Guidance notes
Post project case study

Fact sheet
June 2021

Background

Post project analysis is an opportunity to challenge our decisions that were made at the start of the project. This leads to better understanding of the outcomes and provides for improvement in our decision making processes. Lessons learned can save cost and time, reduce carbon footprint, improve operation and maintenance, and selection criteria for future projects by implementing changes to our processes and standards.

Discussion

For this example, we look at how we can optimise our practices across all phases of the Pukekohe Wastewater Treatment Plant project.

The project involves the updates of the existing plant to allow the treatment of wastewater from 60,000 households.

Throughout the project, we endeavoured to use our 40:20:20 principles to spot ways to reduce our carbon footprint, enhance safety and well being, and optimise costs. By continuing to make good material selections and use technologies that enhance workmanship we can further optimise our projects.

Themes from our example project

- Strategy around the need of the asset and its design life
- The budget is adhered to
- Material selection is fit for purpose and includes supply chain
- Specification level and interpretation
- Involvement of operations throughout the project
- Contractor methods and support

Outcomes

- Provide guidance notes on recurring subjects to offer detailed interpretation of the specifications
- Produce documents that address historical acceptable practices. This helps to identify limitations and possible improvement.
- Development of multiple product-based design solutions that allow for continuous improvement. This will improve on time, cost and quality of delivery.
- Identify opportunities where new and existing infrastructure can be reused.

Pukekohe Wastewater Treatment Plant project background

The project is to upgrade the existing treatment facility to allow the treatment of wastewater from up to 60,000 households.

The expansion included:

- New inlet works
- New activated sludge reactor
- New membranes
- Chemical systems
- UV system
- Electrical switch rooms

Watercare
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