CANADIAN BOARD OF EXAMINERS FOR PROFESSIONAL SURVEYORS
ATLANTIC PROVINCES BOARD OF EXAMINERS FOR LAND SURVEYORS

SCHEDULE II / ITEM 4 — October 2006

LAND USE PLANNING AND ENVIRONMENTAL MANAGEMENT

Note: This examination consists of 8 questions on 2 pages.

Time: 3 hours

Q. No		Marks Value	Marks Earned
1	Your geomatics consulting firm has been selected by the Regional District in your province to provide mapping and land information services, as part of a project team, for the Regional Planner's study of two potential sites for a year-round recreational subdivision. The best available topographic mapping is at 1:50,000 scale with 100 foot contour intervals. Recent black and white vertical air photo coverage is available at 1:10,000 scale. a. What geomatics and survey services would you recommend to the Project Team in order to assess the suitability of the site? (8 marks) b. What other types of consultants are likely to be on your Project Team? (6 marks) c. After the Project Team has received your information provided in a. along with the preliminary work from other consultants, it is concluded that the site has potential to provide approximately 50 lots in the 1 to 1.5 hectare range. Your firm has been asked to develop a conceptual subdivision design for the development. i. List the criteria you would consider in developing such a design. (6 marks) ii. What agencies or authorities would you liaise with during the design stage? [Candidates may cite the agency names for their province or territory of residence or best familiarity.] (6 marks) iii. You are asked for your views on public consultation for the proposed development because of the long presence of your firm in the area and your familiarity with the local year-round and seasonal residents. Describe in point form the recommendations you would make and the rationale for each. Assume and state any factors which you need for your answer. (6 marks)	32	
2	Explain the following terms as they apply to land development (2 marks each): a. planned unit development b. sideyard setback c. zoning plan d. floor area ratio e. footprint f. official community plan g. restrictive covenant h. strata title	16	

3	Discuss in general terms the optimum site utilization of a triangular parcel of land on which a six storey condominium development, with underground resident parking, might be developed.	8	
4	What unique factors must be taken into account and designed for in residential land development in a cold climate municipality in northern Canada?	8	
5	With respect to road and trail classification, describe the major attributes of each of the following (3 marks each): a. trail b. access road c. haul road d. collector road	12	
6	An addition to a waterfront National Park reserve on Vancouver Island is to be completed by acquisition of forested portions of three adjacent privately owned District Lots, each 160 acres in size, leaving the owners with the upland remainder of each. As a Canada Lands Surveyor and British Columbia Land Surveyor, you are retained by Parks Canada to make a legal survey of the three areas to be severed from the District Lots. These three areas will then be consolidated with the original National Park reserve. What particular precautions would you take in the conduct of the required boundary survey?	8	
7	Discuss some of the key factors to be considered in the establishment of a new municipal landfill site.	8	
8	A major natural gas pipeline in the interior of British Columbia has legal right-of-way 60 metres in width, centred approximately on the buried pipe, and has a cleared width of 40 metres through timber and vegetated areas. Describe two techniques available to reduce surface soil erosion in areas of the right-of-way where the longitudinal grade is greater than 5 percent.	8	
	Total Marks:	100	