



Update for Ardersier and Petty Community Council – January 2021

- As we have discussed with members of the Community Liaison Group (CLG), we want to be clear that Scottish Water accepts full responsibility for the situation that has arisen in relation to the 2 structures within the upgraded WWTW site which are taller than the current planning consent. One of the structures has already been installed on site, while the other has not yet been delivered to the site. We recognise that we have let the community down.
- We should have identified the issue that had arisen in the detailed design process much earlier – and either redesigned the site to comply with the original consent or discussed this with the community before seeking a planning amendment ahead of construction.
- Following on from earlier discussions and feedback provided by the CLG, we have been reviewing technical options to address the structure heights.
- We have discussed with members of the CLG that there are no easy options to resolve the situation – but we also recognise that the community feels strongly that we should comply with the original planning consent.

Picket Fence Thickener

- The Picket Fence Thickener tank is part of the sludge treatment process.
- Further work with the suppliers of the Picket Fence Thickener tank has identified an option to lower this structure so that the height of the permanent parts of the structure would be 9.7 metres AOD (5 metres above ground level), which was the height indicated in the 2016 revision to our original planning consent.
- We would still require an access gantry, but the fixed base of this would be included in the 9.7m height and we are developing a system for the handrails to be collapsible. The handrails would then only need to be in place for infrequent operational access and would be folded down afterwards.
- While we are responsible for the situation that has arisen, we cannot compromise on the safety of our team so we are in the process of confirming that we can put a system of work in place to allow this arrangement to be managed safely. We will also paint the gantry and handrails to match the colour of the tank itself.

Inlet Works

- We have also explored options to reduce the height of the Inlet Works, which has not yet been installed but is part of the retrospective planning application currently pending further consideration. This is located on the side of the site nearest to the public road and furthest from the most sensitive vantage points on the coastal path.
- The new Ardersier Waste Water Treatment Works has been designed as far as possible to operate using gravity rather than pumped arrangements – this is beneficial for the site's smooth operation and also to minimise operational cost, both carbon and financial.
- Inlet works are used to screen 'rags', grit and fats from the sewage before it enters our treatment process. They operate like a big sieve, but are extremely important as they protect the treatment processes downstream, the performance of which ensure a clean effluent is returned to the Moray Firth.

- The inlet works is a 'package' plant, which means it is pre-built off site and lowered on to a concrete slab at the site. Use of off site manufacture is part of Scottish Water's strategy to reduce the amounts of physical work required on site which improves safety, reduces vehicle movements to the site, and decreases the carbon impact of our works.
- The height of the current inlet works has been set by the hydraulic design of the plant – pumped sewage from Ardersier and surrounding areas enters the Waste Water Treatment Works and then flows by gravity through most of the plant. By avoiding pumping the plant is more reliable, less noisy and uses less electricity therefore having a lower carbon impact.
- Some parts of the inlet works are higher than we originally anticipated. This includes the top parts of some of the screens which 'sieve' the sewage, but stick up above the main structure, and part of the handrailing which keeps our operatives safe when they are maintaining the plant.
- We have looked at how we could lower the inlet works. This would involve creating a large excavation over 2m deep and installing a sheet pile wall along one side of it. We would then lower the roadways, install new drainage and lay a new concrete slab for the inlet works to rest on. Existing pipework, electrical ducting and lighting would have to be reinstalled.
- Lowering the inlet works means that gravity can no longer be used to allow the sewage to flow around the treatment process and a new pumping station would have to be installed. This involves sinking a shaft into the ground to create a well, and then installing large submersible pumps into the shaft with associated power supply and electrical controls. Whilst this is possible, it introduces a costly additional item to our process which will require maintenance for the life of the plant and will pump constantly with a carbon impact and potentially additional noise.
- Given the significant financial and carbon cost of lowering the inlet works, as well as the operational risk created, we feel that the right thing for us to do is to provide the further information and visualisations that have been requested by the Planning Committee and seek consent for the increase in height of the tallest parts of this structure; as well as for the electricity substation which is much lower.
- We will explore whether the visual impact of this can be reduced via the painting of the higher parts of the structure and provide visualisations.

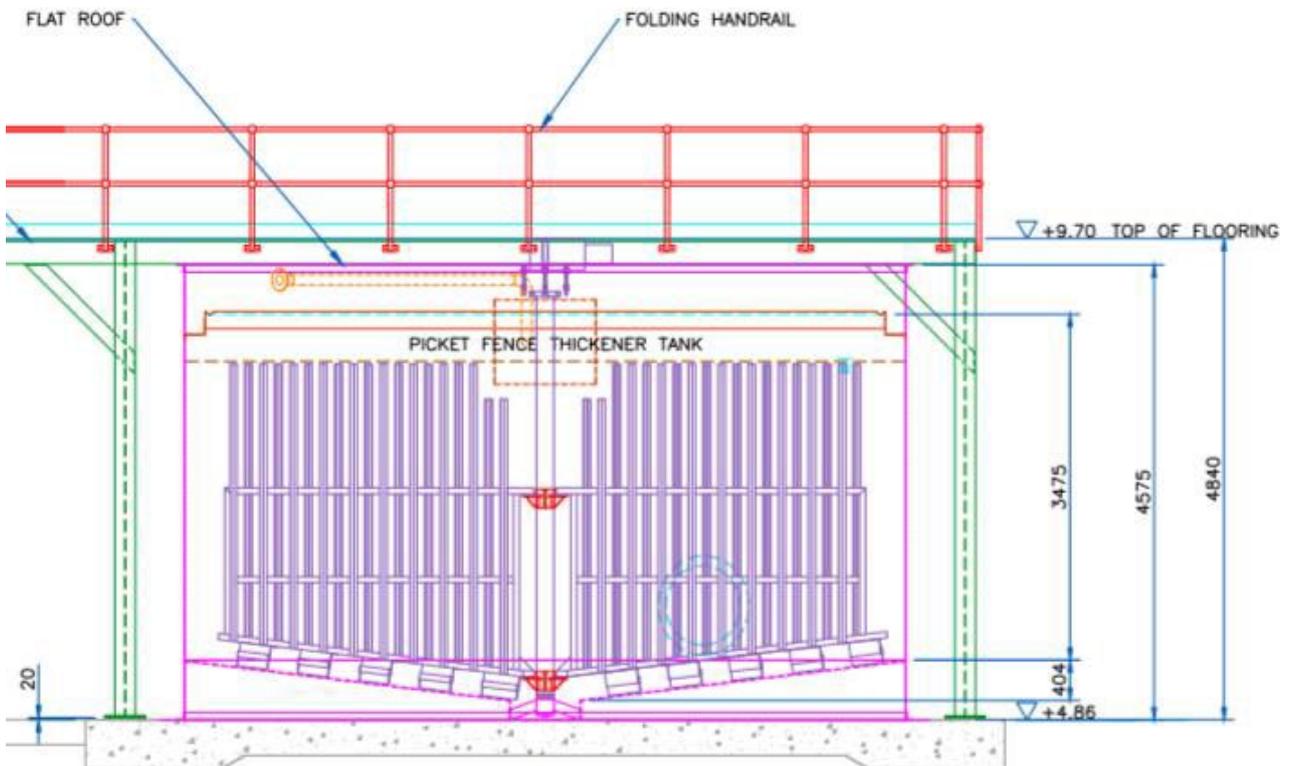
Summary

- We understand that the community may not agree with our proposed approach, which we recognise does not fully resolve the mistake that has been made. However, we hope that substantial changes to the Picket Fence Thickener, particularly to improve the appearance of the site from the coastal path, will go some way to reflect that we have tried to listen and to go as far as we feel we can.
- We are very sorry for the situation that has arisen with these two structures and we are committed to seeking to resolve this appropriately via the planning process.
- We recognise that we have obligations to the community beyond the formal planning process and we hope to continue working with the CLG to address these once the planning process has taken its course.



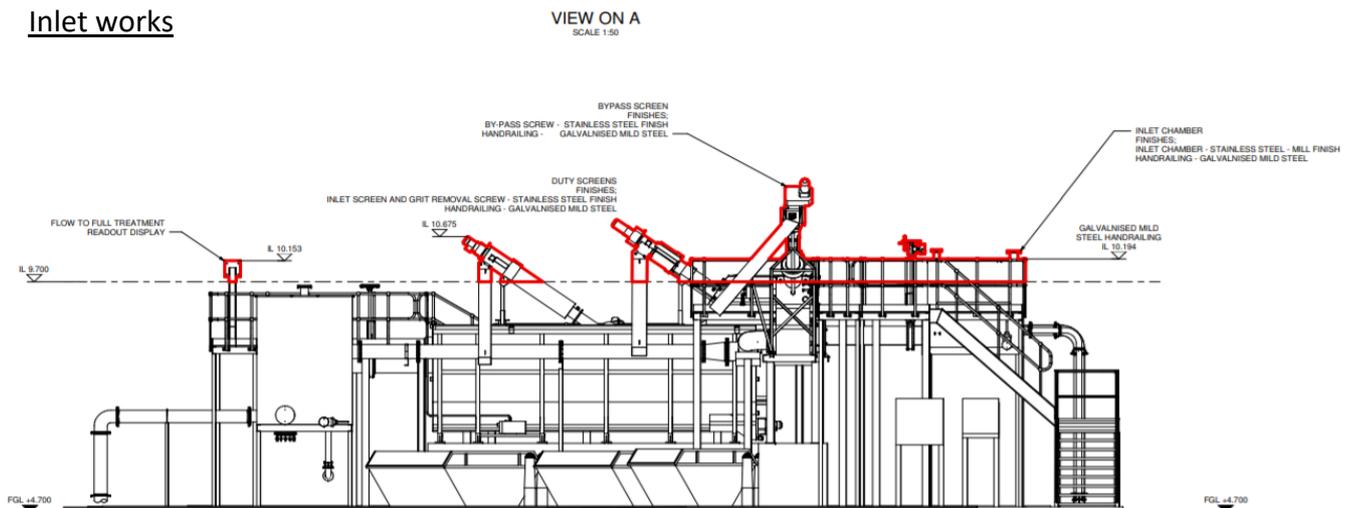
Drawings

Picket Fence Thickener (proposed revised design)



Drawing 1: Provisional cross-section of revised Picket Fence Thickener (includes internal arrangement within the tank which will not be visible). The handrail is shown upright, but would be folded down when not in use. A final drawing will be provided to the CLG and via the planning process.

Inlet works



Drawing 2: Elevation of proposed Inlet Works, with part of handrail and equipment above 9.7 metres AOD highlighted in red.

Note: drawings are not to scale