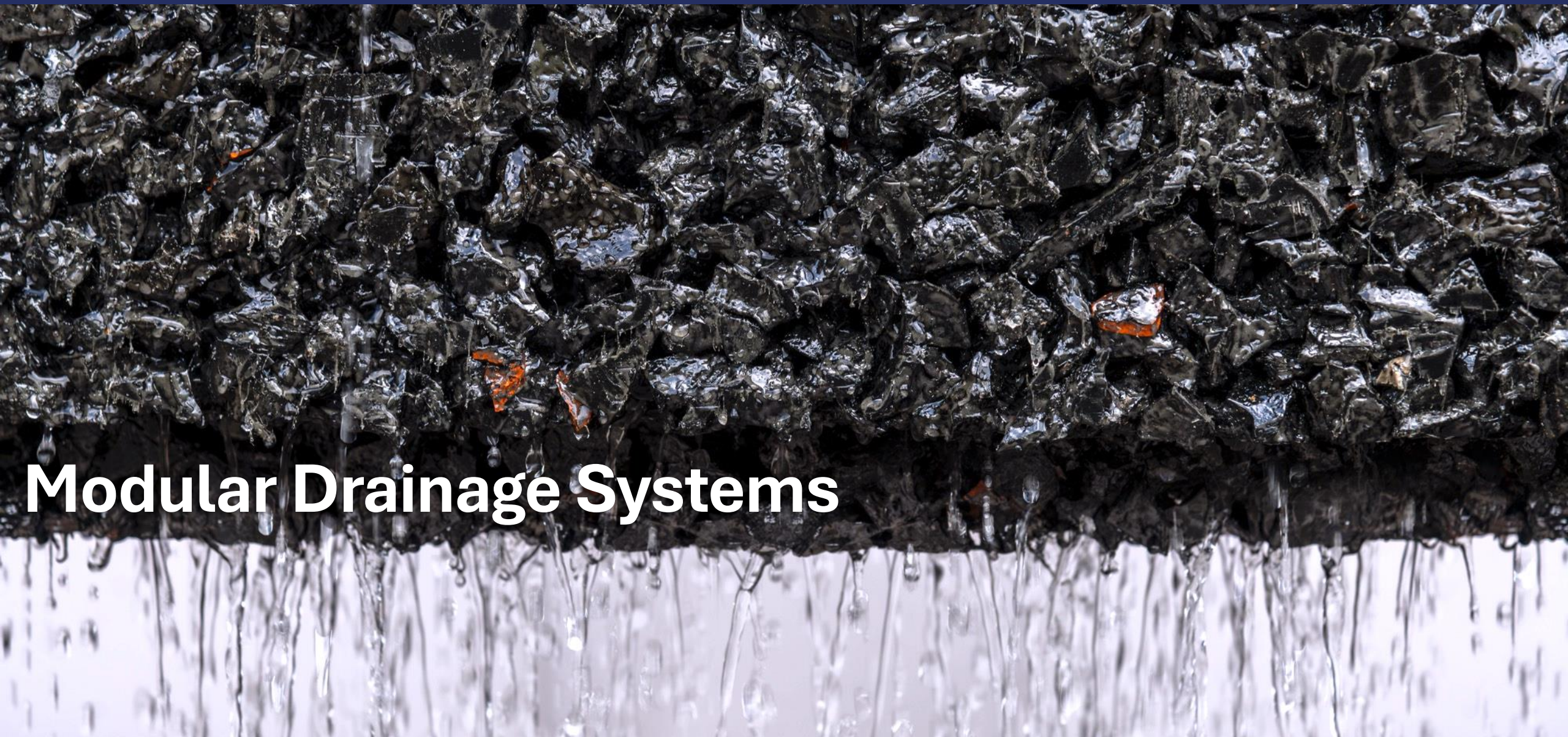




Cycle Paths and Active Travel



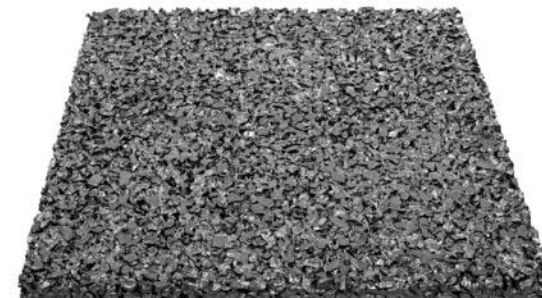
Modular Drainage Systems

Sustainable manufacturing right here in the UK

Rosehill Polymers manufacture the modular drainage units in Sowerby Bridge, West Yorkshire by repurposing recycled tyre rubber using low energy cold-cure polyurethane resin forming processes.



Drainage Unit Options





Environmental Impact of End-of-Life Tyres (ELTs)

Global Overview:

Massive Production and Waste

Every year, approximately 1.9 billion new tyres are manufactured globally, and 4.1 million tyres are discarded each day.

Reuse and Disposal Methods

- ❖ **Retreading: ~10%** (prior to the following at end-of-life):
 - **Recycling/Recovery (Domestic/Light Civils/Additives): ~35%**
 - **Recycling/Recovery (of which Civil Engineering including Water Management): ~10%**
 - **Landfilling: ~5%**
 - **Global Incineration: ~50%** Significantly contributing to CO₂ emissions (e.g., burning a car tyre releases ~22 kg of CO₂e, while a truck tyre releases ~110 kg of CO₂e).
 - **UK Incineration: : ~63% Domestic Energy Recovery ~34%** (350,000t) **Exported Low-Grade Fuel Source ~29%** (300,000t)

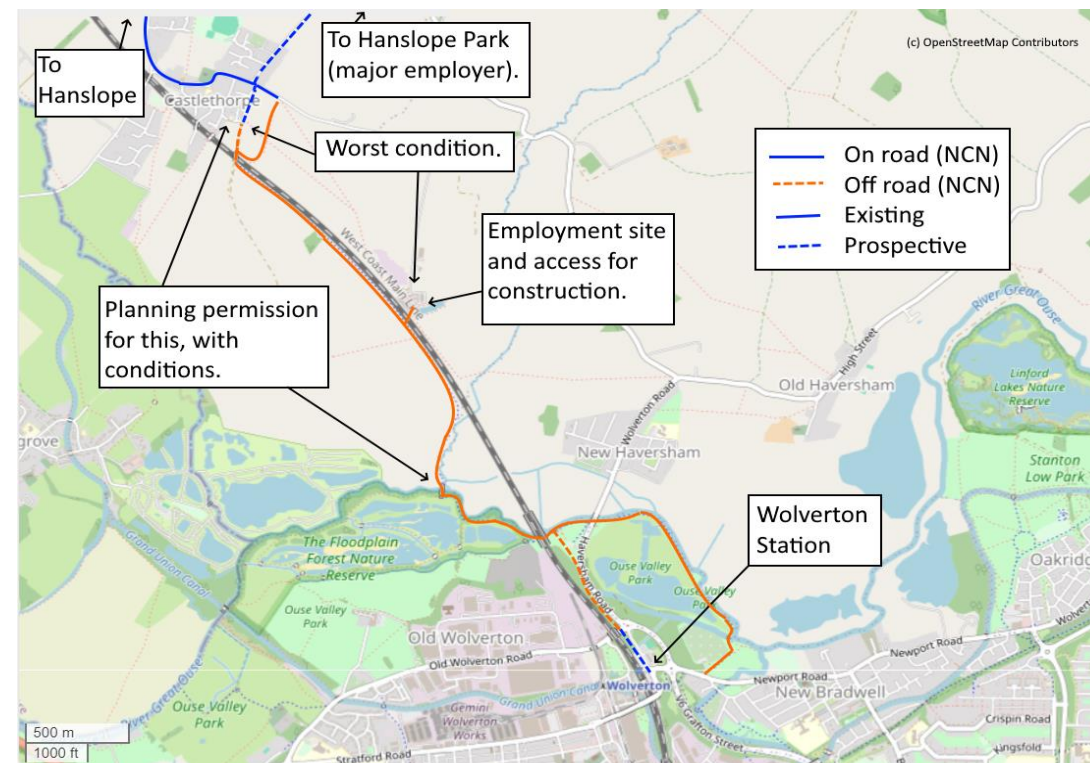
Sources:

European Tyre & Rubber Manufacturers' Association (ETRMA) | World Business Council for Sustainable Development (WBCSD) | EMR Claight Global Market Tyre Report (2023) | Institute Polytechnique De Paris Management Report (2019 Data) | RTFA: Circular Economy and ELTs | TRA: Calls for Policy Reform on ELT Exports (2023) | Tyre & Rubber Recycling: ELT Export Trends (2023).

ETRMA EL

Rural Transport DfT Project

NCN Route 6 Cycle Path Castlethorpe to Wolverton



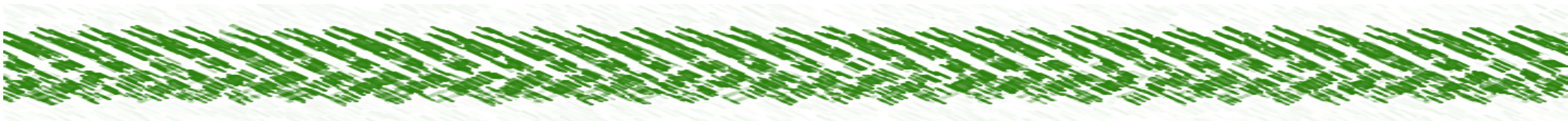
Ground Engineering Solution Overview





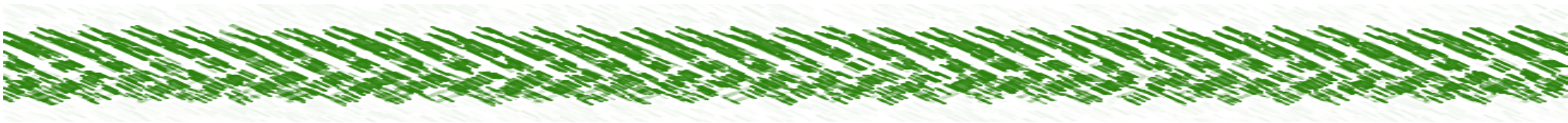
Key Outcomes

- First-of-a-kind, no-dig, greener cycle path design and construction
- Planning regulations and sustainable drainage plan approvals secured ~2.5km
- Cost reduction of up to 19% compared to if traditional methods and materials had been used



Key Outcomes

- Carbon footprint reduction of up to 50% compared to if traditional methods and materials had been used
- Environmental, wildlife, ecology and biodiversity preservation: badger setts were not disturbed and did not need to be relocated
- Solution aligned with the DfT's priorities: enhanced rural mobility, promotion of active travel and future proofing transport infrastructure



Social Impact



Supply Chain and Community Engagement from Start to Finish:

- 91 members of the local community engaged
- Over 70% would use the path now and use it more because of the works
- Over 58% would use the path to access Wolverton train station

Social Value Impact Estimated by the Rural Design Centre:

Forecast values if the full footpath was undertaken

Impact (Based on 10 years)	£3,157,333.79
Social return on investment	£5.49 per £1.00

“Demonstrating outstanding commitment to environmental sustainability by delivering innovative greener transport solutions for rural communities.”

Achievements and Future Opportunities

➤ **Milton Keynes NCN Route 6 Path Upgrade:** ~1.1km using the 'no-dig' Hydrotrench system.

➤ **Awards:**

- DfT Rural Transport Sustainability Award for Civil Water Management Ltd.
- Ground Engineering Awards 2025 Finalists for Sustainability Category.



➤ **Product Development & Engineering:** L-shaped rubber units and durable *fully grassed or gravel surfaces* are being developed to enable integrated walking and cycle paths within routes, parklands, estates and green public spaces.

➤ **Cross-Sector Expansion:** Civil Engineering, Roads, Rail, Public Realm, Transport, Government & Local Authorities

THANK YOU