

**Agenda item for Directors Group/Plus**

<b>Agenda Item Title</b>	Hostile Vehicle Mitigation (HVM) Position Statement
<b>Sponsor Director</b>	Mandy Bishop
<b>Lead Officer</b>	Gary Peacock/Lynda Deane
<b>Date of Meeting</b>	13 February 2019
<b>Time Needed</b>	20 Minutes

<b>Is this item confidential?</b>	Yes	<input type="checkbox"/>
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**Purpose of Attendance at Directors Group:**

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Strategic Planning        | <input type="checkbox"/> Strategic Resource Allocation |
| <input checked="" type="checkbox"/> Strategic Risk Management | <input type="checkbox"/> Other (please state)          |

**OUTCOMES Required**

- |  |                                 |   |
|--|---------------------------------|---|
| <input type="checkbox"/> Decision              | <input type="checkbox"/> Steer  | <input checked="" type="checkbox"/> Information |
| <input checked="" type="checkbox"/> Engagement | <input type="checkbox"/> Action | <input type="checkbox"/> Other                  |

**What ACTIONS are required from Directors Group:**

Director's Group is asked to note the contents of the Report, the work undertaken to date and the project priorities in moving forward on a permanent HVM solution for Bath city centre and to be aware that this is a cross-council Council scheme, which should be included, in strategic plans for both new developments and public realm improvements.

Director's Group should note the financial implications, recognising there will be a requirement for third party and/or Council funding to complete the works and the risks of not implementing a permanent solution

**Summarise information that will assist Directors Group to achieve the desired outcome: e.g. context, issue, options, impacts, risks, financial implications, recommended course of action etc.**

**1.0 Introduction**

Following a number of terrorist attacks in the UK and mainland Europe in 2016 and early 2017, the Design & Projects Group, together with officers from other key areas across the Council were tasked with considering Hostile Vehicle Mitigation (HVM) measures to protect the public in the most crowded spaces of the city centre, which included the

## Christmas Market.

Outside of central London, Bath contains some of the highest levels of footfall, which is unsurprising given its World Heritage Status and the number of iconic buildings both old and new within its central core, which attracts large visitor numbers on a regular basis. Uniquely the city is also home to Bath Rugby located at the famous Recreation Ground on the banks of the River Avon, with a large influx of fans visiting on match days. Bath also hosts a number of regular major events through its annual calendar such as the half marathon and Christmas market. The University of Bath and Bath Spa University campuses are situated on the outskirts of the city and there are a number of student accommodation properties within the central area.

It would therefore seem appropriate that consideration is given to protect the city's national infrastructure and crowded spaces on both a permanent and temporary basis.

### **2.0 Types of Attack**

The most frequent attack method used has been Vehicle as a Weapon (VAW) and driving into a crowd or group of pedestrians, but Vehicle Borne Improvised Explosive Devices (VBIED) have also been used. Appropriate and considered HVM solutions within the public realm will prevent these types of attack, although Person Borne IED's and layered or individual bladed/ blunt force weapon attacks are less easy to counteract within a HVM strategy. It should be recognised that layered attacks could be nullified if the attack driver is disabled if driven into PAS rated security bollards.

### **3.0 Work Undertaken to Date**

#### **3.1 City of Westminster Visit**

In April 2017 the project team visited staff from City of Westminster Council who have undertaken similar HVM projects, where we were able to discuss with them some of the various challenges of delivering HVM in the public realm and around national assets in London. This provoked some useful thoughts to incorporate within our own project in Bath.

#### **3.2 Initial HVM Proposal**

Following the visit to London, the project team produced an initial security footprint plan, which considered the most vulnerable areas of the city to be protected, principally during the Christmas market period. This was based upon information from our Security Hub Management Team and a previous survey report from Avon & Somerset Police counter terrorism unit focusing on the area around the Abbey/ Abbey Churchyard and Pump Rooms, which outlined the current vulnerabilities to attack by Vehicle or Person Borne IED's. Both the plan and survey were provided to MFD Consulting Engineers as part of the initial brief information.

#### **3.3 Consultant Commission**

In July 2017, MFD Consulting Engineers were chosen to provide a Hostile Vehicle Mitigation Study to provide a possible HVM solution to protect the public in crowded spaces in the city centre core area, in particular around the annual Christmas market.

HVM solutions recommended were based upon temporary measures in the form of the National Barrier Asset (NBA), as the priority was the Christmas market in November.

In the end the solution proved cost prohibitive, with the organisers of the Christmas market eventually using a cheaper solution of 1 Tonne concrete blocks placed at close centres to prevent access to crowded areas and other locations of perceived vulnerability. It is worth noting that whilst the blocks may have acted as more of a visual deterrent, they would prove ineffective in the event of a penetrative attack with a large vehicle.

The MFD report has provided some useful information in the form of Vehicle Dynamics Assessment (VDA) which provides approach speeds, vehicle mass and approach routes to all vulnerable areas e.g. Bath Abbey and the approach to it from Orange Grove.

Based on the VDA, MFD evaluated the most suitable available products from the NBA, but also considered and recommended crash tested bollard and street furniture manufacturers for a permanent solution.

Each part of the potential HVM line has been assessed for vulnerabilities from both high speed and low speed penetrative attacks, with impacts from 7.5t and 2.5t vehicles considered.

### 3.4 Permanent HVM Plan

Further work was undertaken on a preferred HVM solution following recommendations from the MFD report and discussion with the National Barrier Asset representatives, who visited in September 2017.

The current plan takes account of the following aspects:-

- footfall figures – peak approx. 130,000 visitors to the city centre, dropping to an average of 80,000 to 100,000 per week ;
- current and future development;
- various Council policies;
- aesthetics;
- Council wide operations across the city;
- cost.

It is recommended that the design (included as Appendix A) is further progressed to provide a template to be endorsed by both the Council and CPNI/ Avon & Somerset Police counter terrorism unit.

Further work is required with city wide partners, such as Bath Rugby, to agree solutions for future HVM that are in the interest of both parties.

### 3.5 Standard Bollard Infill

One recommendation from the London visit was the consideration of using standard bollards in combination with PAS rated security bollards. Whilst it is acknowledged that standard bollards would be ineffective against a penetrative attack, they could be used in low risk/ low speed situations and if used with the same bollard profile, there would be no awareness of the potential line of weakness.

This is a low cost solution that has also been adopted by Bath & North East Somerset Council and as a result standard bollards were installed in 2017/ 18 at the junction of Upper Borough Walls/ Burton St/ Old Bond St and Union St and also at the junction of Westgate St/ Union St and Stall St. They were also provided at the junction of Saw Close and Barton St, as part of the recently completed Saw Close public realm improvement.

Standard bollard installations are included at other locations within the permanent HVM solution for the city centre.

Avon & Somerset Police accept that this is an appropriate solution, which is proportionate to the risk.

It is recommended that works carried out to date and any proposals delivered as part of this project, should be scrutinised through a prescribed audit/ risk assessment and approval process at various stages by Counter Terrorism Police and CPNI.

### 3.6 Meeting Industry Suppliers

In early 2018 the project team met with three recognised suppliers of HVM products – ATG Access, Heras and Townscape.

There is an ever increasing number of product suppliers on the market, but these are considered the more appropriate, given the products they supply are in accordance with design standards and tested in accordance with Mira to ensure they are fully approved. Marshalls have also visited the Council recently and could be another company that we give consideration to, based upon the same industry accreditation and testing regime.

This is not an exhaustive list, but they do provide a range of equipment that meets the requirements of vehicle dynamic assessments, access control, engineering challenges and aesthetics that are sympathetic to Bath.

## 4.0 Next Steps & Priorities

### 4.1 Project Priorities

The principal priority for this project is reducing the vulnerability of the national infrastructure and ensuring crowded places in the city are safe from terrorism. The **primary** focus is the area around Bath Abbey, including Abbey Churchyard/ Kingston Parade and all accesses and egresses.

Delivery of other HVM measures required elsewhere within the city centre should be prioritised as follows:-

- Southgate/ Lower Borough Walls/ Henry St/ New Orchard St;
- North Parade/ Pulteney Bridge in collaboration with Bath Rugby;
- Cheap St - Westgate St – Saw Close - Upper Borough Walls combined pedestrianisation.

Third party funding opportunities will be sought which will include Grants Funding from public bodies and the private sector.

These proposals adhere to the Council's Transport and Public Realm and Movement Strategies and whilst there is no specific constraint upon delivery, there is likely to be an element of overlap within each area.

The project must also link in with current live projects in York St and Kingsmead Square to advise and ensure that these respective schemes fund appropriate measures for inclusion with the design proposals.

Dialogue should also commence with potential developers regarding their security arrangements and potential for seeking other funding opportunities.

### 4.2 Operational Consideration

A review of the type of HVM to be used is required as part of the initial design process and the following aspects should be considered:-

- HVM can be operated either manually (e.g. gated system) or mechanically (e.g. rising bollard) or a combination of both. The suitability of one of these systems will depend upon the sub-surface constraints and challenges the city offers, such as shallow services and underground cellars/ vaults.
- Mechanical systems such as rising bollards, will require on-going energy, maintenance, monitoring and technical costs as well as staff resourcing to consider.
- Manual systems such as gates would also require suitable resource to operate and maintain the system.
- The standard restriction period for Lower Borough Walls/ Stall St pedestrian area is 10am-6pm daily, but this period might require an extended period, to account for the night time economy. The same consideration may be required where other pedestrian areas with restricted access are proposed.
- The restriction periods may want to be extended to account for events in the city centre.

### 4.3 City Centre Development Review

Under The National Planning Policy Framework, new developments should promote public safety and take into account wider security requirements.

Local planning policy should reflect the national framework and where necessary include bespoke requirements tailored towards specific areas of the Authority.

Where the development does not require specific security measures, the developer contribution should be considered towards wider ranging HVM or security measures for the city.

Early discussion is required with all new developments, in particular Bath Rugby stadium, taking account the surrounding areas of North Parade and Pulteney Bridge, where fans congregate during match days. The potential hotel development on Upper Borough Walls, formerly the Mineral Water Hospital (RNHRD) will require detailed discussion, particularly as it will reside within the proposed pedestrianised area.

Southgate shopping centre has also been keen to work collaboratively with the Council to formulate a combined solution to protect land owned by each party. However, as a result of the delay in initialising our project, they have taken the decision to continue to provide HVM independently at the curtilage of their land and that opportunity, together with potential funding from them is no longer available.

The recent waterside infrastructure improvement at Bath Quays North will allow potential commercial development opportunities in the future and these will need to adhere to both national and local policy to shape their security arrangements.

#### 4.4 Street Furniture Review

A review of the current suite of street furniture contained within the Pattern Book is required, as some of the current items are deteriorating, have maintenance problems and are not cost effective.

Future street furniture products will need to be compatible with HVM products, to ensure they are seamless in appearance.

The review process undertaken by the Public Realm Team, should feed into the security project, but it should not affect overall delivery.

#### 5.0 **Financial Implications**

Following approval of the Bath City Centre Streetscape - Security PID and supporting Business Case. The February Council Report will seek Full approval for the current £495k of provisional funding for next financial year. This is made up of £445k of CSB and £50k of CIL.

Part of this funding will be used to support a Project Manager being appointed to work with key departments and external partners.

This project will facilitate design work, survey work and data to support a further £2.5m anticipated capital investment

#### 6.0 **Scope of project**

1. The project will be delivered by Highways and Traffic under the Capital Programme Governance arrangements. A project manager has been appointed who will work as part of a cross Council Team to continue the process previously commenced work, to support the design and delivery measures for a permanent HVM solution for Bath city centre.
2. The priority areas are Abbey Churchyard and Roman Baths
3. The project team will work to support planning policy changes, particularly to new developments and major city centre schemes, for identifying S106 funding for improved security measures and on-going revenue for maintenance, repair and monitoring (as required)
4. The Team will unblock/support dialogue with private and public developers, in line with new planning policy and seek opportunities for third party funding.
5. Opportunities to improve safety and security as part of existing schemes will be a priority alongside quick wins and the development of project designs for more complex areas (some interventions are highways permitted development while others will require additional consents)