



LEADING THE WAY TO CARBON ZERO WITH SUSTAINABLE
METHODS FOR LINE MARKING

CASE STUDY



LEADING THE WAY TO CARBON ZERO WITH SUSTAINABLE METHODS FOR LINE MARKING**OVERVIEW:**

South West Highways are responsible for many road surfacing and maintenance projects for Plymouth City Council, who have ambitions in reaching carbon neutrality by 2030.

South West Highways are committed to ensuring their schemes and projects make a lasting difference by benefiting local environmental, social and economic sustainability.

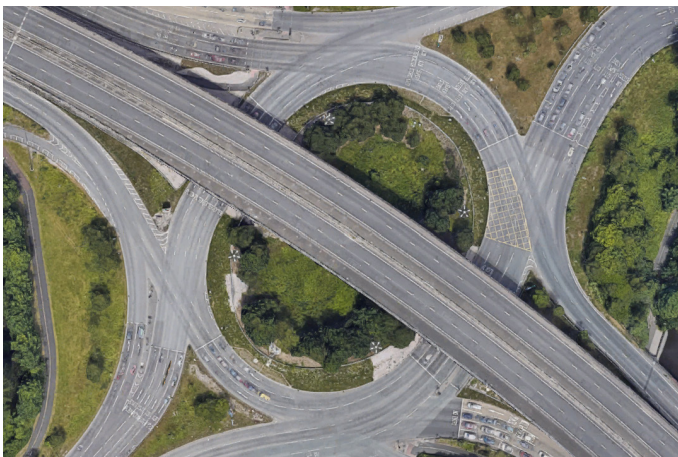
PROJECT:

A series of thermoplastic road markings found on the heavily trafficked Marsh Mills roundabout needed refreshing.

Marsh Mills is the main gateway for visitors to Plymouth City Centre, as such an important intersection it is crucial that the road markings are kept maintained and visible to road users.

Whilst undertaking this project, practising the delivery of sustainable line markings is a core objective for South West Highways, as key figureheads in leading environmentally friendly initiatives within the highways industry.

This ambition requires innovation and consideration into how they engage with the local environment, ensuring they are proactive by integrating sustainable methods of practise when delivering surfacing projects.

**METHOD:**

Traditional line marking application methods involve the use of thermoplastic material, requiring hot works for application, which will result in higher levels of carbon output.

South West Highways delivered the line marking project using MMA cold plastic paints, used alongside the ECO ES RoadLiner, an all-electric line marking machine.



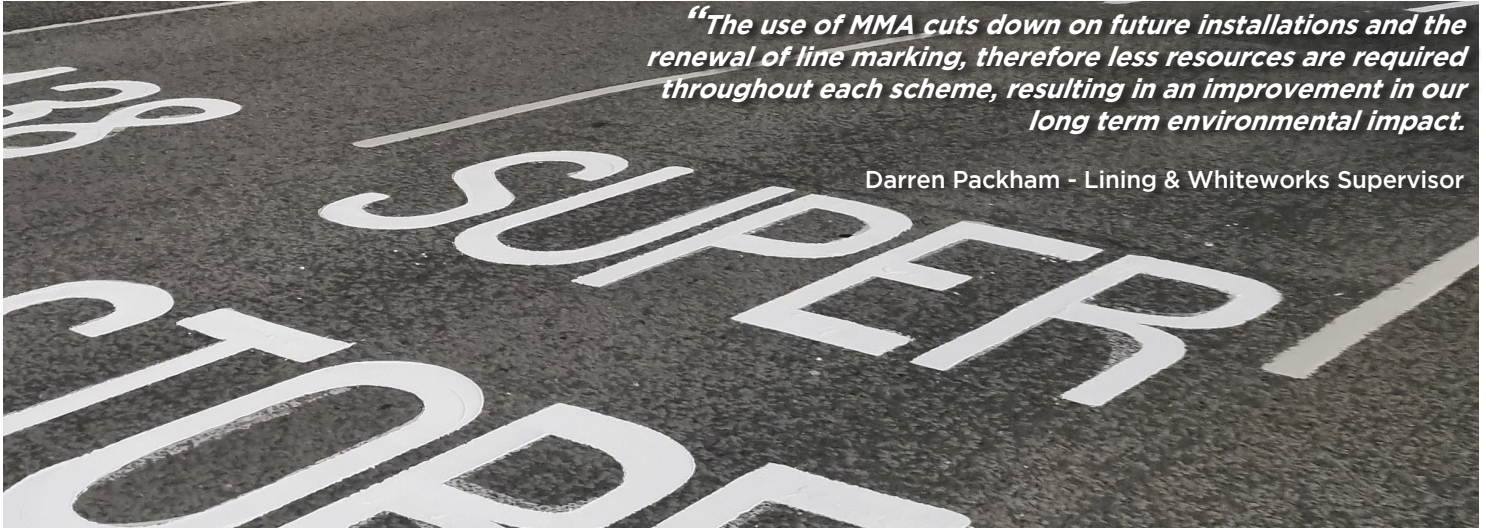
There are many benefits to be found when using cold applied MMA for line marking, compared to using thermoplastics.

This includes greater durability of the finished line markings, a reduced risk of hot works related injuries and a huge reduction of carbon usage. Making the choice of delivery using MMA paint, the safest, most economical and environmentally friendly option for line marking.

"The ES RoadLiner is an amazing piece of kit that we can really utilize. We had to get our crews trained, prior to the use of the machine on site.

We were invited to attend a training course at Meon, in Portsmouth. There we were taught how to use the piece of equipment and learn about the correct products to be used with it. This has aided us in delivering an efficient road marking service to our clients."

Darren Packham - Lining & Whiteworks Supervisor



“The use of MMA cuts down on future installations and the renewal of line marking, therefore less resources are required throughout each scheme, resulting in an improvement in our long term environmental impact.

Darren Packham - Lining & Whiteworks Supervisor

RESULT:

The all-electric ECO ES RoadLiner, used in conjunction with MMA cold applied line marking paint is a fantastic opportunity for South West Highways to stay aligned with their core objectives, leading environmentally friendly initiatives within the highways industry.

The use of an all-electric line marking machine, such as the ECO ES RoadLiner, results in a reduction in carbon usage of up to 60%, when compared to traditional methods of line marking using thermoplastic materials.

This ensures these methods of practise help to contribute towards Plymouth City Council's environmental ambitions, for carbon neutrality by 2030.



Not only the most environmentally friendly solution, cold applied electric line marking also offers the safest and most economical alternative to traditional hot works.

Going forward, the future for sustainable line marking within South West Highways will see use of these sustainable methods of practise implemented within more of their lining works, especially in high traffic areas.

“Our collaboration with Meon so far has been short, but I feel there will be many more years of collaboration to come.

Meon continue to support us throughout what we do, by supplying us with great customer support.

We continue to grow our relationship with Meon and we look forward to consulting and seeking their advice when we need it.

Darren Packham - Lining & Whiteworks Supervisor

60%

**Carbon Savings -
In comparison to
using thermoplastic
materials**

SYSTEMS USED:

GRACO LINELAZER ECO ES ROADLINER



The industry's first all electric line marking machine, capable of applying highway specification line markings which have 300% increased durability and 60% increased retro-reflectivity, compared to traditional methods whilst cutting carbon output by 90%.

The ES RoadLiner is developed from the Graco LineLazer ES 2000 and LineDriver ES, providing proven reliability.

This machine also provides increased safety for the operator, involving no hot works and with a noise level of only 82dB, which means nearby traffic or machinery can be heard.

PRODUCT FEATURES

- Pressurised Bead System with simple one-button operation
- Dual AGM batteries
- 2 additional pressurised air couplings
- Flashing Beacon with switch & chapter 8 chevrons on rear

CUSTOMER BENEFITS

- Zero carbon emissions with no need to offset for full compliance
- Absolutely no hot works removing any associated safety considerations
- Incredibly low noise output that enables residential night time working
- Will complete min 8hr shift at full usage without recharge

SPECTRUM ULTRASTRIPE L224 | Sprayable MMA Hard Wearing Line Marking Paint



Spectrum UltraStripe L224 MMA line marking paint provides high-performance markings and has a fast cure time, allowing reopening areas to traffic quickly. UltraStripe L224 has a simple application method, using standard equipment and reactive glass beads.

- Fast and consistent application - less disruption and better performance results
- Cost-effective and environmentally friendly

SPECTRUM ULTRALINE L210 | MMA Hard Wearing Line Marking Paint



Spectrum UltraLine L210 is a cold plastic line marking paint that is ideal for high wear markings on roads. It has a very simple application method that uses little equipment, making it possible to apply markings for many situations such as informative markings.

- Very hard-wearing - lasts at least 3 times as long as thermoplastic
- Very fast cure time to allow rapid re-opening of areas to traffic

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