

ROTHERHAM BOROUGH COUNCIL - REPORT TO MEMBERS

1.	Meeting:	Improving Places Select Commission
2.	Date:	Tuesday 16th April 2013
3.	Title:	Highway Maintenance – ‘Multihog’ patching and pothole procedures
4.	Directorate:	Environment and Development Services

5. Summary

Further to the report presented to Improving Places Select Commission on 25th July 2012, this report provides members with an update on the effectiveness of the new method of highway repairs and potholes defects using the ‘Multihog’ milling machine.

6. Recommendations

- **It is recommended that Members note the contents of the report**

7. Proposals and details

Highway Patching Works

Prior to the ‘Multihog’ milling machine becoming available small patching works had to be excavated by hand or conveyor milling machine. The hand method had health and safety risks related to the use of equipment that generated vibration; the process is therefore no longer practical and was also time consuming with low outputs. The conveyor milling machines are very large and difficult to move and require a large heavy goods vehicle to transport them from site to site. The minimum size of these machines is with a 1 metre wide milling head, which means that a significant amount of good carriageway is removed and it therefore wastes material.

The investment in the multihog has provided both milling operations and winter salting/ploughing capabilities. The machine has proved to be very effective in these work areas due to its versatility;

- It is small enough to carry out detailed planing around street furniture
- It reduces the amount of road surface to be removed
- It can travel quickly from location to location making it more efficient than traditional methods

- It can be quickly transformed from milling to salt spreading

The expenditure to complete smaller permanent carriageway patches by traditional methods would have cost approximately £60/m², this compares to approximately £30/m² when using the multihog machine.

Rotherham is one of the first councils in the country to use the machine which has generated significant interest and numerous visits have been hosted from other Local Authorities including: Bury, Derbyshire, Darlington, Lincolnshire, Tameside, Bardon Contracting etc. The initiative has also received media coverage in the 'Surveyor', 'Highways' and 'Local Authority Plant and Vehicle' magazines, the 'Rotherham Advertiser' (13 November 2012), as well as featuring in a case study by Multihog. **Appendix A**

Many positive comments have been received from residents who have been impressed with the speed and quality of the highway repair works carried out using the Multihog planer. As with any new initiative it is reassuring to receive positive feedback.

The 'Multihog' operation formed part of a successful submission to Association of Public Service Excellence APSE - Best Service Team: Highways, Winter Maintenance & Street Lighting - National Finalists.

Safety Defect Repairs

There are a number of issues with this existing method of pothole repairs;

- The quality of repair
- The number of repeat pothole repairs are rising
- Inefficient use of Highway Inspector and Delivery Team resources through repeated visits to the same location and/or defects
- Safety defects arising at the side of existing repaired defects

In order to address the above issues a new method of working is being trialled. This builds on the success of the patching work carried out with the Multihog planer, its versatility lends itself to carrying out permanent repairs to potholes. Using the Multihog planer provides a quick and efficient method of excavating the highway to accept better quality material and repair methods; this significantly reduces the number of repeat safety repairs being carried out at a location.

To be able to implement the new system, the response time to repair potholes needed to be extended from 24hrs to 48hrs, thereby enabling more efficient planning of works. This change has been endorsed by the Council's insurers along with the solicitors/ barristers that are used to represent the Authorities when defending third party highway claims.

Identification, Categorising and Risk Assessment

The Multihog work is identified by the Highway Inspector as part of the routine safety inspections; the existing procedure of generating cyclic inspection reports has not changed.

If a Priority 1 (24hrs) defect is identified, then a further risk assessment will be carried out on site.

The location of the pothole needs to be considered. Higher risk locations such as; schools, doctors, hospitals, high traffic volumes (vehicle/foot), vulnerable people, Permit Street, etc. will place this defect in the existing Priority 1 (24hrs) category.

All other defects are placed in the new (48hrs) category and the nearby, surrounding area is assessed. The methodology includes any previous temporary repairs and any other defects that could become hazardous in the near future. The completed repair should be of a "table top" size.

The cost of a traditional pothole (24hr) repair is around £12/defect and the cost of a 'Multihog' (48hr) repair is around £8/defect.

In addition to the milling attachment, the Multihog has a salt spreader and plough attachment. This equipment has been used successfully this winter to pre-treat parts of the highway network prior to snowfall, and also to plough and salt accumulations of snow. As an additional resource to our winter fleet, it has been particularly useful on parts of the network which are not accessible to the larger gritters. Salting routes have been devised for the Multihog which incorporate schools, Doctors surgeries, community centres, pedestrianised shopping areas, and remote villages.

8. Finance

Financial implications are considered within the body of the report.

9. Risks and Uncertainties

These are covered by the Code of Practice for Highway Inspection and Assessment.

10. Policy and Performance Agenda Implications

11. Background Papers and Consultation

Code of Practice for Highway Inspection and Assessment.

12. Contact

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Multihog's Versatility is just the job for Rotherham MBC

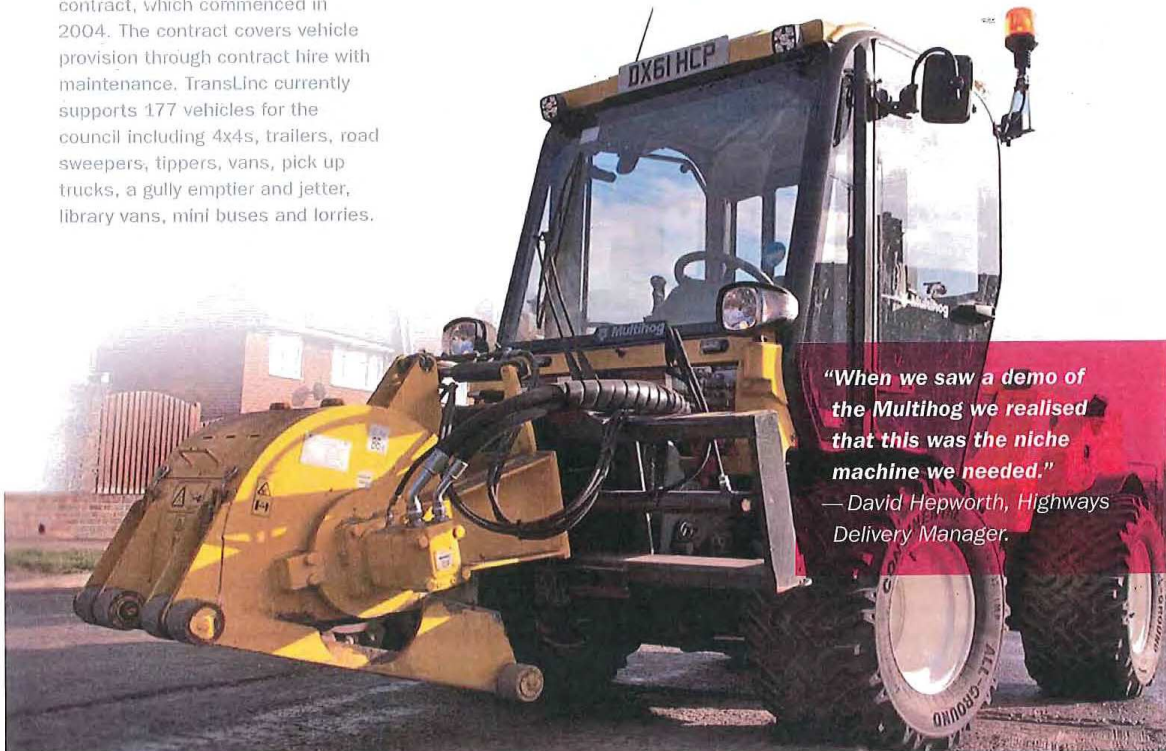
Rotherham
Metropolitan
Borough Council



ROTHERHAM MBC has taken delivery of a Multihog multi-purpose utility vehicle for highway maintenance duties to keep the region's road network safe and in good condition. The vehicle was supplied by TransLinc, May Gurney's specialist fleet services business.

TransLinc is working in partnership with the Council under a 10-year contract, which commenced in 2004. The contract covers vehicle provision through contract hire with maintenance. TransLinc currently supports 177 vehicles for the council including 4x4s, trailers, road sweepers, tippers, vans, pick up trucks, a gully emptier and jetter, library vans, mini buses and lorries.

The Multihog is being used primarily for patch planing this season, but along with the planer attachment the council also ordered winter service attachments in readiness for next winter. Having the hydraulically operated gritter unit and the heavy duty lift, tilt and angle snow plough available will however enable snow clearing to be carried out should the bad weather return before then. ↘



"When we saw a demo of the Multihog we realised that this was the niche machine we needed."

— David Hepworth, Highways Delivery Manager.



Previous patch planing operations relied on traditional methods which involved the use of multiple vehicles and manual breaking, and Highways Delivery Manager David Hepworth was keen to find a more streamlined procedure as he explains: "We had looked for a while for a quicker and more effective method for carrying out these types of repairs. Smaller machines were not up to the job and I was of the opinion that there was definitely a gap to be filled in the market. Following a short demo the Multihog was trialed for two days in real time repairs and the combination of the powerful base unit and the 400mm wide planer

attachment proved to be a time saving and efficient method which also eradicated the need for manual breaking. This contributes to much better health and safety procedures as any risk of hand arm vibration is avoided. Planing to a depth of 125mm, the attachment saves the cost of infill materials by accurately removing only what is needed. This produces a sound base for reinstatement and reduces transport and recycling costs by creating a re-usable material.

"We anticipated significant increase in structural damage after the winter period and Multihog pulled out all the stops to get the machine to us for

early January as required," says David. "Although the weather has not been as harsh as expected the machine has been in operation on a daily basis ever since. At the moment it is doing basic patching work but its versatility means that we will be using it within a planned scheme of first time fixing of pot holes and for major maintenance scenarios in future." ■

"We have been more than happy with its performance and the drivers love it – they regard it as their extra Christmas present"

If you require any further details or a demonstration then please do not hesitate to contact our sales department on the number listed below.



Multihog

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