# ITEM: 11

PAGE: 1

# REPORT TO: ENVIRONMENTAL SERVICES COMMITTEE ON 26 OCTOBER 2005

## SUBJECT: KINGSTON COAST PROTECTION

#### BY: DIRECTOR OF ENVIRONMENTAL SERVICES

#### 1 <u>Reason for Report</u>

- 1.1 To seek Committee approval to commission a study of the outline business case for the Kingston Coastal Protection Scheme.
- 1.2 This report is submitted to the Committee in terms of Section D(22) of the Council's Administrative Scheme relating to the maintenance of piers and harbours and coast protection and Section D (23) relating to the functions of the Council under the Flood Prevention (Scotland) Act 1961 as amended by the Flood Prevention and Land Drainage (Scotland) Act 1997

## 2 Background

- 2.1 The coastal strip to the West of the mouth of the River Spey consists of mobile shingle ridges and there has been a history of erosion and flood damage occurring at Kingston. Management of this coastline has historically been carried out by reprofiling of the shingle ridges and cutting a new mouth to the River Spey when necessary. The most recent engineering works were carried out in 1995 when a new mouth was cut and river profiling work carried out. There is ongoing monitoring of the estuary and adjacent shorelines.
- 2.2 A report to Technical & Leisure Services Committee of the Moray Council on 19<sup>th</sup> June 1997 (and ref. report of 27<sup>th</sup> June 1996) provided an update on the scheme and sought approval for design and site investigations to progress. The committee noted the position at Kingston and instructed the monitoring works to continue. They also, approved the offshore breakwater design and suspended Standing Orders to allow the Consultant Engineers (Babtie) to be engaged to investigate the design solution and prepare contract details including environmental consultations, planning consent, grant aid submission, and Scottish Office approvals (para 29 of Minute refers).
- 2.3 A marine ground investigation was completed in September 1998 and the design was further developed.

#### ITEM: 11

#### PAGE: 2

2.4 Scottish Natural Heritage (SNH) published the report "The geomorphology, conservation and management of the River Spey and Spey Bay SSSI's" in November 2001 prepared by the University of Glasgow. The SNH report will have an impact on the scope of works being proposed for the Kingston frontage and SNH will be consulted in the development of a suitable physical model.

#### 3 <u>The Proposals</u>

- 3.1 It is proposed that the Committee consider the report entitled "Revised Stage 1 Proposal" contained as **Appendix B** to this report and the recommendations as noted in this report.
- 3.2 The proposal is to provide a sustainable Coastal Management Scheme for the Kingston frontage, which is currently at risk from erosion of the mobile shingle beach exposing properties to flooding and eventual loss due to wave action.
- 3.3 The current phase in the scheme is to prepare a detailed business case for consideration by the Committee and subject to further approval, thereafter carry out physical modelling of the preferred option. Modelling the coastal and fluvial processes at Kingston is required due to the complexity of the processes involved and to give the necessary confidence in the proposed options for application to the Scottish Executive for grant aid.
- 3.4 A procurement strategy for the scheme is required. The Council has to date retained the services of a consultant employed many years ago by the former Grampian Regional Council. EU Procurement Regulations necessitate that the contract be put to tender.

## 4 <u>Financial Implications</u>

- 4.1 The outline costs are considered in **Appendix A**. The proposals and recommendations in this report do not commit the Council to the costs involved beyond the Stage 1 of investigation, and development of the outline business case. There is allowance of  $\pounds$ 77,000 in the **Capital Plan** (2005-06) for this expenditure.
- 4.2 The funding mechanism for coast protection and flood alleviation schemes is the same as for other flood alleviation schemes, i.e., eligible for an 80% Grant from the Scottish Executive in line with current arrangements.
- 4.3 The estimated scheme costs are outlined in **Appendix A** with a detailed breakdown of the **Stage 1 costs in Appendix B**. The cost is estimated to be **£6,052,000** which includes a 60% allowance for Optimism Bias (i.e. an allowance for risks associated with the fact that the design, based on the preferred option of an offshore breakwater, is at a very early stage; this optimism bias reduces as a scheme develops and the risks become better understood and mitigated) in the construction costs as required by the Scottish Executive. The key stages, estimated start dates and estimated costs are:
  - Stage1:Prepare outline business case preliminary benefit/cost assessment and an<br/>Environmental Impact Assessment Screening Report.<br/>Estimated completion date March 2006.Estimated cost £46,000

- **Gateway**: The Committee will need to consider the business case and all options before proceeding further.
- Stage 2:Physical Model and detailed business case for Grant Aid Application.Potential earliest start date May 2006.Estimated cost £425,000.
- Stage 3:Detailed Design & Documentation.<br/>Potential earliest start date Aug 2007.Estimated cost £270,000
- Stage 4:Construction (assuming that an offshore breakwater would provide the<br/>best solution).<br/>Potential start date May 2008Estimated cost £5,310,000

#### 5 <u>Staffing Implications</u>

5.1 The procurement exercise and subsequent supervision of the project, should there be a business case for progressing it, will require staff resource. It is considered that this can be accommodated within the current establishment.

#### 6 <u>Environmental Implications</u>

6.1 Environmental implications will be evaluated during the process and reported at the appropriate stage.

#### 7 <u>Sustainable Development Implications</u>

7.1 Sustainable development implications will form part of the evaluation process in Stages 1 & 2 and reported back to this Committee.

## 8 <u>Consultations</u>

- 8.1 The Chief Financial Officer has been consulted and his comments have been incorporated in this report.
- 8.2 Alasdair McEachan, Senior Solicitor has been consulted and is in agreement with the contents of this report.

## 9 <u>Corporate Development Plan</u>

9.1 Kingston Coast Protection Scheme forms part of the implementation of the corporate priority of "Providing flood alleviation schemes for Moray Communities".

#### 10 <u>Recommendations</u>

# **10.1** It is recommended Committee approve the commissioning of a study of the outline business case for the Kingston Coastal Protection Scheme.

Author of Report:Brian Kinnear, Engineer, Environmental Services ConsultancyBackground Papers:BK/R4/18

# PAGE: 4

#### APPENDIX A

	£ ,000			
	2005-06	2006-07	2007-08	2008-09
Prepare Business Case for Scheme	46			
Physical Model & Grant Aid Application for Preferred Scheme		414		
Detailed Design			48	
Environmental Assessment & Action Plan			28	
Contract Documentation, Surveys & Mobilisation			188	
Construction				5,300
TMC Fees and Management	6	6	6	10
Total Value (£,000)	52	420	270	5,310
	Total Estimated Scheme Cost Grant aid at 80%			6,052 4,842
			Net Cost	1,210

ITEM: 11 PAGE: 5

# **APPENDIX B**

Consultants Report - Revised Stage 1 Proposal: BWA/0012082