NATIONAL EXAMINATIONS – DECEMBER 2008

CIV-B6

Urban and Regional Planning

3 Hours Duration

Notes:

1. If doubt exists as to the interpretation of any question, the candidate is urged to submit with the answer paper, a clear statement of any assumptions made.

2. Candidates may use one of two calculators, the Casio or Sharp approved models.

3. This examination is CLOSED BOOK. No aid other than an electronic calculator (see 2 above) is permitted.

4. The first TWO (2) questions plus FIVE (5) of the remaining questions constitutes a complete paper. Additional questions which are answered will not be marked. The first two questions are worth 25 marks each. The remaining questions are worth 10 marks each.

5. Either SI or English units may be used.

6. Most questions require an answer in essay format. Clarify and organization of the answer are important.
MARKS | PART A: CANDIDATES MUST ATTEMPT ALL SECTIONS OF QUESTIONS 1 and 2

1. You have just been hired by the Town of Greenfield as a municipal engineer. A new Official Plan has recently been prepared showing substantial growth over the next twenty years. The Town Council requires information on future municipal services to prepare long term budget estimates and decide on the phasing of new growth. You have been asked to undertake this project.

10 (a) How will the Official Plan be of assistance? What areas of the Official Plan would you refer to?

10 (b) Explain the relationship between the Official Plan and the Zoning by-laws? Why would the zoning by-laws be of interest to you in preparing your report?

5 (c) What other documents would you review and why would these be of interest to you?

2. You are a partner in Ellis Associates, a successful consulting firm providing engineering and planning services. A valuable client has just purchased a 140 hectare farm adjacent to the Town of Macdonald. The Town is expected to grow substantially as a manufacturer plans to construct a new plant. Your client wishes to subdivide the property for housing and has asked you to make a presentation to the Macdonald Planning Committee.

10 (a) Prior to preparing your presentation what agencies, departments or individuals would you contact? From each contact note one (1) piece of information you would like to obtain?

5 (b) When would you visit the site? What would you look for during your site visit?

10 (c) Having collected basic information and visited the site you schedule a review meeting with your client. At this meeting she asks that a short report be submitted to the Macdonald Planning Committee. Outline the table of contents of this report and then give a 1-2 sentence description of each section.
PART B: ANSWER FIVE (5) OF THE FOLLOWING QUESTIONS
ALL QUESTIONS ARE OF EQUAL VALUE

3. Many Canadian plans call for infill or intensification of existing urban areas rather than greenfields development on the edge of cities. What are the advantages and disadvantages of urban intensification?

4. Population and employment studies are the foundation of many community plans.
   a) What are the key variables for predicting population growth?
   b) Which is the most important variable for predicting the growth of major Canadian cities?
   c) What is the most frequently used method of population forecasting?
   d) What are three methods of forecasting future employment trends?

5. Underlying the statement by Daniel Burnham - "make no little plans" - is the belief that an ideal urban form can be achieved through community planning (i.e. planners feel they can do more than solve the problems posed by current development). Discuss this concept in the historical context of city-building that Hodge investigates in Planning Canadian Communities.

6. Urban and Regional Planning requires a familiarity with many related subjects and areas of planning activity. Discuss TWO (2) of the following subjects, and note how each relates to community planning.

   (a) environmental protection  (d) heritage conservation
   (b) site planning            (e) preservation of agricultural lands
   (c) water supply and sewage 

7. The newly-elected mayor of your city ran for office on a pro-growth, tax-cutting political platform. In his first week in office, he announces that he is considering closing the municipal planning department to save taxpayers dollars. He will also promote economic development by revoking the city’s zoning bylaw and official plan so that there are no obstacles in the way of property development proposals from landowners. You are a principal in an engineering and planning consulting firm, and the mayor's transition team wishes to confidentially canvass your opinion of these proposals. What advice would you give the transition team, and why?
8a. Classify the six numbered streets in the diagram below using the following hierarchy: (street types may be used more than once for an answer). Please copy the answers into your exam booklet.

- Cul-de-sac
- Local
- Collector
- Arterial
- Expressway

8b. What are the advantages and disadvantages of a curvilinear hierarchical road system such as the one above, when compared to the grid road systems in the older parts of cities?
9. In the context of urban and regional planning define FIVE (5) of the following terms:

(a) minor variance  (e) easement
(b) secondary plan  (f) modal split
(c) severance  (g) non-conforming use
(d) environmental assessment  (h) development control

10. Societal concern for environmental issues has caused those responsible for land development to consider the merits of a more integrated environmental planning approach. Such an approach attempts to achieve a balance between human and natural factors. Discuss ways in which planning today can be more environmentally sensitive.