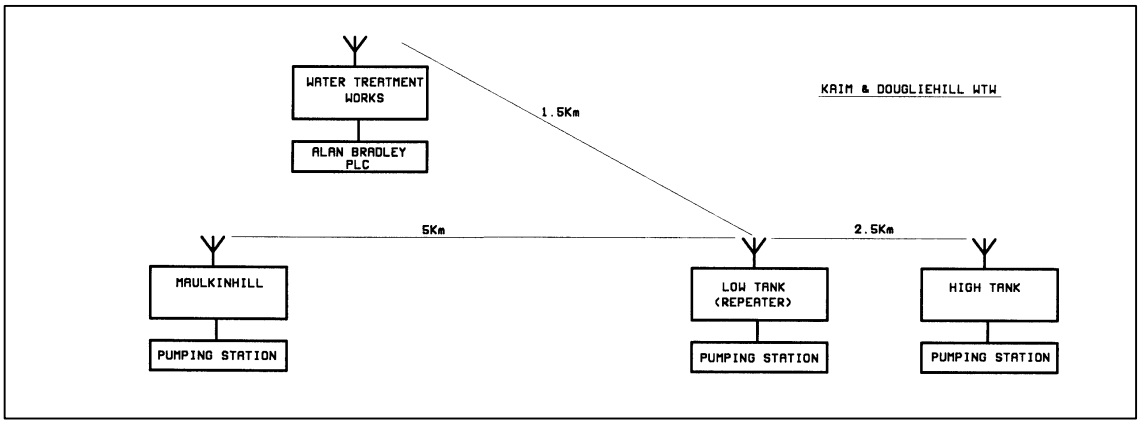
## KAIM & DOUGLIEHILL WATER TREATMENT WORKS AP124

Overview

The West of Scotland Water Authority needed to monitor and control the outlying pumping stations supplying water to the Water Treatment Works at Dougliehill. Only one pumping station at Low Tank was in radio range of the pumping stations at Maulkinhill and High Tank and the Water Treatment Works. All signals two and from the Water Treatment Works to the outlying pumping station had to be repeated through Low Tank. pumping station.

A 24Hr battery back up along with a telemetry fail indication was provided at all the installations.




System Specification

A XNET transceiver configured as node 0 was installed at Low Tank. This then acted as the network manager co-ordinating and controlling the other three XNET transceivers. A total of 9 Digital Outputs, 44 Digital Inputs , 3 Analogue outputs and 24 Analogue inputs were required. Hence the following hardware was specified:

1 off X7100 Transceiver with 8 DI, 8DO, 2 AI and 2 AO
1 off X7102 Digital Output Module with 8 DO
5 off X7101 Digital Input Module with 8 DI
1 off X7105 Analogue Output Module with 4 AO
5 off X7104 Analogue Input Module with 4 AI

A XNET transceiver configured as node 1 was installed at The Water Treatment Works. A total of 74 Digital Outputs, 16 Digital Inputs , 47 Analogue outputs and 3 Analogue inputs were required. Hence the following hardware was specified:

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1 off X7100 Transceiver with 8 DI, 8DO, 2 AI and 2 AO
10 off X7102 Digital Output Module with 8 DO
1 off X7101 Digital Input Module with 8 DI
6 off X7105 Analogue Output Module with 4 AO
1 off X7104 Analogue Input Module with 4 AI

An XNET transceiver configured as node 2 was installed at the pumping station at High Tank . A total of 4 Digital Outputs, 4 Digital Inputs and 8 Analogue inputs were required. Hence the following hardware was specified:

1 off X7100 Transceiver with 8 DI, 8DO, 2 AI and 2 AO
1 off X7102 Digital Output Module with 8 DO
1 off X7101 Digital Input Module with 8 DI
2 off X7104 Analogue Input Module with 4 AI

The transceiver was programmed to repeat its transmissions at Low tank

A XNET transceiver configured as node 3 was installed at the pumping station at Maulkin Hill. A total of 3 Digital Outputs, 16 Digital Inputs and 14 Analogue inputs were required. Hence the following hardware was specified:

1 off X7100 Transceiver with 8 DI, 8DO, 2 AI and 2 AO
1 off X7102 Digital Output Module with 8 DO
1 off X7101 Digital Input Module with 8 DI
4 off X7104 Analogue Input Module with 4 AI

The transceiver was programmed to repeat its transmissions at Low tank.

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