

The Wenchi Water Project

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SUMMARY

The purpose of the Wenchi Water Project was to construct a pipeline from the Tain River, through the Water Treatment Plant and to the Reservoir to supply the community with clean water. In undertaking this project, the main objectives were to establish a pipeline route from the river to the treatment plant and finally to the reservoir, conduct a cadastral and topographic survey of the Water Treatment Plant area, establish control pillars along the way from the river to the reservoir, conduct a hydrographic survey of the Tain River and produce a planimetric map of the project area and a cross-section map of the river. In the course of the project, RTK surveys, static surveys and total station surveys were conducted for the coordination of unknown points, planting of survey pillars to serve as temporary control points and hydrographic survey to analyze the nature of the river. The results show a planimetric map of permanent features such as buildings, drains and poles within the project area and a suitable design for a pipeline route from the river to the reservoir as well as temporary control points for traverse surveys and a cross-sectional diagram of the nature of the river, taking into consideration the average river level, the meandering nature of the river and the nature of the water bed. These results are analyzed so as to come out with a perfect design for the pipeline route, a conduit or a dike. The project shows the nature of the project area, specifically the exact positions of all permanent features.

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