

# **Balfour Beatty**

SCAPE SCOTLAND
CIVIL ENGINEERING

# Edinburgh North Bridge Refurbishment

# Traffic Management Phase 2 Stakeholder Notification

The traffic management which has been on the bridge for some time now will change mid November 2021 following completion of the works to the eastern side of the bridge. This will allow the works to progress to the next phase on the west.

The current traffic management with both Northbound and Southbound traffic has permitted the refurbishment of 40% of the bridge deck. To complete the remaining 60% of the bridge additional traffic management measures must be implemented.

From Sunday 14th November 2021 at 0600 hrs the new traffic management will only permit Southbound traffic to cross the bridge. All Northbound traffic will follow alternative diversion routes which will be signposted. The current pedestrian provision on the bridge will be maintained.

The decision to divert the Northbound traffic from the bridge has not been taken lightly and it has been planned to take into consideration other traffic management schemes planned for the city

Note: Such Traffic Management alterations have been planned through close collaboration with the City of Edinburgh Council, Emergency Services and Lothian Buses. Dates for implementation have been planned for after the COP26 event, thus minimising traffic disruption to the wider city within this period.

## **Balfour Beatty**

Ref:

Balfour Beatty Civil Engineering Ltd.

Maxim 7

Maxim Office Park

Parklands Avenue

Eurocentral

ML 4WQ

01698 647 500 www.balfourbeatty.com

01 November 2021

#### Re: North Bridge Refurbishment - Notification of Traffic Management

To whom it may concern,

I take pleasure in taking this opportunity to reintroduce myself, I am Rory McFadden; the Project Manager working for Balfour Beatty. My team is responsible for the ongoing delivery of the North Bridge Refurbishment Project on behalf of the City of Edinburgh Council.

We are well advanced in the refurbishment of this Category A Listed Structure to address health and safety concerns and safeguard the long-term use of this vital link to Edinburgh city centre.

We are writing to notify you that the Project is entering a new phase of Traffic Management (Phase 2) (As per appended plan Drawing) which will require modification of the existing Traffic Management currently in place (TM Phase 1). The current Traffic Management extent segregates the worksite across the eastern bridge footpath and extends to central reserve; the western footpath remains operational with two running lanes maintained, one for Northbound and one for Southbound directions.

The new phase of Traffic Management (Phase 2) is to facilitate both works to the top, and to the underside of the bridge deck on the western side. Works to the top of the deck include relaying of pavement slabs and kerbs, surfacing works, drainage upgrades, waterproofing repairs, reconstruction of secondary structures, and construction of maintenance access manholes through the bridge deck. Works to the underside involve the repairs to the reinforced concrete bridge deck.

Phase 2 of Traffic Management requires closure of the western footpath across North Bridge, with the eastern footpath re-opened to the public. One lane of Southbound traffic will be operational during this phase, situated adjacent to the eastern bridge kerb line. Such extents are required to conduct works to the Concrete Deck Structure within the central reserve section of road which has been revealed to be in a worse condition than expected.

This new phase of traffic management has been developed with due consideration of all road users. The planning of this new phase of traffic management involved the relevant consultees within City of Edinburgh Council, Lothian buses, Police Scotland and other Emergency Services.

As per the appended posters, the western walkway will be maintained between the High Street Junction to the Scotsman Steps and between the Pure Scottish shop/Balmoral Hotel and the Princess Street Junction. The adjacent road area will be segregated for construction activities during this period to progress works and maintain health and safety of the public domain. This encompasses closure of the pedestrian crossing outside Vince Scott Kiltmakers. Loading bay provisions are proposed to maintain delivery of goods to all relevant stakeholders.

# **Balfour Beatty**

One Southbound traffic lane within the Traffic management Phase 2 will be in operation from 14th October 2021 at 0600 hrs, and it will remain in place until works to repair the west deck are complete, with a period of up to 9 months being anticipated Full road closures of North Bridge between the Princes Street and High Street junction have been confirmed for the evenings of 13<sup>th</sup>, 14<sup>th</sup> and 15<sup>th</sup> November 2021 between the hours of 2000-0600hrs. Such dates will allow set up of this Traffic Management Phase and takes due consideration of the COP26 event, ensuring traffic flow within the event period is not disrupted.

During the project we will endeavour to ensure that the Works are carried out with as much due regard to our neighbours as possible. Our project priorities include: keeping our neighbours regularly informed on project development; delivering the Project safely; and where possible, eliminating or minimising nuisances and disruption to our neighbours.

If you have any queries in relation to these Works please contact myself or Glen Henderson as noted below.

Yours faithfully,

Kerymfed don

Rory McFadden Project Manager

Balfour Beatty Civil Engineering Ltd

rory.mcfadden@balfourbeatty.com

Glen Henderson Site Agent

Balfour Beatty Civil Engineering Ltd glen.henderson2@balfourbeatty.com

## **Access over North Bridge**

During the execution of the Traffic Management Phase 2 setup, pedestrians will have full access along the newly reinstated eastern footpath. One running lane of Southbound traffic will be operational adjacent to the eastern kerb line, maintaining traffic flow across the bridge structure.

Within the current Traffic Management Phase 1 setup, works are ongoing to erect and paint marine plywood hoarding on the eastern footpath, across all 3 spans of North Bridge.

The segregation of Southbound traffic from the works site across 60% of the structure will be facilitated through Temporary Vehicle Restraint Barriers (TVCB's) placed on the newly reinstated road lane and will continue across all 3 spans. Aesthetic hoarding will be placed on top to provide site security and protection of the public from the works site.

TVCB's will be strategically placed taking account of intrusive concrete breakouts within the site confines. This ensures the bridge structure can sustain the loadings of operational traffic as works progress. The TVCB's also offer vehicle impact resistance in the event of a crash, a surfacing buffer will be placed internally within the site behind such TVCB's to offer a deflection margin if required. This will safeguard both vehicle users and that of the site team.

Placement of such TVCB's will be conducted within the current TM setup during dayshift operations, reducing the scope of works required during nightshift works (13<sup>th</sup>, 14<sup>th</sup>, 15<sup>th</sup> November 2021) to formally switch into the TM phase 2 setup.



#### What can I do to help?

Due to the configuration of the existing structure and the repairs required there is no viable alternative to the proposed traffic management.

We encourage people to plan their routes to avoid the North Bridge where possible until both Northbound and Southbound carriageways are back in use.

Where travel to the city centre is required, we encourage people to consider the use of public transport, walking and cycling. This also aligns with our greater sustainability goal.



#### **Road Level Works**

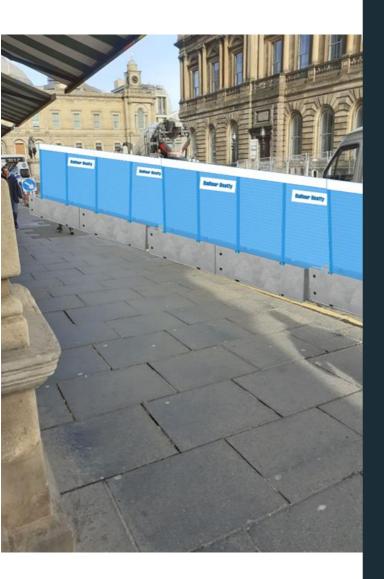
How do you conduct intrusive concrete and surfacing removal, waterproofing, paving works, cast removal and concrete reinstatement... all within a partially closed bridged structure?

Rigorous activity and logistical planning has been undertaken to schedule key works activities within all 3 spans concurrently. This reduces the project duration and allows efficiency of working on site, whilst most importantly keeping the site team and members of the public safe.

Over the coming months a variety of plant and equipment will be brought onto the road level site confines. Nuisance to local stakeholders will be reduced as far as reasonably practicable through adoption of noise mitigation measures and dayshift working.

Access and egress of plant vehicles will be facilitated through specialist Traffic Management Contractors in addition to banking of vehicles through internally trained site workforce members.

October 2021

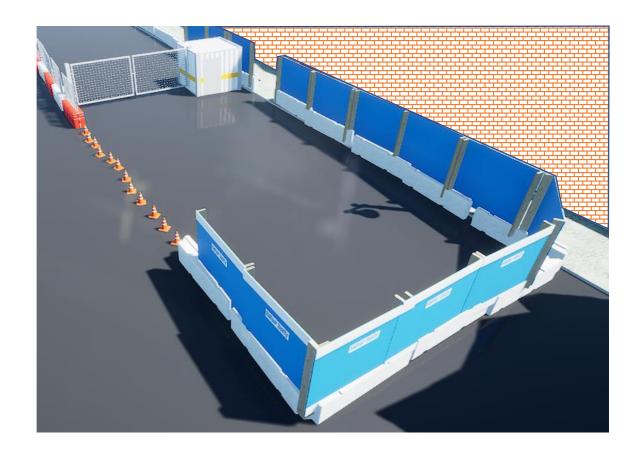


# Western Footpath Pure Scottish shop to Princes Street Junction

The western footpath from the Pure Scottish Shop to the Princes Street junction will be maintained with construction site extents segregated via brand new hoarding (2.4m in height) This will be mounted upon new concrete lane guards situated on the footpath kerb line.

A designated loading bay for the Pure Scottish shop and Balmoral hotel will be facilitated (As per plan Drawing). The existing pedestrian crossing at the Princes Street junction will be maintained, providing full visibility of Southbound traffic approaching North bridge.

Clear signage will be erected at the Princes Street Junction to emphasise all stakeholder facilities are open for trade.



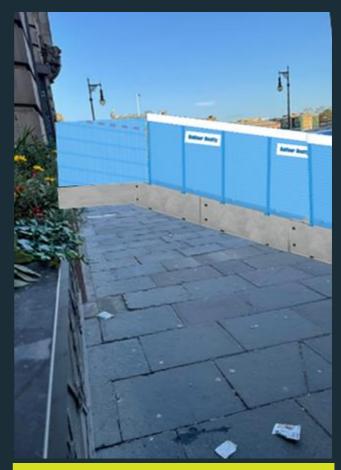
# Western Footpath: High Street to Scotsman Steps

The western footpath from the High Street Junction to the Scotsman steps will be maintained with construction site extents segregated via brand new hoarding (2.4m in height) This will be mounted upon new concrete lane guards situated on the footpath kerb line

Through collaboration with City of Edinburgh Council we plan to create a photographic gallery upon such hoarding to display the rich history of Edinburgh and the vital transport links North Bridge has provided throughout the years between the Old and New Towns.

The existing crossing point outside Vince Scott Kiltmakers is proposed to be closed to maintain safe segregation between site works and that of public domain.

Clear signage will be erected at the High Street Junction to emphasise all stakeholder facilities are open for trade.



Western footpath on approach to Scotsman Steps

## **Stakeholder Operations**

The central city centre location of the North Bridge structure provides allows proactive steps within the Traffic Management phase to minimise disruption to stakeholders.

A designated loading bay for western situated stakeholders is proposed This will be approached from the Southbound direction across North Bridge and contains segregation via MASS barriers allowing safe unloading and transport to required stakeholders.

At the High Street crossing, the use of MASS barriers allows unimpeded visibility of the Southbound traffic to pedestrians. Such measures were conducted in collaboration with a Stage 2 Road Safety Audit conducted by an external organisation.







# North Bridge walkway Eastern Footpath

Access over North Bridge will be via the newly reinstated eastern footpath. Over the past months Contractors have been working at replacing previous damaged and uneven footpath paving, allow replacement with new paving materials.

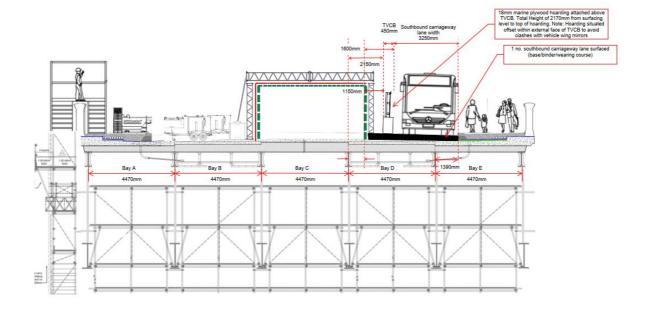
Such paving incorporates a mixture of previous and new paving, making use of the aesthetic stone appearance. Safe segregation from the works scaffolding will be maintained via erection of freshly painted marine plywood hoarding.

To improve pedestrian walkway widths, the previous bus stops have been removed and temporarily re-located outside the Hilton Hotel (Stop ND). This provides unimpeded access across the footpath, allowing clear routes for all members of the public including wheelchair and pram users.

The 1 lane of Southbound traffic will be located on a newly surfaced road structure using the latest materials. Such surfacing will improve the smoothness of journeys for vehicular and cyclist users across the bridge.

The site segregation from the western 60% of the bridge width is provided through concrete restraint systems and freshly painted hoarding. Such hoarding is offset from the vehicle lane to provide clear access for large vehicle wing mirrors.

### **Cross Section of North Bridge carriageway/Public Footpath**



## **Traffic Management Phase 2 Overview**

Through review by a Stage 2 Road Safety Auditor, the layout of new Traffic Management Phase has been generated. The site boundary encapsulates 60% of the bridge structure width from the west side to allow vital concrete repair, waterproofing, steelwork strengthening, paving and surfacing works to be undertaken. A 3250mm carriageway width for southbound traffic will be operational adjacent to the eastern kerb line with the road completely closed to Northbound Traffic. Through close communication with City of Edinburgh Council, diversion routes for Northbound Traffic have been generated which aim to reduce disruption.

Pedestrians will have access over North Bridge via the newly reinstated eastern footpath. The site extends up to the junctions of High Street and Princes Street respectively.

