

## Applied Hydraulics – Week 11 – Gradually Varied Flow, Computer Solutions

**Reading Assignment:** Chin, Ch. 3, section 3, pages 127-145.

**Homework Problems:** 3.46, 3.47, 3.48 (problems may be done w/ StormCAD)

### Hands-on Assignment

This week you'll learn how to use a computer program (Haestad Method's StormCAD) to do gradually-varied flow calculations.

### Procedure (this may be done from any Mosaic computer)

1. From a Mosaic machine open StormCAD from the Start menu.

All Programs → Mosaic XP → Engineering → Civil → Haestad Methods → StormCAD

2. Go through the "Introduction to StormCAD" (the top button in the "Welcome to StormCAD" window).
3. Go through the Overview, Pipes, and Design/Calculations tutorials.
4. Create a StormCAD directory somewhere in your personal space within Mosaic disk space (e.g. H drive, U drive).
5. Click on the "Open Existing Project" button.
6. Open one or more of the projects available under the "Lesssons" or "Samples" subdirectories. When opening, errors will result because of missing files on the C drive. You can eliminate these errors by saving the project file (.stm) to your local space, then pushing the "GO" button to run the analysis. Do this with one or more projects. You can go back and open other projects, which can be found here:  
  
C: → Program Files → Haestad → STMC
7. Go back to the help pages, and get help on "Sample Projects," then open and look through one or more of these projects.
8. Now do problem 3.45 from the textbook using StormCAD (solution is available on the class web page).

### To Be Done Later (Bring to class November 19)

Bring your StormCAD solution to problem 3.45 to class on November 19.