



Colas complete further surfacing work for private contract client: Shouler & Son Estates

Retread is a cold in-situ recycling process which reconstructs the entire carriageway or footway surface to a depth of 75mm. With increasing focus on sustainability, Colas' Retread process offers a low CO₂ emission alternative. By reducing the output of energy, emissions and waste, Colas are able to aid clients in significantly lowering their carbon footprint and cost.

During May 2014, Colas Retread carried out a private contract in the estates of Stoke Rochford.

Shouler & Son Estates used Retread for the first time a couple of years ago at the country estate of Lord and Lady McCorquodale (Lady McCorquodale being the elder sister of Princess Diana) in Stoke Rochford, Lincolnshire.

They were convinced about the benefits that the process had to offer, such as: minimal waste occurring on site, significantly less lorry movements to and from each site and having the lowest carbon emissions of any construction process in the UK.

This year's contract consisted of 4 private roads totalling 3,347m².

One of which was the main road leading to Shouler & Son Estates. During the Retread process, the Colas team filled in eroded areas in the road's surface which were caused by the spell of harsh winters with road planings. Retread material was then applied to specific areas followed by a surface dressing finish to complete the works.

The project was carried out on time, within a time period of just 3 days and to budget. The professionalism of the crew contributed to this successful scheme and Shouler & Son Estates have already confirmed further work to be carried out later in the year.

Key Facts:	
Client:	Shouler & Son Estates – private contract
Date:	May 2014
Location:	Stoke Rochford, Lincolnshire
Duration:	3 days

Savings

Site	Meterage (m ²)	6mm used (Tonnes)	14m used (Tonnes)	Binder Retread C (Tonnes)	K170 (Tonnes)	Conventional surfacing (Tonnes)	Planings removed from site (Tonnes)
						Binder course 20mm HDM@75mm	
1. Cringle Road, Stoke, Rochford NG33 5EF	1,718	21.08	20.53	8.62	3.8	306.79	306.79
2. The Row, Little Ponton NG33 5BX	368	5.08	2.45	1.37	0.8	65.71	65.71
3. Grange Farm, Little Ponton NG33 5BP	220	3.44	3.6	0.95	0.5	39.29	39.29
4. Whalebone Lane, Little Ponton NG33 5BU	1,141	14.67	19.01	4.9	2.9	203.75	203.75
Total	3,447	44.27	44.59	15.84	8.00	615.54	615.54

With conventional surfacing techniques, **615.54** tonnes would have been removed and then reintroduced back onto site. This would be **61** lorry movements/loads, using **20** tonne lorries.

Total Energy Consumption & Green House Gases

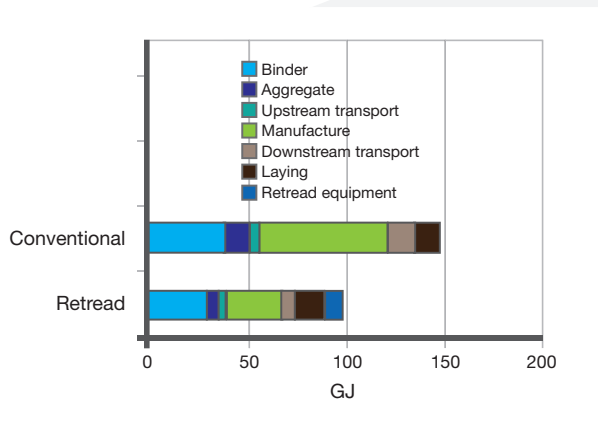
Conventional – Plane out 75mm & replace with DBM binder course

Retread – Pulverize 75mm & retread

Area – 3,447m²

Structure	Binder	Aggregates	Upstream transport	Manufacture	Downstream transport	Laying	Retread equipment	Total
Conventional	95.4	34.1	47.3	200.1	75.6	28.1	0.0	480.5
Retread	47.4	5.1	0.5	9.6	18.4	13.4	56.5	151.0

Comparison of Energy Consumption



Before & after – road 1



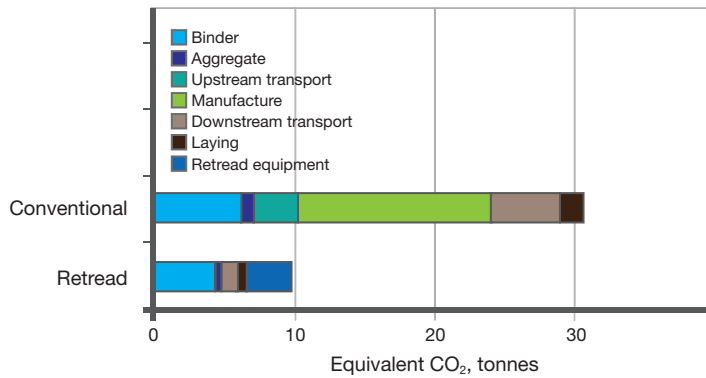
Before & after – road 2



GHG Emission in Equivalent CO₂, tonnes

Structure	Binder	Aggregates	Upstream transport	Manufacture	Downstream transport	Laying	Retread equipment	Total
Conventional	5.6	1.2	3.5	13.0	5.6	2.2	0.0	31.0
Retread	2.8	0.2	0.0	0.2	1.4	1.0	4.2	9.9

Comparison of Greenhouse Gas Emissions



“The Stoke Rochford Trust Estate is very pleased with the road Retread procedure carried out by Colas this summer to 3,347m² of Estate roads. We were delighted with the professional service and operation of the team on site, which minimised the disruption on a sensitive area of the Estate. The final product is excellent and hopefully will wear as well as a similar area carried out by Colas approximately 15 years ago.”

Simon Allam
Shouler & Sons Estates

Before & after – road 3



Colas Limited,
Dysart Road
Grantham
NG31 7LG
T: 01476 404 200
F: 01476 404 215
E: info@colas.co.uk