

A284 Lyminster Bypass (North) – February Progress Update

Date: 06/03/24

This is the latest monthly newsletter updating you on progress made in the construction of the Lyminster Bypass. We hope you find it useful, but please contact us if there is anything you would like more information on or would like to give us any feedback.

About a month and a half ago we have filled in Brookfield Stream at the crossing with the existing A284. To keep the water flowing through this section we have commenced overpumping the water from the East to the West of the A284. Unfortunately, a combination of excessive rain and a mechanical failure have led to the road being flooded for a period of time last month.

To prevent this from reoccurring we have installed a different pumping system and installed additional higher level gravity overflows. The road is now clear again and the fields East of the A284 are no longer flooded.

North of Ancient Hedgerow

We have dug out our Northern swale which connects to the drainage of the new Lyminster Bypass and outfalls into Brookfield stream. This acts as a catchment for water, slowing down the rate it goes into the stream. With the drastic recent increase in rainfall, our swale has worked as an extra water store.

Due to the area being a flood plain and a having a high-water table we continuously fight against ground water. To ensure drainage works can continue, any hole that is dug below the water level we use a pump to transfer the ground water back into the river. We have done this with our manhole installation by using a manhole trench box with a slightly deeper area where the pump can sit. This allows us to lay our drainage pipes and bed the manhole in concrete keeping it in place.

The soil mixing continues, churning cement and GGBS into the ground, North of Brookfield stream. This process strengthens the ground in preparation for the rest of the road to be built and the installation of the new, larger culvert. Due to the increased capacity of new culvert, it will allow Brookfield stream to flow at a higher rate underneath the road.



Image 1 Newly dug swale.



Image 2 Water pump in manhole trench box.



Image 3 Continued drainage works.

Ancient Hedgerow to Bridleway

This month we have focused on getting the foundations of the pegasus crossing fully completed. The Pegasus crossing is where the existing bridleway crosses the new road. It is designed to provide three separate crossings for pedestrian, equestrian and agricultural plant with a single traffic light for traffic on the carriageway. To ensure the bridleway is built with the designed curve, we use a surveying device called a total station. This measures angles and distances and is equipped with a computer programmed to allow us to set out the design to the nearest millimetre. The design was marked out with metal pins which were hammered into the chalk. Wooden edgings then got laid following this curvature and Type 1 aggregate was placed on top.



Image 4 Pegasus crossing.



Image 5 Bridleway.

Bridleway to Black Ditch

As we are coming to the end of the concrete pours for the viaduct, we have started to 'bridge the gap' between the viaduct and our newly built road. The embankment near the bridge is currently being constructed to allow access up to the deck. To reduce settlement, the type of material used is

placed in a step-down pattern away from the bridge, ensuring a stable ground. It is also being built up in layers, allowing for full compaction.

‘Back of wall’ drainage on the North Abutment is ongoing. The excess runoff from the road will get transferred down into filter drains and eventually will run off into the swale. The filter drains and the swale provide natural filtration to the runoff from the road, ensuring the water is clean when it flows into Brookfield Stream.



Image 6 North abutment.



Image 7 Concrete deck on viaduct.

South of Black Ditch

For every concrete pour that goes into our bridge piers, we stop the concrete from flowing into areas we do not want it to by using timber board shutters. These are unique to the gaps between each beam and ensure the concrete stays in place and allows enough concrete cover for the steel reinforcement. The shutters get propped up with wooden supports, meaning although it is a lengthy process, the craft of the carpenters ensure a smooth concrete finish on each pier.

As we will finish our viaduct’s concrete pouring by the end of next month, the structure’s team will be focusing on installing the new culvert.



Image 8 Shutters ready for instalment.



Image 9 Fresh concrete pour.



School visits

Our senior Public Liaison Officer, Shannon Acton-Brown attend a local secondary school to assist year 10's in their annual mock interview event on Tuesday 27th February 2024. This event is very beneficial for many reasons including boosting confidence on the approach to leaving education, learning new interview skills, engagement tools and learning from their interview feedback.

For further information about the scheme please visit the Lyminster Bypass North page on West Sussex County Council's website:

<https://www.westsussex.gov.uk/roads-and-travel/roadworks-and-projects/road-projects/lyminster-bypass-north/>

Should you have any specific scheme enquiries, please contact lyminsterbypass@jackson-civils.co.uk