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# Welcome

## Thank you for attending today's information event about our proposed investment in the sewer network in Stewarton

### We have information on: -

- Why the investment is needed
- What is proposed
- Where work is proposed to take place
- The approximate duration of the work
- Who is doing this work
- How you can keep in touch

This is a £12m investment (latest estimate) in the waste water infrastructure to help prevent flooding in Stewarton and improve the environment of the Annick Water. The proposed work will be carried out by Caledonia Water Alliance (CWA) and George Leslie.





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# Improving Urban Waters - Stewarton

Scotland's water quality is at its highest level since the first Water Framework Directive classification in 2009, with 87% of waterbodies now achieving at least "good condition".

At Scottish Water we're always working hard to find ways of improving our services for customers and communities. We're committed to bringing urban waters to an even higher standard and we're carrying out improvements and upgrades to our sewer infrastructure across the country to achieve this.

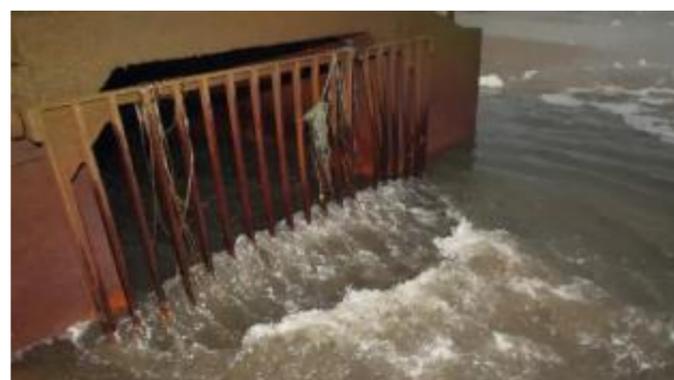


Did you know – Scottish Water's Improving Urban Waters Routemap has been developed and is available to view at [Scottishwater.co.uk](http://Scottishwater.co.uk)

Annick Water

**The proposed investment will help: -**

- **Alleviate flooding in Stewarton**
- **Significantly reduce sewer related debris in the environment**
- **Reduce discharges from the sewer network**
- **Provide us with more reliable monitoring and reporting data**





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# Improving Urban Waters—Stewarton

Did you know – Rainfall is projected to increase significantly in the next 30 years?

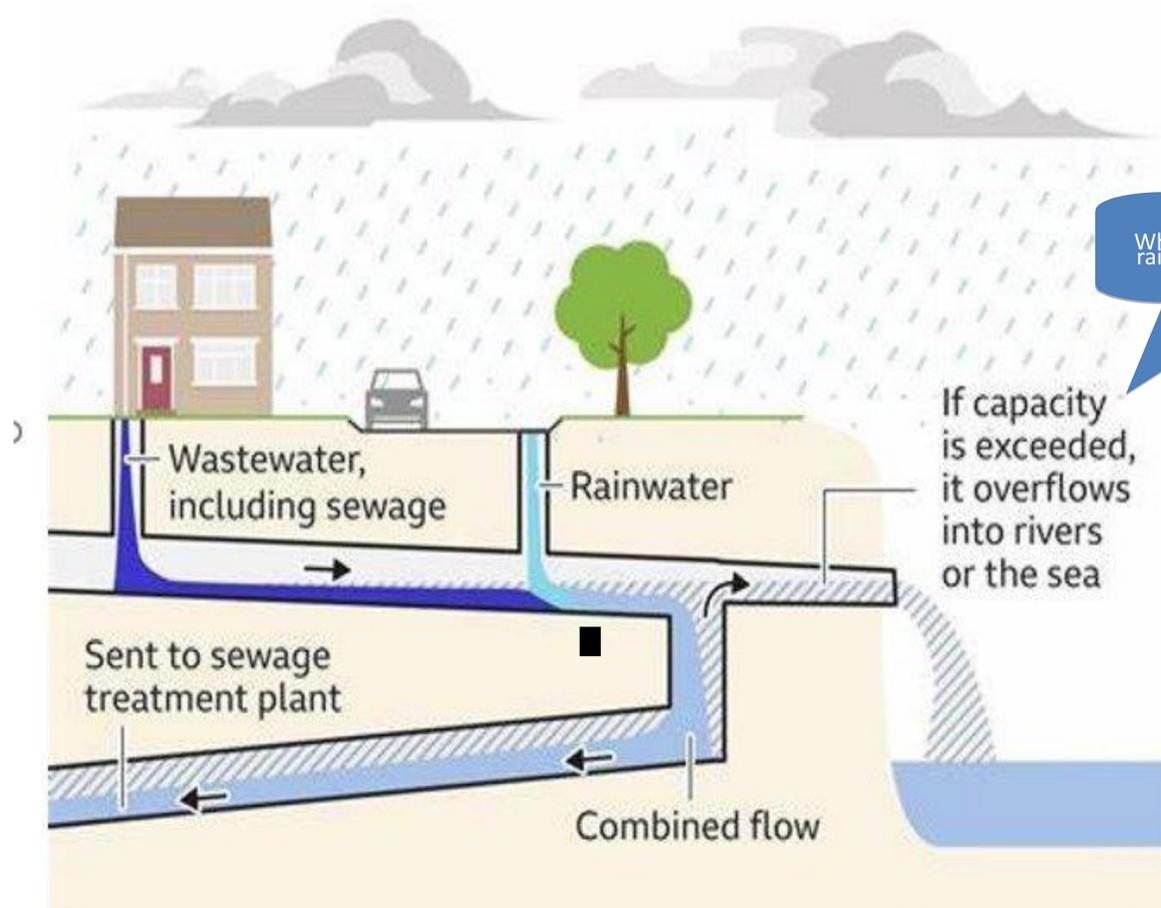
## What is a Combined Sewer Overflow (CSO)?

A combined sewer overflow is an essential part of the sewer network. It is a vital piece of infrastructure which acts as a relief point, helping to reduce the risk of properties and streets being flooded during storm events when pipes become full or when issues occur. CSOs are licensed by Scottish Environment Protection Agency to spill under certain conditions, and we work hard to comply with these licences.

CSOs are designed to release pressure on the network from rain using overflows to rivers and the sea.

When there are overflows from a rain storm, less than 1% of this is waste water from toilets.

CSOs are licensed and regulated by SEPA



Did you know:  
When there are overflows from a rain storm, less than 1% of this is waste water from toilets.

## CSO Myth Busters

- CSOs are not pumping or dumping raw sewage into the rivers or sea.
- Water discharged from a CSO during intense rainstorms is very dilute, with less than 1% waste water from toilets.
- Discharges consist mainly of run-off from roads and roofs, and grey water from household appliances.
- Many factors contribute towards water quality in rivers, including pollution from agriculture, urban and industrial pollution and private sewage systems.
- We cannot simply get rid of CSOs – they are there to safely carry flood water away from homes, businesses and roads.



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# Improving Urban Waters—Stewarton

We've identified a number of locations on Stewarton's sewer infrastructure where improvements could be made:

- **Kirk Glebe CSO** – we propose to construct a brand new CSO
- **Kirkford Bridge CSO replacement** – we propose to replace and upgrade the existing CSO
- **Barbour's Park CSO** – we plan to construct a brand new CSO and create greater capacity in the sewer pipework (this also forms part of the wider Barbour's Park flooding project)
- **Bridgend (High Street)** – we propose to upsize the combined sewer pipework, creating greater capacity and a brand new CSO
- **David Dale Phase 2**— Sewer upgrade to help alleviate flooding



The funding has been approved for Barbour's Park and David Dale (shown in green font). The funding for the other projects is yet to be secured. Exact timescales for delivery are still to be confirmed.

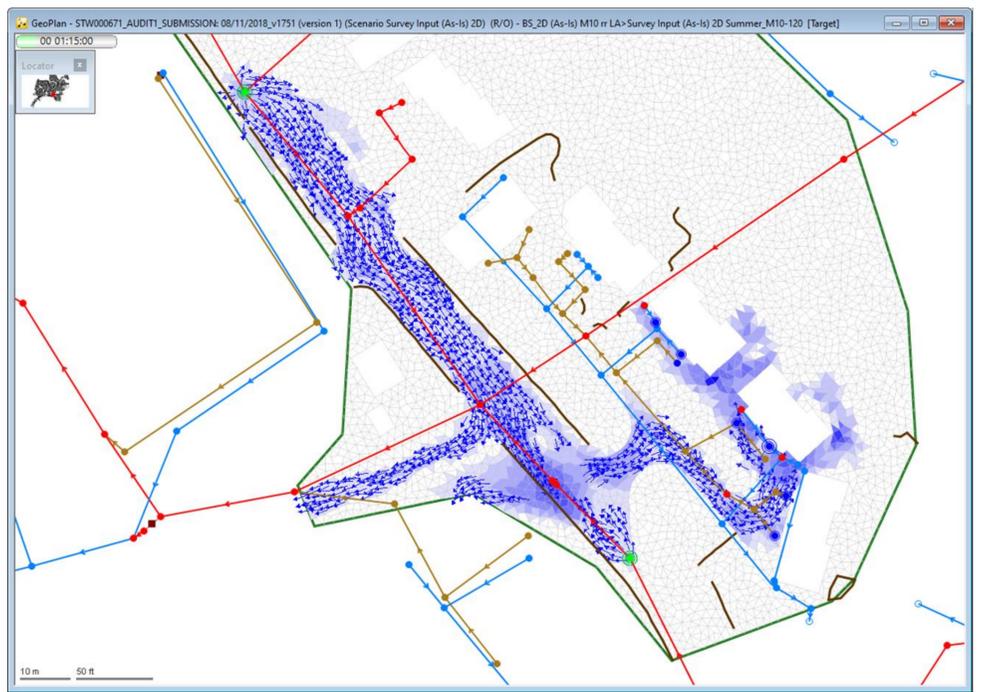


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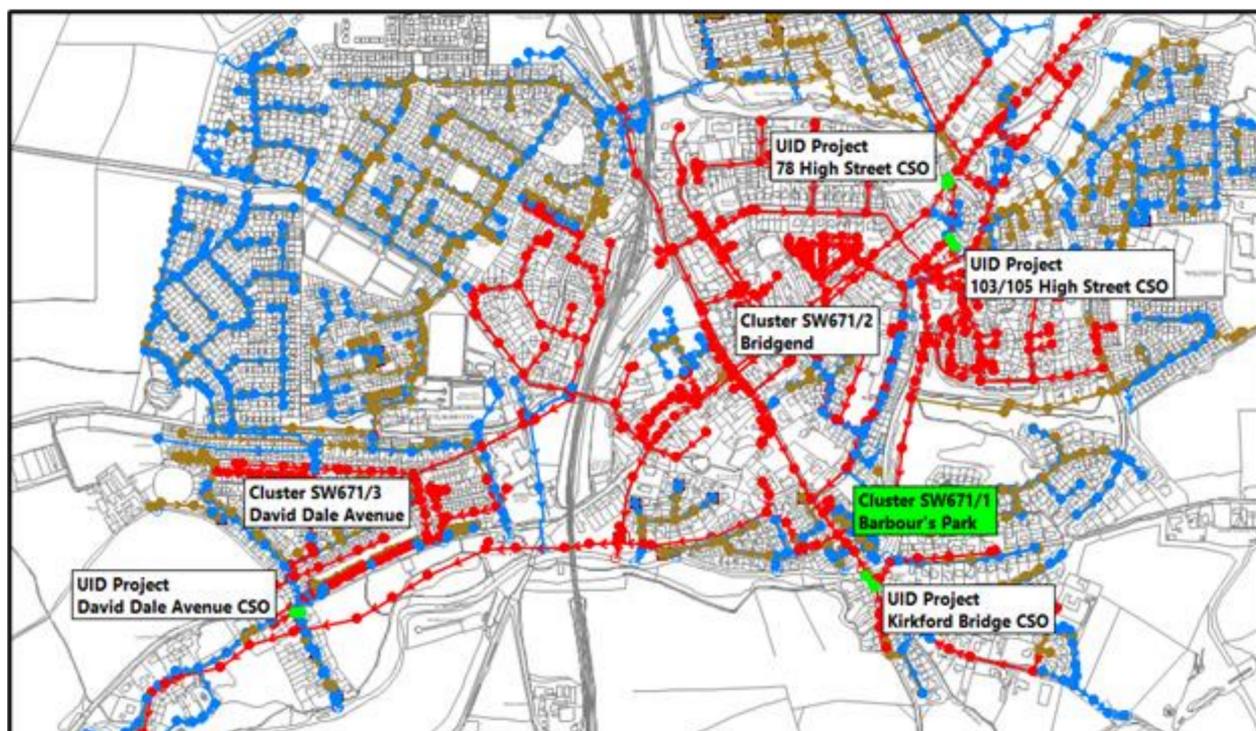
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# Why are we doing it?

**Flooding has occurred at multiple places in Stewarton.**



We have modelled the sewer network in various storm simulations and developed up solutions to help alleviate flooding in Stewarton.



We now need to carry out investigation work to help us design up the proposed solutions.



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# Stages to develop solution



2019

Issue identified

Flooding model

Develop solutions

Early Design stage

2024 March—April

Investigation stage

Minor excavation work /  
Boreholes / CCTV surveys.  
Short term duration

Detailed Design stage

Late 2024—2026

Construction stage

Major works stage—sewer  
pipe installation / CSO up-  
grade / Shaft tank con-  
struction—Longer term  
construction duration

Completion



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# Investigation stage

**The investigation stage will take place in February, March and April 2024 at various locations in Stewarton**

1



Pedestrian & vehicle management is set up.

2



Additional work vehicles may be parked in the area

3



The CCTV camera robot is lowered into the sewer from the manhole

4



The sewer is accessed from a manhole and a camera survey is undertaken

5



The condition of the sewer is recorded and the manhole lid safely put back on

There may be some disruption to local traffic movements, including temporary traffic lights and restricted parking. Please follow all signs in place. Pedestrian routes and access to properties will be maintained.

6



A borehole machine may also be needed

7



Investigations are carried out

8



Reinstatement is done and site returned to normal



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# Investigation stage

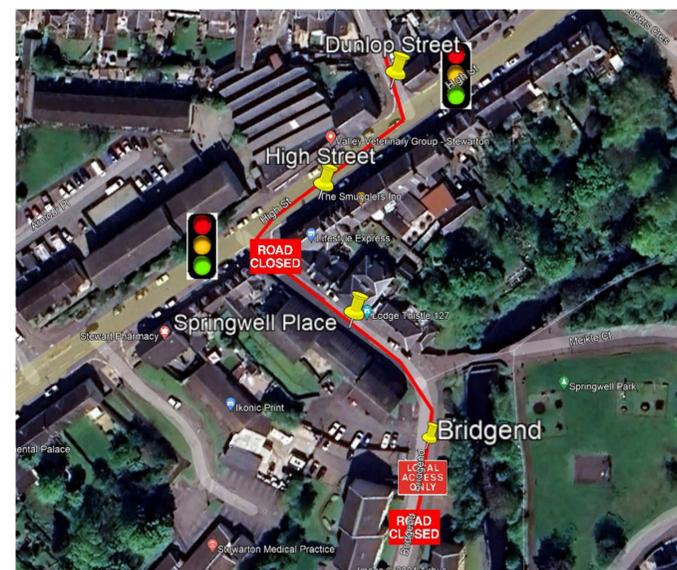
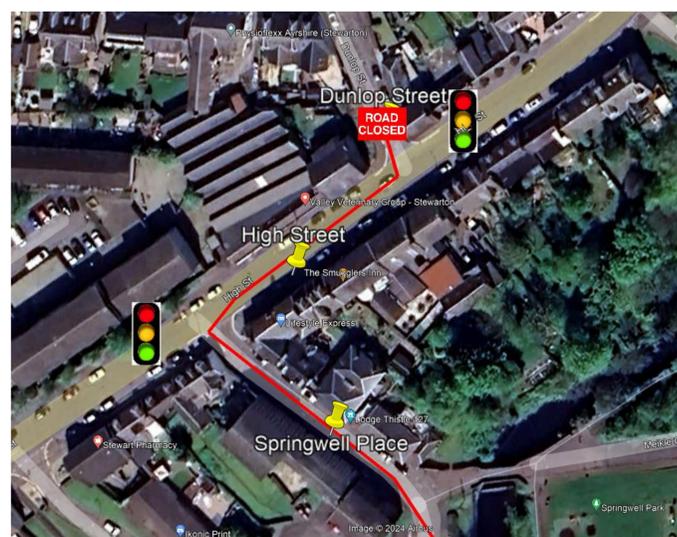
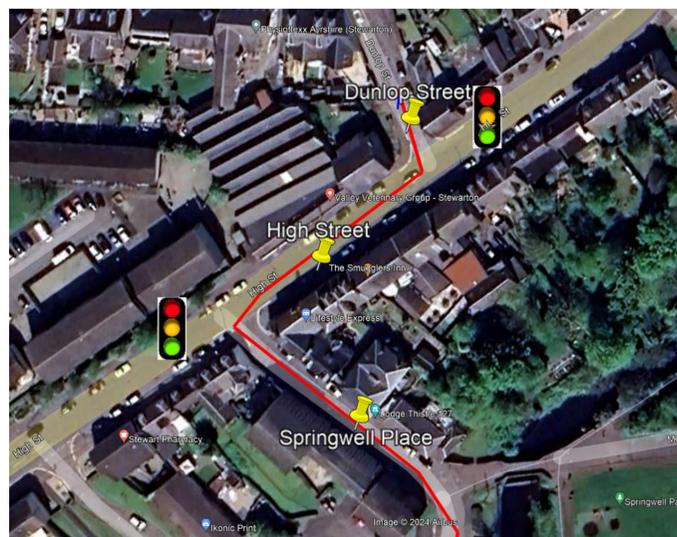
Local businesses open as usual while we are working



**High Street, 2 way traffic lights**  
26/02/24 for 5 weeks. Parking restrictions will be in place on High street.

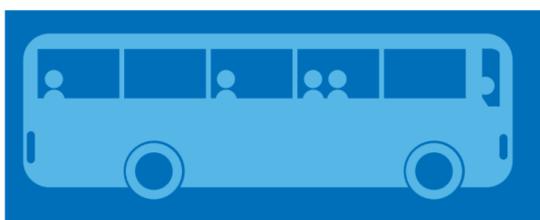
**ROAD CLOSED** **Dunlop Street, Road closure** at junction with High Street from 26/2/24 for up to one week.

**ROAD CLOSED** **Springwell Place, Road closure** at junction with High Street to 82 Bridgend from 11/3/24 for three weeks.



## Buses

Buses services will still operate as normal however some bus stops may be required to be relocated or closed. Please see the bus stops for further information.



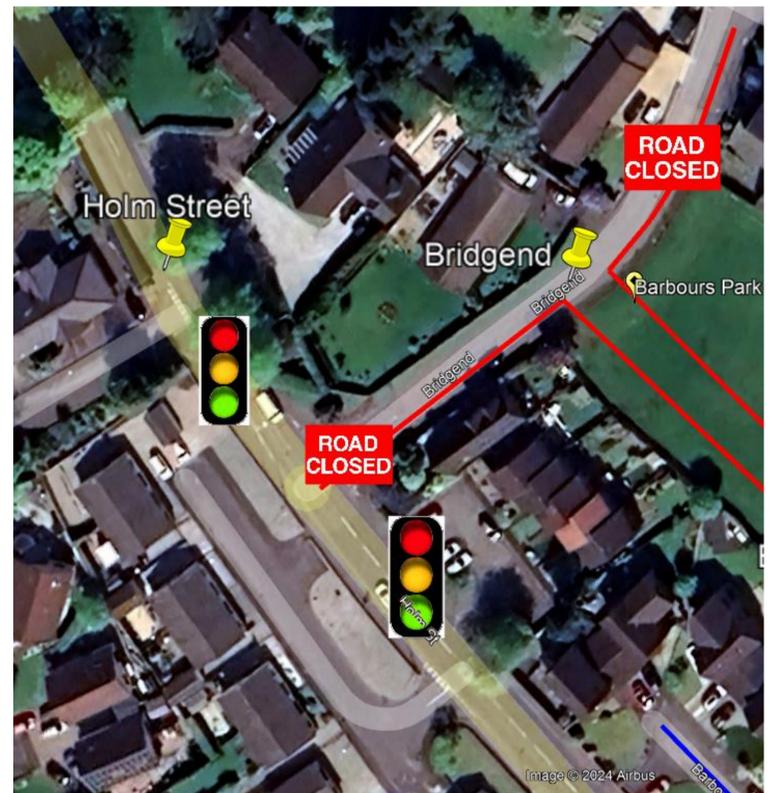


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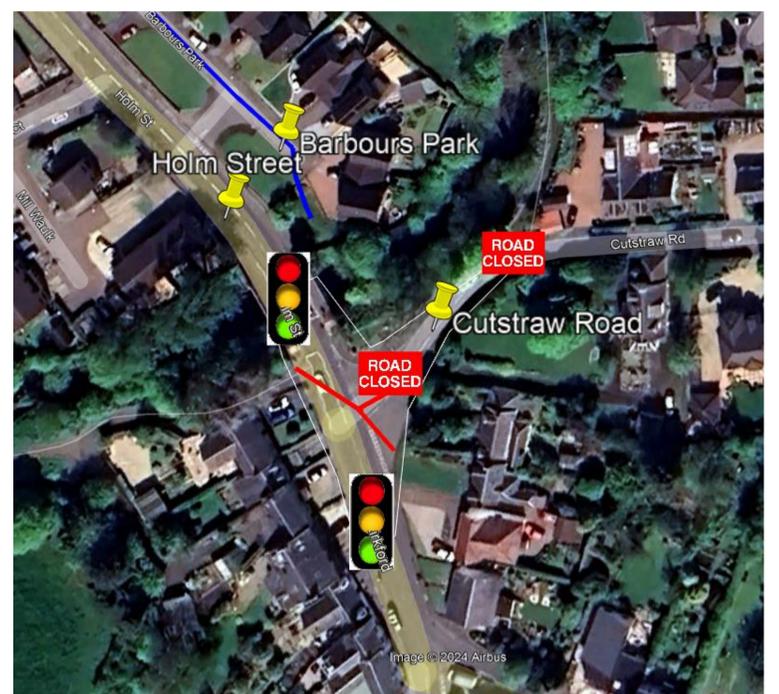
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# Investigation stage

**ROAD CLOSED** **Bridgend Road closure** from junction with Holm Road together with two way traffic lights on Holm Road from 1/4/24 for two weeks.



**ROAD CLOSED** **Cutstraw Road - Short** section of Cutstraw Road to be closed from junction with Holm Road together with two way traffic lights on Holm Road from 15/4/24 for two weeks.



*The dates shown are subjective to change depending on weather and works progress*

Once the detailed design stage is finalised, the project then moves onto the main construction stage.



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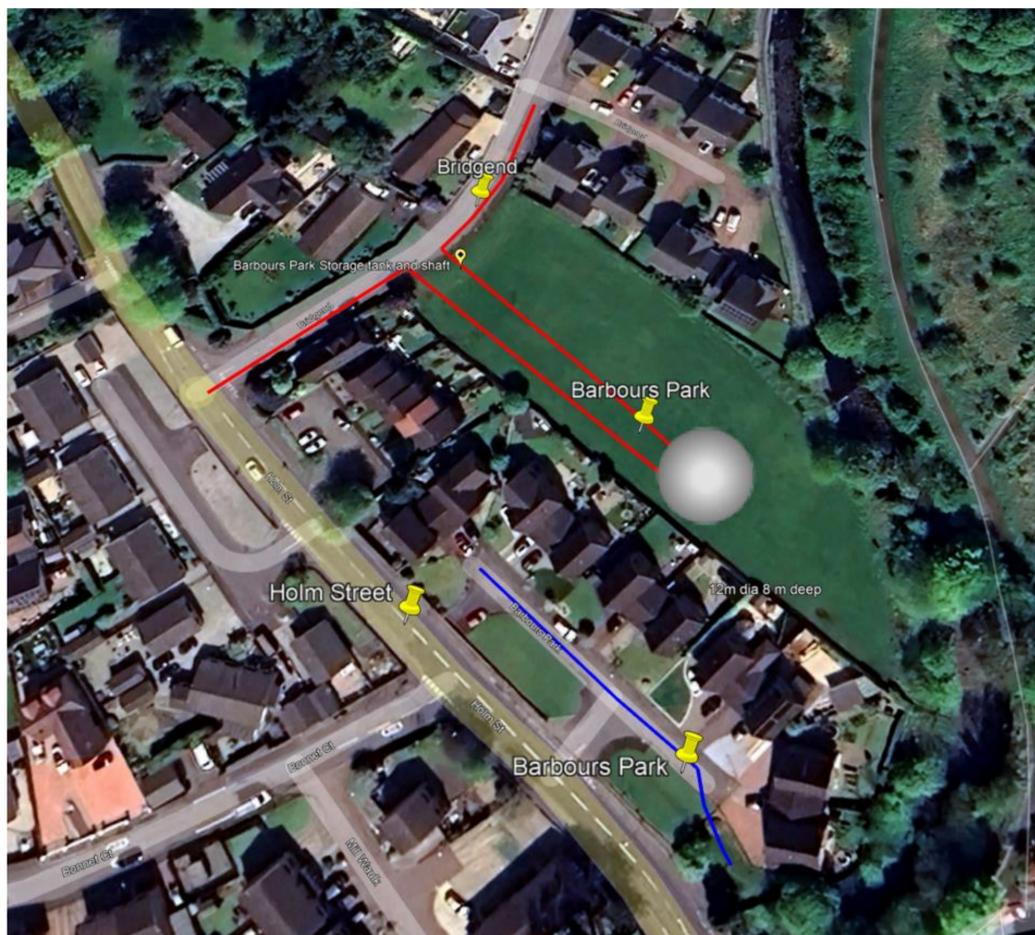
# Barbours Park



We propose to redirect the storm flows from sewers that are overloaded to a new underground tank in Barbours Park. This tank will store the waters during storms to help prevent flooding.

Once the storm has subsided, the storm water is then pumped back into the sewer network when it is safe to do so.

The solution has been designed using evidence from previous heavy rainfall events and using a computer model on the existing sewer network. Working together with East Ayrshire Council, the park was identified as the most suitable location to accommodate the large underground tank. Once complete, the park will be reinstated. New large sewer pipework is also needed in neighbouring streets.

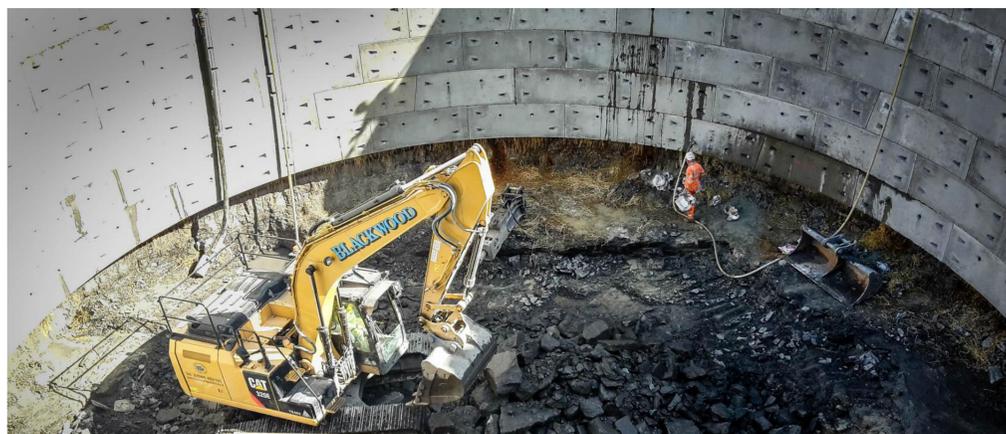
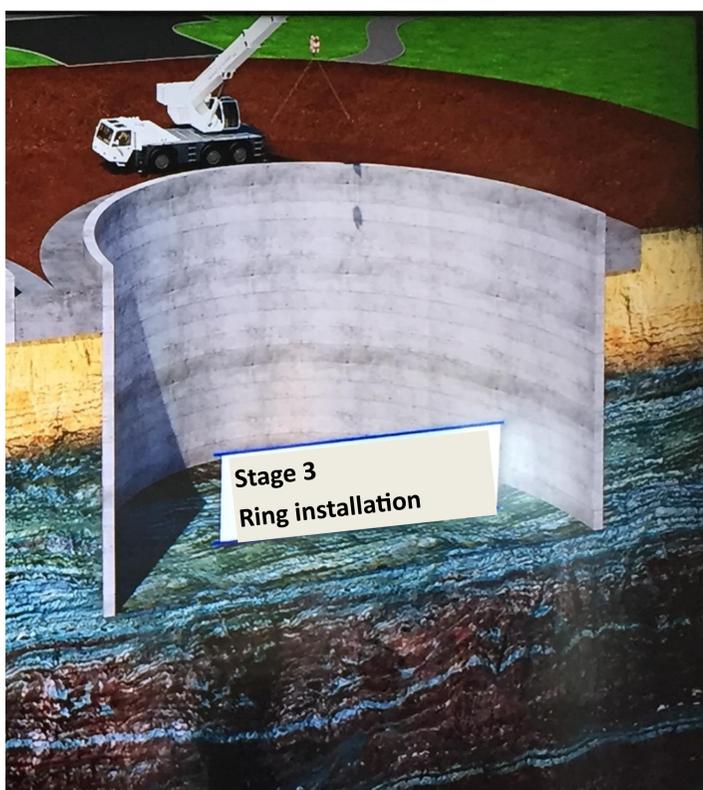
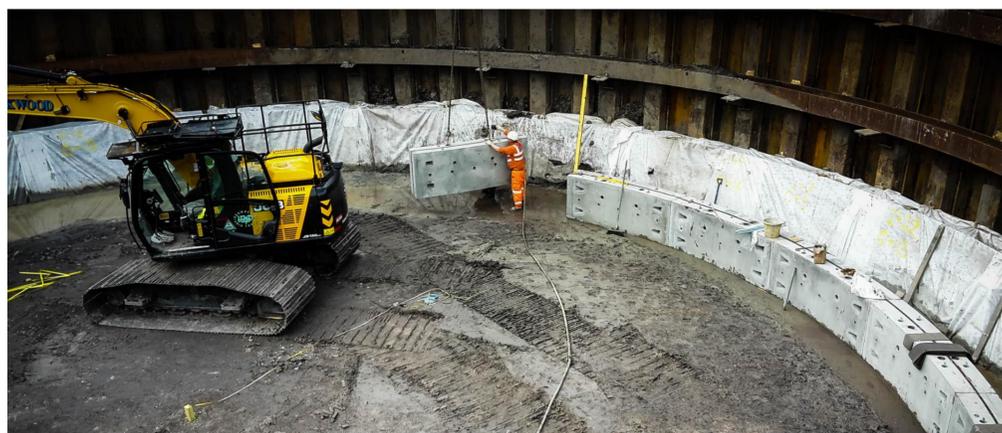
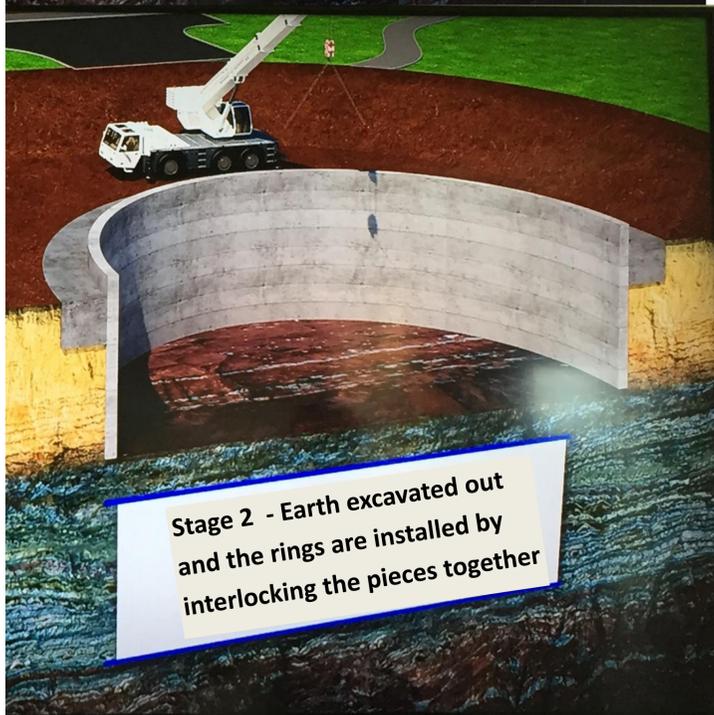
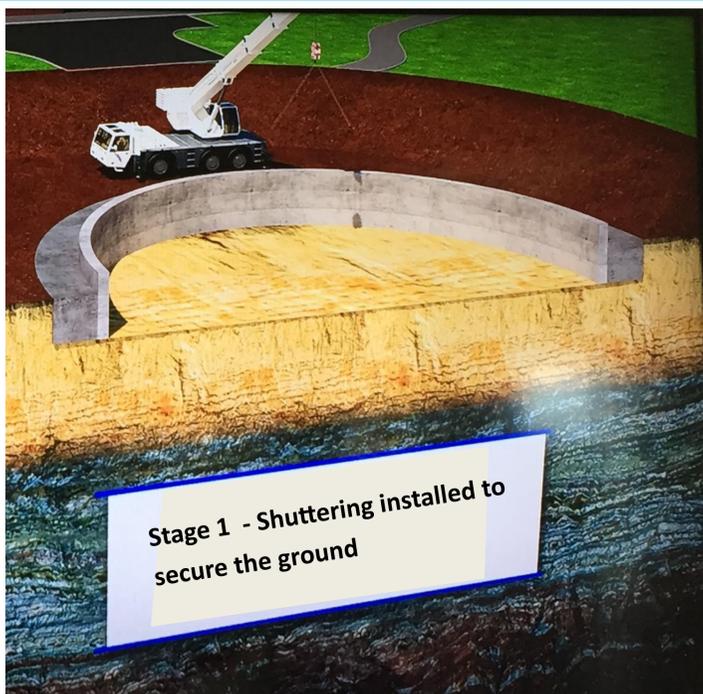




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# Storm Tank construction



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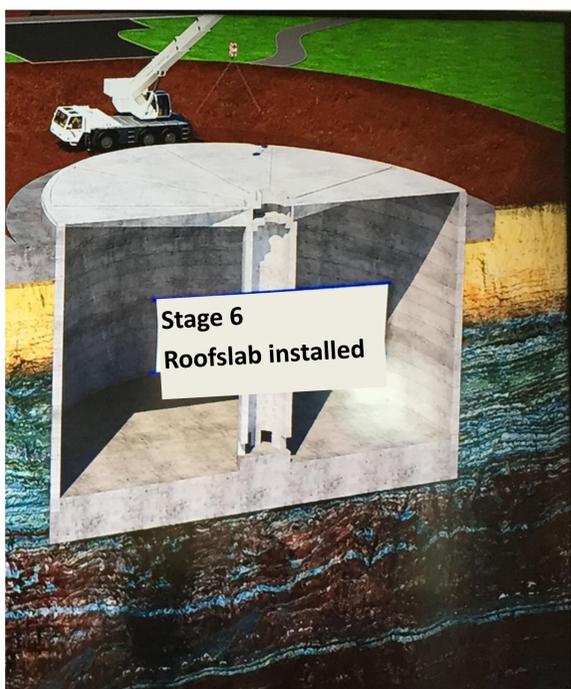
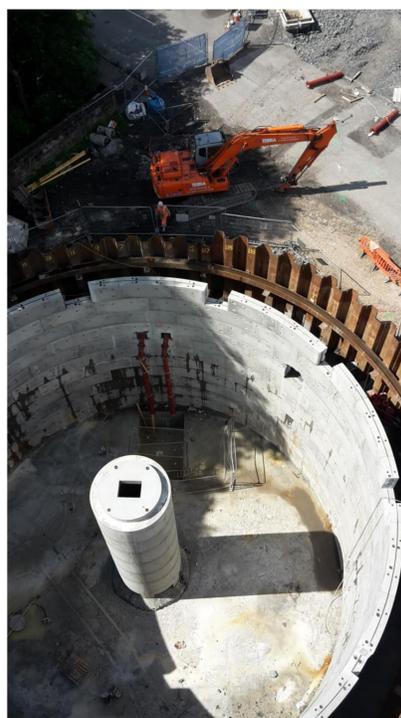
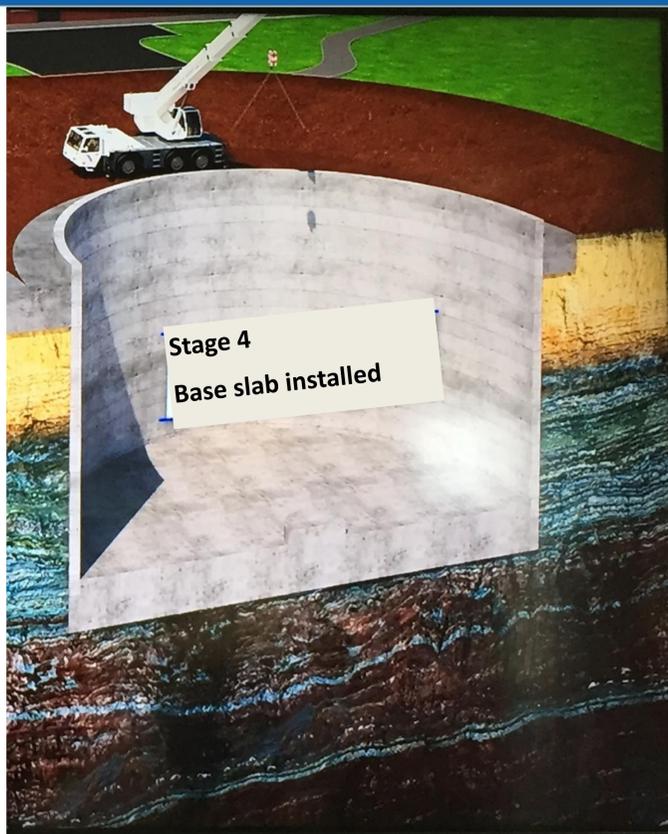
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# Storm Tank construction

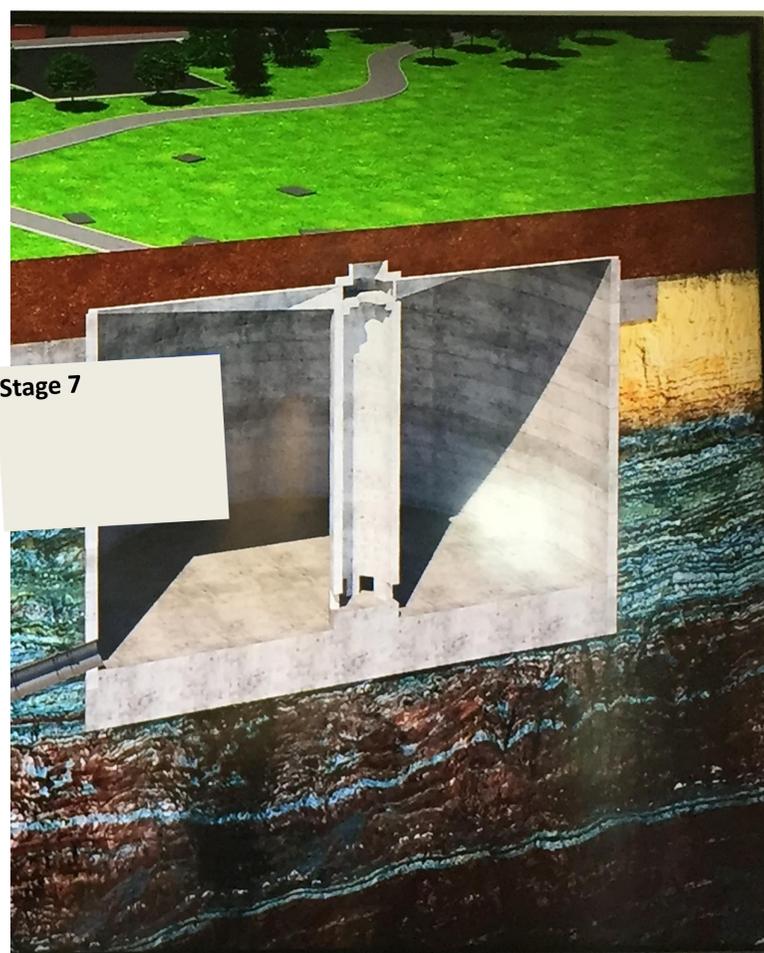




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# Storm Tank construction



## Stage 7

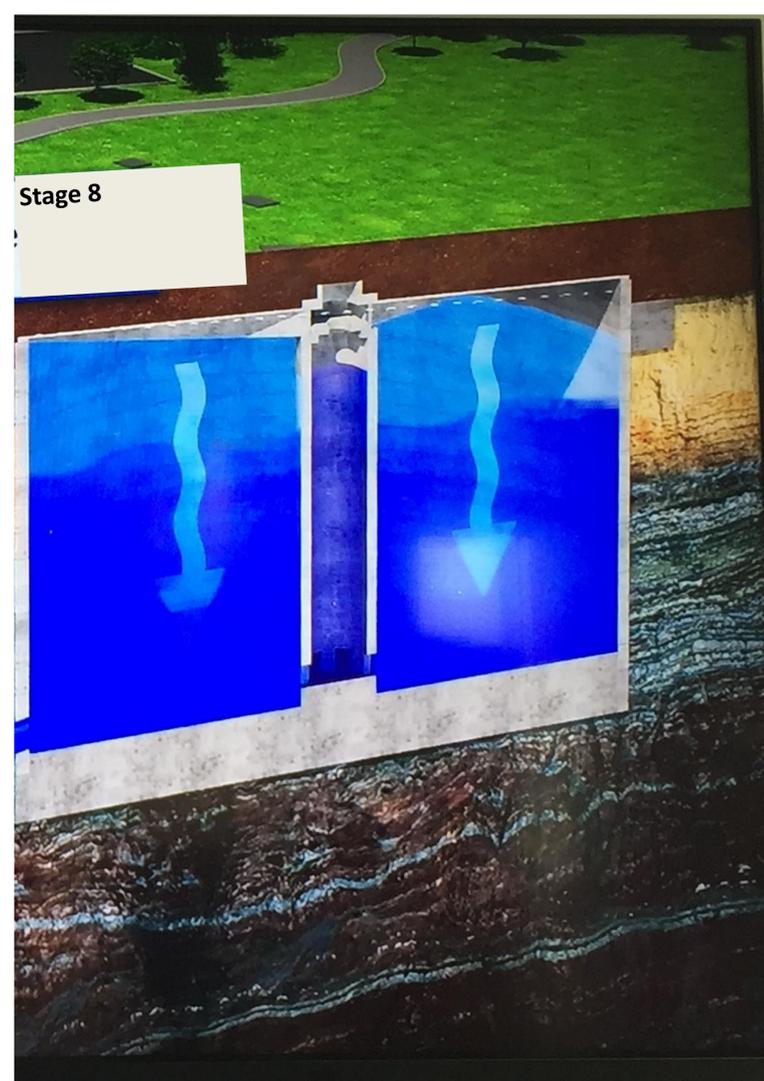
Area backfilled over the tank and landscaped.

## Stage 8

Storm waters are directed to the tank via the new pipework. The tank fills up during the storms. (The middle column of water is used to flush out the tank after a storm).

## Stage 9

The storm waters are pumped back into the sewer network after the storm has subsided when it is safe to do so freeing up capacity for any future storm events.





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# David Dale Avenue

## Project overview

Design and installation of two new sewer pipelines to alleviate the internal and external flooding experienced at residential properties on David Dale Avenue, Stewarton. The approximate investment for the works is £1,000,000.

## What we are doing

Scottish Water is delivering this project in a phased approach. Phase 1 has already been delivered and has stopped internal sewer flooding experienced by properties on David Dale Avenue. Phase 2 is currently in the latter stages of the design phase and will be delivered on site in late summer / early autumn 2024.

**Phase 1:** A new section of sewer network was installed in summer 2023 from the junction of Fleming Drive and David Dale Avenue, and ties into the existing trunk sewer running through Lainshaw Woods. Compensatory tree planting works related to the trees removed as part of Phase 1 are due to commence later in 2024.

**Phase 2:** Scottish Water plans to install approximately 140m of 1800mm diameter sewer pipe from Morton Road to an existing trunk sewer running through an area adjacent to the railway viaduct. The new sewer pipe will be laid underneath the perimeter of Lainshaw Primary School playing fields. Drilling will occur underneath the roundabout connecting David Dale Avenue, Lainshaw Street, and the A735 to minimise the impact to road users in the area.





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# David Dale Avenue

## Why we are doing it

**Phase 1:** Properties on David Dale Avenue were experiencing internal sewer flooding. The new section of sewer installed has stopped the flooding experienced by our customers.

**Phase 2:** Properties on David Dale Avenue and Morton Road are experiencing external sewer flooding. A new section of sewer will allow the sewage to flow directly into the existing trunk main and will resolve flooding experienced by our customers

## Proposed timescales

**Phase 1:** Sewer installation completed in summer 2023. Tree planting works to be carried out later in 2024 during a suitable planting period.

**Phase 2:** Further ground investigations will be carried out in February and March 2024. The construction works will commence from late summer / early autumn 2024. The duration for the construction works will depend on the further ground investigations carried out.

## Community Impact

All works within Lainshaw Primary School will be carried out during school holidays where possible to reduce the impact on the operation of the school.

Customers will be notified in advance of the construction works commencing on site.

Scottish Water are planning to minimise disruption to the community by drilling the new pipeline underneath David Dale Avenue, Lainshaw Street, and the A735—this will avoid closing the main route into Stewarton.





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# Holm Street, Sewer upsizing

## Project overview

We are proposing to upsize 47m of the existing sewer network on Holm Street to a larger pipe diameter of 300mm. The investment is approximately £500k.

## What we are doing

Prior to upsizing the larger sewer we need to divert a section of the existing gas mains and 13 metres of water mains to provide enough space to install the new larger sewer. All the works will be carried out by George Leslie within Holm Street (near to Barbour's park).

## Why we are doing it

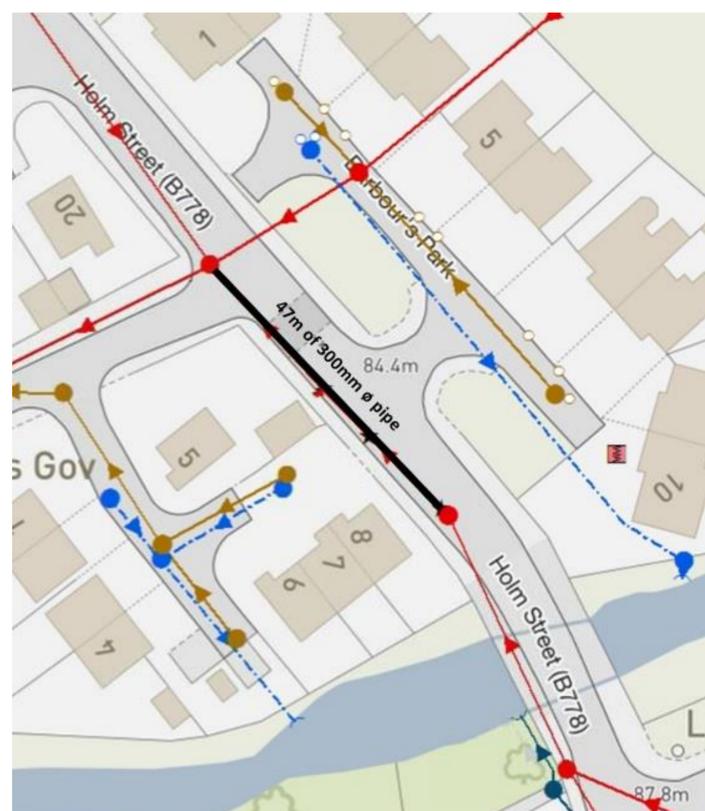
This work is needed to remove any potential flood impact associated with the new housing development.

## Proposed timescales

Works are proposed to start in summer 2024, once road access is confirmed by the council. The works should only last up to 3 weeks.

## Community Impact

Traffic lights will be set up on Holm Street at the Barbour's Park / Bonnet Crescent junction.





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# Minimising the impact of the works

Scottish Water is working hard to future proof the waste water services for the Stewarton community and the proposed upgrade works will provide a huge benefit for the town and the environment, now and for years to come. We appreciate that construction works of this nature can cause some disruption to the community going about their everyday lives. You can expect some increased noise and disruption due to traffic management, and you'll see us working on our various sites. We would really appreciate your patience and ask for your understanding while our delivery carry out these vital works as quickly and safely as possible. To help minimise any disruption as far as possible, we have planned in various mitigation measures, including: -

- **Noise** - Echo barriers will be placed around the generators to help reduce the noise impact.
- **Pedestrian Access** - Pedestrian access will be maintained around our work
- **Trees** -We may require to take some trees down near the river embankments. We will replace any trees taken down with 3 more trees. The replacement trees may be required to be planted in other locations away from the new infrastructure and in agreement with the council or land owner.
- **Site compounds**- We will write to you further with locations of the site compounds.
- **Working hours**—Our normal working hours will be between 8am-6pm Monday to Friday. We may require to work additional hours depending on works progress.





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# Next steps



- We will keep in touch as our projects progress and will post regular updates on our dedicated webpage: -

**[www.scottishwater.co.uk/stewarton](http://www.scottishwater.co.uk/stewarton)**

We will write to you two weeks before we start the work.

