



HIGHWAYS HIGHLIGHTS

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INFORMATION FOR LOCAL COUNCILLORS
SEPTEMBER 2023

**INNOVATION
WITH ADDED
VEGETATION**

SAFER / GREENER / HEALTHIER

COMMENT

COUNCILLOR LEE SCOTT

CABINET MEMBER FOR HIGHWAYS MAINTENANCE AND SUSTAINABLE TRANSPORT

This month will be my last column for Highways Highlights as I prepare to move to a new portfolio and leave you in the very capable hands of one of my colleagues.

The launch of the DigGo bus service and it seeing its first birthday was a particular highlight. This innovative service is changing the way people travel, offering a flexible shared service that is fully electric, giving people more safer, greener and healthier choices in how they travel.

I'm also incredibly proud of how hard the teams at Essex Highways have worked in rolling out the very successful LED upgrade programme and responding to the damage the winter brought to our roads by delivering a county-wide resurfacing programme that's currently underway.

A lot has been achieved by the many hard working teams I've encountered and I want to thank each and every one of you for your hard work and determination to improve the way Essex residents move around the county.



A SOLUTION WITH BAGS OF POTENTIAL

The Structures Team recently completed building an innovative vegetated retaining wall for the Public Rights of Way (PRoW) Team. Sophie Ruffer, Engineer, Structures said: “The retaining wall carries the PRoW along the River Roding. The natural embankment had collapsed, so the PRoW was not fit for purpose. When given the brief for the project, I immediately thought of the Flex MSE system. The PRoW team agreed to the design idea and the Environment Agency gave us the go-ahead to use the construction system.”

The 100% recycled and recyclable Flex MSE system consists of earth and sand filled ‘geobags’ with joining plates, and layers of geogrid and structural fill behind the bagged facing. It is designed to outlast materials such as concrete and steel. The geobags and interlocking plates adapt and move with the land, giving it the capability to endure events that would destroy traditional wall systems. Installation takes nearly half the time and cost of most other walls, with only 3% of the carbon.



BEFORE: NATURAL EMBANKMENT IN COLLAPSED STATE

A SOLUTION WITH BAGS OF POTENTIAL

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The wall is hydroseeded (a spray seeding system) to allow for plants to take hold and grow from the retaining structure.

The root system helps strengthen the wall and the finished product has a 120-year life and 75-year warranty, making it extremely cost-effective.

Sophie is really delighted with result so far: “The wall was completed at the end of July 2023. The grass started growing within days, and a month on had already thickened up on the top half of the wall.

“You can see how well it has taken from the before and after photos. We are looking forward to seeing how the wall naturalises and settles into the surrounding environment over the months and years to come.”



AFTER: THE REBUILT EMBANKMENT ALREADY THRIVES

ESSEX HIGHWAYS TRIALS NEW 'ROADMENDER' MATERIAL

A new method of filling in potholes and cracks in roads that promises to be greener and quicker is being trialled by Essex Highways in Colchester and Tendring.

Currently, potholes and cracks are repaired by cutting out the road surface surrounding the defect. Fresh, hot asphalt is poured into the defect and then compacted to fix it. This process might also include removing any previously applied material to make sure the repair is safe.

Roadmender Asphalt has developed a technique that no longer requires roads to be dug up, and the asphalt, which is made up of recycled materials including old lorry tyres, can be prepared on site as needed.

The new technique is, so far, reducing the amount of time Essex Highways crews are on each site by removing the need to excavate, improving productivity and potentially increasing the number of defects that can be fixed each day.

The material used to make a repair, known as Elastomac, has a high rubber content. Once any holes have been filled and compacted, it is poured over the surface as a molten liquid that forms a waterproof patch over the area as well as filling minor defects, preventing further failure. It cools within minutes, which reduces the amount of time a road is closed compared to a more traditional repair.

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Essex Highways crews are currently out across the county delivering repairs using a number of techniques. From whole road resurfacing to patching smaller areas, different methods are applied depending on the repair required and how the repair and the type of road it is on is prioritised.

If the Roadmender Asphalt trial is a success, it could be adopted by the service to repair more defects, more quickly, more safely and with less waste and new material - reducing carbon. Essex Highways crews will assess the test sites in spring and summer next year to understand how the material has held up over the winter period before deciding whether to adopt this new method and use across the county.

To ensure value for Essex residents in how the highways service delivers repairs and maintenance Essex Highways is trialling a number of new technologies, innovations and materials. While not all trials are adopted, those that promise longevity and a safer, greener and healthier approach to road maintenance, as well as value for money, will help Essex Highways deliver road repairs that last longer and serve a road network that is fit for the future.

Cllr Lee Scott, Cabinet Member for Highways Maintenance and Sustainable Transport said: “Essex Highways has a long-established reputation for trialling and bringing innovation into service, making sure that it keeps up with developments in technology to help it continue to do more with less. Materials such as the Roadmender Asphalt are becoming more sophisticated and potentially offer advances in road surface durability which ultimately helps us save money from maintenance budgets.

“That they also help us reduce our carbon footprint while increasing the productivity of our teams can only be a thing as we continue to contribute to making Essex a safer, greener, healthier county for its residents. I welcome this latest trial and it will be interesting to see how this material holds up during the more extreme weather that Winter may well deliver.”



The construction industry is the largest sector in Essex both by the number of businesses and total employees. It is one of Essex County Council's (ECC) five priority growth sectors and a key contributor to a more productive, inclusive, and sustainable local economy.

The Essex Construction Alliance (ECA) has been created to bring the sector together to share challenges, opportunities and to achieve more together via collaboration between industry and the public sector on key issues. The first event took place in Harlow on Friday 15 September, officially launching the ECA.

Essex Highways attended the event, represented by Ringway Jacobs and Jacobs on one of the stands. Key discussion points of the day focused on the need to understand the benefit that including social value in supply chains can bring to local communities and the role industry can play in maximising the value of each 'Essex pound' spent. There was also an opportunity for attendees to learn about a new, easier way for suppliers to access Local Authority procurement opportunities in Essex

While there, Phil Horton, Managing Director, Ringway Jacobs, took the opportunity to sign the company up to the new Essex 'Business Community Pledge'. Phil said: This is a fantastic initiative created to support the recruitment and training of local people into the construction sector – and to improve access to a pipeline of future talent which will potentially really benefit local communities. It's been a great event and one that we've been delighted to support and be involved with. I think we've seen the beginning of something really worthwhile launched here today."



Above: James Marshall (Jacobs), RJ's Amanda Morris, Phil Horton and Nicky Bell, and Brad Antliff, Marcus Concannon, Paul Mckay (all Jacobs)

RINGWAY JACOBS SIGNS UP TO THE ESSEX BUSINESS COMMUNITY PLEDGE AT ESSEX CONSTRUCTION ALLIANCE LAUNCH EVENT

LANDOWNERS URGED TO HELP US GET WINTER-READY

Essex Highways crews have been out on the network through the spring and summer clearing gullies. Teams have also been grass cutting and weed spraying to prevent overgrown vegetation from blocking the highway and causing flooding.

But Essex Highways needs landowners to be diligent and maintain their own hedges and ditches. This helps keep highways across Essex usable and safe. In anticipation of wetter weather over the autumn and winter, the highways team is preparing for more calls and incidents relating to flooding. Many local floods are preventable if landowners keep on top of ditch and hedge maintenance.

Landowners are responsible for maintaining trees, hedges, shrubs and ditches on their land. This applies even if they are close or next to a road or pavement. They have a duty of care to take reasonable steps to prevent, or reduce as far as possible, the risk of injury or damage that could be caused to anyone else. Most trees and hedges by roads are on land owned by private landowners, including district councils,

city council, parish councils, housing associations and homeowners.

Examples of works that should be carried out by landowners include:

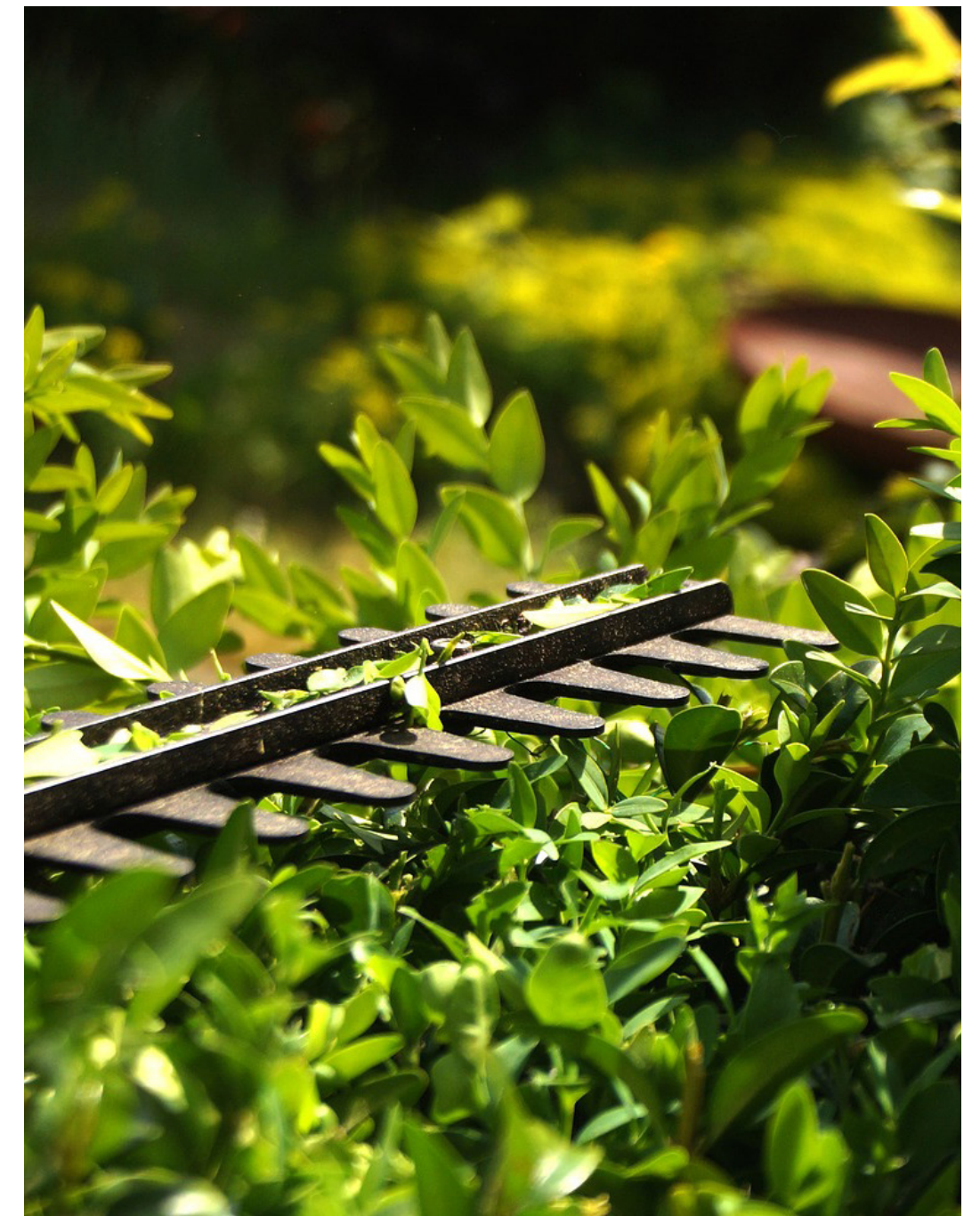
- cutting back overhanging branches, which reduce the width of or block the view of the road
- cutting back overhanging branches that reduce the height or clearance of the road for tall vehicles such as double decker school buses
- removing or trimming a damaged or diseased tree that is in danger of falling onto the road or pavement
- trimming overgrown hedges obscuring road signs or streetlights
- clearing any ditches located on private land to avoid any flooding during periods of heavy rain

Councillor Lee Scott, Essex County Council Cabinet Member for Highways Maintenance and Sustainable Transport, said: “Coming into the autumn months, it’s important that preventative action is taken to ensure flooding is minimised across the county.

“Essex Highways crews have been busy throughout the summer clearing

gullies and maintaining our land in preparation, but we need this work to be complemented by landowners taking action too.

“I urge landowners – whether you’re a homeowner, farmer or developer – to check ditches and hedges near roads and pavements and make sure they are properly maintained.”



WATCH AND LEARN: GULLY CLEANSING



ROUTINE REPAIRS: JULY/ AUGUST 2023



COUNTY ROUTES

July: 482
August: 634

LOCAL ROADS

July: 305
August: 492

PAVEMENTS

July: 417
August: 411

DRAINS CLEARED

July: 11,460
August: 8542

STREETLIGHTS

July: 2264
August: 2104

