

1. Introduction

- 1.1 This report has been prepared using a baseline of the mid 1990's, therefore its accuracy is limited post that baseline.
- 1.2 There are a number of historic sewerage issues that will be potentially affected by the impact of additional development within Malton and Norton and other areas within the drainage catchment area of Malton Waste Water Treatment Works (WWTW).
- 1.3 A number of the main sewers are combined, taking foul and surface water flows from the catchment area.
- 1.4 Yorkshire Water prepared an Asset Management Plan (AMP) for the Ryedale Sewerage Agency Area in the mid 90's, all the sewage and sewerage related issues for the Malton/Norton catchment were recorded at that time in the AMP. Yorkshire Water (YW) will have to confirm that the issues have or will have to be resolved to enable further development.

2. Historic Sewerage Issues

- 2.1 The various historic sewerage issues within the catchment area of the Malton WWTW at the time of the AMP preparation are as follows: -
 - Malton WWTW: limited capacity and air pollution issues;
 - Old Malton – Lascelles Lane sewerage pumping station: reliability, sewerage pollution issues;
 - Butchers Corner, Malton: air pollution issues;
 - Norton – Vine Street area: limited capacity, sewer structural integrity issues;
 - Malton Bacon Factory (MBF), Norton – Impact of proposed expansion of the facility and increase in production levels;
 - The environmental impact on the River Derwent and local watercourses when storm water overflows and pumping station emergency overflows operated.

3. Malton Waste Water Treatment Works (WWTW)

- 3.1 The WWTW receives foul and surface water effluent from the catchment area, which include Malton, Norton, Old Malton, 'Eden Camp' area, and villages on the B1257 corridor west of Malton and MBF.
- 3.2 There are capacity constraints on the WWTW and also air pollution/smell issues emanating from the WWTW. The WWTW is located within the 400m of the York Road Industrial Estate and historically numerous complaints were received from businesses and residents who had premises nearby.
- 3.3 Any future development within the WWTW catchment area will impact on the capacity and pollution issues highlighted in 3.2 above if not fully addressed.

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4. Malton Sewerage

- 4.1 Butcher's Corner (junction of B1248 and B1257) is an environmental air pollution hot spot, which is recorded in the Highway Authority's (NYCC) Local Transport Plan (LTP). The issue is highlighted by the road signage for switching vehicle ignitions off when stationary at the traffic light controlled junction. There were/are air pollution issues as a result in part of sewer gas emissions.
- 4.2 The sewer gas build up is a result of the foul sewage discharge from Old Malton pumped into the gravity sewer in Old Maltongate west of the former rail bridge, east of the Fitzwilliam Estate Offices, one mile distance from the Lascelles Lane pumping station. Septicity develops in the effluent, resulting in increase sewer gas emissions.
- 4.3 The sewer in Old Maltongate is a combined sewer and the sewer gas discharges to street level though the highway road gullies at the Butchers Corner. NYCC had plans to replace the untrapped gullies with trapped gullies, however this would only alleviate the problem as when the traps were dry gas could still pass to street level.
- 4.4 The sewage ejector stations on Castlegate and Sheepfoot Hill were unreliable and YW had plans to replace with submersible pumps. Have the ejector stations been replaced or upgraded? The effluent 'pumped' by these stations passes through the sewerage network close to Butcher's Corner.
- 4.5 The proposal to develop Pasture Fields off the B1257 Broughton Road, Pasture Lane and Showfield Lane will exacerbate the pollution problems at Butchers Corner as well as increase the flow at the WWTW, and significantly if surface water runoff from the proposed development indirectly drains to the combined public surface water sewers in southern Malton.

5. Old Malton Sewerage

- 5.1 The Lascelles Lane pumping station had issues related to reliability and septicity of the sewage pumped forward to the WWTW, which impacted on the air environment at Butchers Corner detailed in 4.2 above. YW/RDC installed a gas injection system to reduce the septicity, which partially alleviated the problem at Butchers Corner, whilst the gas injection was operating.
- 5.2 YW had concerns with the actual revenue costs, resulting in the gas injection system frequently being not fully operational.
- 5.3 The sewage effluent from the 'Eden Camp' area is pumped to Old Malton. The tourist attraction is $\frac{3}{4}$ mile north of the Lascelles Lane pumping station.
- 5.4 The proposal to develop land off the Westgate Lane will exacerbate the problems associated with the Lascelles Lane pumping station. If surface water runoff from the

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proposed development will need to outfall that has no direct or indirect connection to the pumping station.

6. 'Eden Camp' Sewerage

- 6.1 The summer seasonal flow from the Eden Camp tourist attraction will be higher in nitrates. The same problem occurred at Rosedale Abbey the first summer after the first time foul sewerage system was commissioned; Ryedale DC had to pay for additional submerged aerated filter plant (SAF) to be installed by YW to enable the effluent outfall discharge to meet the Environment Agency discharge consent for the WWTW in the village.
- 6.2 It is a seasonal issue as there are not the normal levels of non-human body effluent in the flow to dilute the nitrate content.
- 6.3 Additional development in this area will impact on the issues at Old Malton and Butchers Corner. The foul effluent from the 'Eden Camp' area is pumped to Old Malton and then pumped forward to the WWTW via the Lascelles Lane pumping station.
- 6.4 Is there an emergency overflow and/or storm water overflow from the 'Eden Camp' pumping station and where does it discharge to? Potential environmental pollution of watercourses etc in the locality if there is a potential pollution incident caused by under capacity and/or mechanical and electrical (M&E) breakdown. Is there telemetry on the pumping station to warn YW of such potential pollution incidents and what is YW's required maximum response time to deal with such incidents?

7. Norton Sewerage

- 7.1 The proposed expansion of MBF in the mid/late 1990's would have required significant improvements to the Malton WWTW capacity and sewerage infrastructure in Norton, due to the increased levels of trade effluent and its consistency from MBF. Were the improvements to the WWTW and Norton sewerage infrastructure implemented as part of the MBF expansion proposals?
- 7.2 What are the longer term plans for MBF, and what trade effluent restrictions are currently in place for MBF?
- 7.3 Historically there were problems with the main sewer in the Vine Street and Plum Street area. In the same area there is a sewage pumping station the northern side of the railway, accessed off Wallgates Lane, which had M&E problems. There were concerns related to the capacity of this pumping station when MBF were looking to expand in the 90's.
- 7.4 The sewage from Norton is pumped to Malton WWTW from the pumping station the southern side of the railway to the rear of the new Lidl supermarket (formerly the

Robson Motor Services development). There were concerns also on the capacity of this pumping station when MBF were looking to expand in the 90's.

- 7.5 What impact has the recent developments on Scarborough Road and Park Road/Bark Knotts Terrace area have had on the sewerage network?

8. Storm Water Overflows/Emergency Overflows

- 8.1 There are a number of storm water overflows and pumping station emergency overflows on the sewerage network. They discharge to the River Derwent or other local watercourses.
- 8.2 If they are still operational in times of heavy rainfall or mechanical and electrical (M&E) breakdown of the pumps then there is the potential environmental pollution of watercourses/surrounding area.
- 8.3 Further development will potential increase the frequency of these overflow features operating. Although YW were planning to provide telemetry on the pumping station to warn YW of such potential pollution incidents and reduce the risks, the risk of pollution remains.

9. Analytical Modelling of Sewerage Network

- 9.1 Does YW now have a computer model to analyse the whole of the sewerage network within the Malton WWTW catchment area?
- 9.2 Before any further development is considered or even approved the sewerage network must be analytical modelled to determine the impact of any potential development and the cost of the appropriate improvements fully assessed as a whole and not piece meal.

10. Freedom of Information (FOI) Requests

- 10.1 FOI to YW or the Water Services Regulation Authority (OFWAT) re infrastructure details, pumping and ejector station maximum capacity and level of spare capacity, sewerage network and WWTW capacities, the issues highlighted in the AMP or any subsequent updates/revision and capital expended on refurbishing and improving the network and WWTW.
- 10.2 FOI to YW or OFWAT and Environment Agency (EA) re pollution incidents directly and in directly related to combined sewer storm overflows, pumping/ejector station storm overflows and/or emergency overflows operating, and incapacity in the sewer network.

11. Conclusion

- 11.1 Before any further development is considered or even approved the sewerage network must be analytical modelled to determine the impact of any potential development and the cost of the appropriate improvements fully assessed as a whole and not piece meal to ensure the sewerage network can sustain the level of development being considered.
- 11.2 This report has been prepared using a baseline of the mid 1990's and should only be used as a guide for obtaining the additional information to be requested in section 9.0 above.