

**CARDIFF COUNCIL  
CYNGOR CAERDYDD**

**CABINET MEETING: 17 JUNE 2021**

---

**COASTAL RISK MANAGEMENT PROGRAMME – FULL BUSINESS  
CASE AND PROCUREMENT OF CONSTRUCTION CONTRACT**

**CLEAN STREETS, RECYCLING & ENVIRONMENT (COUNCILLOR  
MICHAEL MICHAEL)**

**AGENDA ITEM:**

---

**Reasons for this Report**

1. To provide a briefing to Cabinet on the principle design for the coastal protection scheme and the requirements within the draft full business case to be submitted to Welsh Government for the Coastal Risk Management Programme.
2. To seek Cabinet approval for the procurement approach including the evaluation criteria/weightings set out in the report for the construction contract to deliver the coastal defence improvements.
3. To seek Cabinet approval to commence procurement for the construction contract to inform the Final Business Case for the coastal defence improvements, which are estimated to cost £23.5M.

**Background**

4. Following assessment reports; *Rover Way Foreshaw Coastal Defence Assessment, Mott McDonald, 2009* and *Cardiff Council Coastal Erosion Risk Assessment, Atkins, 2013*, there was an identified need to improve the condition of coastal defences in the River Rhymney and Coast around Rover Way.
5. The Coastal Risk Management Programme is on Cardiff Council's Corporate Risk Register.
6. The proposed scheme will manage flood risk to 1,116 residential and 72 non-residential properties over 100 years, as well as preventing erosion of landfill material, key road infrastructure and the Rover Way Travellers Site.
7. The scheme will provide defence for a 1 in 200 year severe weather event, plus an allowance for climate change influence of 40%.

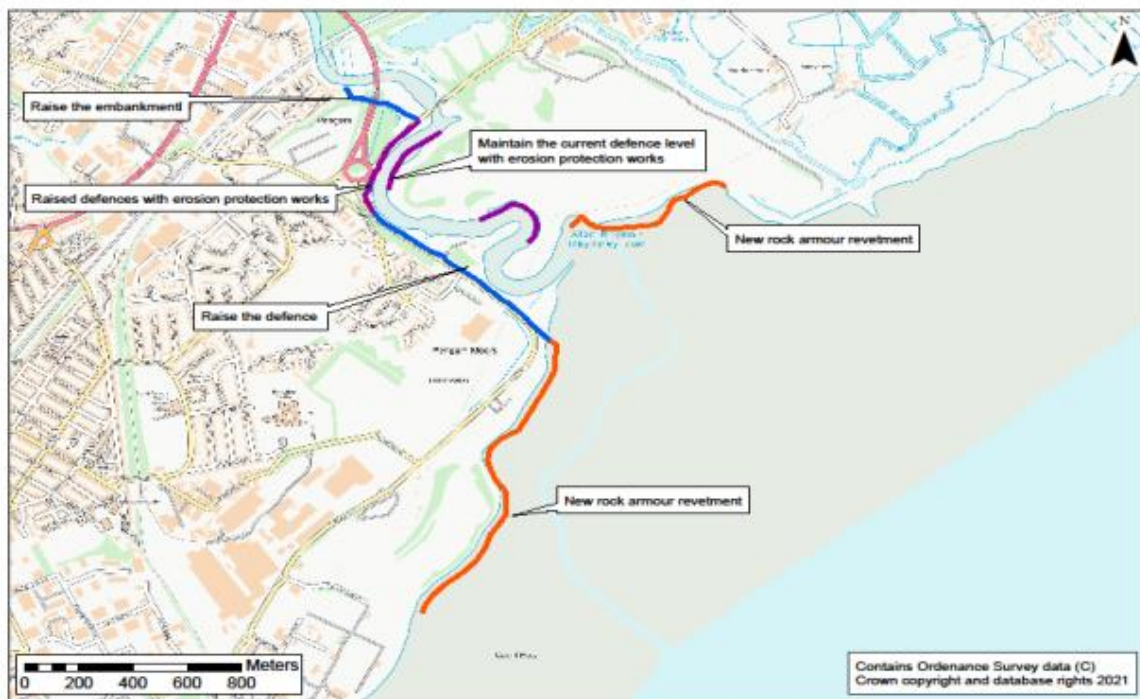
Welsh Government's Coastal Risk Management Programme (CRMP)

8. Cardiff Council received 100% funding from Welsh Government for the development of the Outline Business Case. Based on the assessments undertaken the overall preferred option was to improve the coastal protection measures as follows:
  - Rock revetment along the coast to manage erosion and wave overtopping
  - Sheet piling along Lamby Way Roundabout
  - Maintain earth embankments elsewhere and raise low points in earth embankments where required to reduce flood risk.
  - Rock scour protection added to Lamby Way Bridge.
9. The consultancy services for the Outline Business Case were carried out by Jeremy Benn Associates (JBA) and procured under the Construction Consultancy Framework managed by the National Project Service (NPS), using the relevant 'Water Management' Lot under the framework.
10. Welsh Government accepted the submitted Outline Business Case in March 2018 as part of a funding application, to proceed to the Full Business Case.
11. Cardiff Council has received 100% funding from Welsh Government totalling £1.129 million for the development of the Full Business Case to deliver the detailed design and cost estimates to construct the coastal defence improvements.
12. The development of the Full Business Case and detailed design was awarded to JBA following a competitive tender under the NPS Framework.
13. There is a requirement to develop the design and full business case concurrently with all required permissions, consents, and licenses for construction, including planning permission, marine license and flood risk activity permit.
14. With agreement with Cardiff Council. JBA employed a Contractor, Knights Brown, to provide Early Contractor Involvement (ECI) advice through the developed and detailed design stages. This enables the Client team to benefit from the knowledge and experience of a Contractor to advise on buildability of the design, programme and cost estimating whilst maintaining control of the design and statutory processes.
15. The Welsh Government Coastal Risk Management Programme provides a one-off opportunity for local authorities to implement coastal improvements with Welsh Government contributing 85% of project costs (previously 75%). As indicated by Welsh Government the construction of the coastal defence improvements need to commence prior to 31<sup>st</sup> March 2022.

The proposals and requirements of the Full Business Case

16. The proposed coastal defence improvements are as follows:
  - i. New Rock Armour Revetment on coastal foreshore either side of the river Rhymney.
  - ii. Raised and maintained sea defences along the River Rhymney utilising a combination of hard and soft engineering to maintain river tidal habitat.
  - iii. Raising of exiting coastal defence embankments.

**Figure 1 - A summary of the proposed new defences**



Appendix A – Layout and Design Principles provides the draft drawings being utilised to develop the Full Business Case.

17. The principle of the design is to minimise concerns relating to existing habitats in the tidal influence within the river and coastal foreshore whilst ensuring the coastal protection improvements have limited ongoing maintenance.
18. The estimated construction cost for the coastal defence improvements is £23.5M. The increase in estimated construction costs from the 2018 Cabinet Report has come from a requirement to design for an increase in climate change influence from 30% to 40% as required by Welsh Government and the site investigation boreholes undertaken during the detailed design process.
19. The financial position from the 2018 Cabinet Report is as follows:

*Welsh Government (WG) have grant funded the development of an outline business case as indicated in this report. This has indicated indicative costs for*

*design (£1 million) and construction (£10 million) totalling approximately £11 million (inclusive of VAT). The Coastal Risk Management Programme assumes that WG would support 75% of design and construction costs (£8 million) whilst the Council will have to find the balance of 25% of the estimated cost (£3 million). Whilst Council's highlighted the affordability issues of such an approach, WG are unlikely to change the initial approach.*

20. The cost increase relating the climate change is influenced by the following changes:
  - Coastal defences are now larger in height and profile.
  - River section defences are now raised and previous infills defences now require much longer stretches of defence to be constructed and raised.
21. The cost increase relating to the geotechnical site investigations is influenced by the following changes:
  - The results indicate much larger sheet piles are required.
  - Due to the location of bedrock the length of sheetpile is limited. This means that the slope in front of the sheet pile must be maintained to prevent failure. This led to the addition of scour protection to the bank slope fronting the sheet pile sections to retain the slope. The design will also replace the mud over the scour protection on the upper slope to maintain designated mud habitats.
22. Two slips have occurred along the riverbank edging to Lamby Way Tip. Geomorphological assessment verified that an additional section not within the outline business case should be included. This led to the addition of erosion protection works to the meander opposite the sailing club.
23. The estimated internal costs to deliver the scheme is £1.5M. This cost will cover the following aspects:
  - Contract Management
  - Cost Management
  - Supervision of work
  - Ongoing support from JBA as designer
24. The scheme provides protection to existing key infrastructure, such as road and utilities.
25. The scheme will provide a gravel/stone dust path to form part of the Wales Coastal Path linking with existing public rights of way.

**Issues**

Submission requirements and timelines

26. A funding letter from Welsh Government to enable the delivery of coastal defence improvement will not be issued without the following information being provided:
- Full Business Case with tendered costs for the works – please submit a draft FBC for review prior to go to tender.
  - Planning consent (or written confirmation why this is not needed).
  - Marine Licence (or written confirmation why this is not needed).
  - Copy of the published Coast Protection Notice and report on representations received.
  - Copy of Coastal Protection Act Approval.
  - Any other statutory consents required to carry out the works.
  - Confirmation Land agreements/Crown Estates agreements are in place to enable construction.
  - Report on public engagement for the scheme and any issues arising.
  - General Arrangement Drawings.
  - Tender Appraisal Report.
  - Copy of successful tender.
27. The funding necessary to support the scheme needs to be secured for 2021-22 as if works are not commenced prior to March 2022, Welsh Government are unable to offer any assurance that the relevant funding will be made available in future years.
28. Identification of funding needs to be set within the budget to meet the full cost of the scheme from start of the contract across all financial years for construction. Currently there is not enough funding in the budget to meet the Council's obligations of the grant.
29. The key programme dates envisaged are as follows:
- i. Submission of Planning and Marine Licence Application – June 2021
  - ii. Submission of draft FBC to WG – June 2021
  - iii. Procurement of construction Contractor – July 2021
  - iv. Submission of Final Business Case to Welsh Government – November 2021
  - v. Award tender for construction contract – December 2021
  - vi. Construction commences – March 2022
  - vii. Construction completes – August 2023
30. There will be a requirement for a further Cabinet report, for Cabinet approval of the Full Business Case, final costs, project risks and mitigations.

### Approach to Procurement

31. Cardiff Council commissioned Faithful & Gould to provide a procurement options report to review the best approach to procure the scheme. Appendix B Cardiff Coastal Defence – Procurement Options Report, Faithful & Gould, 30th March 2021.
32. Due to the specialist nature of the construction, the recommendation not to utilise the frameworks available. Although, this may provide the quickest procurement route, there would be a need for the contractors on the frameworks to engage specialist contractors due to the nature of the work. It was felt this would adversely influence the cost of the contract and may lead to similar procurement timescales.
33. The recommended approach is undertake a restricted procedure where there is a prequalification, selection and evaluation. This approach will allow contractors to submit a pre-qualification questionnaire to demonstrate they have the experience and capability to deliver the scheme. Those contractors who are shortlisted are shortlisted will then be invited to submit a full tender
34. The recommended contract to be used is a target cost contract (NEC ECC Option C) to share risk and reward in the construction stage. This approach should prove attractive to the market due to the incentives provided by pain/gain mechanism and shared risk between parties.
35. The risk profile for this project is high and Cardiff Council will likely get better value for money with this approach compared to a fixed sum contract where contractors would likely include a significant risk allowance within the lump sum price.
36. The tender assessment will be based on a 60 price / 40 quality split.

### **Local Member Consultation**

37. The Flood and Coastal Risk Management team consulted the relevant local members from Rumney, Splott, Trowbridge, Adamsdown and Penylan. These wards are impacted by the extent of flooding, if a scheme did not proceed.
38. Local Members have received updates as the scheme has progressed with the latest consultation taking place on 18<sup>th</sup> May 2021 in relation to the principle design for the coastal protection scheme.
39. The Coastal Risk Management Programme was scrutinised by Environmental Scrutiny Committee on 6th March 2018.

### **Reasons for Recommendation**

40. To note the principle design of the coastal improvements and the requirement of the Full Business Case to be submitted to Welsh Government
41. To approve the procurement approach and evaluation criteria/weightings for the construction contract.
42. To note the 15% funding requirement of the construction cost of the Contract as detail in the grant memorandum.

### **Financial Implications**

43. The report provides a briefing on project which is a key corporate risk for which current estimates of Total Cost are £25 million. The latter will be confirmed as part of the full business case to be submitted to Cabinet as part of future report and following confirmation of tendered costs for a scheme. It is noted that current WG guidance suggests that the project must commence by 31 March 2022, however it is essential that the full business case is complete and reviewed effectively prior to submission and approval and that the Council has the opportunity to and carefully consider : any significant risks to financial cost variations (controllable and non controllable), how such risks will be managed and mitigated, that the scope of the project works is clear and agreed at the outset and that the relevant skills and expertise are in place or will be procured to deliver the scheme.
44. The funding approach to the Coastal Risk Management Programme of Welsh Government assumes 85% of the construction cost is to be funded by Welsh Government, with 15% to be identified by the Council. The Welsh Government funding approach is not a cash grant towards the expenditure, but to re-imburse the Council for the costs of servicing borrowing that would need to be taken, over a twenty five year period as part of the annual Revenue Support Grant.
45. The Council's Capital Programme approved in March 2021 includes £8.5 million of assumed borrowing to be supported by WG, but based on the estimates and reasons for increase in costs set out in this report, the level of borrowing required to be undertaken by the Council to support this scheme is £21.25 million. As part of the final business case approved by Cabinet, confirmation will be needed from WG as to their approval of business case and the increased costs, the details terms and conditions of financial support, but also an agreement as to how any variations of costs are to be treated, to ensure that they are not borne solely by the Council. Any changes to the borrowing requirement of the Council will need to be considered as part of the 2022/23 update of the Capital and Treasury Management Strategy.
46. Based on the estimated cost set out in this report, the Council would need to identify a budget of £3.75 million as its agreed contribution to the project. £2.6 million is available as part of the Council's existing capital allocation for this

project, including a sum of £475,000 from a financial provision held towards specifically the element of this scheme that related to the Landfill. The shortfall in funding of £1.15 currently assumed and to be confirmed as part of the final business case will need to be managed within the overall capital programme set in March 2021, with re-prioritisation across all areas where feasible to do so. The detailed level and approach to Council funding will need to be set out as part of the Final Business Case.

47. The final business case will also need to set out the revenue budget impact of the scheme in the short, medium and long term, with allocations included in the medium term financial plan to ensure ongoing inspection, management and maintenance of any new infrastructure assets is supported and the responsibility for such clearly allocated.

### **Legal Implications**

48. The report recommends, amongst other things, commencing procurement. It is understood the value of the contract is over the threshold set out in the Public Contracts Regulations (Regulations) and legal services are instructed that the client department intends to follow a restricted procedure in accordance with the process set down by the Regulations. Legal advice should be sought on the procurement documents including the form of contract.
49. It is noted that the service area wishes to use the NEC4 option C form of contract. Further legal advice should be sought but generally, under Option C, the contract sets out a target price and the respective shares of any savings made if the "actual" price of carrying out the works is less than the target price, or any overrun if the target price is exceeded. If the final price is equal to the target price then there is no gain or pain share.
50. Some of the key points to note about Option C are that:
  - i. the target price is subject to adjustment as a result of compensation events, such as changes/variations to the Scope;
  - ii. the Contractor is paid the full cost of carrying out the works (subject to any Disallowed Cost) plus its Fee, regardless of the target price, until completion of the whole of the works. Following that the Contractor's share of any savings or overruns assessed and taken into account;
  - iii. any target price should be set at a realistic level.

### **Grant**

51. It is noted that the contract will be partly funded by way of a grant made available through the Welsh Government. Accordingly, the Service Area will need to be satisfied that the Council can comply with any grant conditions attached to the funding.



52. It is recommended that the advert and procurement documents make it clear that the contract is subject to grant funding.

Equality Duty

53. The Council has to satisfy its public sector duties under the Equality Act 2010 (including specific Welsh public sector duties) – the Public Sector Equality Duties (PSED). These duties require the Council to have due regard to the need to (1) eliminate unlawful discrimination, (2) advance equality of opportunity and (3) foster good relations on the basis of ‘protected characteristics’. The ‘Protected characteristics’ are: • Age • Gender reassignment • Sex • Race – including ethnic or national origin, colour or nationality • Disability • Pregnancy and maternity • Marriage and civil partnership • Sexual orientation • Religion or belief – including lack of belief.

Well Being of Future Generations (Wales) Act 2015 - Standard legal imps

54. The Well-Being of Future Generations (Wales) Act 2015 (‘the Act’) places a ‘well-being duty’ on public bodies aimed at achieving 7 national well-being goals for Wales - a Wales that is prosperous, resilient, healthier, more equal, has cohesive communities, a vibrant culture and thriving Welsh language, and is globally responsible.
55. In discharging its duties under the Act, the Council has set and published well being objectives designed to maximise its contribution to achieving the national well being goals. The well being objectives are set out in Cardiff’s Corporate Plan 2021-24. When exercising its functions, the Council is required to take all reasonable steps to meet its well being objectives. This means that the decision makers should consider how the proposed decision will contribute towards meeting the well being objectives and must be satisfied that all reasonable steps have been taken to meet those objectives.
56. The well being duty also requires the Council to act in accordance with a ‘sustainable development principle’. This principle requires the Council to act in a way which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs. Put simply, this means that Council decision makers must take account of the impact of their decisions on people living their lives in Wales in the future. In doing so, the Council must:
- Look to the long term
  - Focus on prevention by understanding the root causes of problems
  - Deliver an integrated approach to achieving the 7 national well-being goals
  - Work in collaboration with others to find shared sustainable solutions
  - Involve people from all sections of the community in the decisions which affect them
57. The decision maker must be satisfied that the proposed decision accords with the principles above; and due regard must be given to the Statutory Guidance issued by the Welsh Ministers, which is accessible using the link below:

<http://gov.wales/topics/people-and-communities/people/future-generations-act/statutory-guidance/?lang=en>

**General**

- 58. The decision maker should be satisfied that the procurement is in accordance within the financial and budgetary policy and represents value for money for the council.
- 59. The decision maker should also have regard to, when making its decision, to the Council’s wider obligations under the Welsh Language (Wales) Measure 2011 and the Welsh Language Standards.

**HR Implications**

- 60. There are no HR implications to be considered in this report.

**RECOMMENDATIONS**

Cabinet is recommended to:

- 1. Note the principle design for the coastal protection scheme and the requirements within the draft full business case to be submitted to Welsh Government for the Coastal Risk Management Programme.
- 2. Approve the procurement approach and evaluation criteria/weightings set out in the report.
- 3. Approve the commencement of procurement for the construction contract to deliver the coastal defence improvements estimated at £23.5M.
- 4. Note the presentation of a further report to Cabinet with the final Full Business Case, including final tender costs, project risks and mitigations.

<b>SENIOR RESPONSIBLE OFFICER</b>	<b>ANDREW GREGORY</b>
	Director Planning, Transport & Environment

Appendix A – Layout and Design Principles

Appendix B - Cardiff Coastal Defence – Procurement Options Report, Faithful & Gould, 30<sup>th</sup> March 2021

The following background papers have been taken into account:

Cabinet Report 15<sup>th</sup> March 2018 – Coastal Risk Management Programme

National Strategy for Flood and Coastal Erosion Risk Management in Wales

<https://gov.wales/national-strategy-flood-and-coastal-erosion-risk-management-wales>

DRAFT