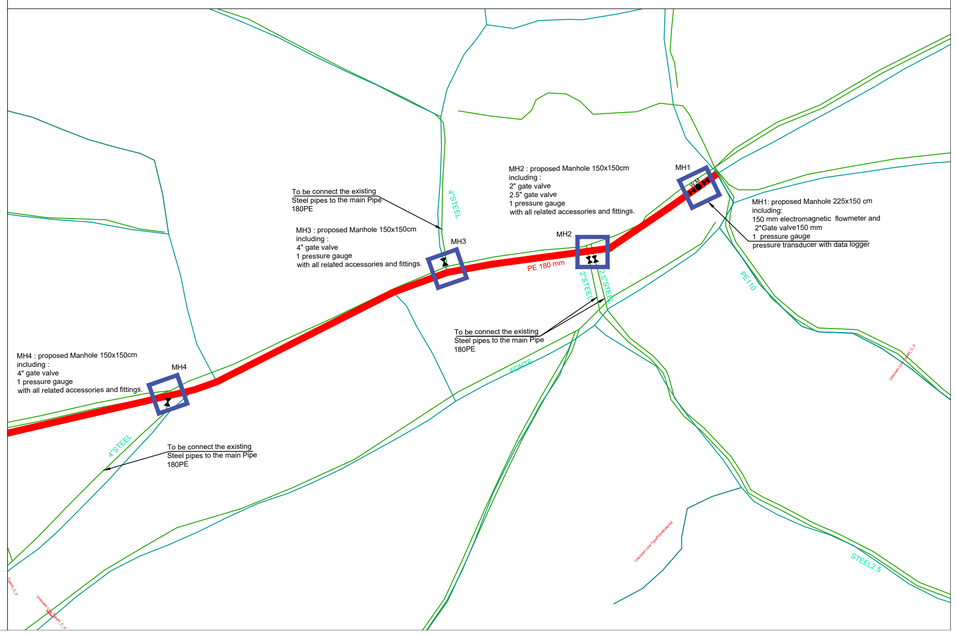
legend:

existing pipe network

Danash pipe network

proposed working path