George's Street properties would be potentially replanted.
- The small pocket of open space at Molyneaux Road would be replanted.
- Planting would be replaced on the embankments and road edges, creating several new blocks of mixed tree and shrub planting, and acting to partially screen the development; it may also assist wildlife habitat creation and the soft scape would offer an informal drainage sink.
- Corporation Street and Garmoyle Street would be planted with street trees, a grass verge, to the West of the existing pedestrian path.
- Great George's Street would be planted with street trees. The scheme would narrow the road and widen the southern path to facilitate improved public realm.
- Appropriate screening would be provided where possible. Immediate temporary screening will be required where the visual impact is significant.
- Proposed acoustic barriers along the Westlink in the vicinity of North Queen Street Bridge would be designed to allow road corridors and cityscape to flow under the structures to minimise its visual prominence.
- Proposed enhancement lighting to the underbridges.

In addition to the points recommended by the Inspector regarding landscape effects, the Department state that the SAG should also consider the following;

- An entrance area, including pedestrian steps and ramp access to York Street and Henry Street.
- Large-scale land art, sculpture and landform around road network.
- Designed parapets with enhanced aesthetics on York Street overbridges. The proposed bridge may become a positive landmark in the cityscape.
- Boundary treatments and decorative finishes to retain walls and structures.
- Improved public realm treatments to key streetscapes. This would be ideally designed as a coherent masterplan, considering Belfast City strategic design issues, feature lighting and decoration of underpasses, especially pedestrian underpasses.
- Temporary enhancements and feature boundary treatments to the potential future development areas.
- Sensitive location of construction compounds and stockpile locations in order to reduce the extent of adverse visual impacts.
- Construction compounds would be fully reinstated and secured with appropriate boundary treatments following completion of the works.

Land Use

Land take from and inconvenience to affected landowners would be minimised as much as feasibly possible. Suitable accommodation works have been considered for each land plot affected by the Proposed Scheme. A comprehensive schedule of accommodation works and mitigation measures would be developed through consultation as necessary. Construction compounds to be located in areas that would cause the least disturbance to existing land uses, and to be fully reinstated post construction. Any land used for construction works, and outside the area to be developed for the scheme, would also be fully reinstated at a minimum. Land uses adjacent to the site should be able to continue with minimal disruption and inconvenience. A CEMP shall be prepared in advance of construction to mitigate potential impacts and maintain continued access to and operation of land as necessary.

The Department will carry out a review of land vested for construction. If this exceeds the minimum required for the performance of the Department's present and future responsibilities, any surplus land may be sold back to the original owner or others at the then market value.

Noise and Vibration

Low noise road surfacing would be provided on Interchange links between the Westlink, M2 and M3 and the slip roads from these to the local road network. A noise barrier would be provided adjacent to the northbound carriageway of the Westlink and a noise barrier would be provided adjacent to the southbound carriageway of the Westlink.

The Department have suggested several mitigation measures (where feasible) which are considered appropriate and of good working practice for all construction contracts and this is detailed in BS5228 (1997 & 2009), 'Noise and Vibration Control on Construction and Open Sites.' Typical measures would include positioning of static plant as far away from receptors as possible, using well-maintained plant, temporary screening, enclosures, restricting works to daytime and staggering high vibration activities such as piling and jack hammering. The procedures regarding noise and vibration during construction will also be documented in the Contractors CEMP.

Pedestrians, Cyclists and Community Effects

Cautious consultation with the local community would be essential to negate adverse impacts.

A new bus lane is proposed between a new signalised junction at Galway House and the junction of York Street and Great Patrick Street. All other existing bus lanes within the scheme would be maintained. In consultation with Translink, any lost serviced bus stops would be appropriately relocated to new routes where feasible. Footways are provided on all surface streets, with existing widths maintained and where possible enhanced.

Changes to the proposed scheme layout for Non-Motorised Users were made in response to views raised as part of the statutory public consultation process and subsequent meetings with the Department's Cycling Unit and Sustrans. In June 2015, TNI implemented the London Cycling Design Standards as its design manual going forward for the design of cycling schemes in Belfast. The revised layout for York Street within the Proposed Scheme has been developed in line with these standards, although it is recognised that it has been possible to fully comply with all aspects of the standards owing to the constraints presented by existing build infrastructure engineering constraints. The changes are outlined below.

- Widening of the northbound cycle lane. This has required a reduction in the width of remaining traffic lanes and footway widths.
- Widening of the southbound cycle lane between the junction with Dock Street and Galway House
- Continuation of cycle lanes through junctions as recommended by LCDS.
- Separation of the cycle lanes, where running adjacent to general purpose traffic lanes, using light segregation in the form of cycling bollards. Segregation will be via road marking only in the shared bus/cycle lane as permitted by LCDS.
- The relocation of cycle lanes at junctions to minimise the conflict between cyclists and left-turning traffic.

- The use of a bus stop bypasses adjacent to the existing bus stop at Cityside Retail Park and a potential new bus stop in the southbound direction in a similar location.
- A revised junction arrangement at the start of the southbound bus lane to allow cyclists to cross over into the southbound bus lane without conflict from other road users.

At all junctions' provision should be made for non-motorised users in accordance with Department for Transport Local Transport Notes and Traffic Advisory Leaflets. Dropped kerbs and tactile paving is proposed at all crossing points, with pedestrian guardrail provided. Puffin crossings will be proposed in line with DMRB guidance. There will be provision of a new, modern road lighting system for the safety of motorised and non-motorised road users. The provision or replacement of existing lighting systems has been considered and there will be additional lighting under bridge structures. There will also be careful traffic management to facilitate safe passage for pedestrians and others.

The contractor will ensure delays to local and strategic traffic are kept to a minimum. Mitigation measures include; advanced publicity outlining the traffic management proposals and duration, advanced warning of specific traffic management measures; reducing lane widths, efficient phasing of contraflow operations and adequate advance signing of the works. The contractor will maintain at least two-way traffic around the junction during peak traffic flow.

Vehicle Travellers

Mitigation would include open parapets on overbridges to allow views from the road and to reduce the mass of the structure and planting design which should be sensitive to the interaction between retaining views from the road and screening. As part of the Traffic Management Plan, temporary warning and variable message signs would be erected as appropriate to draw attention to particular hazards including site accesses and temporary traffic management measures. The local and wider community would be notified of major works in advance through the local press, community facilities, radio or internet.

Road Drainage and the Water Environment

A centrally-located storm water pumping station is proposed to collect surface water drainage from a catchment and convey water to an appropriate outlet via an existing Combined Sewer Overflow (CSO) located at Gamble Street. All other remaining catchment areas within the wider scheme footprint would drain to the existing NIW system as currently is the case. Further drainage measures including surface water drainage solutions would be required in isolated areas adjacent to the site. These include the central scheme areas which may be landscaped and would be included in the pumping station catchment area.

Underpasses would be designed as sealed structures with sufficient load bearing capacity and flexural strength. In consideration of changes in the local hydrogeological regime, which may potentially affect groundwater flow in the fluvial deposits, leading to changes in the hydraulic gradient and increased hydraulic heads that may be transmitted to overlying deposits.

The following additional information is required as part of the detailed design development:

- further routine groundwater level gauging of boreholes
- in-situ hydraulic testing of wells installed in the three hydrogeological
- numerical groundwater modelling to test the effects of deep foundation structures on the groundwater flow regime

Scheme flood retaining walls would be provided and ramp approaches would be sufficiently raised to reduce the risk of coastal flood water ingress to underpasses. A temporary flood barrier would be incorporated to provide protection and remove the potential flood entry point. A Flood Risk Management Plan would be developed to outline flood warning procedures, provide a safe work plan for erecting the temporary flood barrier, detail ownership and responsibility for the flood barrier, as well as methods for safe storage, and outline procedures for closing Nelson Street. New drainage infrastructure would be designed to prevent back flow routes occurring into underpasses during flood events.

Any works in, near or liable to impact a waterway 'must' gain the approval of NIEA – WMU Pollution Prevention (PP), Marine Team and Rivers Agency, a minimum of two months prior to commencement of such works. Works require Method Statements to be agreed prior to the commencement to demonstrate how they would be completed with minimum disturbance. Measures established through dialogue with the NIEA-WMU Major Client Interface Group and stakeholders engaged through the consultation process would be included within the Method Statements. An Environmental Liaison Group would also be set-up to ensure that potential for significant impact upon the water environment is addressed with appropriate mitigation measures.

The Contractor shall be required to comply with the Pollution Prevention Guidelines (PPGs) regarding pollution of watercourses and CIRIA manuals C532 ('Control of Water Pollution from Construction Sites'), C648 ('Control of Water Pollution from Linear Construction Projects') and SP156 'Control of water pollution from construction sites – guide to good practice'. An Emergency Response Plan shall be prepared to minimise the risk and potential effects of any spillage incidents.

In principle, it has been agreed that temporary discharges from the works would be possible to the existing NI Water sewerage network, subject to consultations and submission of design proposals to NI Water. The CEMP would include an Erosion Prevention and Sediment Control Plan prior to commencement of any works.

Geology and Soils

The Contractor will produce a CEMP to provide details of environmental control measures to deal with contaminated land during operations. Management of all materials onto and off the site would be suitably authorised through the Water Management Regulations (NI) 2006 and/or the Water Order (NI) 1999. This would be verified through a Site Waste Management Plan.

If material cannot be re-used, its disposal will be at suitable licensed tip where it would be subject to landfill tax. The Contractor is required to reuse as much as possible because it is illegal to dump surplus fill.

ADEPT and MPA guidance on managing reclaimed road materials and the NIEA publication on bitumen road planings will be followed in the identification and management of road planings.

Departmental Decision

The Department considered the Inspectors Report and all other representations made and have agreed with the Inspectors in that the proposed York Street Interchange scheme should proceed and the necessary Orders made. The decisions and Orders set out below will be subject to the requirement to carry out the mitigation measures.

Environmental Statement

• The Department has decided to publish a Notice to Proceed with the scheme. *Designation Order*

• The Department has decided to make the Designation Order.

Vesting Order

• The Department has decided to delay the making of the Vesting Order for the scheme to align with the construction.