

CABINET MEETING – 15 JUNE 2021

EXECUTIVE SUMMARY SHEET – PART I

Title of Report:
PANNS QUAY COLLAPSE – EMERGENCY WORK

Author(s):
Report of the Executive Director of City Development

Purpose of Report:
The purpose of this report is to update Cabinet on the design and construction work carried out urgently to Panns Quay East after it collapsed on the 16th March 2021, and to seek approval to the appointment of a contractor to complete the further reconstruction works to Panns Quay East.

Description of Decision:
Cabinet is requested to:

- i. Authorise the Executive Director of City Development, in consultation with the Dynamic City Portfolio Holder and the Executive Director of Corporate Services, to take all necessary steps to procure the delivery and completion of the reconstruction works to Panns Quay East after the collapse on the 16th March 2021, including the direct award of a contract to ARM Pipetek as Principal Contractor, and the award of any other necessary appointments to deliver the proposed works.
- ii. Approve the funding arrangements for delivery of the proposed works and approve the resultant variation to the Capital Programme.

Is the decision consistent with the Budget/Policy Framework? **Yes**

If not, Council approval is required to change the Budget/Policy Framework

Suggested reason(s) for Decision:
During the night of the 16th March 2021, a section of Panns Quay East collapsed into the river and the footpath along the top was washed away. Prior to the collapse investigative works were taking place by ARM Pipetek and the Councils Flood and Coastal Team to ascertain what was causing large cracking within surface of the footpath and therefore the area was safe and fenced off when the incident happened. The direct award of a contract for the reconstruction works described within the report will allow the Council to reconstruct the collapsed Quay as soon as possible and address any related health and safety issues to the public and surrounding buildings.

As ARM Pipetek are currently on site it is proposed to directly award the repair / reconstruction work to them to save on costs and time.

Alternative options to be considered and recommended to be rejected:

Do-Nothing: Leaving the quayside exposed due to the absence of the original sheet pile wall would inevitably result in further erosion of the riverside footpath area and further collapse of the remaining sheet pile wall within the vicinity, together with the increased risk of washout/destabilisation of the adjacent university building foundations and a more significant cost. – not considered an option due to costs and health and safety issues.

Procure a contractor: This would require additional time for the tendering process and contractors to price and organise the works, leading to additional costs and potential risks associated with a delay in completing the works. – not considered an option due to additional time and health and safety implications.

Impacts analysed;

Equality **Privacy** **Sustainability** **Crime and Disorder**

Is the Decision consistent with the Council's co-operative values? Yes

Is this a "Key Decision" as defined in the Constitution? Yes

Is it included in the 28 day Notice of Decisions? Yes

REPORT OF THE EXECUTIVE DIRECTOR OF CITY DEVELOPMENT

PANNS QUAY COLLAPSE – EMERGENCY WORK

1. Purpose of the Report

- 1.1 The purpose of this report is to update Cabinet on the design and construction work carried out urgently to Panns Quay East after it collapsed on the 16th March 2021, and to seek approval to the appointment of a contractor to complete the further reconstruction works to Panns Quay East.

2. Description of Decision (Recommendations)

- 2.1 Cabinet is requested to:
- i. Authorise the Executive Director of City Development, in consultation with the Dynamic City Portfolio Holder and the Executive Director of Corporate Services, to take all necessary steps to procure the delivery and completion of the reconstruction works to Panns Quay East after the collapse on the 16th March 2021, including the direct award of a contract to ARM Pipetek as Principal Contractor, and the award of any other necessary appointments to deliver the proposed works.
 - ii. Approve the funding arrangements for delivery of the proposed works and approve the resultant variation to the Capital Programme.

3. Introduction/Background

- 3.1 During the night of the 16th March 2021, a section of approximately 60m of Panns Quay East collapsed into the river and the footpath along the top was washed away. Prior to the collapse investigative works were taking place by ARM Pipetek and the Councils Flood and Coastal Team to ascertain what was causing large cracking within surface of the footpath and therefore the area was safe and fenced off when the incident happened.

Please refer to Appendix A Photo 1.

4. Current Position

- 4.1 Remedial repair works are currently taking place following the collapse to remove the debris from the river. These are being undertaken by marine salvage experts (Sealane) under the Principal Contractor, ARM Pipetek. A structural design is being carried out by consultants (Mott MacDonald's) to determine what size cantilevered steel piles are needed to allow for the reconstruction. Once the design is complete, orders will be placed for the steel piles to allow construction works to commence in July 2021.

Please refer to Appendix A Photo 2.

5. Cost Estimate and Risk

- 5.1 The estimated total cost for these works is £1.5m including a £0.2m risk contingency. This is inclusive of the expenditure to date as part of the original Panns Quay East investigative works (£0.197m). The repair works to be undertaken by ARM Pipetek are estimated at £1.060m. Unexploded Ordinates (UXO) Mitigation Measures and design works undertaken by Mott MacDonald's is estimated at £0.043m.
- 5.2 The cost estimate is based on the following information:
- consultation with ARM Pipetek and other stakeholders;
 - previous schemes of a similar nature; and
 - a comparison against published cost data (Spon's Civil Engineering and Highway Works Price Book 2018) including inflationary allowances to up to 2021.
- 5.3 The risk contingency figure takes account of the fact that at the time of writing this report, the final design had not been confirmed (hence the residual risks associated with a potential change in design). It also includes for the risk of the impacts due to adverse weather, as well as risks associated with working within a marine environment.
- 5.4 One, additional key risk relates to being able to achieve the required design pile toe levels, i.e. the reduced level of the bottom of the pile. At the time of writing, the current design allowed for an approximate 12m embedment into the underlying soil using vibration plant equipment. The driveability characteristics were based on information derived from borehole information contained within the previous Riverside Quay assessment reports, which suggested the design toe level could be achieved. If the toe level cannot be achieved alternative plant solutions/method of installation would have to be assessed, or the design revisited.
- 5.5 The risk contingency is 15% and is based on consultation with experienced contractors and consultants, as well as experience of previous projects based on the type of work undertaken, i.e. sheet piling.

6. Reasons for the Decision

- 6.1 During the night of the 16th March 2021, a section of Panns Quay East collapsed into the river and the footpath along the top was washed away. Prior to the collapse ongoing investigative works were taking place to ascertain what was causing large cracking within surface of the footpath and therefore the area was safe and fenced off when the incident happened. The award of a contract for the reconstruction works described within the report will allow the Council to reconstruct the collapsed Quay as soon as possible and look to address any related health and safety issues to the public and surrounding buildings.

7. Alternative Options

- 7.1 *Do-Nothing*: Leaving the quayside exposed due to the absence of the original sheet pile wall would inevitably result in further erosion of the riverside footpath area and further collapse of the remaining sheet pile wall within the vicinity, together with the increased risk of washout/destabilisation of the adjacent university building foundations and a more significant cost. – not considered an option due to costs and health and safety issues.
- 7.2 *Procure a contractor*: This would require additional time for the tendering process and contractors to price and organise the works, leading to additional costs and potential risks associated with a delay in completing the works. – not considered an option due to additional time and health and safety implications.

8. Impact Analysis

- (a) **Equalities** – No equality analysis has been undertaken. The proposals are based on reducing the risk of further damage to the structures in question and will not have a disproportionate impact on any protected characteristics.
- (b) **Sustainability** – A Sustainability Impact Filter has been produced. The score was less than the 125 threshold and therefore no Sustainability Impact Appraisal has been produced.
- (c) **Privacy Impact Assessment (PIA)** – There are no privacy impacts identified as part of these works.
- (d) **Reduction of Crime and Disorder – Community Cohesion / Social Inclusion** - The proposals have no crime and disorder impacts

9. Other Relevant Considerations / Consultations

- (a) **Financial Implications**
As set out in section 5, the estimated total cost for these works is £1.5m, including the spend to date of £0.197m. Provision for £1.0m is included within the capital programme allocation for the Panns East Quay Replacement scheme. The balance of £0.5m is to be met from available capital resources.
- (b) **Risk Analysis** – Undertaking the repair works has associated risks. The following is a list that requires consideration as part of the decision-making process:
 - a. Cost certainty – as discussed in Section 8(a) a £0.2m contingency has been included for risks associated with works. These risks include the fact that at the time of writing the final design had not been confirmed (hence the residual risks associated with a potential change in design), ability in achieving design toe level, impacts of adverse weather and risks associated with working within a marine environment.

- b. Existing state of repair - the existing condition of the Quay Wall remains in a relatively poor condition, and there remains a risk of further failure. To help mitigate this risk, an ongoing monitoring programme is in place to check the alignment of the affected area. This will help inform potential, future repair/maintenance work.
 - c. Material lead-in times - the estimated lead-in times for steel piles is currently 10-12 weeks. Any increase in this time may lead to delays in the completion of the project, and an overall cost increase due to increase in steel prices.
- (c) **Legal Implications** – The Assistant Director of Law and Governance has been consulted on the proposals and her comments are included in the report.

The Council is both the landowner of the affected area of Panns Quay and the Lead Local Flood Authority under the Flood and Water Management Act 2010. It has the necessary powers to carry out the proposed works under s4 of the Coast Protection Act 1949.

- (d) **Health & Safety Considerations** – The works are to be directly awarded to the number one ranked contractor on the Council's drainage investigation and minor works framework who are experienced in work of this nature. The Construction Design and Management (CDM) Regulations apply to these works, and ARM Pipetek will be appointed as Principal Contractor under the regulations, with the Council's LLFA lead carrying out the role of Principal Designer.
- (e) **The Public / External Bodies** – Notices are currently erected on site and a press notice has been issued. The works are classified as emergency works, so a Marine Management Organisation (MMO) license is not required. The Environment Agency have been notified of the collapse.
- (f) **Procurement** – Due to the urgency of the situation and the need to repair the collapsed area as soon as possible, To directly award to ARM Pipetek who are currently on site and top ranked contractor on the 'Drainage Investigation and Minor Works' framework and who are experienced in work of this nature. These works will help safeguard against the risk of further undermining and destabilization of adjacent structures; the risks associated with the general public and river users and prevents any impact on the functionality of the structure as a berthing facility.

10.0 List of Appendices

10.1 Not applicable.

11.0 Background Papers

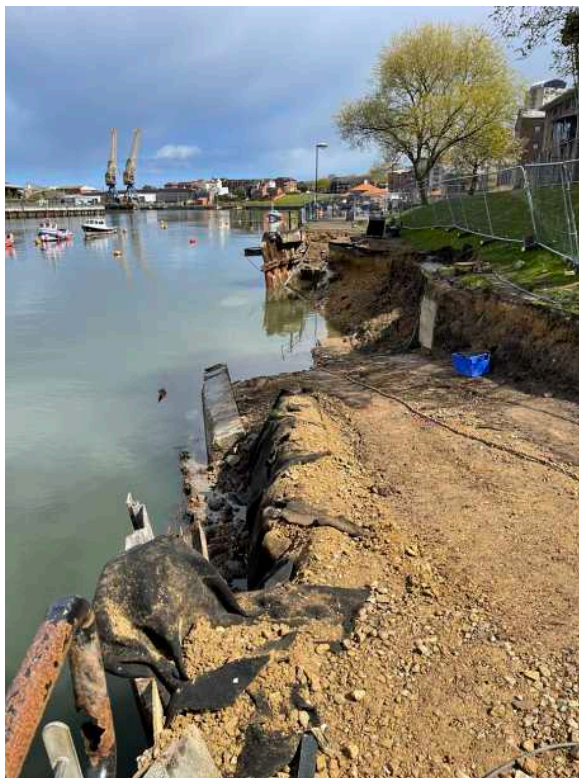
11.1 Not applicable.

Appendix A
Photographs



View of Collapse 17th March 2021

Photo 2



Marine Salvage Works – 6th May 2021