



PART A:	MATTERS DEALT WITH UNDER DELEGATED POWERS
REPORT TO:	POLICY AND RESOURCES COMMITTEE
DATE:	14 NOVEMBER 2019
REPORT OF THE:	HEAD OF WASTE AND ENVIRONMENT BECKIE BENNETT
TITLE OF REPORT:	ASSESSMENT OF INSTALLING PERMANENT ELECTRIC PUMPS TO REPLACE TEMPORARY DIESEL PUMPS IN MALTON
WARDS AFFECTED:	MALTON

EXECUTIVE SUMMARY

1.0 PURPOSE OF REPORT

- 1.1 This report provides an assessment of installing permanent electric pumps to replace temporary diesel pumps deployed when experiencing flooding in Malton.

2.0 RECOMMENDATION

- 2.1 To recommend:

- a) That the consequences of replacing temporary diesel pumps deployed in Castlegate, Chandlers Wharf and Sheepfoot Hill in Malton with permanent electric pumps are not positive due to the significant financial impact on the Council's revenue and capital budgets and the detrimental impact of pursuing a completely new scheme for Malton which is outside the scope of the Malton, Norton and Old Malton Flood Alleviation Scheme.
- b) A commitment to replace all the Council's diesel portable pumps with alternative energy efficient portable pumps over the next 5 years.

3.0 REASON FOR RECOMMENDATION

- 3.1 The Council resolved the following at the meeting on 5 September 2019 (Min Ref 34): A 20% contribution towards the Malton, Norton and Old Malton Flood Alleviation Scheme (MNOMFAS) up to a maximum of £320,000 from the New Homes Bonus Reserve on condition that the temporary diesel powered pump deployments on Castlegate, Sheepfoot Hill and Chandlers Wharf, Malton be replaced by the installation of permanent three phase electrically powered pumps in order to protect the health of the public by preventing exposure to dangerous concentrations of nitrogen dioxide, provided we receive a positive report on the costs and practicality of three phase pumps.

3.2 Further to this resolution, officers have undertaken due diligence, in liaison with NYCC colleagues and for the following reasons do not recommend replacing the temporary portable diesel powered pumps currently utilised in Malton with permanent pumps;

- i. The high level costs included in the 2012 Flood Study commissioned by NYCC, did not explore the feasibility of providing of permanent electric pumps however did provide a starting point of what could be done. The option that included permanent pumps in Malton estimated costs of over £1m and did not include the cost of the electric supply and securing wayleaves. These costs are now out of date and additional work would need to be commissioned by RDC to provide full scheme costs. Consultant's costs estimated to be in the region of £40,000.
- ii. The initial capital cost of implementing permanent electric pumps are estimated to be in the region of £1.5m subject to the outcome of the work required in (i). It would then be necessary to explore any funding available to support the delivery of this scheme. In additional annual capital costs for asset replacement assuming a 25 year life are estimated at £40,000 (assuming the replacement cost of £1m). RDC would need to include all these costs in the capital programme as this scheme would become a RDC project.
- iii. NYCC, as lead flood risk authority, over the past 3 years have commissioned spend in excess of £100,000 on consultants to examine each element of the Flood Study to produce a rationalised scheme for Malton, Norton and Old Malton and developed business cases for funding applications.
- iv. There is no skilled resource within either NYCC or RDC to maintain permanent electric pumps and therefore the future revenue costs associated with their installation would be more significant and involve the sourcing of the resource needed to undertake this. This is one of the reasons why permanent pumping options have been previously discounted. The reduction in flexibility over future maintenance and similar reduction in opportunities for the pumps deployment mean this has already been identified as less desirable and inappropriate to the scale of the issue. This has been presented to the Ryedale Flood Liaison Group and scheme development has continued with the most deliverable and cost beneficial options, given when all associated costs of the installation and maintenance of permanent pumps are considered it is very likely that the cost benefit ratio is lower than the scheme that is developed and presented for delivery to Elected Members at this time.
- v. Annual revenue costs for regular inspection, routine repair and maintenance, running costs including electricity supply and expertise/capacity to resolve pump failure are estimated at £20,000 pa. RDC would need to commission and procure these services and would need to increase the annual revenue budget to cover these costs.
- vi. Implementing permanent pumps would need to be a RDC project and would require additional capacity/expertise to deliver in the region of £30,000 pa and could take up to an estimated 2-3 years to deliver. The revenue budget would need to be increased to cover these costs.
- vii. Given the relatively small number of properties at risk from flooding (43), a disproportionate capital spend and higher and targeted future revenue commitment would be established which it is unlikely NYCC (and other funders) could support in one specific location and given the wider cross county issues it also is committed to in present programmes.

- viii. Elected Members are therefore advised to consider the costs of the electric apparatus during its lifespan, including the requirement for its potential future replacement at the end of its lifetime, alongside the on-going maintenance and running costs, all of which are likely to be higher and less flexible than established operations involving temporary pumps. Temporary pumps also offer more flexibility as there is more opportunity for adaptation and operation when future revenue spend decisions are required.
- ix. It is clear that electric options change the scheme more significantly than may have been considered by Elected Members when this amendment was proposed and may result in RDC continuing to maintain the pumps independently because of the higher maintenance costs and the wider implication on NYCC programmes.
- x. The business case for the proposed Malton, Norton and Old Malton scheme is due to be presented to the LEP in December and electric pumps represent a different option to the scheme. There is insufficient time to revise the proposed scheme and the opportunity to secure £500,000 LEP growth funding will be at risk.
- xi. The delivery of the scheme in Norton and Old Malton and timescales would need to be revised and partner funding contributions revisited.
- xii. The proposed scheme refines the existing response to flooding in Malton, Norton and Old Malton and has a positive impact on carbon emissions. In the absence of details for a different scheme it is currently not possible to undertake a meaningful carbon impact assessment comparing permanent electric pumps with temporary diesel pumps. A Climate Change Impact Assessment is attached at Appendix 2 to illustrate the carbon emissions from diesel pumps operating 24/7 for one week to provide some context from the operation of three pumps.
- xiii. In line with the Council's Carbon Reduction Action Plan the option to replace diesel pumps with new pumps with reduced emissions will be explored as part of the pump replacement programme over the next 5 years and a further report will be brought back to Elected Members for consideration.

4.0 SIGNIFICANT RISKS

- 4.1 A Council decision to implement permanent pumps in Malton would present a significant risk to the delivery of the MNOM Flood Alleviation Scheme and the opportunity to benefit from the funding committed by other contributors would be at risk.
- 4.2 Delays to delivering the scheme will therefore mean that improvements to the response in all areas will not be implemented and the communities will be left with a status quo when repeat flooding events continue to affect Malton, Norton and Old Malton. A series of alleviation measures have been identified which will improve the response to flooding, reduce the carbon impact of present operations and serve to reduce the impact and flood risk affecting these communities
- 4.3 There are also significant financial risks associated with replacing diesel pumps with permanent electric pumps which will impact on the Council's revenue and capital budgets.

5.0 POLICY CONTEXT AND CONSULTATION

- 5.1 This report relates to all the Council's priorities; managing the environment of Ryedale with partners and supporting improvements to enhance and deliver sustainable growth; making the best use of resources to ensure maximum benefit for all customers and communities and building capacity in partnership.

REPORT

6.0 REPORT DETAILS

- 6.1 At its meeting on 8 December 2016, the Council made a number of decisions following the Scrutiny Review of the Council's role in Flood Management including the consideration of a funding allocation from the New Homes Bonus towards the funding gap of £1.8m of the approved DEFRA Grant in Aid Scheme for the alleviation of flooding in Malton, Norton and Old Malton and that any contribution should be to a maximum of 20% of the funding gap (Minute No 37).
- 6.2 The Council, at its meeting on 6 December 2018, also approved additional revenue funding of £13,000 (to provide 50% funding totalling £25,000) to support a shared one year fixed term contract for a joint Flood Risk Management Project Manager with NYCC (Minute No 50) to secure delivery of the MNOMFAS.
- 6.3 NYCC as Lead Flood Risk Management Authority, commissioned consultants to make progress with the MNOMFAS which identified a series of actions and further detailed designs have resulted in a series of options to deliver a rationalised scheme with whole scheme costs now valued at £1.6m (previously £3m).
- 6.4 Since April 2019, the Project Manager has been working closely with consultants progressing with detailed designs to enable specifications to be produced and contractors to be commissioned to implement and deliver specific alleviation measures to meet the conditions associated with securing £500,000 LEP Growth Funding.
- 6.5 Evidence to support the business case for the MNOMFAS is due to be presented to the LEP in December and it is a condition of the funding that commitments are in place for the December meeting to demonstrate funding for the total costs of the scheme which must be delivered by 31 March 2021.
- 6.6 At the Council meeting on 5 September 2019, officers were asked to look into the costs and practicalities of replacing the portable diesel pumps used in Castlegate, Chandlers Wharf and Sheepfoot Hill in Malton with permanent electric pumps
- 6.7 A due diligence exercise has been undertaken in liaison with NYCC colleagues who have been leading the work for developing the MNOMFAS as Lead Flood Risk Authority who are the experts in reducing flood risk across North Yorkshire and determining deliverable, cost-beneficial solutions.
- 6.8 Based on the outcomes of the due diligence exercise detailed in the reasons for recommendations in section 3 of this report, Officers do not consider replacing the diesel pumps with permanent electric pumps is cost effective or practical therefore do not recommend this option is progressed.

7.0 IMPLICATIONS

7.1 The following implications have been identified:

a) Financial

Installing permanent pumps to replace portable diesel pumps in Malton

The following cost forecasts provide an indication of the financial impact for the Council to replace the diesel pumps with permanent electric pumps in Malton and it must be noted that further work would be required to confirm the associated costs:

Revenue: One off revenue costs £40,000 to commission consultants to design the scheme plus recurring annual revenue costs associated with managing the assets estimated at £50,000.

Capital: £1.5m to deliver the scheme in Malton plus £40,000 for 25 years to fund the replacement of the asset.

b) Legal

It is a condition of the Malton, Norton and Old Malton Flood Alleviation Scheme Business Case to secure £500,000 LEP Growth Funding that partner funding commitments are secured before December 2019 and the scheme is delivered by 31 March 2021.

c) Other (Equalities, Staffing, Planning, Health & Safety, Climate Impact, Environmental, Crime & Disorder)

The Climate Change Impact Assessment (CCIA) attached at Appendix 1 demonstrates that delivering the MNOMFAS has positive carbon impacts. At present there is insufficient detail to complete a CCIA for a different scheme to implement permanent electric pumps however a CCIA is attached at Appendix 2 to illustrate the carbon emissions from diesel pumps operating 24/7 for one week to provide some context from the operation of three pumps.

8.0 NEXT STEPS

8.1 If Elected Members decide to progress with a different scheme replacing temporary diesel pumps with permanent electric pumps additional work would need to be commissioned and budget approval would be the subject of a further report in due course. In addition the opportunity to secure the LEP funding would be place at risk and the delivery of the scheme would be jeopardised.

Beckie Bennett, Head of Waste and Environment

Author: Beckie Bennett, Head of Waste and Environment
Telephone No: 01653 600666 Ext: 43483
E-Mail Address: beckie.bennett@ryedale.gov.uk

Background Papers:

Scrutiny Review of the Councils Role in Flood Management considered by Council on 8 December 2016 Minute 37
Additional Funding for a Flood Risk Management Project Manager Report to Council on 6 December 2018
P&R Report 4 July 2019 Min 28 and Full Council 5 September 2019 Min 34