

Lavington Avenue Playing Fields Sustainable Drainage Scheme

Community Forest Trust



Creation of linear swale looking towards the detention basin

Date carried out

March 2024

Location

Lavington Avenue Playing Fields, Cheadle, Stockport

Background

The playing fields have long been associated with wet conditions. In recent years, and following more frequent high rainfall events, back gardens of several properties adjacent to the playing fields have experienced flooding. Meanwhile, properties downstream and close to the nearby Chorlton Brook also flood.

This flood risk was well-known locally and Stockport Council was already exploring sustainable solutions. This led flood risk engineers to work with greenspace officers to assess surface water flood data to identify where a Sustainable Drainage Scheme (SuDS) intervention could be located to receive surface water runoff and reduce the likelihood of regular waterlogging and to hold and store water.

Project

A design was produced by Stockport Council Flood Team which comprised a 45m filter strip connecting into a 166m long swale that terminated at a detention basin that would provide 569m³ of water storage.

Partners

Stockport Council, Community Forest Trust, City of Trees, Mersey Rivers Trust and the Environment Agency.

Themes



Water quality



Urban



Green infrastructure

This SuDS train was designed to provide a significant area of capacity to store surface water run-off and then allow it to infiltrate into the ground and prevent it from sitting on the surface of the closest football pitch or making its way into the back gardens of the nearby houses.

In an extreme and long duration rainfall event the detention basin at the end of the SuDS train will provide storage should the capacity of the swale and the ability for rainwater to infiltrate into the ground be exceeded.

The design also included the creation of a raised landscape feature at the south end of the site which was designed to provide an area of natural play for children and a vantage point for picnics and watching the football.

Stockport Council accessed support from the Regional Flood & Coastal Committee's Quick Wins scheme, which is part of the Local Levy.



Creation of detention basin



Creation of raised landscape feature at the southern end of the playing fields

Following discussions within the Upper Mersey Catchment Partnership, Community Forest Trust and City of Trees (Greater Manchester's community forest) aligned this with Natural Course resources to enable delivery on the ground.

After a consultation exercise with the adjacent households and the football clubs, City of Trees invited contractors with a proven track record of SuDS delivery to submit quotes for delivering the scheme.

The appointed contractor commenced work on 4th March 2024 and the works took two weeks to complete.

The swale, detention basin and raised landscape feature were all seeded with a mix of grass and wildflower seed to help bind the exposed soil and to restore the 'green' appearance of the playing fields.

Expected Outcomes

- Reduced incidence of flooding in the back gardens of adjacent properties
- Attenuation of water and slowing the flow in Chorlton Brook
- Reduction in the levels of waterlogging on the football pitches
- Enhanced biodiversity of the site through the introduction of wildflowers and seasonal wetland habitats
- Improved visual amenity of previously low-quality space and natural play area for children

Learning

This scheme demonstrated the value of catchment based partnership working.

City of Trees and Stockport Council are both members of the Upper Mersey Catchment Partnership and it was in this forum that the proposals for Lavington Avenue Playing Fields were discussed.

This provided the opportunity for collaborative working to enable delivery.

The successful partnership between Stockport Council and City of Trees, with support from Mersey Rivers Trust, has led to further dialogue to explore the potential for joint working on projects across the borough. It also enabled alternative routes to procurement and gave better outcomes and value.

Next Steps

- Monitor the performance of the SuDS features through photographic evidence and feedback from householders and site users
- Monitor success of wildflower and wetland creation, in terms of visual impact and biodiversity, through photographic evidence and where possible species recording
- Continued collaboration between Stockport Council and City of Trees and other partners for developing future project opportunities

Pete Stringer, City of Trees said:

"This project demonstrates that our green spaces can provide multiple functions, not only are they important for recreation but they can help us to adapt to the challenge of climate change."

Contact: info@naturalcourse.co.uk