

ASSOCIATION OF CANADA LANDS SURVEYORS
BOARD OF EXAMINERS

SCHEDULE III / ITEM 1
ACTS AND REGULATIONS RELATING TO SURVEYS OF CANADA LANDS

October 2005
(March 18, 1999 Regulations)

Notice to Candidates:

On April 1, 2003 the Government of Yukon took over administration of all lands and mineral resources in Yukon. Legislation was created that mirrors the *Territorial Lands Act*, the *Yukon Placer Mining Act* and the *Yukon Quartz Mining Act*. As the new statutes are not yet accessible on the Internet and have not yet been issued as a revision insert to the e-Edition of the Manual of Instructions on which this examination is based, the present three statutes of Canada appearing in Edition 3 of the Manual continue to apply for the purposes of this examination. Candidates who choose to answer questions based on the successor legislation must clearly state this fact in order for marks to be awarded on that basis.

This examination consists of 7 questions on 3 pages

Marks

Q. No

Time: 3 hours

Value Earned

1	<p>A standard size mineral claim in Yukon was located in 1995 in a manner designed to abut the easterly boundary of Kluane National Park. The location line for the claim was extended into the Park to ensure that there would be no open ground caused by its almost right-angled intersection with the surveyed Park boundary. The result was that the claim was determined to be only about one-half the size of a regular full size claim.</p> <p>The original grantee for the claim, André Morin, remains the current holder. The Minister designated for the purposes of the <i>National Parks Act</i> announces that on April 1, 2006, approximately 6 months hence, the boundary of the Park will be moved approximately one kilometre to the west. The existing prohibition on entry and locating of mineral claims over the area to be deleted from the Park will be repealed on that same date, thereby opening up additional area for the locating of mineral claims.</p> <p>Mr. Morin decides to abandon his existing claim in order that he might relocate his original claim and stake additional full size claims up to the new Park boundary on that date.</p>		
	(a) Describe the statutory process Mr. Morin must follow in order to abandon his claim and be in a position to relocate it on the April 1 date.	3	
	(b) Draw a neatly labelled sketch at some assumed scale to reflect the above-described situation. Show all nominal claim widths, location line lengths and legal posts and clearly label the original and new Park boundaries.	4	
	(c) Identify the governing legislation which applies to these mineral claims.	2	
	(d) Provide your answer to a. in the situation where the mineral claim was located abutting the boundary of Nahanni National Park in the Northwest Territories and was a claim of minimum (single unit) size.	3	
	(e) Provide your answer to b. for the case posed in d.	4	
	(f) Provide your answer to c. for the case posed in d.	2	

2	<p>Lot 455, Group 804, Plan 43555 CLSR, 21222 LTO in the City of Whitehorse in the Yukon Territory, was created pursuant to a confirmed plan of survey in 1949 and remained intact until three partial subdivisions undertaken in the period 1985 to 2003 created a single tier of lots, each having a frontage of 20.00 metres and a depth of 40.00 metres according to the three separate plans involved.</p> <p>The original plan of Lot 455 shows the parcel as a square with sides measuring 1,320.0 feet and having exact cardinal directions. The south boundary, being the northerly boundary of Mountainview Drive has a bearing of 90°00'00" on this plan with bearings derived from the east boundary of Lot 421, Group 804, Plan 40111 CLSR, 20666 LTO, and referred to the meridian through the southeast corner of that lot.</p> <p>The first subdivision, creating 10 rectangular lots, numbered 455-1 to 455-10, easterly from the southwest corner of Lot 455, also subdivided part of an existing parcel on the southerly side of Mountainview Drive, Lot 401, Group 804, Plan 40002 CLSR, 19887 LTO. This plan for the 10 lots shows their south boundary having a bearing of 89°52'00" derived from the westerly boundary of Lot 401 and referred to the meridian through its southwest corner. A second subdivision, creating 5 rectangular lots, numbered 455-11 to 455-15 east of and adjoining Lot 455-10 shows their southerly boundary having a bearing of 89°57'00" derived from the northerly boundary of a distant Lot 442, Group 804, Plan 43000 CLSR, 21001 LTO and referred to the meridian through its most southerly corner. The third subdivision, creating four similar lots and a fifth remainder lot of the same depth, numbered 455-16 to 455-20, completed the subdivision of the full Mountainview Drive frontage of the original Lot 455. This third subdivision plan shows the same southerly boundary having a bearing of 90°12'10", derived from Whitehorse Coordinated Survey Area Coordinated Control Monuments 93G40 and 93G41 and referred to the central meridian of UTM Zone 8, (135°West).</p> <p>As a Canada Lands Surveyor in private practice, you have been retained by the City of Whitehorse to compile an explanatory plan of a 5 metre wide temporary access easement over the north 5 metres of Lots 455-1 to 455-20. It is the City's intention to execute easement agreements with the various owners as part of a future servicing scheme for the parcels. You have completed a field examination of the monumentation and made internal and overall measurements to confirm that the distances shown on the registered plans are correct to acceptable levels of accuracy. All monuments are found to be in original undisturbed condition.</p>		
	(a) Compile at a suitable scale the diagrammatic portion of the explanatory plan acceptable for eventual filing in the Land Titles Office. Supply all necessary dimensions and assume any additional information you require	6	
	(b) Provide the title you would use for this plan.	3	
	(c) Provide the bearing statement you would use for this plan.	4	
	(d) Name the current version of the statute under which the original grant of Lot 455 by the Crown was made.	2	
	(e) Name the current version of the statute under which the original survey was made.	2	
	(f) Name the current version of the statute under which the three subdivisions of Lot 455 were made.	2	
	(g) At what point in time would the plan of the third subdivision become binding on the owner filing or registering it?	2	
	(h) Would the three subdivision plans have been confirmed by the Surveyor General? Why or why not?	3	
	(i) What will the Surveyor General do with your explanatory plan to indicate its suitability for filing in the Land Titles Office?	2	
	(j) Is Lot 455 situated at a greater or lesser west longitude from 135°? Explain your reasoning by way of a sketch.	4	

3	(a) Describe three acceptable methods of determining the configuration of the Ordinary High Water Mark for a parcel of Crown land being surveyed.	6	
	(b) What is the required plotting accuracy for natural boundaries being depicted on an official plan?	2	
	(c) Give an example of a height of land natural boundary between political jurisdictions in Canada.	2	
4	(a) What conditions of the <i>Placer Mining Act (Yukon)</i> must be met for the boundaries of a placer mining claim to be expanded?	3	
	(b) Who has the authority to approve such an application?	2	
	(c) Draw and dimension a standard placer mining creek claim SAL 1 and an adjacent First Tier Left Limit bench claim NOBO 2, located relative to the surveyed base line of Rabbit Creek in the Dawson Mining District, Yukon Territory. Indicate the direction of flow for the creek.	5	
	(d) What is the required value of representation work that must be performed annually on a creek claim and on a bench claim?	2	
5	(a) Give the proper names of four types of authorized monuments you might expect to encounter when surveying in the vicinity of Yellowknife, NWT.	4	
	(b) Identify three types of authorized ancillary monumentation.	3	
	(c) Describe the two components for Combined Scale Factor when working in a Coordinated Survey Area.	4	
	(d) If the Global Positioning System constellation of satellites was to become unavailable for precise position determination, describe three options you might have for determination of bearing for a remote survey.	6	
6	(a) How many Units are there in Grid Area 45°00', 58°00' pursuant to the Canada Oil and Gas Land Regulations?	3	
	(b) Describe the north boundary of Grid Area 60°20', 134°00'.	4	
7	(a) Who may authorize the survey of reserves pursuant to the <i>Indian Act</i> ?	2	
	(b) To whom must an absolute surrender of a reserve under the <i>Indian Act</i> be made?	2	
	(c) Does the <i>Indian Act</i> apply to an Inuit person?	2	
Total Marks		100	