

17th July 2014

Agenda Item 6

REPORT OF SERVICE DIRECTOR, HIGHWAYS

A NEW APPROACH TO CARRIAGEWAY REPAIRS AND POT HOLES

Purpose of the Report

1. This report is to advise Committee of a new approach to carriageway repairs and pot holes.

Information and Advice

2. Nottinghamshire is the 11th largest county in the UK and the County Council looks after a network of around 2,600 miles of road.
3. The condition of the County road network continues to deteriorate in particular the unclassified residential roads where over 21% are in need of repair. Whilst there was little snow last winter the very wet weather and localised flooding continued to damage the surface and foundations of the roads including creating more potholes.
4. An asset management strategy - 'prevention rather than cure' - is followed in the County with programmes of surface dressing to preserve the condition of existing sound road surfaces and resurfacing of worn out roads but this still leaves many roads in need of patching works pending funding for more substantial work.
5. The County Council budgets include over £2.8m per year for carriageway repairs such as patching and filling in pot holes with nearly 34,000 pot holes and carriageway repairs in 2013/14. In addition for this year (2014/15 only) the County Council has been allocated £1.65m from the Government's Severe Weather Recovery Scheme and has won through competition an additional above average award of £2.78m from the Government's Pot Hole Fund, providing a total of £7.23M this year. This will lead to approximately 86,000 pot hole and carriageway repairs being completed in 2014/15. However, whilst this is welcomed it must be noted that this is mainly treating the symptom rather than the cause – worn out road surfaces – which only a long term increase and certainty of government funding for resurfacing will properly address.

6. The additional repairs will be delivered by the Council's Highways Operations group and its current supply chain arrangements.

A New Approach

7. A new approach to repairing carriageway defects and pot holes has been developed which incorporates many of the principles and guidance from the national pot hole review published by the Department for Transport's (DfT) Highway Maintenance Efficiency Programme (HMEP).

The basic principles of this new approach are to put as many carriageway repairs as possible into planned patching programmes - to batch together patching works into small areas and introduce new repair methods where appropriate. For smaller or more urgent pot holes repairs a 'right first time' approach is to be adopted with the use of 'find and fix' teams, to undertake repairs quickly and include nearby pot holes at the same time.

Batching together of patching works

8. There are many roads in the County where the concentration and number of pot holes is so great that it would not be efficient to repair all the pot holes on an individual basis as they are reported. There are also many locations where a repair with the new cold asphalt is not appropriate because of the size of the pothole. In these situations the repairs are batched together and a new repair method used called Nu-phalt. This involves an infra-red unit heating up the road surface around the pot hole, mixing the resultant 'putty' with a proprietary material and then relaying the mixture. This new material fuses with the adjacent road surface to give a water-tight repair and can be completed in 20 minutes. There will still be many locations where it is more appropriate to use the conventional method of repair but overall this new method of repair will mean many more carriageway defects and pot holes can be repaired in a more cost effective way.

Right first time

9. The County Council currently aims to fix potholes which are deeper than 40 mm within a day in the busiest locations and within a few days in other locations. 40 mm is used as the 'intervention level' for repair as at that depth the damage has often penetrated the top layer of asphalt and will deteriorate even further if it is not repaired.
10. The conventional method of filling pot holes has involved cutting out the surface around the pot hole, filling the hole with hot asphalt, rolling the new surface so that it is level and then sealing the patch around the edge so that water cannot get between the old surface and the new. This method is time consuming, labour intensive and expensive but gives a high quality neat repair. Temporary repairs to the worst pot holes with cold asphalt pending a more permanent repair with hot asphalt also gave the impression of

inefficiency because two visits (often weeks apart) had to be made to repair each pot hole.

11. New mixtures of cold asphalt have now been developed which have similar properties to postcrete – the material comes in bags, is tipped into the pot hole, compacted with a hand rammer and then dries into a very hard surface in two minutes. Pot hole repairs with this new material can be completed in less than five minutes by one person and can be done in the rain because the material soaks up water within the pot hole. The repairs are not as neat as conventional repairs but are high quality, permanent and right first time with no repeat visits.

Find and fix

12. The new cold asphalt material is now used throughout the County by the nineteen Highway Inspectors. The vast majority of pot holes are found by Inspectors as part of routine safety inspections and they now fill in these pot holes there and then with the cold asphalt rather than ordering a repair from a conventional patching gang.
13. In addition, four Find and fix teams are now operating around the County responding to customer reports of pot holes and repairing any found with the new material. These improved methods are expected to dramatically reduce the time taken to repair most pot holes and create a much more responsive service to customers. In addition, the service is more cost effective with the new approach contributing to the efficiency savings already planned for 2015/16. Early indications are that residents and road users are very supportive of this approach and improvements in repair times will be included in the quarterly performance report to Committee.

Customer Reports

14. The County Council is encouraging people to report potholes via its Customer Service Centre and website. All such reports now come straight through to the Highway Inspector's iPad for action. If the pot hole is filled in there and then a message can be sent back to the customer confirming the pot hole has been filled. Since it was launched in 2010 the number of potholes reported by residents rather than by inspection has risen from 8% (2,282) to 28% (9,211). Over the last two years the number of pot holes repaired has increased from 27605 in 2011/12 to 33892 in 2013/14. Whilst routine inspections by the Council's highway inspectors continue to find most pot holes, unclassified roads are often inspected just once a year. Therefore without customer reports it is likely that a pothole could be left untreated for some time.
15. Reports of a pothole can be made – ideally online at www.nottinghamshire.gov.uk (this is more direct and less cost) - or by phoning 0300 500 80 80.

Statutory and Policy Implications

16. This report has been compiled after consideration of implications in respect of finance, the public sector equality duty, human resources, crime and disorder, human rights, the safeguarding of children, sustainability and the environment and those using the service and where such implications are material they are described below. Appropriate consultation has been undertaken and advice sought on these issues as required.

RECOMMENDATION/S

17. It is recommended that Committee note this report.

Andrew Warrington
Service Director Highways

For any enquiries about this report please contact:
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Constitutional Comments

18. Report for information.

Financial Comments

19. Report for information.

Electoral Division(s) and Member(s) Affected

20. All