CWR 3540 – WATER RESOURCES ENGINEERING – Fall 2024

Study Material: Modules 3 and 4

Homework Set No.6:

Due on Thursday, November 7, 2024, at the start of the lecture

Required Problems (A and B) below:

Problem A. Solve Problem 16.18 (in p. 740) but using the Florida Department of Transportation (FDOT) IDF Curves for Zone 10 in Florida. Please attach a copy of the curves to your solution, clearly showing your intensity estimates. You should find technical information and documentation by the Florida Department of Transportation (FDOT), including IDFs at the following link:

https://www.fdot.gov/roadway/Drainage/ManualsandHandbooks.shtm

Problem B. In reference to the information provided in Problem 16.13, determine the peak flow at location B from drainage area 1 by the NRCS (SCS) TR-55 graphical hydrograph method. In addition to the related material of our textbook, refer to the report "USDA Urban Hydrology Small Watersheds TR-55", which is available from the folder "Manuals and Reports" of our course website and contains detailed information in support of your solution, as needed.

Recommended Practice Problems:

16.10, 16.12, 16.13, 16.14, 16.15, 16.18, 16.19, 16.22, 16.23 and 16.29, among all others that are available in Chapter 16 of our textbook.

Exam No. 2: Tuesday, November 5, 2024