

THONG WANGSANTIWONGSA : DEVELOPMENT OF A COMPUTER PROGRAM AS AN AID
IN GEOMETRIC DESIGN OF INTERCHANGE. THESIS ADVISOR : PROF. DIREK
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This thesis is to study and develop a computer program for the design and construction of interchanges. This program could form a basis for further refinement in the future, in which application of similar program overseas can be avoided. Ultimately it will save currency outflow and increase the country technologies self-supporting level.

This program consists of 7 Subprogram: Program IN1 to input data of Main Line, IN2 to compute parameter of Ramp, IN3 to input data of Profile, IN4 to print out the result of computation of Main Line and Ramp, IN5 to print out the result of computation of Profile; IN6 to draw the picture of Main Line and Ramp, IN7 to draw the picture of Profile.

The result of this program when applied to the interchange as designed by the Expressway and Rapid Transit Authority of Thailand shows deviations of not more than 2 millimeter which is in an acceptable range. The result also conforms with calculation made by hand.

This program can save computing time from 1-2 months by hand to 1-2 hours by computer application.