

# Decision Pathway Report



**PURPOSE:** Key decision

**MEETING:** Cabinet

**DATE:** 09 March 2021

<b>TITLE</b>	Cumberland Road Stabilisation Project
<b>Ward(s)</b>	Hotwells and Harbourside
<b>Author:</b> Chris Dooley	<b>Job title:</b> Bridges and Highway Structures Team Manager
<b>Cabinet lead:</b> Cllr Dudd	<b>Executive Director lead:</b> Stephen Peacock – Executive Director, Growth and Regeneration
<b>Proposal origin:</b> BCC Staff	
<b>Decision maker:</b> Cabinet Member	
<b>Decision forum:</b> Cabinet	
<b>Purpose of Report:</b> <ol style="list-style-type: none"> <li>1. To update Cabinet on Works progress of the Cumberland Road Stabilisation Works project and to inform Cabinet of the findings of recently undertaken further instructed updated QRA, now forecasted a revised new increase in Capital funding risk shortfall of <b>£2,491,190</b> to execute the full Project, this is very similar to previous forecast (£2.52 million) reported in previous CMD Report. Refer to Appendix D for the additional instructed updated QRA Risk Register.</li> </ol>	
<b>Evidence Base:</b> <p>A section of the river Avon retaining wall failed overnight on 23<sup>rd</sup> January 2020 causing a 40m long section of the Chocolate Path and Heritage railway to fall in to the river. BCC Engineers were informed of failure at 07:00am on 24<sup>th</sup> January 2020. Cumberland Road was immediately closed except for the footway which remained open for pedestrians and cyclists. Tenders for the Cumberland Road Stabilisation Works were returned on 24<sup>th</sup> Jan 2020.</p>	
<b>Project Background and Works Progress</b> <ol style="list-style-type: none"> <li>1. Works commenced on site on Monday 15<sup>th</sup> June, Activities included mobilisation, establishment of site and changeover of Traffic management and commencement of site clearance trial trenching and investigation.</li> <li>2. Contractor encountered uncharted obsolete cast Iron Docks rising main within envelope of works. The cast iron main was attributed to be historic and associated with the original Vauxhall swing bridge operational function. Section removed and then capped off.</li> <li>3. Phase 1a Temporary Works approval submitted to Wessex Water (WW) and is now fully approved.</li> <li>4. Exploratory test CFA piling drilling operation now completed successfully and CFA piling is underway.</li> <li>5. CFA Piling commenced in mid-November 2020, and by close of working shift on Friday 29<sup>th</sup> January the Principal Contractor had installed <b>208 no.</b> CFA piles, which is has now completed Phase 1a temporary Works. Phase 1b now continues to progress and is on Programme.</li> <li>6. Project is currently assessed by NEC PM to be back on the new approved Works Programme timeline.</li> <li>7. Advance warning letter to go out to targeted businesses and local residents has been issued to all Ward Councillors and Transportation member for comment. No major issues have resulted from this. Advanced warning letters hand delivered to the identified catchment by Monday 9<sup>th</sup> November. Some minor responses from some residents regarding Traffic Management issues which have all been responded to.</li> <li>8. Current Traffic Management arrangement is fully bedded in and seems to be working very well.</li> <li>9. One single Piling complaint received in November/December 2020 from a resident in Meredith Court.</li> <li>10. Traffic Management signage and fencing subject to high levels of vandalism. Contractor is dealing with this issue and may install further security measures and CCTV cameras.</li> </ol>	
<b>Overall Project Financial Position – Cabinet Approved Capital Funding of £9,023,190.00</b>	

### Design and Supervision Fees

Jacobs Consultants design fee = £919,000.00

Jacobs – NEC PM & Supervisor Duties = £300,000

Jacobs Secondment (Steve Whitehead BCC PM for the Project and other duties) = £386,000

BCC Internal Staff Fees = £100,000

Sub Total = £1,677,500

### Miscellaneous Structural Enabling Works

Structural Soils (ground investigation and monitoring) = £245,000

ETM Enabling Works (as a consequence of Jan 2020 collapse) = £100,000

Other Associated Costs (incl. traffic signals, drone and LIDAR survey, modelling etc.) = £120,000

Sub Total = £465,000

### Total Project Construction Cost

Awarded Tender Value =	£5,176,000
Total current Capital Commitment against Budget (£5,176,000 + £1,677,500 + £465,000)	£7,318,500
Project Capital Budget Contingency Remaining at time of tender = (£9,023,190 - £7,318,500)	<b><u>£1,704,690</u></b>

### Forecasted Risk to Project Finances

The NEC PM prepared an initial Quantitative Risk Assessment (QRA) in May 2020. This was used as the basis for the original figures previously presented to TMT and EDM during Sept/ Oct 2020.

At the request of TMT in September 2020, the QRA has been further revisited and updated by the NEC PM and BCC PM and reviewed by an in-house BCC QRA Expert team. As a result of this exercise the updated QRA Mean Risk Allowance has been revised slightly downwards from £4,198,000 to £4,196,000. Refer to Appendix D for revised QRA spreadsheet.

The new revised QRA can be split in to two parts representing events that have occurred but are not fully costed and future risks as follows:-

- Estimated consequential costs due to design changes as a direct result of the river wall failure and ground slip. This resulted in the issue of the day one compensation event (CE No. 1), agreed with the Principal Designer and BCC Procurement as the valid basis of proceeding with the Works. These BCC reassessed risks include principal contractor's revised Temporary Works redesign and installation. However since initial rejection by Wessex Water (WW), this has become far more onerous & complex than originally tendered prior to the river wall collapse. Extensive consequential redesign of permanent piling works, ground beams and associated ground works has also been required, affected by the failed zone area.
- Further additional risks Identified in the NEC Risk Register. These additional project risks include, but are not limited to, physical new ground conditions, physical obstructions, Flooding, unforeseen inclement weather, Higher tidal levels, further additional potential wall collapse during the works, UXO etc.

	<b>QRA - Previous TMT</b>	<b>New QRA – Nov 20</b>
Estimate of consequential costs due to river wall failure and changes to temporary works	£2,966,000	£3,074,000
Additional risks identified	£1,232,000	£1,122,000
<b>Mean Risk Allowance</b>	<b>£4,198,000</b>	<b>£4,196,000</b>

The revised Capital Budget Shortfall is £2,491,190.61 as follows:-

	<b>Previous TMT Breakdown</b>	<b>Revised Project Breakdown</b>
Design and Supervision Fees	£1,705,000	£1,677,500
Miscellaneous Enabling Works	£465,000	£465,000
Tender Value	£5,175,880.61	£5,175,880.61
QRA Mean Risk	£4,198,000	£4,196,000
<b>Total Estimated Project Cost</b>	<b>£11,543,880.61</b>	<b>£11,514,380.61</b>
Approved Budget	£9,023,190	£9,023,190
<b>Budget Shortfall</b>	<b>£2,520,690.61</b>	<b>£2,491,190.61</b>

### Further Discussion and Consideration.

It is to be noted at this stage that the NEC PM is using his own estimates for quotes not yet received from the Principal Contractor for consequential changes due to the wall failure, carries a separate risk in its self. Ideally for better forecast reporting quotes from the Principal Contractor would be used, as this element makes up to 75% of the additional financial forecast now being reported, so this risk is still to be further reconsidered once more information is received from Principal Contractor.

When previously reporting to TMT, BCC Engineers had not fully considered the total Mean Average Risk for the overall Project, but had been fully reporting at that time of enquiry that the amount of available contingency would most likely be sufficient, based on what we knew at that present time.

There was at that time £1.705 million project contingency available to cover the consequential associated costs due the wall failure and ground slip. In January 2020, BCC Engineers after consultation with the Principal Designer considered this would be sufficient contingency for the full Project, but the subsequent temporary Works rejection by (WW) costs have now exceeded BCC Engineer and Principal Designer expectations.

The original calculated budget did allow for overall Project risk, but unfortunately a lot of this contingency was subsequently used up when corrosive ground sulphates were additionally discovered during ongoing ground investigations which resulted in last minute design change (i.e. bigger contiguous piled wall and steel sleeves), prior to going out to Tender.

The submitted tender price came in higher than expected due to the design changes explained above. The tender figure appeared similar to the Principal Designers revised overall estimate, but BCC figures had also included a risk allowance in the overall approved Capital funding. The subsequent river wall failure and the COVID-19 pandemic have both contributed to increasing the costs to the overall project.

The NEC PM revised estimate figures include an overall Project risk allowance, i.e. £4,196,000. BCC Engineers had previously reported that there would be sufficient Capital reserve Budget (£1.705m) to cover this if nothing else where to go wrong. When the Temporary Works were first discussed with the Principal Contractor this was a reasonable assumption but is now no longer the case.

The revised NEC PM and the supporting updated QRA is now considered a realistic forecast in the absence of any further information, but it is worth noting that the £11,514,380.61 figure now reintroduces a consequential total risk allowance, whereas the previous £9.023 million forecast assumed that the risk allowance was sufficient based on the information available at that time.

#### **Cabinet Member / Officer Recommendations:**

##### **That Cabinet:**

1. Approve the additional allocation of Capital expenditure of £2,491,190.61 to complete the full Project, based on the revised Qualitative Risk Assessment (QRA) undertaken and the detailed substantiation's given in this Report.
2. Authorise the Executive Director Growth and Regeneration to take all steps required to spend the additional allocation to complete the full project.

#### **Corporate Strategy alignment:**

Both the Chocolate Path and Cumberland Road are Adopted Highways and BCC, as the Local Highways Authority, has a statutory duty to maintain and keep in use and open for the public. The overall Corporate strategy alignment of this project would be fulfilment of some of the corporate strategic themes with regard to Wellbeing, well connected and business as usual.

The specific key objective of the project is to stabilise the location identified in the previous Option 2 – full wall stabilisation, making it safe such that the Chocolate Path and railway line can be re-opened, as well as removing the risk of any subsequent closure of Cumberland Road. The Chocolate Path forms a section of NCN Route 33, as well as being part of Bristol's cycle route network therefore promoting Wellbeing by encouraging sustainable modes of travel and improvements to air quality. Whilst Cumberland Road is classified as a C class road, providing a connection between Brunel Way and the city centre, as well as local access to residential, business and leisure properties, it does now form a section of the new AVTM MetroBus route.

#### **City Benefits:**

Implementing the stabilisation works will allow the Chocolate Path to be re-opened, letting pedestrians and cyclists access to the route once again. This would allow them to use the off-road facility rather than Cumberland Road.

It will also allow the Heritage railway to re-open, letting trains run again as a tourist attraction. This has financial benefits for the operator and a reputational enhancement to the tourist industry corporately within the City. It will also remove the risk of potential structural failure of the ground supporting Cumberland Road and this proposed work will help to protect residents, business and MetroBus from further disruption, protect the river environment in the long-term and avoid further costs maintenance costs escalating

The final recommended concept design (Option 2), will have the additional inclusion new flood defence resilience measures to prevent or reduce future flooding of the Chocolate Path/railway that would result in wider economic benefits from reduced levels of flooding on this corridor and also to Cumberland Road.

### **Consultation Details, including External Stakeholder Consultation**

The Cabinet Member for Transport, executive Director and Ward councillors will be briefed on the proposed additional costs to this Capital project.

The Harbourmaster will be consulted and involved in the scheme developments.

Harbour side Heritage Railway will be continually consulted and kept up-to-date with progress, on the scheme affects to the Heritage railway line.

The Environment Agency (EA) will require details of the proposed activities, as the proposed works are next to a main watercourse and will require the appropriate Consents from the EA.

The Marine and Maritime Organisation (MMO) will be consulted on this project as they license, regulate and plan marine activities in the seas around England to ensure that this project proposal is carried out in a sustainable way.

Residential Frontages and local businesses will be informed of any significant traffic management that affects Cumberland Road.

It is anticipated at this stage that consultation may not be required, as this is a purely a stabilisation and maintenance scheme.-Should any actual consultation be necessary, the overall requirements and timings will be considered as the detailed scheme is being developed.

MetroBus, First Bus and relevant Emergency Services will be consulted also be kept up-to-date on the Project .

### **Background Documents:**

1<sup>st</sup> October 2019 Cabinet Report – Refer to Appendix M

Revenue Cost	NA	Source of Revenue Funding	NA
<b>Chocolate Path Capital Cost</b>	To approve for the additional Capital Funding of £2.49m additional to £9.02m scheme allocation which has already had Cabinet Approval.		The scheme is funded by prudential borrowing under the Approved Capital Programme
<b>One off cost</b> <input checked="" type="checkbox"/> <b>Ongoing cost</b> <input type="checkbox"/>		<b>Saving Proposal</b> <input type="checkbox"/> <b>Income generation proposal</b> <input type="checkbox"/>	

### **Required information to be completed by Financial/Legal/ICT/ HR partners:**

#### **1. Finance Advice:**

- The total approved spend for the project per the capital programme 20/21 was £9.023m. This report seeks to increase this total project spend by £2.5m to £11.514m.
- The rationale for the increase is that updated assessments have indicated that the previously held risk allowance is insufficient. Based upon the latest QRA, the proposed level of risk allowance is £4.196m. This is an increase of 2.5m from the initial level in the project, of 1.7m. This updated value represents a 57% contingency level on the underlying project costs.
- Works have started at the site, therefore this estimate is based upon live information and informed by greater knowledge of the site. The risk of overspend and time delays remains. However, a much greater risk contingency is now included to mitigate this, and is based upon the latest available information.
- The additional funding for the project is proposed in the capital programme proposal for 21/22, (21/22 capital budget of 7.853m, prior years' spend of £3.670m, total project spend 11.523m). This is proposed to be funded from prudential borrowing.
- The additional funding sought in this report is included in the 21/22 capital programme, approved 23/2/21.

**2. Legal Advice:**

The request for additional funding does not in itself raise any legal issues. However it will be important to ensure that instructions for any additions to, or changes in, the works follow the appropriate contractual procedures.

**Legal Team Leader:** Eric Andrews , Team Leader

Date: 04/02/21

**3. Implications on ICT:** No impact to IT Services

**ICT Team Leader:** Simon Oliver, Director Digital Transformation

Date: 16/11/20

**4. HR Advice:** There is no HR implications are evident

**HR Partner:** Celia Williams , HR Business Partner

Date: 05/02/21

<b>EDM Sign-off</b>	Stephen Peacock	3 <sup>rd</sup> Feb 2021
<b>Cabinet Member sign-off</b>	Cllr Dudd	8 <sup>th</sup> Feb 2021
<b>For Key Decisions - Mayor's Office sign-off</b>	Mayors Office	8 <sup>th</sup> Feb 2021

<b>Appendix A – Further essential background / detail on the proposal</b>	YES
Chocolate Path – Revised Business Plan	
<b>Appendix B – Details of consultation carried out - internal and external</b>	NO
<b>Appendix C – Summary of any engagement with scrutiny</b>	NO
<b>Appendix D – Updated QRA Risk assessment</b>	YES
<b>Appendix E – Equalities screening / impact assessment and Checklist of proposal</b>	YES
<b>Appendix F – Eco-impact screening/ impact assessment of proposal</b>	NO
<b>Appendix G – Financial Advice</b>	NO
<b>Appendix H – Legal Advice</b>	NO
<b>Appendix J – Exempt Information – Commercially Sensitive Information</b>	NO
<b>Appendix – HR advice</b>	NO
<b>Appendix K – ICT</b>	NO
<b>Appendix L – Chocolate Path Location Plan and condition photographs</b>	NO
<b>Appendix M – Background Paper – 1<sup>st</sup> October 2019 Cabinet Report</b>	NO