



PHOTO 1 – Overall view of proposed road crossing

Length being 6 meters.



PHOTO 2 – Lowering of the cradle into the starting pit.



PHOTO 3 – Lowering of GRUNDOMAT 180mm ø into starting pit.



PHOTO 4 – GRUNDOMAT 180mm ø aligned in the starting pit ready for commencement of the 6m bore using Grundoscope.



PHOTO 5 – The GRUNDOMAT 180mm \varnothing arrived 100% on target and total boring time of the crossing was around 1 hour.



PHOTO 6 – A towing eye is attached to the GRUNDOMAT 180mm \varnothing to pull back the winch cable using the reverse mechanism of the GRUNDOMAT.



PHOTO 7 – The GRUNDOMAT 180mm \varnothing is reversed back to the starting pit with the winch cable.



PHOTO 8 – An expander of 225mm \varnothing is attached to the head of the GRUNDOMAT for upsizing the hole to accommodate the size of the HDPE pipes of 200mm \varnothing .



PHOTO 9 – Showing the the GRUNDOMAT with the Front-End Expander ready to bore through the existing borehole for upsizing.

Note: A winch cable is attached in the front of the GRUNDOMAT for continuous tensioning of the boring process.



PHOTO 10 – Showing the the worker continue winching the 1.6t winch for tensioning at the reception trench.



PHOTO 11 – Showing the winch cable pulling in the arriving of the GRUNDOMAT with the Front-End Expander.



PHOTO 12 – Showing the completion of upsizing of the borehole.



PHOTO 13 – Showing the 200mm \varnothing HDPE pipe for water connection was successfully installed.