

	<b>REPORT TO CABINET TO BE HELD ON 22 SEPTEMBER 2009</b>
	<b>Key Decision</b> <b>YES</b>  <b>Forward Plan Ref No</b>
<b>Corporate Priority:</b>  <b>Creating Quality Environments</b>	<b>Cabinet Portfolio Holder</b> <b>Cllr A Backhouse</b>

**REPORT OF THE HEAD OF TECHNICAL SERVICES - 09/535**

**WARDS AFFECTED: CAYTON, OSGODBY**

**SUBJECT: CAYTON BAY CLIFF INSTABILITY**

**RECOMMENDATION (S):**

Cabinet is recommended to:

- i. note the findings of the consultation;
- ii. authorise a bid for SBC to become a “pathfinder” council;
- iii. receive, subject to the outcome of (ii), a further report on the outcome of the bid;

**REASON FOR RECOMMENDATION (S):**

To acquaint Cabinet with the details of the recently undertaken consultation with stakeholders affected by the coastal landslide at Knipe Point, Cayton Bay.

**HIGHLIGHTED RISKS:**

As shown in Appendix A.

**1. INTRODUCTION**

- 1.1 On the 1 and 2 April 2008, a large historic coastal landslide was reactivated in the northern part of Cayton Bay, which to date has resulted in cliff top

recession and the loss of private land and three bungalows (which had to be demolished). The landslide, although not as active as in the recent past, is ongoing and further movement could occur. Existing assets which may be threatened by any future cliff top recession include a section of the A165 Filey Road and about 56 bungalows at Knipe Point. The Cleveland Way Coastal Path which passes through the area affected by landslip has had to be closed and diverted inland. Consequently the site is currently the subject of National, Regional and Local media and political interest.

- 1.2 Whilst the Borough Council is not one of the affected landowners within the area, we used our powers under the Coast Protection Act, and in the well-being interests of the affected residents, to attract grant aid to undertake a study to determine whether it was possible to protect the properties using an engineering solution.
- 1.3 As a result, a site investigation was undertaken and a range of engineering stabilisation measures explored and screened to identify the most technically, financially and environmentally suitable options that could deliver the required improvement in stability on the site.
- 1.4 On 22 June 2009 Cabinet approved ( HTS/09/352) to explore with stakeholders whether or not a suitable scheme can be delivered to help secure the assets at risk at Knipe Point.
- 1.5 The above work has now been undertaken and the findings are presented in this report.

## **2. CORPORATE OBJECTIVES AND THE COMMUNITY PLAN**

- 2.1 The study will support a number of the Council's Corporate Plan aims:

Aim 1: Developing a Safer and Stronger Community

Aim 2: Building a Prosperous Community and Creating Quality Environments

## **3. BACKGROUND AND ISSUES**

- 3.1 At Knipe Point, three properties have, in the interests of safety, had to be demolished due to the risk of coastal erosion. A further 33 bungalows are at potential short term risk and fall within the projected cliff top recession zone determined by the National Trust's consultants, Halcrow, on 6 May 2008. A further 23 bungalows are located at Knipe Point and these properties may become susceptible in the longer term. Prior to the event, each bungalow had a market value of about £150,000 giving a total estimated value of private residential property at risk of approximately £8.4 million.
- 3.2 Properties landward of the A165 Filey Road at Osgodby may also become at risk from coastal erosion and landslip in the medium to long-term as contemplated in the Cayton Bay Coastal Strategy. The A165 Filey Road is currently in a zone of possible cliff top recession over a 200 m section which

includes an important junction providing access to and egress from Osgodby and beyond. In places, the active headscarp of the landslide is within 10 m of the A165 carriageway.

- 3.3 The exact causes, mechanisms and scale of the landslide have been confirmed with a high degree of confidence, that Cayton Cliffs comprises a deep seated translational landslide system. The origin of the landslide system is not known but believed to be many thousands of years old. The evolution of the cliffs is characterised by episodic reactivation of large scale landslide complexes.
- 3.4 Given the complexity of the landslide mechanisms and site constraints associated with working within and the vicinity of the Cayton, Cornelian and South Bay SSSI any preferred engineering stabilisation options would aim to :
1. Prevent deep seated ground movement of Cayton Cliff and re-establish support to the headscarp at Knipe Point and along the Filey Road, and
  2. Prevent shallow failures and recession of the Knipe Point headscarp and stabilise the cliff top and secure assets located above the headscarp.

#### **4. CONSULTATION**

- 4.1 Following the production of the site investigation report (“Cayton Bay Cliff Stability Assessment Ground Investigation and Appraisal of Engineering Stabilisation Options”, April 2009, Halcrow Group Ltd.) a series of consultations have been undertaken with stakeholders.
- 4.2 Key stakeholders in this matter include Scarborough Borough Council and North Yorkshire County Council (with respect to the A165), the National Trust (landowner of Cayton Cliff), local residents (owners of private property at risk), Osgodby Parish Council, Natural England (part of the cliffs is designated a Site of Special Scientific Interest (SSSI)), utility providers (the main UK-Germany fibre optic cable is adjacent to the A165) and users of the Cleveland Way Coastal Path and beach
- 4.3 Natural England has sympathy with the concerns of the residents of Knipe Point and is committed to continuing to work in cooperation with the other stakeholders to minimise the risk to people and property if at all possible. They believe this is best achieved by the consideration of all available options not just stabilisation of the slope through engineering works.
- 4.4 Natural England (NE) has a legal duty to notify Sites of Special Scientific Interest and ensure that they remain in good condition. NE work can include making payments for habitat management as well as ensuring that no activities take place which will damage the special features of the SSSI without NE consent. Cayton, Cornelian and South Bays SSSI extends from the Spa in Scarborough in the north to Killerby Cliff in Cayton Bay in the south and includes the area below Knipe Point.

- 4.5 The SSSI is notified for a number of features including geological exposures and a variety of habitats on the slopes (details of interest features and a site map are available on the SSSI citation). These features are maintained in good condition by the continuation of natural processes including coastal erosion and slumping of the coastal slope.
- 4.6 Natural England state that operations likely to damage the SSSI would include drainage, modification of the structure of watercourses, changing water levels, erection of sea defences or coast protection works, modification of natural features and battering, buttressing or grading of rock surfaces. Any of these actions will require the "consent" of Natural England before any work can be agreed.
- 4.7 Any engineering solution which is designed to stabilise the slope or change the slope hydrology is likely to have an adverse impact on the biological features i.e. the habitat mosaics and the species that rely on these habitats.
- 4.8 However in Natural England's view an adaptation approach will be more likely to be environmentally acceptable, securing favourable condition of the SSSI features in the long term and will not have the maintenance requirements of engineering structures.
- 4.9 Based on Natural England' comments it is considered unlikely that any engineered solution be given consent by NE which would meet the objectives as set out in sections 3.6.1 and 3.6.2.
- 4.10 The process of 'adaptation' is defined as "the process of becoming adjusted to new conditions, in a way that makes individuals, communities or systems better suited to their environment".
- 4.11 The position of NYCC is that the A165 now follows a new route as a result of the completion of the Scarborough Integrated Transport System (SITS) project. If Filey Road became unsafe or required closure traffic would be diverted onto the new road. Consideration would then need to be given to providing properties adjacent to Filey Road with access.
- 4.12 The risk to Filey Road is, however, reported as being comparatively low at the present time and the road and adjacent land will continue to be monitored. An emergency response contingency plan is also in place which covers our response to the need for emergency action at Knipe Point/Filey Road. Utilities have already been offered the opportunity to relocate their services alongside the new A165. So far none have taken up this offer.
- 4.13 It is considered unlikely therefore that any funding contribution to a scheme adjacent to the A165 would be forthcoming in the immediate future.
- 4.14 The National Trust's position is that at this site it has neither assets at risk nor an interest in property with any commercial value. It therefore takes essentially a neutral stance. Nevertheless the Trust remains committed to

working with other stakeholders to assist them to find a long-term management strategy that responds to the inherent instability of Knipe Point/Cayton Bay.

- 4.15 The Trust feels that consideration, including the probability of long-term effectiveness, of all the options available (not just engineering works) is essential, and recognises that a phased approach may be necessary. Where any prospective solutions need work on Trust land, it would allow this provided they are consistent with the agreed long-term management strategy and the SSSI designation, and within the constraints placed on the Trust by its charitable status.

## **5. ASSESSMENT**

- 5.1 Coastal defences are provided where it is sustainable and affordable to do so, but it is not possible to protect every stretch of coastline. Defences must be technically sensible and sustainable over time, and we must ensure value for money is achieved with public funds, paid for by taxpayers across the country. Public money is therefore prioritised in order to achieve maximum benefit from it for the country and society as a whole.
- 5.2 Should an engineering project be considered for Environment Agency funding certain criteria are required to be satisfied. Prospective projects are awarded an Outcome Measure score based primarily on the cost of the project and number of properties to be protected and the asset.
- 5.3 In the opinion of Officers it is not thought that an engineering solution should be promoted to address the land instability at Cayton Bay for the following reasons:
- i. The Shoreline Management Policy for the bay is “no active intervention “ a policy approved by the Environment Agency, Natural England and SBC. No active intervention is a decision not to invest in providing or maintaining defences.
  - ii. Natural England has expressed concern that “any attempt to stabilise or improve the drainage of the cliffs below Knipe Point would lead to significant damage or destruction of biological features of the Site of Special Scientific Interest (SSSI). Moreover Natiral England state that the invertibrate interest is maintained by the presense of a range of habitats which are reliant on the continued instability of the site. Natural England believe that stabilisation of the slope would eventually lead to loss of some of the habitats (eg the bare ground and ponds) which would lead to loss of the invertibrates that rely on those habitats.
  - iii. In our opinion therefore any engineering solution proposed would be unlikely to recieve NE’s “consent” and would be at odds with the Nation Trusts position and thereby unable to be progressed without their approval.

- iv. The National Trust as landowner of Cayton Cliff, has a policy for the sustainable management of its coastal sites, known as “shifting shores - living with a changing coastline”. The Trust realises that sometimes choices will be hard because there may be adverse consequences whatever decisions are taken. The National Trusts policy is to take a long term view, working with natural coastal change wherever possible.
  - v. The report commissioned by SBC “Cayton Bay Cliff Stability Assessment Ground Investigation and Appraisal of Engineering Stabilisation Options, Halcrow, April 2009, investigated a range of engineering stabilisation measures that could be considered to provide improvement and long term stability of the site. However the report identified that the costs of promoting the preferred scheme relative to the benefits could be prohibitive and would require successful demonstration of the required benefit cost assessment process.
  - vi. Notwithstanding the environmental constraints imposed on any engineered solution the economic case for the consideration of a scheme requires the demonstration of a cost benefit ratio greater than unity for a scheme to have a realistic chance of success in receiving grant aid. Many promoted schemes around the country are unsuccessful with far higher ratios than this due to the finite nature of Government funding.
- 5.4 Following discussion with Knipe Point residents, their legal representatives and consulting engineers it is pleasing to report that the Knipe Point Residents Association is to investigate and if possible take forward potential solutions independently of SBC. To assist in this process the Knipe Point Residents Association via its legal representatives will be setting up a working group of relevant agencies. SBC Officers are available to assist in this process if requested.
- 5.5 It should be pointed out that notwithstanding that the Council has taken advice in this matter and attracted grant aid for the site investigation there is no guarantee/commitment that a cost effective and environmentally acceptable scheme can be undertaken, either privately or publically.
- 5.6 Agreement has been made with the respective agencies that the preferred course of action is therefore to be consideration of adaptation options including any possible mechanisms for moving people, property and infrastructure away from the area at risk of landslip, allowing natural processes to continue and resulting in sustainable coastal management. It was identified in the Halcrow report that consideration of adaptation would be appropriate at Knipe Point.

### **Consultation on Coastal Change Policy**

- 5.7 Currently no legal mechanism exists within the UK for home owners threatened by coastal erosion to claim compensation for their losses.

Therefore the only current mechanism is protection via engineering measures funded privately or by grant aid. However as stated above, it is the opinion of Officers that grant aid would not be forthcoming for an engineering solution at this site.

- 5.8 SBC has been at the forefront of lobbying and policy-making on coastal adaptation, through national working groups comprising national Government departments and agencies alongside local councils, and, as a result, the Government is developing a Coastal Change Policy for England — supported by the £11 million fund for innovative adaptation projects.
- 5.9 This involves DEFRA developing approaches to support communities that face risks of coastal erosion and coastal flooding in cases where properties, businesses and infrastructure are significantly impacted. This work aims to ensure that communities and infrastructure are more resilient to the impacts of coastal change.
- 5.10 To deliver this project DEFRA is working with local Government to generate and then test possible methods of delivery. These will form a coastal change policy framework which will set out how government and communities can respond to and plan for change.
- 5.11 To this aim DEFRA has published a “Consultation on Coastal Change” document. The consultation provides details of a new coastal change pathfinder programme that DEFRA are intending to establish. Bids are invited from coastal local authorities interested in becoming coastal change pathfinders. Pathfinders would be able to explore some of the ideas and approaches set out in the consultation. A new coastal change fund of up to £11 million nationwide is available to support their work.
- 5.12 Scarborough Council wishes to answer the Government’s call for ‘pathfinder’ bids for a share of this £11 million to help the Knipe Point community adapt to coastal change, building on its experience of coastal management and working closely with communities to plan for coastal change.
- 5.13 The consultation is looking for ways that communities can be supported in the face of an eroding coast, if sea defences cannot be justified. This might include taking a different approach to development control, giving councils the power to buy at-risk properties and lease them back to residents, giving people practical help if they lose their homes, and maintaining infrastructure that is vital for businesses and householders.
- 5.14 Pathfinder projects are expected to develop imaginative local solutions to issues such as loss of investment, loss of confidence, blight and environmental degradation which affect many of our coastal settlements to varying degrees. The Council will also continue to campaign for long-term solutions by responding to the consultation and demonstrating innovative schemes that can be repeated elsewhere.

- 5.15 Upto £3 million is available for the coastal change fund for the remainder of the current financial year, and up to £8 million for the 2010/11 financial year.
- 5.16 This will enable successful pathfinders to get work quickly underway with their communities on understanding the potential future changes and starting to plan for and manage these. In the light of the experience of the pathfinders and responses to this consultation, DEFRA will review whether there is a case for continuing with the coastal change fund in future, subject to wider decisions on funding. Our long term aim, in line with overall principles for effective delegation to local areas, and streamlined local government finance, is that adaptation to coastal change should be part of mainstream decision-making and funding.
- 5.17 Approaches could range from projects to help maintain beach car parks or access points damaged by coastal change; to exploring ways of supporting “roll-back”; to buy and lease back schemes designed to smooth the transition where a property is at risk of being lost in the near future.
- 5.18 Bids for pathfinder status will need to demonstrate the following :
- Evidence of the risk of coastal change that the community is facing, with priority being given to areas facing significant or immediate challenge.
  - The contribution proposed spending will make to the overall aim of supporting communities in adapting to coastal change in a way that ensures continuity of community.
  - Broad objectives and outcomes – with identified and timetabled deliverables, including consideration of how the work undertaken during the pathfinder could be carried forward in the long-term.
  - Commitment to working with existing funding streams; and identifying and exploring opportunities for income generation and working alongside other private contributions.
  - Commitment to work with local partners (both public and private), and engage with the local community. DEFRA will be particularly interested in approaches which seek to support better informed communities, able to shape decisions, and innovative approaches to build local adaptation solutions.
  - How the approach will link up with local spatial planning and enable the local community to influence and shape strategic decision-making for their areas.
  - Clear commitment to share lessons and participate in wider evaluation of the pathfinder programme.

5.19 DEFRA envisage that projects and approaches to using the fund explored by pathfinders should meet the following criteria :

- The focus should be on adapting to coastal change (although approaches that additionally support adaptation to coastal flooding risk could also be explored).
- The emphasis should be on providing benefits to the wider community where these are proportionate to the costs.
- The focus should be on those sections of the community that are the most vulnerable to the impacts of coastal change.
- Approaches should tie in with a long-term plan for change within the community and be supported through extensive community engagement and discussion.

DEFRA are also proposing that part of the fund should be made available to cover some of the transition costs currently incurred by individual homeowners who experience total loss of a home due to coastal erosion. DEFRA are inviting views on proposals to make a grant available to local authorities to cover a baseline level of assistance to help with the immediate demolition and moving requirements that homeowners losing a property to coastal erosion face.

5.20 DEFRA propose that this assistance grant would provide:

- Assistance with moving to a new home of up to £1,000 (towards costs associated with removals, redirection of post, reconnection of services etc.); and
- The costs of demolishing the property for which the homeowner is liable, enabling local authorities to make provision for demolishing properties safely at the public expense rather than charging the homeowner. Demolition costs are expected to be approximately £3,000 per property (but could be up to £5,000 depending upon the size and hazards of the property).
- The Coastal Change Fund would not be limited to properties within selected pathfinders.

5.21 Given that the practical issues that the proposed scheme will cover will be encountered in all cases of loss as a result of coastal erosion, DEFRA's intention is that the assistance grant would be available in areas regardless of whether the property had been previously defended or not and where the property :

- is at imminent risk, is vacated in agreement with the authority, is declared unsafe or is lost as a result of coastal erosion (or coastal slip) during the running life of the scheme;

- is the sole residential property of the homeowner (i.e. not a second home, buy to let or other type of investment property);
  - is a fixed dwelling (i.e. is not a movable home such as a caravan or temporary structure);
  - was purchased before the consultation document was launched; and
  - was vacated by agreement, demolished or lost to erosion after the consultation document was launched (subject to the outcome of this consultation and establishment of an appropriate payment mechanism for any grant that is introduced, claims will be eligible backdated to the launch date of this consultation).
- 5.22 Local authorities currently have statutory duties regarding the process for demolition of unsafe properties. DEFRA propose that the demolition and moving assistance grants scheme would run in parallel to Authorities' current duties. This will keep administration costs for the process to a minimum.
- 5.23 Pathfinders may also want to consider approaches to facilitating relocation of facilities or businesses at risk, for example through their planning strategies, where this is an adaptation measure that has been identified through their community adaptation planning and engagement. The following section provides some more details on how facilitating rollback could help support local businesses in adapting.
- 5.24 The concept of "Rollback", in which businesses or dwellings physically move further inland away from the threat of coastal erosion, has been identified as a way to furthering sustainable coastal economic, environmental and social infrastructure development. This approach is particularly relevant to the caravan and holiday park industry.
- 5.25 The consultation on coastal change policy and the accompanying request for Pathfinder projects provides an ideal mechanism for exploring the various measures available to assist the residents of Knipe Point adapt to coastal change. Central government is clearly moving towards a new policy for those affected by coastal change and regardless of the success or otherwise of the Pathfinder bid it is hoped that assistance will be forthcoming through the new policy.
- 5.26 The Pathfinder scheme is a short-term funding package (Autumn 2009-Spring 2011), but if judged successful and if future money is available will be continued. Ideas about what local authorities could deliver under this scheme are varied and largely uncertain/untested. This will be a particular challenge especially for those communities that have already suffered losses and continue to face an uncertain future. Knipe Point, Cayton Cliff provides a real-time example of the challenges faced by all stakeholders.

## **6. IMPLICATIONS**

### **(a) Policy**

- 6.1 The proposals accord with the Council's SMP2, which was adopted in May 2007 and the Cayton Bay Coastal Strategy (2002).

### **(b) Financial**

- 6.2 It is pleasing to notify Members that £300,000 Environment Agency grant aid funding has been secured so far for this investigation.
- 6.3 The total expended to date (as at 29.8.09) on consultants ( Halcrow), contractor (Norwest Holst) and officer time is £315,000.
- 6.4 A contractual dispute is ongoing with Norwest Holst in relation to additional claims for time on site which may increase the total cost of the investigation. However additional third party funding has been secured to fund any shortfall in grant aid.
- 6.5 The grant is awarded in accordance with the Environment Agency's Memorandum relating to Scheme Approval and Grant under the Coast Protection Act 1949.
- 6.6 Under the terms of the grant, the Council is required to complete the study, identify the problems and make the results of the study available to the Agency.
- 6.7 If any of the above conditions are not fulfilled, the study will no longer be eligible and the Agency may take steps to recover any grant paid.

### **(c) Risk**

- 6.8 The risks, which may arise from the undertaking of study, are as set out in Appendix A.

### **(d) Legal**

- 6.9 The Cayton Bay Instability Investigations and any possible future works have been carried out using the Council's permissive powers under the Coast Protection Act 1949.

### **(e) Environmental and Sustainable Development**

- 6.10 It is not envisaged that the proposed Pathfinder bid will in itself adversely impact on the environment. Any adaptation measures will be undertaken having regard to health and safety and other considerations.

**(f) Others**

6.11 I have considered whether the following implications arise from this report and am satisfied that there is no identified adverse implications that will arise from this decision to proceed with the Cayton Bay Instability Investigations.

Equalities and Diversity  
Staffing  
Planning  
Crime and Disorder  
Health and Safety

**7. ACTION PLAN**

7.1 The current programme is given below:

Prepare Pathfinder bid	September 2009
Cabinet receive update report and actions thereafter	To be reported as necessary



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**Background Papers:**

Cayton Bay Coastal Strategy (2002).  
River Tyne to Flamborough Head Shoreline Management Plan 2 (2007)  
Cayton Bay Cliff Stability Assessment Ground Investigation and Appraisal of Engineering Stabilisation Options (2009)

Appendix A

Risk Matrix

Risk Ref	Date	Risk	Consequences	Mitigation	Current Risk Score	Target Score	Service Unit Manager/ Responsible Officer	Action Plan
1	8.9.09	Borough Council attracts liabilities and responsibilities as a result of undertaking the Pathfinder bid.	Council could be subject to legal action from affected stakeholders	Pathfinder bid made under powers of well being to residents. If successful affected stakeholders agreement will be sought before any implementation commences.	B4	B2	CB/CR	Result of bids announced Autumn, report as required.
2	8.9.09	Failure to obtain full support from all consultees.	Pathfinder bid not proceed.	Full consultation with statutory consultees to secure agreement	C3	B2	CB/SR	Continue dialogue through public meetings
3	8.9.09	Pathfinder bid failure	No other course of action available to SBC. SBC ceases to take lead on issues relating to Knipe Point instability.	Residents continue self funded scheme development and investigations	C3	B2	CB/SR	Assist residents develop own solution.
4	8.9.09	Contractual dispute with Norwest Holst.	Additional claims for time on site which may increase the total cost of the investigation.	Additional third party funding has been secured to fund any shortfall in grant aid	C2	C1	CB/SR	Ongoing negotiations

**Glossary of Terms**

Risk	An event which may prevent the Council achieving its objectives
Consequences	The outcome if the risk materialised
Mitigation	The processes and procedures that are in place to reduce the risk
Current Risk Score	The likelihood and impact score with the current mitigation measures in place
Corporate Objectives	An assessment of the Corporate Objectives that are affected by the risk identified.
Target Risk Score	The likelihood and impact score that the Council is aiming to achieve
Service Unit Manager	The Service Unit or Officer responsible for managing the risk
Action Plan	The proposed actions to be implemented in order to reduce the risk to the target score

***Risk Scoring***

Impact	5					
	4					
	3					
	2					
	1					
		A	B	C	D	E
	Likelihood					

Likelihood:

- A = Very Low
- B = Not Likely
- C = Likely
- D = Very Likely
- E = Almost Certain

Impact

- 1 = Low
- 2 = Minor
- 3 = Medium
- 4 = Major
- 5 = Disaster