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Report of Director of City Development

Report to Executive Board

Date: 14th February 2014

Subject: Bridgewater Place

Are specific electoral Wards affected?	⊠ Yes	☐ No
If relevant, name(s) of Ward(s): City and Hunslet		
Are there implications for equality and diversity and cohesion and integration?		☐ No
Is the decision eligible for Call-In?		☐ No
Does the report contain confidential or exempt information? If relevant, Access to Information Procedure Rule number:	Yes	⊠ No

Summary of main issues

1. Following the conclusion of the Inquest into the death of Dr Slaney on 3rd December 2013, the Assistant Coroner has issued a Regulation 28 Report to Prevent Future Deaths which contains a recommendation that the Council takes action to restrict the use by members of the public of the junction adjacent to Bridgewater Place (BWP) when wind speeds reach prescribed levels. The recommendation that the Council must consider is as follows:

"Until such time as the remedial works to ameliorate the effect of the wind created by Bridgewater Place are completed, the junction of Water Lane, Victoria Road and Neville Street should be closed to all highway users as soon as the wind in that location attains speeds of 20 metres per second".

- 2. The Assistant Coroner made her recommendation having heard specialist expert evidence at the Inquest from Professor Baker from Birmingham University, an expert in Environmental Fluid Mechanics. Professor Baker gave expert evidence about the impact of wind speeds upon different types of vehicle and different classes of highway user and the optimum intervention trigger levels to protect the safety of highway users. The Council has 56 days to respond to this report, making the due date 7th March 2014.
- 3. Since March 2011 Leeds City Council has had a protocol to deal with high winds (from a south westerly and westerly direction) around Bridgewater Place which involves:

- employing a variable message sign on Victoria Road visible to traffic entering the city centre past Bridgewater Place giving a warning of gusty winds when wind gust speeds reach 15m/s (35mph)
- diversion of all high sided vehicles from the junction of Victoria Road / Water Lane / Neville Street when wind gust speeds reach 20m/s (45mph)
- Closing the road to all vehicles when wind speeds of 30m/s (approx. 65mph) are reached.
- 4. Formally adopting the Assistant Coroner's recommendation would therefore entail an extension of the restrictions contained within the Council's current protocol to reduce the wind speed level at which the road is closed to 20m/s (45mph) and to extend the class of highway users affected to include pedestrians.
- 5. The recommendations made by Coroners in Prevention of Future Deaths reports are not legally binding, and it is open to Leeds City Council to make a decision not to follow the one that relates to it.

The Chief Coroner for England and Wales has issued a detailed Guidance note [Guidance No 5, September 2013] in relation to the issuing of Post Death Reports and in relation to the nature of recommendations which should be made to organisations within them. The Guidance provides that "reports should be intended to improve public health and safety" and should be issued where "circumstances creating a risk of further deaths will occur, or will continue to exist, in the future". It also states that "In some cases the action to be taken following the coroner's concern will be obvious. But it is not for the coroner to express precisely what action should be taken. A PFD report is a recommendation that action should be taken, but not what that action should be. The latter is a matter for the person or organisation to whom the PFD report is directed." The Guidance continues, "The coroner should not recommend what that action should be.... but the coroner can highlight the area of concern and draw attention to it"

6. In the case of Bridgewater Place, a detailed and specific recommendation as to the action that should be taken has nevertheless been issued.

The Council's powers in relation to restricting pedestrian movement on public highways are subject to both statutory and practical limitations. The Council cannot implement a measure in response to this recommendation which would have the effect of exceeding its statutory powers.

7. Leeds City Council must provide a fully reasoned response which sets out the decision that it has taken, the steps that it proposes to take and reasons for this. The report and the Council's response will be publicly available and sent to all interested parties, including the family of Dr Slaney.

This report therefore:

(i) Summarises the expert evidence which was given to the Inquest in relation to wind speeds at which different classes of highway users -

- pedestrians, cyclists, motor vehicles and high sided vehicles would experience difficulties;
- (ii) Sets out the Council's statutory powers as Highway Authority and the restrictions upon them;
- (iii) Sets out the practical and physical limitations presented by the location of the BWP building itself, the nature of its use and the limited means of access and egress from it and
- (iv) Recommends a revised High Winds protocol for Bridgewater Place.

Recommendations

Executive Board is requested to:

- i) Note the Assistant Coroner's recommendation from the Inquest which concluded on 3rd December 2013; and note also that the decision as to what action should be taken in response to the concern that a future death may occur remains solely that of the Council;
- ii) Note that the Council is subject to both statutory and practical constraints in the exercise of its highway management functions and in actions that it can in fact take to improve conditions for pedestrians accessing this area;
- iii) Approve the proposed revisions to Leeds City Council's High Winds Protocol in relation to Bridgewater Place, as detailed in 3.15;
- iv) Approve Appendix A as the basis of a response to the Assistant Coroner to be returned by 7th March 2014;
- v) Delegate to the City Development Director and Chief Officer Highways & Transportation the authority to amend the High Winds Protocol in consultation with the Executive Member for Development and the Economy should circumstances and experiences on site deem it necessary and to expedite the work to provide pedestrian shelters and the appropriate Traffic Regulation Order(s) to facilitate the recommendations contained within this report and within existing financial approvals; and
- vi) Note:
 - 1. The revised protocol will be implemented when approval is granted by the Executive Board;
 - 2. This decision will take immediate effect:
 - 3. The Chief Officer of Highways and Transportation will be responsible for implementing the protocol in consultation with the Peace and Emergency Planning Unit (PEPU) and the Police.
 - 4. The installation of the pedestrian shelter will be expedited subject to any mandatory planning, highways and procurement issues with delivery expected in March/April 2014.

1 Purpose of this report

1.1 To request approval from the Executive Board to accept the revised Leeds City Council's protocol on actions to be taken when high winds are forecast in relation to Bridgewater Place in light of the Assistant Coroner's recommendation to the Council and to approve the basis of a response to the Assistant Coroner.

2 Background information

- 2.1 Bridgewater Place is a privately owned development located at the junction of Water Lane, Victoria Road and Neville Street near Victoria Bridge.
- 2.2 Planning permission for Bridgewater Place was granted in November 2001. A condition of the permission was that a wind impact assessment was carried out prior to construction to ensure that the microclimate was not adversely affected. No unacceptable impacts were identified by BRE Ltd in their report dated October 2001 and therefore the building was constructed without any significant design modifications having been made.
- 2.3 The October 2001 BRE report provided a number of conclusions and recommendations including "the wind calculations are generally acceptable for the activities that are likely to take place around the development" and "the proposed development is unlikely to have a major impact on the wind conditions around the existing Halifax building."
- 2.4 A further BRE Ltd study in November 2008, post construction, concluded inter alia "the area surrounding the existing Bridgewater site has wind conditions that are suitable for Pedestrian Walking and Business Walking but are not suitable for Long Term Sitting or Entrances. Beyond the vicinity of the Bridgewater building, the Bridgewater development does not affect significantly the general wind conditions."
- 2.5 The building was completed in late 2007; during 2007 and early 2008 the Council started to receive complaints from local residents and workers about the severity of the wind conditions being experienced around the building. All of the concerns expressed related to pedestrians being blown about whilst using the highway; none involved motor vehicles.
- 2.6 From March 2008, Council Officers have been in dialogue with both the developers of the building, Landmark Development Ltd and the agents for the owners of the building to identify the mechanism of the wind generated conditions and amelioration measures which could effectively counter them. Assurances have been given on numerous occasions that appropriate remedial action will be taken by the owners.
- 2.7 Pending a solution to this issue being identified and in direct response to the concerns being expressed, Leeds City Council (as Highway Authority) erected significant lengths of pedestrian guardrail in the area to prevent pedestrians from being blown into the road on Water Lane and Victoria Road. This was initially put in as temporary concrete barriers in 2008 but was replaced with permanent guardrail

- in January 2010, with additional lengths added in July 2011. In addition, wind sock signs were erected to warn motorists of the potential for side winds.
- 2.8 The first reported incident involving a motor vehicle being affected by the windy conditions took place on 11th March 2011 when a high sided vehicle was lifted off the ground and blown onto pedestrians, tragically killing Dr Slaney and seriously injuring another person.
- 2.9 This incident gave rise to the need for Leeds City Council immediately to undertake a further formal risk assessment and option appraisal which, resulted in further measures being implemented to mitigate against the risk to road users in the area. One of the outcomes of this process was that the Council's current High Winds protocol was devised.

The High Winds protocol consists of:

- Employing a variable message sign on Victoria Road visible to traffic entering the city centre on the approach to Bridgewater Place giving a warning of gusty winds when wind gust speeds reach 15m/s (35mph);
- Diversion of all high sided vehicles from the junction of Victoria Road / Water Lane / Neville Street when wind gust speeds reach 20m/s (45mph);
- Closing the road to all vehicles when wind speeds of 30m/s (approx. 65mph) are reached.
- 2.10 The wind speed intervention thresholds were selected following a review of the somewhat limited protocols and procedures adopted by other authorities, principally by the Highways Agency, in relation to bridges in exposed areas. The intention was that the thresholds would be adjusted in light of experiences on site.
- 2.11 To date, only winds from a westerly or south-westerly direction form part of the protocol because of their interaction with the building. This reflects the frequency and strength of the prevailing winds that are experienced in Leeds.
- 2.12 The latest version of the risk assessment, which has been reviewed regularly and since the outcome of the Coroner's Inquest in December 2013, is a background document to this report.
- 2.13 An anemometer (wind speed and direction measuring device) was also installed in July 2012 near to Victoria Bridge and a daily wind forecast specific to the BWP area is being obtained from the Met Office which will be further improved as the dataset from the anemometer is built up. At present, forecast wind gust speeds are significantly higher than actual wind gust speeds recorded.
- 2.14 In addition, following the options appraisal work and a survey of the number of HGVs entering the city over Victoria Bridge, a permanent ban on all heavy goods vehicles (HGVs) exceeding 7.5 tonnes has been introduced on Neville Street. This was implemented in July 2013 following the completion of statutory processes. Additional warning signage for pedestrians and cyclists has also been erected warning of the risk of gusty winds.

- 2.15 To identify an appropriate scheme to ameliorate the wind conditions an independent specialist wind consultant (CPP) was appointed jointly by Landmark Developments Ltd, Leeds City Council and the owners CPPi Bridgewater Place Limited Partnership in 2010 to identify a permanent solution to the problems being experienced on and off the public highway in the vicinity of the building.
- 2.17 Leeds City Council does not employ wind engineering experts; therefore consultants were employed from Buro Happold to advise on the appropriateness and validity of the wind testing being undertaken by CPP. Buro Happold attended all relevant meetings with the Developers and owners and has advised the Council on the most appropriate solution to address concerns within the highway.
- 2.18 CPP tested various canopy designs through a wind tunnel at their facilities in America but although the canopy proposals did demonstrate improved conditions for the public in the immediate vicinity of Bridgewater Place, none of the options put forward materially improved conditions within the public highway.
- 2.19 As a result of the Council's insistence that a holistic solution be identified which resolved all building generated wind conditions, on and off the public highway, the Council commissioned Buro Happold to look more broadly at further options not previously considered. Buro Happold undertook computational fluid dynamic (CFD) modelling on a number of scenarios during the summer of 2012 and identified a proposal which offers significant wind mitigation within the highway.
- 2.20 In brief, this comprises a canopy on the building in combination with three tall vertical screens on the north western corner of the Bridgewater Place building and four baffles across the highway on Water Lane. The CFD modelling tests have been validated by wind tunnel testing by CPP.
- 2.21 The Assistant Coroner gave a narrative verdict into the circumstances surrounding the death of Dr Slaney on Tuesday 3rd December 2013 and made recommendations which have now been formalised in Prevention of Future Death Reports which have been issued to the various relevant parties. The recommendations made to the various interested parties are summarised below; the specific Prevention of Future Death report issued to the Council is attached as Appendix B.
 - 1. **BSI** (British Standards Institute) -;
 - i. That there should be standardisation of criteria employed in the preparation of wind study reports for tall buildings; and
 - ii. Wind study reports should routinely consider not only the effect of the construction of tall buildings upon pedestrian comfort, but also pedestrian safety, as well as the safety of all types of highway user.
 - 2. DCLG (Department for Communities and Local Government) -
 - When considering the wind effect which is likely to be created by the construction of a tall building, appropriate criteria should be established in relation to the safety of all highway users; and
 - ii. Guidance should be provided to all planning authorities that consideration should be given to the wind effects of tall buildings

upon all highway users namely high sided vehicles, motor cars, motor bikes, pedal cycles, and pedestrians

3. Building Owner -

i. That all necessary steps should be taken as soon as possible to properly ameliorate the wind effect caused by Bridgewater Place.

4. Leeds City Council -

- i. Until such time as the remedial works to ameliorate the effects of the wind created by Bridgewater Place are completed, the junction of Water Lane, Victoria Road and Neville Street should be closed to all highway users as soon as the wind in that location attains speeds of 20 metres per second
- 2.22 On Thursday 5th December 2013, high winds exceeding 65mph were forecast. In accordance with its protocol, Leeds City Council implemented a road closure to all vehicles (including cyclists) at the junction of Victoria Road / Neville Street / Water Lane between the hours of 6am and 4pm. This was the first time that the thresholds for a road closure under the Leeds City Council existing protocol had been reached and the first time the road had been closed.

Leeds City Council received a number of complaints from members of the public regarding:

- The disruption caused to local businesses and the travelling public throughout much of the closure period across the southern half the city which was deemed unacceptable with traffic delays of up to 2 hours. The problems and delays experienced were exacerbated by other road closures on the alternative route being implemented by the Police as a result of debris falling from buildings in the windy conditions;
- The Council should not use taxpayer's money to close the road;
- The Council should have closed the footways as per the Coroner's
 recommendation to prevent pedestrian injuries; on the day, a pedestrian did
 suffer a fractured skull after being blown over. It is understood this incident
 occurred on private land close to the Water Lane entrance to Bridgewater Place
 whilst the pedestrian was walking on private land between Lloyds and
 Bridgewater Place.
- 2.23 Council staff on site did receive thanks from Members of the public for helping them across the road in the windiest area and there was considerable feedback that the right decision had been made to close the junction on the day.
- 2.24 It should be noted that although winds were forecast to exceed the 65mph threshold, on site wind readings on the 5th December showed peak wind gust speeds at 24 m/s (54mph).

3 Main Issues

3.1 Bridgewater Place is owned by a syndicate of investors, CPPi Bridgewater Place Limited Partnership and managed by Jones Lang Laselle. The development was

- designed by Aedas Architects with the developer being Landmark Development Projects and St James Securities with Bovis Lend Lease being the contractor. The nationally renowned BRE Ltd undertook a wind assessment as part of the planning permission which did not identify any unacceptable impacts.
- 3.2 Construction of the building began in 2004 and was completed in 2007 becoming the tallest building in Leeds and Yorkshire (excluding Emley Moor). Bridgewater Place has a height of 112 metres (367 ft) and 32 storeys comprising both residential and commercial elements. There are approximately 1000 tenants and 200 residential apartments at Bridgewater Place.
- 3.3 Current office tenants include Eversheds, Ernst & Young, ghd, BDO Stoy Hayward and DWF LLP. Retail tenants include Tesco, Starbucks, Casa Mia, Panini Shack and Philpotts.
- 3.4 The independent wind study tests carried out by CPP confirm that prior to the construction of BWP, "the base case conditions can be seen to pass the distress criterion; comfort conditions are generally suitable for Pedestrian Walking or Pedestrian Standing with only three locations in the Business Walking category" [CPP Wind report dated 15.6.11] although regular users of the area recall this being a windy area prior to construction.
- 3.5 The post construction CPP Wind report dated November 2011 confirmed conditions "are very windy around the north of the development and would not be considered acceptable for normal pedestrian use.... a large number of test locations can be seen to have both uncomfortable conditions and to fail the distress criterion. The mechanisms leading to the high wind speeds are a combination of the wide face of the building being normal to the prevailing wind direction and this being exacerbated by downwash down the face of the tower." [CPP Wind report dated November 2011] As such, it is clear that the current issues affecting the highway emanate directly from the interaction of the BWP building with the prevailing south and south westerly winds in that area. The building in its current form therefore constitutes a public nuisance. The onus of abating this nuisance lies with the building owner who must bring forward and implement measures which will return this area to conditions of safety.
- 3.6 Given the above and the Coroner's very clear recommendation to the building owner, the onus is very much on the owners to expedite a permanent solution at the earliest opportunity. The owners gave a presentation to the City Plans Panel on 16th January 2014 with the intention of gaining planning permission in Spring / Summer 2014, and starting construction on site by the end of 2014. The construction period is expected to be 9-12 months. As a consequence, there could be an18 24month period before the remedial measures are in place.
- 3.7 The Assistant Coroner has recommended that the Council's current wind speed intervention trigger level be reduced from 65mph to 45mph. She has recommended that when wind speeds reach this level the free movement of pedestrians at this junction should also be restricted.
- 3.8 In responding to the Assistant Coroner's recommendations, the Council has carried out a full review of the expert evidence presented to the Inquest which directly relates to safety of highway users in the windy conditions experienced at this

location. In the light of this it has carried out a further review of its risk assessment and current BWP protocol; it has also taken into account the experiences of the road closures implemented on 5th, 27th and 30th December 2013.

- 3.9 The Council has taken all relevant factors into account in considering its response to this recommendation:
 - (i) The <u>expert advice</u> given by Professor Baker in relation to environmental fluid mechanics and highway user safety intervention levels;
 - (ii) The extent of the Council's <u>statutory powers</u> and the limitations placed upon them;
 - (iii) The <u>physical and practical limitations</u> of what can be achieved taking into account the legal constraints that the Council is subject to and the constraints arising from the built environment around BWP, land ownership constraints and the limitations posed by the design of the building itself.
 - (iv) The <u>impact on a key commuter route</u> into and out of the city the highway restrictions will cause to highway users in a significant business area of the City and the realistic likelihood of the pedestrian protocol measures being adhered to.

3.10 Expert Advice

Chris Baker, Professor of Environmental Fluid Mechanisms at the University of Birmingham provided expert advice to the Assistant Coroner at the inquest. In relation to wind speeds which detrimentally affect highway users, Professor Baker made the following comments at the Inquest. In his opinion;

- Wind speeds of 15m/s would be safe for pedestrians and cyclists, but that speeds exceeding that could cause problems for normal pedestrians in terms of standing up; similar speeds are applicable to cyclists and motorcyclists;
- A standard sized motor vehicle would feel the effects of wind speeds at 15-20m/s and would experience severe problems during wind gust speeds of 30m/s:
- A driver of a truck/high sided vehicle would be likely to experience difficulties steering or have his/her driving affected by wind gust speeds of 20 – 25m/s, and such a vehicle could be blown over at 30m/s.

3.11 Statutory Powers

The Highway Authority does have powers under Section 14 of the Road Traffic Regulation Act 1984 to restrict pedestrian access and vehicular access to Bridgewater Place along Water Lane/Victoria Street but there are limitations on the use of these powers as follows:

 The powers can be used only if an alternative pedestrian access to premises situated on or adjacent to the closed road or to any other premises which are accessible by pedestrians from (and only from) that road is provided. The Highway Authority's Powers will be exceeded if the effect of its actions is to "prevent access at any time".

- A Notice served under this Section 14 can remain in operation for a maximum period of 21 days. A Temporary TRO can remain in place for a maximum period of 18 months initially but this can be extended on application.
- When considering the use of its powers the Council should always have regard to the reasonableness of its actions. It should consider the impact and practicality that a proposed diversion route would have on all pedestrians including not only business walkers but also parents with young children and pushchairs, the disabled, people with mobility issues and carers supporting wheelchairs. It should also take into account that whereas it has the power to implement a diversion, its capacity to enforce compliance is limited.

3.12 Physical and Practical Limitations

3.12.1 In the circumstances therefore, as long as a reasonable alternative pedestrian access is identified and made available to pedestrians, the junction can be closed on an emergency basis if wind conditions indicate it is appropriate to do so. The problems lie in identifying the safe alternative access point at BWP, the appropriate alternative routes that pedestrians will reasonably use and enforcing the use of the alternative routes.

Members will note that any alternative route will place restrictions on pedestrians accessing nearby properties, some of which are private residential homes. The areas around all three (Western, Northern, Southern) entrance points to BWP have previously been the location of injuries and/or the subject of complaints and concerns from members of the public. Following discussions with the managing agents, it is noted that the main northern entrance at the bullnose is closed most frequently with the prevailing winds being from a westerly direction and that the southern entrance is seen as the preferred entrance point to the building in high winds.

The potential alternative routes via Leeds Bridge or Granary Wharf are lengthy and/or involve crossing private land. Forcing pedestrians to use these routes at the point of closure at Victoria Bridge would also be extremely difficult given the large number of pedestrians seeking to cross the Bridge throughout the day.

3.12.2 The preferred option therefore is to close:

1. The western footway on Victoria Bridge and main crossing points at and within the central area of the Neville Street/ Victoria Road and Water Lane junction and channelling pedestrians to the eastern footway and the formal crossing points near Asda (Appendix C refers). This would enable pedestrian access to Bridgewater Place to be maintained via the southern entrance and ensure the central areas of the junction where winds are strongest are avoided. Following some further testing by the Council's consultants, an extended pedestrian shelter (Appendix D refers)is being progressed to reduce potential risk associated with high winds. Pedestrians approaching from the west via Water Lane have a relatively short diversion via David Street which will be signed.

2. It is clear that due to the statutory limitations on the Highway Authority's powers and the physical limitations presented by the access / egress points at BWP itself, it is not possible to eradicate all of the potential risks and / or the conflicting issues.

3.13 Impact on a Key Commuter Route

The impact that the imposition of highway restrictions will cause to highway users in a key commuter route in a large business area of the City. The council has also to take into account the practical difficulties of enforcing full compliance with a road closure on pedestrians. As the Assistant Coroner said in her summing up at the Inquest on 3rd December in relation to the recommendation to close the junction to all highway users "this may not be looked at with favour by the Local Authority."

Neville Street is an important route into the city centre. Over 22,000 vehicles cross the Bridge every day (two way flows) and is used by thousands of pedestrians each day to access areas of employment to the north and south of the city. Whilst the number of HGVs is comparatively low, any significant restriction on traffic movements in this area quickly results in tailbacks and delays to the south of the city and on the adjacent motorway network. During the three road closures implemented to date the Council has received a number of complaints about the congestion and delays that has resulted from the closures and comments stating that the Council's response has been disproportionate. In the longer term, there are aspirations to down grade this approach into the city centre to enable public realm improvements to take place in City Square and near the Railway Station and to better link the proposed HS2 station in New Lane to the existing station; significant investment in new road construction to extend the loop southwards will be required to facilitate this and move through traffic away from this area.

3.14 Recent Action Taken

- 3.14.1 On the 5th December, wind speeds were forecast to exceed 65mph triggering the full road closure to vehicles. On the day, actual wind gust speeds measured by the local anemometer peaked at 54mph. Even at this gust wind speed however it was observed on site that pedestrians were significantly affected by the wind in the vicinity of Bridgewater Place. It was evident that it was appropriate to remove the vehicular / pedestrian conflict on that occasion despite the substantial knock on impacts to traffic felt across the city. One lady suffered a fracture of the skull after being blown over on private land close to the car park / exit points at Bridgewater Place having apparently journeyed from the adjacent offices to Bridgewater Place across private land.
- 3.14.2 The cost of physically implementing the road closure on the 5th December was approximately £3k. This excluded the cost of the manufacture of the temporary signing.
- 3.14.3 Based on the experiences of 5th December 2013 and following the risk assessment review, the recommendation is to close the junction of Water Lane, Neville Street and Victoria Road to all highway users, including pedestrians, when forecast wind

gust speeds are 45mph. Pedestrians will avoid the junction by being channelled to the eastern footway of Neville Street and Victoria Road. Given the experiences on 5th December, this revised threshold of 45mph has been adopted as an interim threshold pending Executive Board's consideration of the matter.

- 3.14.4 Over the subsequent Christmas and New Year period, the forecast wind gust speeds came close to the revised threshold on a number of occasions. Recorded wind gust speeds however have been significantly below forecast levels which is complicating the decision making process. The junction was again closed on the 27th and 30th December. The situation will be kept under review in case the thresholds may have to be modified to prevent unnecessary and lengthy closures of the junction.
- 3.15 Notwithstanding the above, adopting and following in full the expert advice given to the Inquest by Professor Baker and taking full account of the recommendation made by the Assistant Coroner and the reasons underlying it, the following courses of action are being taken to support the road closures when they are enacted; these will form the basis of the proposed revised High Winds Protocol.
 - Employing messages to all variable message signs in the city, including the Victoria Road sign which is visible to traffic entering the city centre at the approach to Bridgwater Place, giving a warning of gusty wind conditions when forecast wind gust speeds reach 15m/s (35mph);
 - Close the junction to all vehicles when the revised threshold of 20m/s (45mph) is forecast to be exceeded, to remove the risk of conflict between pedestrians and vehicles;
 - In addition, the Council will close the pedestrian crossing points at the Water Lane / Neville Street / Victoria Road junction. Pedestrians will be guided away from the western footway of Victoria Bridge and away from the central areas of the junction and the strongest winds, channelling pedestrians around the eastern edge of Victoria Road to the formal crossing points near Asda. Wind speed modelling tests for this eastern route have been carried out to identify whether there are any points along it which could potentially fail wind speed distress measurement criteria in conditions during which the route would be in use. As a consequence of this work, an extended pedestrian shelter will be installed to provide further protection for pedestrians. It is expected this shelter will be in place for a period of approximately 2 years until the permanent works have been installed and proven to work. The safety and experience of pedestrians using this diversion route will be closely monitored and kept under review and further advice will be taken from the Council's external advisors if appropriate.
 - Providing an alternative pedestrian route via David Street to avoid the junction.
 - Providing additional traffic diversion signs to reduce potential delays on the alternative vehicular routes when the closure is in place.
 - Additional and larger warning signs of wind for pedestrians.
 - Continuing liaison with the managing agents for the owners and other interested parties to coordinate the management of access to / egress from the site during windy conditions and road closures.
 - Access for emergency services will remain.

• Reviewing pedestrian signing in the general area to take into account the recent developments that have taken place.

4 Corporate Considerations

4.1 Consultation and Engagement

- 4.1.1 Following the Coroner's Inquest, Senior Officers of the Council have met (again) with the agents and also the owner's representative. The latter have provided updates on the progress of the design of the remedial works (Appendix E shows the baffles, screens and canopy) and the timetable for submitting a planning application and construction. A pre-planning presentation was given to the City Plans Panel on 16th January 2014 by the owners' representatives with the proposals receiving positive feedback from Members who made it very clear they wanted to see progress on site at the earliest opportunity. Subject to planning permission being granted, construction would start on site by the end of 2014, with a 9-12 month construction period. The diversion of statutory equipment in Water Lane to accommodate the baffle foundations will be a significant element of the works.
- 4.1.2 A communications and publicity campaign has been developed by the owners around the proposed remedial works and planning application. At the time of drafting the report this was being handled remotely without a spokesperson being put forward to discuss the issues in the media. The Council has continued to press the owner on this point and a spokesperson has now given media interviews.
- 4.1.3 Full public consultations will accompany the Planning Application.
- 4.1.4 Discussions have taken place with the Police on the proposed revisions to the High Winds Protocol.
- 4.1.5 A meeting has been held with the agents to coordinate the management of access to and from the site during windy conditions. In addition, engagement is taking place with the local businesses to ensure that they are considering appropriate actions and guidance for their staff when high winds are forecast e.g. encouraging staff to work from home or getting their staff to use public transport if appropriate, when the junction is closed in the future. Access to staff car parks within the closed area will be maintained, wherever possible. Such arrangements and liaison will continue until the remedial measures are installed by the owners.
- 4.1.6 Early notification of closures will be issued via the well established LeedsAlert system operated by Peace and Emergency Planning Unit and the Council's Communications Team will publicise the closure using appropriate media.

4.2 Equality and Diversity / Cohesion and Integration

- 4.2.1 An EDCI screening has been carried out (Appendix F refers) and identified that a full impact assessment is not required for the approvals requested.
- 4.2.2 The equality screening process identified the following impacts on the equality characteristics on implementation of the High Winds Protocol.

4.2.3 Positive Impacts

- The introduction of the revised protocol will continue to remove the risk of conflict between pedestrians and vehicles, and reduce the risk of accidents.
- The closure of the pedestrian crossing points at the Water Lane / Neville Street / Victoria Road junction will guide pedestrians away from the central areas of the junction and the strongest winds, channelling pedestrians around the eastern edge of the junction to the formal crossing points improving pedestrian safety which will be of particular benefit to the more vulnerable groups, such as parents with young children and pushchairs, the disabled, people with mobility issues and carers supporting wheelchairs.
- LCC Staff will be on site to guide / inform the general public when the road closures are in force which will be extremely beneficial for people who are visually impaired; young and old people; carers supporting wheelchairs/pushchairs and the disabled.
- Additional and larger wind warning signs to highlight the safety issues and encourage them to be more vigilant.
- Additional signing to better direct traffic around the city when the full closure is in place.
- Extensive guard rails are in place that can be used to gain extra stability when
 moving through the area in high winds which will be particularly beneficial to the
 more vulnerable groups described above.
- Continuing liaison with the agents for the owners to coordinate the management of access too and egress from the site during windy conditions.

4.2.4 Negative Impacts

 The introduction of the road closures will have a negative impact on motorists and pedestrians; however, this is mitigated against by the need to ensure public safety at all times.

4.3 Council policies and City Priorities

4.3.1 The area of the city to the south of the river will see significant change over the next 10 to 15 years. Infrastructure improvements will be key to driving forward this change which will aid the city in achieving its Vision for Leeds 2030 to be the best city in the UK and contribute to the wider objectives of the Local Development Framework, Draft Core Strategy and South Bank Planning Statement.

The measures outlined in this report and the permanent scheme proposals being developed by the owners of Bridgewater Place to resolve the significant problems around the building are important steps prior to the changes and planned growth in this area of the city. As such they link to the Best Council outcome of improving the quality of life of our residents and the objectives of sustainable and inclusive economic growth by supporting jobs and employment and improving our roads.

Improvements to keep open important routes into and out of the city centre support the City Priorities as well as the West Yorkshire Local Transport Plan (LTP3) and West Yorkshire Transport Fund.

4.4 Resources and value for money

4.4.1 Executive Board in February 2013 agreed the injection of £245k into the Capital Programme to progress mitigation measures for Bridgewater Place. To date £80k has been spent. The cost of the pedestrian shelter has not been confirmed yet but is expected to be in the region of £125k. The works will therefore be progressed within the constraints of the existing approvals.

4.5 Legal Implications, Access to Information and Call In

4.5.1 The Coroner has a duty to make a Prevention of Future Deaths Report where during the course of his/her investigation something is revealed which gives rise to a concern that circumstances creating a risk of further deaths will occur (or will continue to exist in the future) if in the coroner's opinion action should be taken to prevent those circumstances happening again or to reduce the risk of death created by them. This report is sent to the organisation(s) that the Coroner believes may have power to take action.

The Coroner's function in making recommendations is limited to highlighting areas of concern in relation to possible future deaths. The Coroner's function is limited to recommending that action should be taken. The decision of what that action (if any) should be is a matter for the organisation to whom the recommendation is made.

- 4.5.2 Organisations are under a duty to respond within 56 days from receipt of the Coroner's report (or longer if the Coroner grants an extension). The response must detail the action taken or to be taken and the timetable for it. If no action is to be taken then the response must explain why this is the case.
- 4.5.3 The report and the replies received are sent to the Chief Coroner, the deceased's family and all other interested parties. The Coroner may also send the report to "any other person who the coroner believes may find it useful or of interest". The Chief Coroner may publish reports on the public judiciary website and there is a presumption in favour of publication.
- 4.5.4 The recommendations made by the Coroner in her Prevention of Future Deaths report are not legally binding, and it is open to LCC to make a decision not to follow the one that relates to it. LCC must however provide a fully reasoned response which sets out the reasons for its decision. The report and the Council's response will be publicly available.
- 4.5.5 This report is subject to call-in.

4.6 Risk Management

4.6.1 The associated risk assessment has been the subject of numerous reviews in recent years and will continue to be reviewed in light of incidents and experiences on site.

The adoption of the revised threshold which has been adopted pending the Executive Board's consideration of the matter has resulted in the forecast wind gust speeds coming close to the new threshold on a number of occasions. Recorded wind gust speeds however have been significantly below forecast levels which has complicated the decision making process. The concern remains that lengthy road closures could be imposed for periods when actual recorded wind speeds do not reach the levels expected or do so for a fraction of the time that the closure is in place. Both could lead to adverse feedback to the Council. Accordingly, the situation will be kept under review in case the thresholds may have to be modified to prevent unnecessary and lengthy closures of the junction.

- 4.6.2 Unfortunately, there is no absolute guarantee that further incidents will not occur but the constant reviews and action proposed will mitigate the probability.
- 4.6.3 The permanent measures that are being developed are innovative. The Council will continue to press for these emerging proposals to be tested as far as is possible through computer modelling and wind testing in laboratories. To date, the test results are encouraging but the measures will only be judged to be successful when they have been installed on site for a period and tested in windy conditions.

5 Conclusion

- 5.1 It is imperative that the permanent solution identified is implemented by the owners at the earliest opportunity.
- 5.2 In the interim, it is also important that steps are taken by all interested parties to mitigate the risk of further incidents at Bridgewater Place.
- 5.3 In the context of the difficult circumstances that exist and the practical and legal limitations placed on the Council, the revised protocol and thresholds outlined in this report have been developed to meet this objective.
- 5.4 Lowering the threshold to 20m/s (45mph) for closing the junction of Water Lane, Neville Street and Victoria Road to all vehicles is being brought forward as the Council's response to the Coroner's recommendation. In addition, junction movement by pedestrians in and out of Water Lane onto Neville Street and Victoria Road will also be closed with pedestrians being directed to the eastern footway of Neville Street and Victoria Road.
- 5.5 Members are asked to note that the acceptance of this revised threshold will inevitably lead to more and potentially lengthier closures of the junction during windy conditions causing significant disruption to the south of the city. Signing will be put into place to promote alternative diversion routes but delays are inevitable.

5.6 The situation at Bridgewater Place will be consistently kept under review and changes made as appropriate to the risk assessment and the associated High Winds Protocol.

6 Recommendations

6.1 Executive Board is requested to:

- i) Note the Assistant Coroner's recommendation from the Inquest which concluded on 3rd December 2013; and note also that the decision as to what action should be taken in response to the concern that a future death may occur remains solely that of the Council;
- ii) Note that the Council is subject to both statutory and practical constraints in the exercise of its highway management functions and in actions that it can in fact take to improve conditions for pedestrians accessing this area;
- iii) Approve the proposed revisions to Leeds City Council's High Winds Protocol in relation to Bridgewater Place, as detailed in 3.15;
- iv) Approve Appendix A as the basis of a response to the Assistant Coroner to be returned by 7th March 2014;
- v) Delegate to the City Development Director and Chief Officer Highways & Transportation the authority to amend the High Winds Protocol in consultation with the Executive Member for Development and the Economy should circumstances and experiences on site deem it necessary and to expedite the work to provide pedestrian shelters and the appropriate Traffic Regulation Order(s) to facilitate the recommendations contained within this report and existing financial approvals; and
- vi) Note:
 - 1. The revised protocol will be implemented when approval is granted by the Executive Board;
 - 2. This decision will take immediate effect:
 - 3. The Chief Officer of Highways and Transportation will be responsible for implementing the protocol in consultation with the Peace and Emergency Planning Unit (PEPU) and the Police.
 - 4. The installation of the pedestrian shelter will be expedited subject to any mandatory planning, highways and procurement issues with delivery expected March/April 2014.

7 Background documents¹

- 7.1 BRE Ltd report dated November 2008
- 7.2 Bridgewater Place High Winds Procedure
- 7.3 Risk Assessment January 2014

The background documents listed in this section are available to download from the Council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.

8 Appendices

- 8.1 Appendix A Basis of Response to the Assistant Coroner
- 8.2 Appendix B Prevention of Future Death Report issued to Leeds City Council 10th January 2014
- 8.3 Appendix C Area of Road Closure, potential alternative routes for pedestrians and location of pedestrian shelter.
- 8.4 Appendix D Example of pedestrian shelter to be used
- 8.5 Appendix E Permanent remedial works proposed for Bridgewater Place
- 8.6 Appendix F Equality Impact Assessment Screening