

## Highway and Transport Overview and Scrutiny Committee

# Living Water Project Croft Depot

**8 June 2023**

- ❑ The Highway Operations aims to recycle all its construction waste.
- ❑ The team clean over 100000 gullies each year and support with the clearance of drainage blockages.
- ❑ Gully waste is extremely difficult to recycle.



- ❑ The Ecological Treatment System - The Living Water Project.
- ❑ Construction was completed in July 2020.
- ❑ The construction cost of just over £300,000.
- ❑ The system consists of:
  - ❑ Gully emptying bays,
  - ❑ A balancing tank,
  - ❑ Straw bale filter bays,
  - ❑ An Ecological treatment system.



## □ Reception Area

- Gully Waste Emptying Bay - where the cleansing unit discharges its load under control conditions.
- The surface drain to the rear is used – for draining the liquid from the solid.



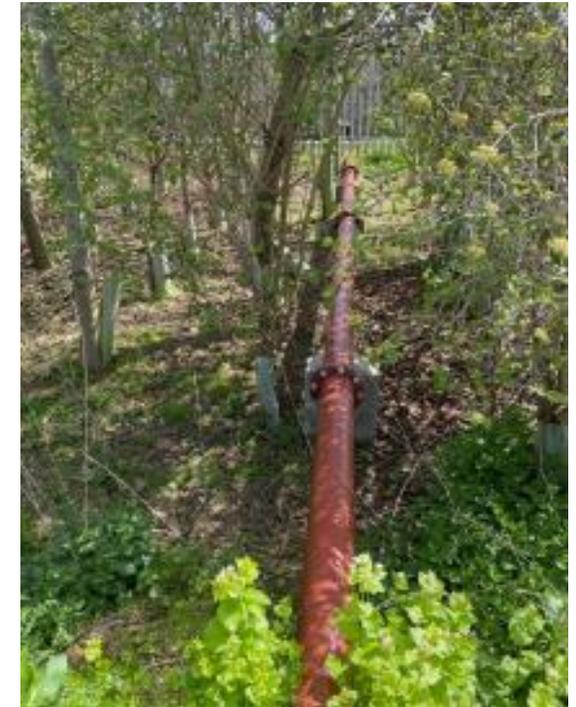
- ❑ The solid waste is left in the bay to drain and dry naturally.
- ❑ Once it is dry, it is taken to the larger stock pile.
- ❑ Bulk HGV bring the dry solid waste to a recycling plant.



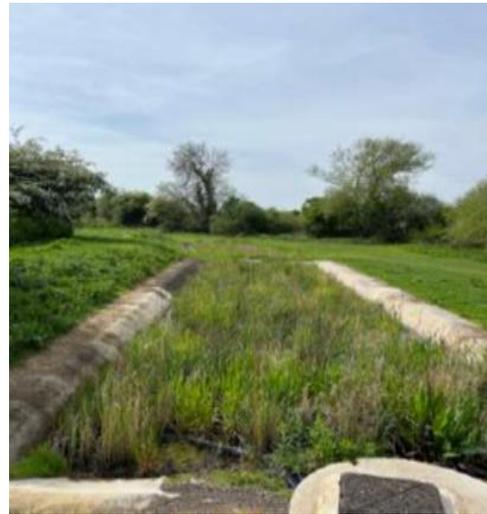
- ❑ From the drainage channel, the liquid is discharged into a balancing tank and then is pumped on to the straw bales.
- ❑ The Balancing tank and the pumping station enables liquid to be discharge in a controlled environment.
- ❑ The straw bales filler for the initial filtering of the oils, hydrocarbons, silt and some salts.
- ❑ The bales filtration ensure that bacteria has sufficient time to degrade and break down the contaminants.



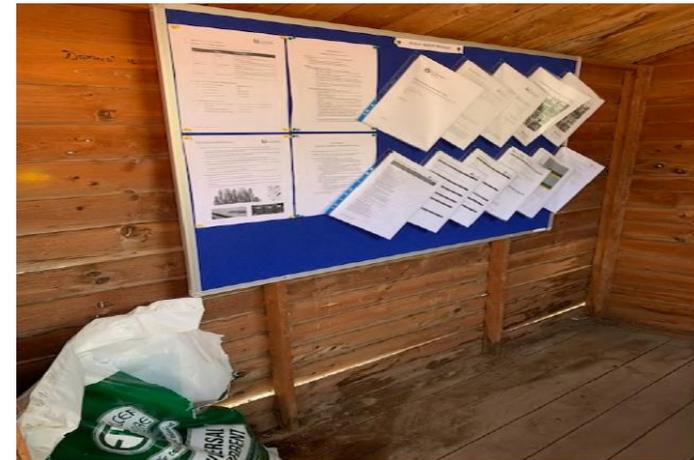
- ❑ The liquid then drains by gravity into the saltmarsh wetland cells. The ecological treatment system consists of one saltmarsh wetland cell and two wetland cells so that clean water can be discharged to the watercourse, known as the Broughton Astley Brook.



- ❑ The First wetland cell is a saltmarsh cell - with salt plants feeding on the salt that is in the liquid.
- ❑ There are further two wetland cells – this ecology enables the wetland plants and their associated bacteria and micro-organisms to thrive and treat the water neutralising the contaminates like detergents, oils and hydrocarbons with different plants.
- ❑ By the end of the wetland stage – good quality water.



- ❑ Environment Agency under regulation 13 of the Environmental Permitting Regulations 2016.
- ❑ Daily sampling is undertaken by the onsite team.
- ❑ Third Party Quality Assurance.
- ❑ Our team are trained and competent to run the facility.
- ❑ Regular inspections from the EA.



- ❑ Children from a Leicestershire primary school have been given an insight into a Council scheme which endorses its environmental credentials.
- ❑ 40 pupils and staff from Croft Church of England Primary School paid a recent visit to the nearby works depot which is front and centre in an ecological initiative which sees oils, diesel and chemicals collected from road gullies being treated and cleaned before going back into the eco-system.

