

August 30, 2018

To the Various Land Managers across Canada:

In 2015, the Association of Canada Lands Surveyors (ACLS), in partnership with the Surveyor General Branch (SGB) of Natural Resources Canada and Indigenous Services Canada (ISC) conducted a “Survey Cost Study” to consider the assertion made by ISC that “the costs of surveys on Canada Lands is 2 to 3 times more expensive than on non-Canada Lands”.

The “Survey Cost Study Working Group” was formed, comprising of members/personnel from the above-mentioned organizations/departments. The Working Group contracted out the research and preparation of a Report to a third party, to investigate the validity of the assertion related to costs of surveys.

It had to be an “Apples to Apples” comparative study of the survey projects between those surveys on First Nations lands, and those done under the Provincial system. For example, a subdivision survey done on First Nation Reserve lands, compared to a subdivision survey done on neighbouring Provincial lands.

It would not be practical, nor be a meaningful collection and analysis of the data, to compare two surveys prepared for different purposes on the different lands.

There were 3 parts to the Data Collection:

- A. Interviews with First Nations
- B. Surveys Research and Land Surveyor Interviews
- C. Comparison of Surveys

The Cost Study Report has been prepared, reviewed and finalized. As you can imagine, the volume of data collected from 76 First Nation responses, 73 sample survey projects and a few dozen follow up interviews, was immense and highly technical. In reviewing the Report, it contained a wealth of data, but being at a decidedly technical level, the ACLS felt that it could be a challenge and a time-consuming effort for those trying to extract useful information from, when wanting to obtain a survey on First Nation Reserve lands.

Therefore, the ACLS created a sub-committee of their Members and have prepared this DRAFT version of a Toolkit, that pulls out the applicable information that Land Managers may find useful when looking to have a survey conducted on their Reserve lands.

Please note the following terms referenced, may be interchanged in the Cost Study Report and the following pages:

- Survey(s), land survey(s) – are both intended to have the same meaning;
- Surveyor, land surveyor, Canada Lands Surveyor (CLS) – they are intended to have the same meaning, unless otherwise specifically referencing surveys conducted on Provincial lands;

- Surveyor General Branch (SGB), Natural Resources Canada (NRCan)- they are intended to reference the same Federal Government Department;
- Aboriginal Affairs and Northern Development Canada (AANDC), Indigenous and Northern Affairs Canada (INAC), Indigenous Services Canada (ISC) - they are intended to reference the same Federal Government Department

In reading through the Report, the cost drivers relating to surveys seemed to relate to 1 of 4 categories:

1. Project Initiation and Preliminary Planning and Research
2. Fieldwork
3. Plan Preparation and Office Work
4. Approvals and Registration of Survey Plans

We encourage you to read through the following documents as they relate to these 4 sections. The intent of these documents is to provide clarity and information on the cost drivers and potential ways to mitigate the cost drivers, while referring to the data collected and analyzed in the Report.

As these are only in a DRAFT format, we encourage any feedback you may have on these documents. Please contact Jean-Claude Tétreault (contact information is on the attached business card) with your questions or comments by November 30, 2018.

The intent is to have this document evolve and provide further information on surveys on Canada Lands. The Indigenous Relations Steering Committee of ACLS is already working on additional documents to add to the Toolkit. With your feedback, we are confident that we can create a useful resource tool for surveys.

Thank you for your time taken to review the documents,

Tania Bigstone

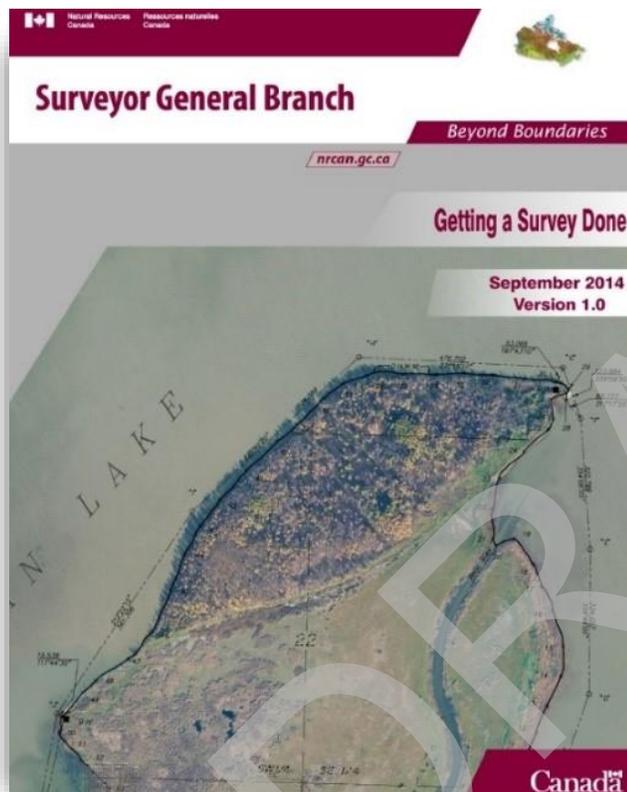
Tania Bigstone, CLS, PEILS_(np)
Chair, Survey Cost Working Group

PROJECT INITIATION

...PRELIMINARY PLANNING

...RESEARCH

Project initiation, preliminary planning and research for preparing a legal survey on a First Nation Reserve Lands generally follow a series of steps to effectively conduct the survey.



http://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/earth-sciences/files/pdf/geomatics/Getting_a_Survey_Done_eng.pdf

These steps include:

- **Initial discussion** with client (usually the Land Manager)
- **Review** of the site in person and/or with online tools and aerial photography
- **Research** all land interests
- **Research** any previous and/or abutting surveys
- Determine an **estimate of costs**
- **Prepare a sketch** of the proposed survey
- **Obtain approvals** from the applicable First Nation representative (usually the Land Manager) and any other stakeholders
- **Submit** the sketch, approvals, and land status documents **to the Surveyor General Branch (SGB)**¹ to obtain Survey Instructions

Throughout the process; many cost driving factors may come into play that can cause the cost of a survey to escalate. These cost drivers should be addressed in specific detail to provide the First Nation (i.e. Land Manager) with ways to stay on budget for the survey and overall project.

With careful planning and effective communication with the surveyor (and other parties involved), the benefits of this can be substantial.

¹ The Surveyor General Branch (SGB) of Natural Resources Canada (NRCan)

PROJECT INITIATION

...PRELIMINARY PLANNING

...RESEARCH

DEFINING A SCOPE OF WORK AND CLEAR END PRODUCT

Clearly defining the scope of work is the most important aspect of the project initiation as it is the grass roots of how effectively the project will perform. Effective and frequent communication with a surveyor and all parties involved in the project will be the staple that will hold everything together when it comes to clearly defining the scope of work.



The cost study report suggests that although most of the surveyors indicated that the scope of work presented to them was clear, the projects that were not clear, had on average a 31% increase in the average total labour hours per project.

Lack of clarity in the scope of work will have a significant impact causing delays that in turn will result in additional hours of labour which drive up the cost of a survey. Land Managers can have an effective role when it comes to defining a clear scope of work. The following are suggestions that Land Managers may consider in their efforts to clearly define the scope of work for a project.

- Land Managers should communicate with as much detail as possible with the surveyor of what the project will entail and what the final product will be once completed.
- Creating a good working relationship with numerous surveyors is an effective way to become familiar with the processes as well as acquiring a second opinion on particular project concerns.
- Frequent communication with the surveyor about project changes, updates and any other concerns (as early in the process as possible) will effectively allow for a project to follow a successful course.

PROJECT INITIATION

...PRELIMINARY PLANNING

...RESEARCH

ADEQUATE BASE DATA AND MAPS, PLANS EXISTING INFORMATION, REGISTRY SEARCH (UNDERSTANDING/USING ILRS OR FNLRS), LEARNING OF UNKNOWN/UNREGISTERED INTERESTS (E.G. NEW UTILITIES) THAT MAY IMPACT WORK.

To prevent land interest conflicts (and potential delays), thorough research of ownership status and land interests must be conducted prior to the commencement of a survey project.

Research will involve: viewing maps, survey plans, acquiring land related instruments from the Indian Lands Registry System (ILRS) or First Nation Lands Registry System (FNLRS) and any other land registry or Land Titles office (LTO) depending on the jurisdiction the land is situated in.



Land Managers can familiarize themselves with the various research tools available, to generate a land status report. This can be done using the:

- Indigenous Services Canada (ISC)² Electronic Registry Index Plan (E-RIP) application: a graphical representation of the legal interests registered on Reserve lands; http://services.aadnc-aandc.gc.ca/ILRS_Public/home/home.aspx
- Accessing documents from the ILRS/FNLRS: these can include, instruments for Reserve Creation, Addition(s) to Reserve, Land Designation(s), Lease Agreement(s) and other 3rd Party agreement(s);
- Researching internal records: Land Managers should also make surveyors aware of internal document/information affecting their lands, that doesn't show up in any record system that is accessible to the surveyor to effectively plan a project, save time and resources for the First Nation. By conducting this research, it results in the surveyor not having to incur chargeable time to do this. Land Managers can add to their understanding and familiarity in regard to the land interests, which in turn could lead to more efficient and effective decision making, concerning the lands involved.

² Indigenous Services Canada (ISC) previously referred to as Indigenous and Northern Affairs Canada (INAC)

PROJECT INITIATION

...PRELIMINARY PLANNING

...RESEARCH

COMMUNICATION AND INITIAL APPROVALS AND ADDRESSING POTENTIAL CHANGES TO THE SCOPE OF WORK.

Depending on the scope of the project, various approvals from Band Council, government agencies, and community planning will need to be considered prior to the commencement of a survey. These processes can take time and if they are not accounted for, they can lead to unnecessary delays in the project. Land Managers should familiarize themselves with these processes to effectively schedule time that will enable better project planning. The Land Manager can also pro-actively ensure that a surveyor receives approvals from all parties promptly and request updates pertaining to any complications or anticipated delays.



SCHEDULING – INVOLVEMENT OF APPROPRIATE AUTHORITIES AND/OR PROFESSIONALS OR DISCIPLINES.



Much of the time a surveyor invests in a project comes at the front end of the process and the initial conversations about the project. Costs can accelerate when there are multiple “touch points” – people and agencies a surveyor must liaise with to complete the project. The various parties that may be involved in a project include (but are not limited to): Engineers, Planners, Geo-technicians, architects, real-estate appraisers, lawyers etc.

The Land Manager can play an active role when it comes to consulting with the various parties that may have an interest in the project.

- Consider hosting a meeting or conference call with all parties together, early in the project planning stages. This will give all parties a better idea if the project is feasible or if any unforeseen components of the project were not accounted for.
- Acquiring a timeline from the various parties of their involvement is a prudent way to schedule and make decisions pertaining to the project. A clear concise schedule allows the Land Manager to keep the various parties in order and follow up with any deliverables that the parties were obligated to provide.
- Communication is a vital aspect to the success of scheduling a project for it to be on-budget and on-time.

FIELD WORK

The Field Work component of a survey generally involves the following activities in preparing a legal survey on First Nation Reserve lands:



- Finding and taking measurements to acceptable survey monuments in the area,
- Cutting and blazing property lines,
- Placing survey monuments at new corners, and/or replacing disturbed or missing survey monuments from previous surveys,
- Measuring any encroachments/conflicting interests,
- Measuring all features close to the boundaries, such as fencing,
- Meeting client and/or First Nations Authorities on site,
- Addressing concerns/questions from abutting homeowners.

Considering these activities, a surveyor will take into account a number of factors that may affect the performance of a survey and thus effect the overall cost of the survey. To address these factors, some survey projects may require more labour or logistical support to properly conduct the field work portion of the survey. While keeping in mind that each survey project is unique in its own way, certain survey projects may require more labour-intensive activities and or logistical support than others.

The following cost drivers related to fieldwork, which will be further addressed include:

- (1) Logistical Requirements;
- (2) Terrain, conditions, specific requirements (i.e. line cutting);
- (3) Existing Survey Fabric – condition/age of evidence (some external boundaries are old and evidence harder to find, i.e. WO's);
- (4) Time of year;
- (5) Licencing Requirements of the surveyor;
- (6) Extent of Labour for the type of boundary surveyed;
- (7) Clarity of the Scope of Work.

FIELD WORK

1. LOGISTICAL REQUIREMENTS

Depending on the location of the survey, the following logistical requirements will need to be considered for the fieldwork to be performed effectively, efficiently and safely.

a. Travel to/from and while on the Project Site

Most projects will require some form of travel to transport a field crew to and from the project site. Depending on the location of the site, some travel will require different modes of transportation to mobilize and demobilize crews and equipment. Air travel maybe involved and private air travel can markedly increase the cost of a survey. Terrain and season of the year, may also determine the different forms of transportation required to complete the survey safely and efficiently (ATV, boat, snowmobile, helicopter, etc.)

Almost 1/3 of the projects analyzed in the Cost Study reported that equipment and travel expenses totalled over \$1000 per project.

b. Accommodations and Meals

If a project requires a substantial distance to travel to the site, then meals and accommodations for the field crew will need to be considered. Depending on the longevity of the project, certain cost-effective options may be available depending on the local resources. Remoteness can play a big factor in the cost of a survey in terms of accommodating a field crew.

In remote communities, the cost of food/meals/accommodations can be expensive, which is something that can make this cost driver difficult to adjust or mitigate.

Recommendations

- Hiring local survey assistants could help in the reduction of the survey costs for certain transportation, that will be required to conduct the survey. To ensure that local assistants meet the current safety standards and that they have a basic understanding of surveying, training for the local staff may be required. However, this training will have costs associated with it. Although the up-front costs for these services may be significant, the costs in the long term could be reduced, as safety certifications generally last for a couple of years and the use of previously trained assistants will allow the surveyor to use local help in future surveys (without charging out for the surveyor's own staff).
- Hiring local survey assistants or cutters can reduce the cost in terms of not having to pay for travel, living out allowance and accommodations for another crew member. This also supports the local economy in the area as well as gets community members involved in some of the local projects.
- Grouping survey projects into one trip will reduce the amount of mobilizing and demobilizing costs of a field crew.
- First Nations' resources can be used to lessen costs by providing boats, ATV's, snowmobiles, chainsaws, etc.
- Setting up a camp or arranging some form of lodging where meals are provided may be a cost-effective way to accommodate a field crew.
- For certain projects, helicopter costs can be offset through careful planning by the client. For example, using a helicopter for multiple projects while it is on site could significantly reduce the costs in mobilizing and demobilizing a helicopter.

FIELD WORK

2. TERRAIN, CONDITIONS, SPECIFIC REQUIREMENTS (I.E.: LINE CUTTING)

Although only a small percentage of projects require line cutting and blazing, the ones that do can significantly increase the cost of the survey due to the amount of labour input required to perform the activities. The number of hours devoted to cutting and blazing accounted for as much as half of the total labour for the project when distances exceeded 500m. However, line cutting and blazing serve a purpose in terms of clearly demarcating the boundaries and protecting the survey monuments from destruction. Cutting and blazing a boundary, where it is practical to do so, could reduce costs of future surveys and/or the future number of surveys required. Varying terrain can influence the production of a survey. Steep terrain and densely treed areas will obviously have an effect on the time it takes to complete a survey, as compared to flat, open terrain. Experienced surveyors can usually approximate the amount of time a survey may take based on the terrain from aerial imagery or potentially a familiarity of the area.

Recommendations

- Offering local knowledge of the project area to surveyors could help reduce the costs by directing field crews as to where the best access can be acquired. (i.e. ATV trails, seasonal conditions that may affect access)
- If line cutting isn't a requirement but a First Nation still desires to have it carried out, an agreement could be negotiated with the surveyor. The boundaries could be flagged/identified by the surveyor, and the First Nation could have their own line cutting crew clear the boundary line.

3. EXISTING SURVEY FABRIC – CONDITION/AGE OF EVIDENCE

The survey fabric is comprised of the survey evidence that defines a parcel or boundary on the ground. Survey monuments and supporting marker posts (or other ancillary monuments) placed by surveyors are used to mark the boundaries of a surveyed parcel of land. The poor condition of, or missing, or disturbed evidence along a boundary line can have a significant impact on labour inputs.



A surveyor tries to determine the potential state and probability of finding survey evidence when costing a survey, based on several factors, such as:

- Timeframe of the original survey (likelihood that the monumentation/boundary evidence could still be found),
- Type of monumentation and ancillary monumentation (wood posts, iron post, rock posts, bearing trees, etc.) placed at the time of survey,
- Development or maintenance (i.e. snow removal) in the area,
- Changes in the landscape (i.e. flooding, land slides, etc.).

Based on the state of these factors, a surveyor may be able to accurately determine the required work that will need to be completed to establish, restore or re-establish the boundaries. However, sometimes unforeseen circumstances can arise leading to additional work (costs) that were not originally anticipated.

Recommendations

- Informing members, developers, etc. of the importance of surveys and that the protection of survey monuments should be paramount for all projects.
- Determine if “delayed posting” would be a beneficial part of the survey process (survey monuments are not put in until development or earth work is complete).

FIELD WORK

4. TIME OF YEAR



The time of year field work is performed can have a substantial impact on the planning of a survey project. Certain tasks performed in the winter will be more labour intensive than those same tasks performed in the summer. However, according to the cost study report, the time of year does not play a significant factor in the amount of time that is required to perform the activities necessary to produce surveys. Generally, the work requires the same amount of time year-round. This is mostly attributed to the fact that surveyors will advise on and select the most appropriate time of year to accomplish the work efficiently.

Recommendations

- Select a surveyor with a substantial amount of experience in the region to allow for a more accurate idea on the time of year a project should be conducted.

5. LICENCING REQUIREMENTS OF THE SURVEYOR

For surveys involving interior boundaries, a surveyor must be commissioned and licenced as a Canada Lands Surveyor (CLS). A survey of a common boundary with Provincial lands (jurisdictional boundary) will need to be conducted by a surveyor who has a license to practice surveying in that province and is also a CLS.

Recommendations

- The surveyor hired, could be licenced in both jurisdictions (Canada and Provincial) for any projects, as there may be unforeseen work along a jurisdictional boundary.

6. EXTENT OF LABOUR FOR THE TYPE OF BOUNDARY SURVEYED

Jurisdictional boundary surveys cost more than parcel surveys or right-of-way surveys. According to the cost study, on average it took over three times the total number of hours of labour to produce jurisdictional boundary surveys than either parcel surveys or rights-of-way surveys. *“This might be explained by the requirements to tie into both Provincial and Federal monumentation, which essentially doubles the distance surveyed.”*

7. CLARITY OF THE SCOPE OF WORK

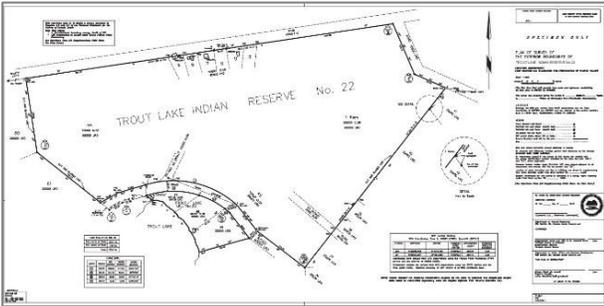
The clarity of scope of work can have an impact on the cost of surveys. The cost study report indicates that the average total labour was 31% higher when the scope was not clear for the project. Clarification of the type of survey required for the intended transaction, prior to the field work starting is key to ensuring the project outcome is what was expected and needed.

Recommendations

- Good communication with the surveyor and other stakeholders in the project will be key in ensuring that the project is completed efficiently as possible. Frequent communication between the surveyor and Lands Manager will enable clarity in the scope of work amongst all parties involved.
- Local knowledge provided by the Land Manager can often reduce the risks of the surveyor. Land managers should discuss the project and their knowledge of site and survey conditions thoroughly, prior to issuing a contract.
- Utilization of local resources (survey assistants, accommodation and transportation rental) can reduce costs and increase capacity.

Plan Preparation and Office Work

The most labour-intensive cost driver for surveys occurs “behind the scenes”, not visible to the client.



The research, calculations, drafting of the plan and quality control of the plan accounts for the most time involved when compared to any other aspects of a survey.

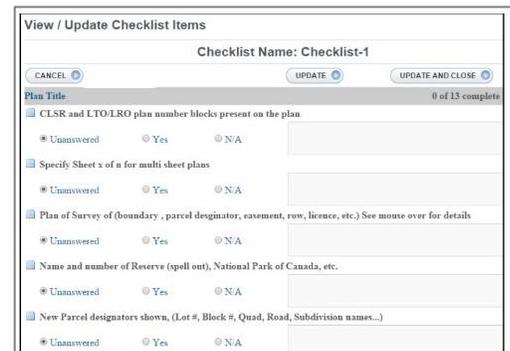
This may be surprising to some, as one would think that the field work component (with field personnel, equipment, travel, etc.) would be the most labour intensive.

However, the results of the survey cost study indicated that *surveyors and their staff spend more time (1) doing calculations, (2) drafting plans and (3) performing quality control checks; than in any other activity in the process.*

1. After the field crew submits their data/results, the information is reviewed and assessed by the surveyor, and according to the survey cost study, this accounts for 5.7 hours per project on average. The type of work and issues encountered in the field can add to the difficulty of the analysis and calculations:

- Old evidence (for example: wooden posts set in the 1900’s) were not set or measured with the same tools or accuracy, so it can be challenging to reconcile with modern techniques.
- Sometimes modern survey evidence has been destroyed over large areas due to new development (roads, pipelines, large buildings). Computing the original positions of the monuments from very little found evidence can be difficult and time consuming.
- Natural boundaries can be defined by the Ordinary High Water Mark (OHWM) or water’s edge of lakes, creeks or rivers. Re-measuring old ‘natural’ boundaries or making survey ties to current ones, can often require extra care and time during evaluation of the field work.

When the calculations are complete, and the survey monuments are placed, the drafting of the final survey plan proceeds. This is completed by a competent drafts person who is familiar with Canada Lands survey and plan requirements.



Plan Preparation and Office Work

2. The drafting of a survey plan and report (where required) must be done according to the National Standards for the Survey of Canada Lands (Standards). The experience of a company's employees with surveys on Canada Lands and the complexity and availability of survey fabric in the area can directly affect and extend the time needed to complete a plan.



On average, the cost study found that the number of hours spent on drafting the plan was 23.3 hours.

This is the most labour-intensive part of the overall survey. The drafting of the plan is also one of the more important parts of the survey process, as it visually depicts what was done by the field work and graphically defines the extents of the parcel or boundary being dealt with.

3. Once the draftsman has completed the preliminary plan, the surveyor reviews the plan and conducts a quality control check on the plan, to ensure that it properly depicts all the field work, conforms to the requirements of the Standards, and reflects the requirements in the survey instructions.

The average number of hours spent on the quality control of the plan is approximately 6.4 hours per plan, in which this work is carried out by the surveyor who will be signing the plan. Any changes to the Standards, the scope of the project or survey instructions directly impact the amount of labour required.

In October 2016, the Standards were amended to enable the survey plan to be digitally signed and submitted. *“While digitally submitted plans have clear benefits and potential for future cost savings and efficiencies, there is a cost to implementing this change”.* Other changes to the Standards included the types of plans allowed, submission of CAD (computer aided drafting) files and other plan requirements. These changes can cause a previously experienced draftsman and surveyor to have to become re-acquainted with the plan requirements. While the surveyor does not charge his/her client for the additional training to become re-familiar with changes to the Standards, the efficiency that the surveyor and draftsman once had, must be re-attained.



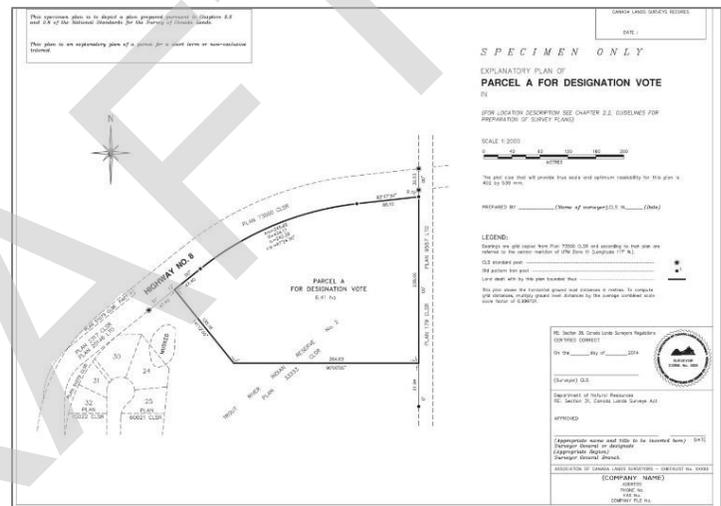
Plan Preparation and Office Work

Where changes to the scope of work are necessary, it is important to identify these as soon as possible in the process.

If changes, such as lot configurations or sizes, are identified once the plan has been prepared, not only are there additional costs to the field work component, there are additional costs to the drafting of the plan and the quality control of the additional work by the surveyor. Even though it may seem to be as easy as “moving some lines and text around”, there is a lot more involved in the re-drafting of a plan. There is a lot of data associated/tagged with each point, line and text in a CAD file, moving one line can cause a lot of additional work to address other parts of the digital file.

Upon the surveyor completing his/her quality control checks on the plan, survey report (if required) and CAD file, any necessary amendments are completed. Errors or issues identified by the MyCLSS checklist are to be addressed by the surveyor before the plan can be accepted by the Surveyor General Branch (SGB)¹ for their final review. The plan is then certified by the surveyor and submitted to the SGB through the plan submission website MyCLSS.

Depending on the type of plan being prepared, the First Nation’s approval may be required prior to the plan submission.



There may be ways to mitigate the costs of Plan Preparation and Office Work:

1. The Cost Study notes the value of good relationships, particularly between the Land Manager and the Surveyor. The Land Manager may choose a surveyor that has demonstrated experience working in the Canada Lands Surveys system, in-turn reducing costs associated with the challenges identified above.
2. Land Managers must prepare a thorough, accurate Scope of Work, avoiding changes after the survey has commenced, if possible. Understanding the Standards will be very helpful in this regard and can be discussed with a surveyor and staff at the SGB.
3. Land Managers can improve awareness within the community regarding the impact of survey monument destruction and the many increases in costs that can result in future surveys, including complications in Plan Preparation and Office Work.

¹ Surveyor General Branch (SGB) of Natural Resources Canada (NRCan)

APPROVALS AND REGISTRATON OF SURVEY PLANS

Over the past few years, there has been several changes in the finalization and approval process for survey plans.

- Changes in the stakeholders providing approvals
- Survey Related Laws passed under a First Nation's Land Code (under the Framework Agreement on First Nation Land Management)
- Changes to the Interdepartmental Letter of Agreement (ILA)



With these variations in the approval process; the roles and responsibilities of each stakeholder, including the timeframe for certain activities within the process, are affected.



The "Survey Cost Study" identified that there appeared to be significant time delays in the finalizing and recording of a survey plan. The reasons for the delay may range from changing the scope of work, knowledge and experience with the process, to experience in reviewing and understanding survey plans.

There are some cost drivers that can be mitigated by gaining experience with the Canada Lands Survey System (CLSS) and/or the survey plan finalization process, while other cost drivers that can only be mitigated through the development of processes and building of relationships.

To help address the "Approvals and Registration of Survey Plans" Cost Drivers, the following items were suggested by the Cost Study:

INTERDEPARTMENTAL LETTER OF AGREEMENT (ILA)

Participation and input from those stakeholders directly affected by changes to plan approvals and the recording process, should be part of any amendments to the ILA. *Both First Nations and surveyors need to be aware of and understand the ILA and its contents*, as it identifies the "appropriate methods of describing lands when land descriptions are required for executing and/or registering land transactions in the Registry¹. This Agreement prescribes which survey plan products to use for specific types of land transactions involving Reserve Lands. It also sets out the basic principles on which the standards for the products and methods of describing land are based."

¹ ILRS (Indian Land Registry System) | FNLRS (First Nation Lands Registry System)

APPROVALS AND REGISTRATON OF SURVEY PLANS

Registration Plans were phased out in the new ILA (effective January 5, 2015), and were replaced by a “Plan of Survey”. Registration plans were submitted by the surveyor to the local Surveyor General Branch (SGB)² office, and then approved by the First Nation and Regional Indigenous Services Canada (ISC)³ Officer. However, a Plan of Survey, is now approved by the First Nation only, prior to the surveyor submitting the plan to the on-line plan submission website (MyCLSS). The Regional ISC Officer may become involved, where a plan approval has been delayed for more than 30 days (for Reserve lands managed under the Indian Act).

A copy of the most recent ILA can be downloaded at: <http://clss.nrcan.gc.ca/clss/surveystandards-normesdarpentage/agreements>

MENTORING

Participating in local programs to assist other Land Managers that may not be as familiar with the process. Experienced Land Managers or local surveyors could participate in training programs or one-on-one training for First Nation’s that may not be as familiar with the survey process. “Data from the study has shown a wide range in training and experience among Land Managers.

Insufficient training of Land Managers can lead to inefficiencies and potential higher costs of Legal Surveys.”

The Association of Canada Lands Surveyors (ACLS)⁴ can provide assistance to identify local surveyors. They are also developing additional resources/toolkits with regards to the survey process.

The Resource Centre⁵ and NALMA⁶ offer training sessions on surveys.

Refer to each organizations website for further information.



RELATIONSHIPS

Once a relationship between a First Nation and a surveyor has been established, most surveys can be completed and approved in a timelier manner as the surveyor would be familiar with the First Nation’s survey process, parties to be involved, what the First Nation is requesting and their approval process.

The establishment of these relationships provides a First Nation with a sense of trust for the surveyor and his/her work, especially when the approval of the plan is being requested.

In turn, the surveyor needs to ensure that they can conduct and complete the work within the agreed to timeframes.

In the unfortunate event that there are issues, delays or concerns that a First Nation is unable to resolve with the surveyor, the ACLS can be contacted to assist in resolving the issue.

² Surveyor General Branch of Natural Resources Canada (NRCan)

³ Indigenous Services Canada (ISC) previously referred to as Indigenous and Northern Affairs Canada (INAC)

⁴ ACLS – Association of Canada Lands Surveyors <https://www.acls-aatc.ca/>

⁵ Resource Centre – First Nations Land Management Resource Centre <https://labrc.com/resources/>

⁶ NALMA – National Aboriginal Lands Managers Association <https://nalma.ca/>

APPROVALS AND REGISTRATON OF SURVEY PLANS

Refer to <https://www.acls-aatc.ca/public-home/public-protection/> for further information.

DOCUMENTED PROCESSES

Processes for a survey (from the initial request to the approval of the plan) should be documented. The process could also identify contacts, specific internal processes, contract requirements and payment of services.

It was noted in the “Survey Cost Study” by a Lands Manager that “plan registration times and parcel transfer times are considerably longer than in the provincial system, which affects their commercial dealings.”

By documenting processes, time delays in the project start and plan approval could be minimized which enables the finalization (recording) of the plan in a quicker timeframe.

By having a documented process, clarity can be provided for:

- who may initiate a survey on behalf of the First Nation, and provide permission to enter the Reserve for the survey (i.e. a Band Member, anyone who works on behalf of the First Nation, Chief and Council, etc.)
- required searches of internal records: some First Nation’s may have internal records that contain valuable information that is needed for the survey. By having a documented process, the searching of these internal records would be part of the First Nation’s regular survey process, which could assist in avoiding delays, additional work required of the surveyor, and potential rejections of the plan by SGB or ISC.
- the process to have the plan explained and/or presented once the field work is complete:
 - reviewing the boundaries on the ground – this can be done during the field work and/or upon completion of the field work
 - explaining the survey to Chief and Council, Land Manager, Band Member
 - copies of the plan to provided digitally or hard copy?
- who may provide approval and the format of the approval of the plan:
 - Band Council Resolution
 - Letter from the Land Manager, interest holder, etc. It may be helpful for a First Nation to have form letters/documents prepared for survey requests, permission and approvals, where only the survey specifics can be uploaded to the document, to ensure a quicker turnaround.



In addition, pamphlets or informative brochures of the First Nations survey process could be prepared and made available to Band Members and/or interest holders or developers. This would ensure that everyone knows the requirements, roles and processes required for a survey.

Where necessary, a First Nation managing their lands and resources through their Land Code, can pass Laws to ensure that their survey processes are followed by all stakeholders, surveyors, SGB, etc. The Resource Centre can be contacted to further discuss the development of policies or laws relating to surveys on Reserve lands managed under a Land Code.

APPROVALS AND REGISTRATON OF SURVEY PLANS

INFORMATION/LINKS

Surveyor General Branch (SGB) has several sources of information that may be of use in knowing where a plan is in the process, downloading a copy of the finalized plan, obtaining a copy of the current National Survey Standards or ILA, etc.

Survey Project Search Website: <http://clss.nrcan.gc.ca/clss/project-projet/search-recherche> for survey projects in the plan review process AND for copies of survey plans that have been finalized and recorded in the Canada Lands Surveys Records (CLSR)



Canada Lands Survey System Map Browser:

<http://clss.nrcan.gc.ca/map-carte-eng.php>

for searching plans (by a geographical area) that have been finalized in the CLSR.

Natural Resources Canada Publications:

<http://www.nrcan.gc.ca/earth-sciences/geomatics/canada-lands-surveys/publications/11088>

for National Standards for the Survey of Canada Lands; Regional Chapters, Water Boundaries on Canada Lands (survey principles focusing on water boundaries).

Any assistance or information that a First Nation may require in using the SGB websites, can be obtained through contacting the local SGB Regional office:

<http://www.nrcan.gc.ca/earth-sciences/geomatics/canada-lands-surveys/surveyor-general/11070>

AGREEMENTS

A written contract or agreement between the proponent and surveyor provides for a mutual understanding with the surveyor, as to what is being requested and when payment for services will be rendered. This can be described in a contract, letter or some other written correspondence.

It is important that both parties are of the same understanding of the scope of the project, cost, timeframe and payment.



Any changes, deviations or misunderstandings of the scope of work, can increase cost and the project timeframes.

“While good communication is important to the outcome of a survey project, efficient communication is important to the overall cost...poor communication on the scope of work means extra work for the surveyor”