

# The KRED Pipe Jack

***Gareth John, Project Manager, Tauranga City Council***

The Kennedy Road Embankment Dam Project (KRED) is one of a suite of stormwater projects which will effectively and sustainably manage stormwater in the catchment of the Nanako Stream, Pyes Pa West – specifically in the area that extends from Kennedy Road to Freeburn Road. The objective of these projects is to limit the potential impacts of flows from existing and future development around the Nanako Stream, and on other land and properties in the catchment.

An overview of the catchment is noted below:



The KRED project included the installation of a 2.5m culvert. Tauranga City Council (TCC) opted to use pipe jack/thrust technology in lieu of open cut. The trenchless option allowed the works to be completed quicker, facilitating faster delivery of much needed housing for the city, as well as enabling TCC to keep Kennedy Road open and operational during the works, and not require reconstruction of the road.

TCC opted for an Early Contractor Involvement (ECI) procurement approach due to the construction complexities and risks. In October 2020, we awarded the contract to MAP Project Ltd (with United Tunneling undertaking the trenchless works). In December 2020 works commenced onsite and in June 2021 the jacking works began. The jacking works were completed in September 2021. It is worth noting that works continued during the August 2021 COVID-19 lockdown due to the risk of the pipe becoming stuck halfway

Prior to commencing onsite, we had numerous risk workshops, performed various exploratory geotechnical investigations, and developed various back-up plans (and 'what if' scenarios) in the event the jacking failed.

Long-section of pipe through the dam below:

