Fourth Feasibility study trip to Wangdong Bridge (2 – 3 Mar 2019) Reflection

SIU Ming BEng (CivE) III

The purpose of the trip to Wangdong on March was to communicate with local contractor regarding the construction methods and sequences of the Wangdong cable bridge.

In the trip to Wangdong in last year December, we only had a brief idea on the material used for the bridge and what components the bridge had. However, we had no idea about the layout of the tension and compression reinforcement supporting the bridge. We also did not know about the method of connection between the main span and the bridge deck on the right bank. Yet, all these were discussed in this trip.

During the discussion process, I had applied a lot of knowledge that I acquired from my lecture, especially the structural design course. I had also gained understandings that had not been taught in my lecture; for example, the secondary reinforcement in the bridge deck was designed to be welded together with vertical reinforcements hidden in the bridge pose, that vertical reinforcements were connected to the cable. This monolithic design was adopted such that the weight of the bridge on the right bank can resist the sliding and overturning action and provide more factor of safety to the entire structure. Besides, I had learnt about the method of grouting and design of hooks to serve the purpose of fixing cables and transferring loadings.

All in all, it was a fruitful trip, and I had learnt a lot of meaningful things during it.