



## DESIGN & CONSTRUCTION OF CABLE CROSSINGS Across Tai Shui Hang Channel and Shing Mun River

To reinforce power supply to the Shatin and Ma On Shan region, three 900mm diameter R.C. cable ducts across Tai Shui Hang Channel and Shing Mun River for installation of electricity cable by **“Slurry Shield Pipe Jacking Method”** has been adopted. The design and build project entailed the construction of a pair of jacking and receiving pits for subsequent pipe jacking and cable laying works at the captioned sites. The length of each crossing was 80m and 230m (3 spans for each crossing) at Tai Shui Hang Channel and Shing Mun River respectively.

The selection of Slurry Shield rock cutter head pipe jacking machine has been found to perform satisfactory in this soil conditions. A maximum production rate of 12m/day had been achieved.

One of the critical issues of this project was the construction of a pair of 14m deep working pits adjacent to Tai Shui Hang Channel and Shing Mun River. The pit itself was difficult to construct due to high water table and underground conditions as it was not far away from the existing seawall. There was also a submerged 750mm diameter gas main laid underneath the seabed of Shing Mun River which increased the difficulty of the pipe jacking operation works.



DH-900 Pipe Jacking Machine

Setting Up Of DH-900 Jacking Machine Inside Launching Pit

