UNIVERSITY OF NEW BRUSWICK
DEPARTMENT OF GEODESY AND GEOMATICS ENGINEERING
GGE 3423 (ONLINE): INTRODUCTION TO GIS

LAB ASSIGNMENT 4

Scope:

This assignment is to get the students acquainted with the process of georeferencing in ArcMap. A historical map of Fredericton will be georeferenced, partially digitized, and combined with current basemaps or datasets.

Steps:

1. Visit the Old Maps Online http://www.oldmapsonline.org/ and browse the historical maps of New Brunswick, Atlantic Canada, and the World. Most of these maps are useful resources as they preserve information that is not recorded elsewhere. It would be nice if we could combine these maps with current basemaps. Let's try then…
2. Browse the map sheets that are stored in the directory PANB on D2L > Lab_4. These sheets represent downtown Fredericton in late 1800's and are physically available at the Provincial Archives of New Brunswick (just by Head Hall).
3. The scope of this assignment is to reconstruct the Saint-John river bank as it was in 1800's and compare it with the current one. As you can see there was no bridge back then! Start off with georeferencing the map sheets. You will need to find the coordinates of the control points from a current map. To do so, use the shapefiles from Lab 2 or Google Maps.
4. After the georeferencing is completed, create a new shapefile and digitize the river bank.
5. Add a basemap of Fredericton.
6. Combine all together, i.e., the digitized river bank, historical sheets, and basemap, into a Map Layout [1]. Choose a scale so that the map fits in a Letter size paper (portrait or landscape); add title, north, scale bar, grid, etc.
7. Export the Map Layout as a PDF document.

Deliverables:

a. The Map Layout [1] in PDF format.

Upload [1] on D2L > Assignments > Lab_Assignment_4