ABERDEEN CITY COUNCIL

COMMITTEE Communities, Housing and Infrastructure

DATE 29/08/17

REPORT TITLE Update on Coastal Defence Projects

REPORT NUMBER CHI/17/159

DIRECTOR Bernadette Marjoram

REPORT AUTHOR Craig Porter

1. PURPOSE OF REPORT:-

This report provides members with an update on the current coastal / flooding defence projects in Aberdeen. It also seeks approval to transfer money (£100,000) from the Roads Weak Bridges budget to cover the initial cost of work arising from recommendations from recently completed coastal embankment condition studies.

2. RECOMMENDATIONS

- (A) That the Committee approve the transfer of £100,000 from the Roads Weak Bridges budget to fund initial monitoring, investigative and design appraisal and development work related to Coastal Embankments stabilisation.
- (B) That the Committee note that study work will be undertaken on the condition and potential remaining life of the sea flood defences at Aberdeen Beach as detailed in item 3.4 in this report.

3. BACKGROUND/MAIN ISSUES

- 3.1 Work has recently been completed on the Aberdeen Coastal Embankments Study. This covered the following locations:
 - 1. Donmouth Road Coastal Embankment
 - 2. Greyhope Road Coastal Embankment
 - 3. North Beach Coastal Embankment. Sea Defences, near the mouth of the River Don
- 3.2 The study identified several areas along Donmouth Road and Greyhope Road that were classed as high priority for remedial works. These are areas

where landslips have already occurred and have potential to undermine the roadway above or, in the case of Greyhope Road, where further destabilisation could also affect the footpath below.

- 3.3 The initial works recommended for Donmouth Road and Greyhope Road are:
 - to undertake site investigation and survey work
 - Option appraisal for design solutions

These activities are required to inform and select future remedial measures.

In addition to the above activities a condition monitoring programme is to be established.

- 3.4 A study is about to be commissioned covering the sea defences for Aberdeen between the River Dee and the River Don. In this area the sea defences are also classed as flood defences. The work covers the condition and remaining design life of the existing defences as well as potential development / replacement options.
- 3.5 The initial work at North Beach will be incorporated into the larger sea defences study.

4. FINANCIAL IMPLICATIONS

4.1 Transferring money within the capital budget in order to undertake the work outlined in item 3.3 above will allow work that is considered to be of higher priority to be undertaken whilst having no overall effect on the Council's cost base. It is considered that the originally planned work can safely be delayed into the next financial year without any long term budgetary implications.

5. LEGAL IMPLICATIONS

There are no direct legal implications arising from the recommendations of this report.

6. MANAGEMENT OF RISK

The risks identified with the potential to impact the recommendations of this report are as follows:

Financial

- 6.1 The following financial risks have been identified;
- a) There is a medium to low risk that monitoring is not instituted for the medium and low priority schemes for the coastal embankments resulting in

unbudgeted emergency repairs in future years. We can establish a monitoring programme and link monitoring results to financial provision in future years.

b) Investigation of the sea defences is not done resulting in a very high unbudgeted replacement cost in future years. This is a medium risk which can be mitigated by conducting initial study / investigations and producing a long term strategy for repair / replacement and making budget provision. As a further action we can explore other sources of funding e.g. The sea defences are now also classed as flood defences and there may be external funding to assist with repair / replacement costs.

Employee

6.2 There are no employee risks identified at this time.

Customer / Citizen

6.3 The high priority remedial and monitoring schemes for the coastal embankments are not progressed and there is a risk to public safety (road users on the carriageway above and users of the footpath below). While this is a high risk, this can be mitigated by monitoring progress and undertaking selected remedial schemes and in the short term by the erection of warning signage / prohibiting parking now in the critical areas.

Environmental

6.4 The risk of failure of the sea defences is not fully understood and a breach occurs leading to flooding damage and associated financial and reputational damage. This is, however a low risk that can be mitigated by conducting initial studies / investigations and then by prioritising any work that is identified to minimise risk.

Technological

6.5 There are no technological risks identified at this time.

Legal

6.6 There are no legal risks identified at this time.

Reputational

6.7 The high priority remedial schemes for the coastal embankments are not progressed as they have not been budgeted for and there is reputational damage as the problem has been identified and not acted upon. While this is a high risk, this can be mitigated by transferring money within the capital budget from an area where a potential delay will carry a lower level of risk. This must be followed up by progressing the selected remedial schemes. As further action we can hold community information / publicity sessions to demonstrate action is being taken.

7. IMPACT SECTION

7.1 Economy – The proposed coastal embankment work will contribute to maintaining the roads infrastructure within Aberdeen including access to tourist attractions such as the Torry Battery. The sea defences study will incorporate a section that will request initial development proposals for an area that is a significant asset to the city (Aberdeen Beach).

7.2 People – N/A

7.3 Place – The sea defences study will consider the environmental impact of different types of sea defence and the need to provide a diverse habitat along the coastline. Similar considerations will be taken into account when reviewing potential remedial schemes for the coastal embankments work.

7.4 Technology - N/A

8. BACKGROUND PAPERS

N/A

9. APPENDICES (if applicable)

Aberdeen Coastal Embankments Study Reports:

Appendix A - Donmouth Road Phase 1 Desk Study Report

Appendix B -Donmouth Road Risk Assessment Report

Appendix C - Donmouth Road Phase 2 Recommendations Report

Appendix D - Greyhope Road Phase 1 Desk Study Report

Appendix E - Greyhope Road Risk Assessment Report

Appendix F - Greyhope Road Phase 2 Recommendations Report

Appendix G - North Beach Phase 1 Desk Study Report

Appendix H - North Beach Feasibility Report

Appendix I - North Beach Phase 2 Recommendations Report

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