Using recycled aggregate.

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A state-of-the-art mobile recycling unit that processes excavated material, such as sand and gravel, into recycled aggregate is helping our business become more sustainable - contributing to our target of not sending any excavated material to landfill and reducing our carbon footprint.

We excavate and use large quantities of materials in the projects we deliver as part of our capital programme. In 2017/18 we used almost 50,000 tonnes of aggregate in different applications, such as bedding for pipes, in concrete, and as hardstanding for vehicles. We aim to recycle excavated material as aggregate wherever possible, instead of extracting, processing and transporting new material.

Recycled aggregate standards.

We already have Asset Standards that our design and construction teams all need to follow. These set out the performance requirements, particle size and chemical compatibility of materials. Before switching to alternative materials such as recycled aggregate, we need to be sure that they meet the standards that are required in each situation. As with regular aggregate, it's important that the appropriate material specifications are used to choose a material that's suitable for how it will be used.

On-site recycling.

The recycling unit is proving crucial in our ongoing programme of repairing and restoring water mains.

Instead of excavating material, disposing of it to landfill and using new aggregate to fill the trenches, the recycling unit processes excavated material by crushing it and sieving it, before combining it with other substances like cement additives to help make it stronger. This recycled material was used to help fill the trench after we'd repaired the pipe.

Benefits of using recycled aggregate.

By recycling and reusing the excavated material, we've cut our costs and carbon, as well as our reliance on extracting, processing and transporting new material.

During one of our mains rehabilitation projects last year, we saved 9 tCO_2e in transport emissions. Fewer vehicle movements reduces health and safety risk on sites and roads, and also means less traffic, dust and noise disruption for local communities.

Over the last year, more than 50 per cent of aggregates were obtained from either on-site recycling or other recycled sources. In the future, we aim to use 90 per cent recycled aggregate.

- **Over 50 per cent of all our aggregates are from recycled sources.**
- **Minimising traffic, road and noise impacts on our customers.**