

National Surveyors Conference St. John's, Newfoundland

BC's Electronic Survey Plan Experience

Mike Thomson, Surveyor General

May 6, 2010

LTSA Background



- Created in the fall 2004 via legislation.
- Started operation January 2005.
- Independent not-for-profit, non-share capital corporation.
- Responsible to operate and maintain **land title** and **land survey** systems of BC.
- New independent structure.
- Flexibility to respond quickly.
- Accountable to the people of British Columbia.
- LTSA 11 Member Board of Directors – responsibilities established in legislation – provide strategic direction and ensure Authority meets accountability requirements.

Governance



- 11 member **Board of Directors**

Province (2)

Land Surveyors (2)

Law Society (2)

Notaries

First Nations Summit

UBCM

BC Real Estate Association

BC Registry Agents

- Formal interaction with customer through **Stakeholder Advisory Committee:**

Land Surveyors

Law Society

Province

BC Registry Agents

First Nations Summit

Notaries

Canadian Bankers Assoc.

BC Historical Federation

BC Real Estate Association

BC Assessment Authority

- Provide advice on Authority's mandate, activities, policies, programs, services and customer service improvements.
- Valued forum for ensuring the Authority is adding value to the customer's experience.

Strategic Direction



- **Our Mission** – To create confidence by delivering assured land title and land survey systems essential to the property market and economic foundation of British Columbia.
- **Our Vision** – To earn a reputation for exceptional customer service and excellence in the preservation, access and integrity of the land title and survey systems.
- **Our Values:**
 - We are accountable to those we serve.
 - We act with the highest standards of integrity, knowledge and skill.
 - We respect and value our customers and each other.
 - We will continuously improve.
 - We are approachable and personally responsive to our customers and employees.

Current Objectives



- Instill confidence, maintain integrity and increase the value of the land title and survey systems of British Columbia.
- Improve and deliver professional, consistent service.
- Develop business modernization in order to sustain land title and survey systems services to meet customer needs and the public interest.
- Ensure the optimum structure, people and tools for the effective operation of the LTSA.
- Manage our business in a sustainable and cost efficient manner that directly benefits our customers.

Business Modernization



BTI Mission

- By 2012, the LTSA will transform service delivery so it is sustainable, providing customers with consistency and reliability of information enabled by modern technology, integrated processes and expert staff.
- **Electronic Filing System and Electronic Survey Plans are foundational pieces of sustainability of LTSA**

Business Reasons Why BTI is Critical for the LTSA



- We need to improve business operations and technology to be more responsive to customer and stakeholder needs.
- We need to modernize the workplace – current business processes are highly manual, repetitive, people intensive, time consuming, and inconsistent in their delivery.
- We need to position the LTSA to better respond to anticipated retirements, in particular in the Examiner of Title ranks.
- We need to address the fact that time-consuming, complex submissions are becoming more common.
- We need to increase efficiency and productivity by taking advantage of technology.
- We have an aging technology environment that requires updating to meet future business needs.

Goals of BTI

The goals are:

1. Improve customer service



2. Improve productivity



3. Improve service quality



4. Improve systems technology



By which we mean:

Ease of access to information, new and improved products and services, to be more responsive to customer and stakeholder needs

More opportunity for employees to perform knowledge vs. manual work, increased efficiency

Greater consistency of decisions, accuracy of information, faster service, shorter backlog and turnaround times

Technology is stable, maintainable and able to change to meet business demands

Core Functions

- Ensuring the continued integrity of British Columbia's Torrens System for registering land titles, and interests in titles such as mortgages and other charges.
- Provides conclusive evidence of title, and is backed by an Assurance Fund in the unlikely event of a registration error.
- Offices in New Westminster, Victoria and Kamloops.
- Ave. turnaround time for land title documents – 4.1 days (09/10)
- Ave. turnaround time for Land Title Act plans – 3.3 days (09/10)
- LTSA performance target – 6 days
- **Emphasis on Electronic Filing System (EFS)**
- 2007/08 intake 26.8% of eligible documents
- 2008/09 intake 38.6% of eligible documents
- 2009/10 intake 51.2% of eligible documents
- **Uptake over 50% in 7 of last 8 months** (high 53.9% in March)

Surveyor General Division



- Surveyor General oversees the province's land survey system.
- Works closely with the Association of British Columbia Land Surveyors in maintaining cadastral (legal) survey standards.
- The Surveyor General has three primary responsibilities:

1. The Integrity of BC's Cadastral Survey System:

The Surveyor General is responsible to ensure the continued high quality and integrity of the province's cadastral (legal) survey system. This is achieved through a number of avenues which include:

- The careful review of all survey plans that define Crown land.
- Maintenance of survey plan information in government's Crown land recording systems.
- Parcel designations for new surveys and cancelling survey parcels (when no longer required).
- Maintenance of physical survey plans, historical field notes and other survey related records.
- Approving new and revised Survey Rules which govern all legal surveys in the province.
- The provision of professional guidance to government agencies and land surveyors on land survey issues.
- The adjudication of boundary issues involving natural boundaries.
- The designation of entities able to hold statutory rights-of-way or covenants.
- Through his appointment as the provincial Boundary Commissioner, working with the federal government and the province of Alberta maintaining the Alberta / BC provincial boundary.
- Maintenance of the "Integrated Survey Area" program in the province.

Crown Grants and Records Distribution



2. The Preparation of Crown Grant Documents

The Surveyor General oversees the preparation and issuance of Crown grant documents at the direction of the province. Crown grants are issued where the Province authorizes a sale or other disposition of Crown land to an individual or corporation.

3. The Distribution of Survey Records

The Surveyor General oversees the maintenance and dissemination of all official survey plans for parcels surveyed out of Crown land, together with a collection of historic field books and notes compiled by land surveyors at the time certain surveys were completed. The Surveyor General's vault also houses copies of all provincial Crown grants and other historic survey records.

Selected Acts referencing the Surveyor General:

Land Survey Act

Land Act

Land Title Act

Land Surveyors Act

Mineral Tenure Act

Land Title and Survey Authority Act

Business Snapshot – 2009-10



- Land Title registrations – 1.11 million +/- (1.14 million previous year)
- Private Land Surveys – historically 10,000 – 12,000 per year (not previously tracked)
- Crown land surveys – 2,155 (3,880)
- Crown grants issued – 110* (232)
- Surveyor General statutory applications – 372 (470)
- LTSA Employees – 150
- Surveyor General Employees - 15

Electronic Filing System (EFS) (Land Title Documents)

Electronic Survey Plans (ESP) (Crown Land and Private Land)

What is the Electronic Filing System?



- EFS allows users to submit land title and survey documents to the Land Title Office
- EFS assigns document numbers, receives fees, and provides notice of pending numbers in seconds
- First functionality introduced in 2004
- Over \$7 million invested in system

“The magic of EFS is that you can close a transaction anywhere in the world in 48 hours and you can’t do that with the over-the-counter method. I know of no lawyer who has tried EFS who would then consider reverting to the manual filing system.”

RALSTON S. ALEXANDER, Q.C.
Lawyer, Victoria

The Electronic Survey Plan System



- The Electronic Survey Plan project is a multi-year, multi-phase project that results in the electronic delivery of survey plans, in digital format to the Crown Land Registry and the Land Title Offices.
- A subset of the Electronic Filing System.
- Development commenced in 2003. ESP was to piggy back on EFS.
- Approximately \$1.23 million in development costs
- Functionality to allow electronic submission of plan to the Crown Land Registry went live on July 24, 2006.
 - Includes survey plans prepared pursuant to the Land Act, the Mineral Tenure Act, the Petroleum and Natural Gas Act and the Coal Act.

The Electronic Survey Plan System



- Second release provided functionality for the electronic submission of plans to the Land Title Register on February 28, 2008
 - Includes all survey plans prepared under the Land Title Act and the Strata Property Act.
- Currently only an image is captured – Phase II will include plan intelligence to allow automated maintenance of a provincial legal (cadastral) parcel base map as close to source as possible.

The Electronic Survey Plan Process



Old School

- Legal survey conducted (for example - a subdivision plan).
- Plan plotted to mylar.
- Plan circulated for signatures of owners, chargeholders and approving officer(s) - from person to person to person to person.
- Mylar plan and copies physically delivered to a Land Title Office.

New School

- Legal survey conducted (for example - a subdivision plan).
- Plan created in a digital format (PDF).
- Plan and document circulated for signatures of owners, charge holders and approving officer(s) - circulation may be by e-mail and concurrent.
- Plan submitted via the Electronic Filing System (EFS) to the Land Title Office.

How does the ESP Process Work?



- Land surveyor conducts survey and prepares **Plan** in PDF format.
- Plan is attached to a **Certification Form** which is digitally signed by the land surveyor.
- An **Application Form** is prepared. All of the owners and approving authorities sign a true copy of the Application Form. Circulation of the form may be concurrent and via e-mail.
- A lawyer, notary public or land surveyor digitally signs an Application Form certifying that they have a signed copy or copy of that copy in their possession.
- The **Plan** and **Certification Form** prepared by the land surveyor together with the **Application Form** are submitted to the Land Title Office, via EFS, for deposit.
- **No signatures appear on the Plan**

The Plan

PLAN EPP3

PLAN OF SUBDIVISION OF LOT 2, SECTION 42,
LAKE DISTRICT, PLAN VIP77795,
EXCEPT PART IN PLANS VIP79777 AND VIP81610

B.C.G.S. MAP SHEET 92B.054

All distances and elevations are in metres and decimals thereof, unless otherwise noted.

The intended plot size of this plan is 560mm in width by 432mm in height (C Size) when plotted at a scale of 1:500

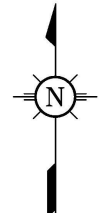
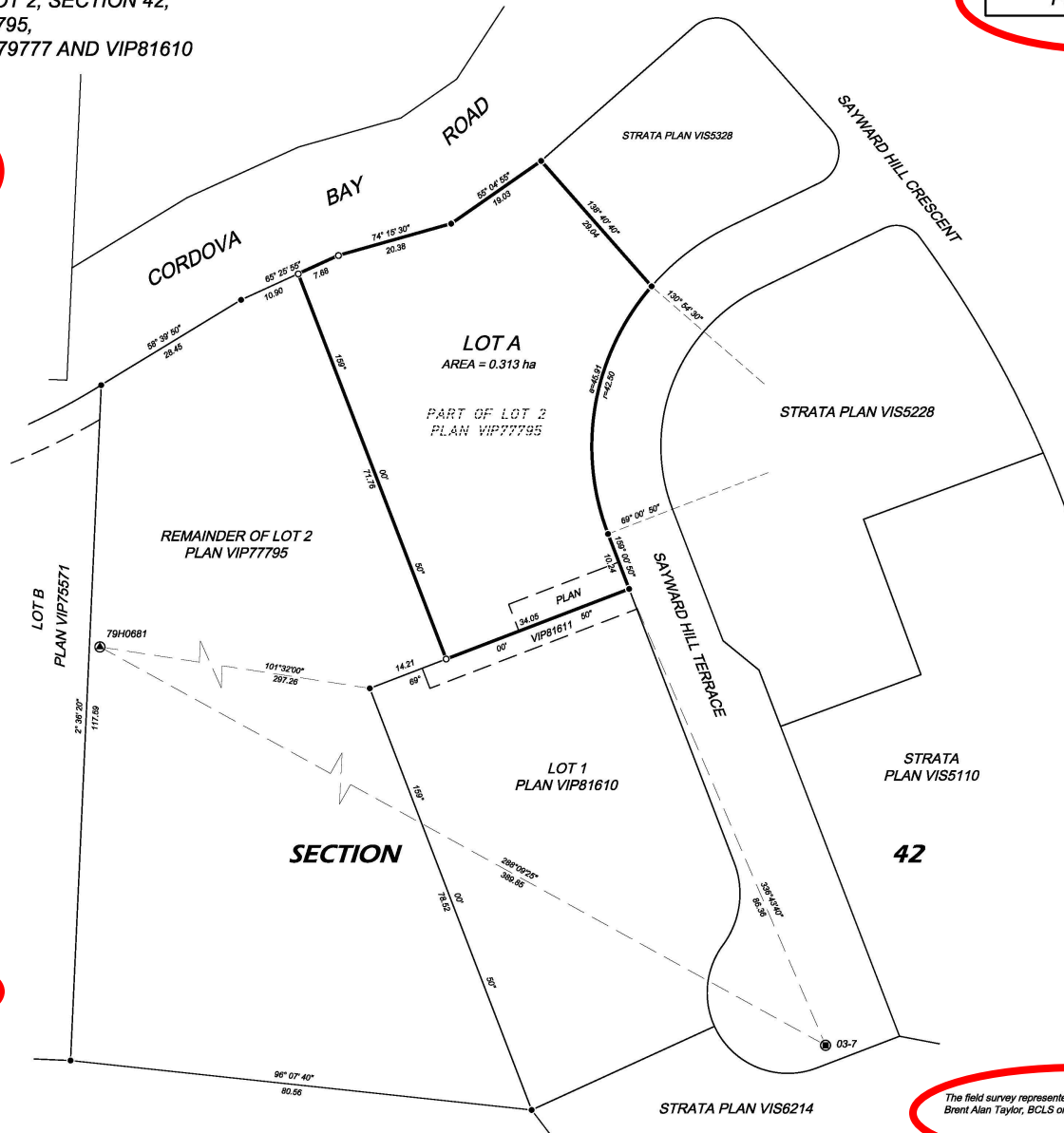
LEGEND

NAD83(CSRS) grid bearings are derived from GPS observations between Control Monuments 03-7 and 79H0681 as shown on Plan VIP81610.

Integrated Survey Area No. 30, the Corporation of the District of Saanich

- ⊕ denotes control monument found.
- ⊙ denotes modified rock post (Type 2).
- denotes standard iron post found (Type 5).
- denotes standard iron post set (Type 5).
- a denotes arc length
- r denotes radius
- ha denotes hectares

This plan shows ground level measured distances. Prior to computation of U.T.M. co-ordinates multiply by combined factor 0.9996008.



This plan lies within the jurisdiction of the Approving Officer for the Corporation of the District of Saanich.

This plan lies within the jurisdiction of the District of Saanich.

Polaris Land Surveying Inc.
Box 324, #110-174 Wilson Street
Victoria BC V8A 7N7

File: 0010\SAYWARD-PLSI040
Drawing: 0010\SAYWARD-PLSI040-SUB-DSP.DWG
Date: 2007-05-08

The field survey represented by this plan was completed by Brent Alan Taylor, BCLS on the 7th day of March, 2007.

Certification Form

FORM_SPC_V1

SURVEY PLAN CERTIFICATION
PROVINCE OF BRITISH COLUMBIA

By incorporating your electronic signature into this electronic plan, you:
(a) represent that you are a subscriber and that you have incorporated your electronic signature in accordance with section 168.73 (3) of the Land Title Act, R.S.B.C. 1996 c.250; and
(b) certify the matters set out in section 168.73 (4) of the Land Title Act. Each term used in this representation and certification is to be given the meaning ascribed to it in part 10.1 of the Land Title Act.

PAGE 1 OF 2 PAGES

Brent Taylor CN = Brent Taylor
DJT5LJ DJT5LJ, C = CA, O = www.junipert.com/LKUP.dfm? id=DJT5LJ, OU = BC Land Surveyor

1. BC LAND SURVEYOR: (Name, address, phone number)

Brent Taylor
Box 324
#110 - 174 Wilson Street
Victoria BC V9A 7N7
(250) 360-7398
btaylor@plsi.ca

2. PLAN IDENTIFICATION: Control Number: 117-868-5496

Plan Number: EPP3

3. CERTIFICATION: Form 9 Explanatory Plan

I am a British Columbia land surveyor and certify that I was present at and personally superintended this survey and that the survey and plan are correct.

The field survey was completed on: 200 March 01 (YYYY/Month/DD)
The plan was completed and checked on: 200 May 01 (YYYY/Month/DD)
The checklist was filed under ECR#: 64222

None Strata Form S

None Strata Form U1 Strata Form U1/U2

4. ALTERATION:

Pre-assigned Plan Number

Control Number

LTSA Application Form

FORM_06PL_V2

**APPLICATION TO DEPOSIT PLAN
AT LAND TITLE OFFICE
PROVINCE OF BRITISH COLUMBIA** LOCK PAGE 1 OF 1 PAGES

Your electronic signature is a representation that you are a subscriber as defined by the Land Title Act, RSBC 1996 c.250, and that you have applied your electronic signature in accordance with Section 168.732, and a true copy, or a copy of that true copy, is in your possession.

1. APPLICATION: (Name, address, phone number of applicant, applicant's solicitor or agent) Import Profile

Brent Taylor, Polaris Land Surveying Inc.

Box 324	(250) 360-7398
#110 - 174 Wilson Street	btaylor@plsi.ca
Victoria BC V9A 7N7	

Deduct LTO Fees? YES

2. PARCEL IDENTIFIER AND LEGAL DESCRIPTION OF LAND:
[PID] [LEGAL DESCRIPTION]

026-113-015 LOT 2, SECTION 42, LAKE DISTRICT, PLAN VIP77795 EXCEPT PART IN PLAN
No PID NUMBER VIP79777 AND VIP81610

Use Schedule - Short Form Use Schedule - Long Form

3. APPLICATION FOR DEPOSIT OF:

PLAN TYPE	PLAN NUMBER	CONTROL NUMBER	NUMBER OF NEW LOTS CREATED
Subdivision	EPP3	117-868-5496	1

4. OWNER(S): (updated owner(s) name(s), occupation(s), postal address and postal code) Use Schedule

SAYWARD HILL DEVELOPMENTS LTD

5331 CORDOVA BAY ROAD		Incorporation No
VICTORIA	BRITISH COLUMBIA	BC0540574
V8Y 2L3	CANADA	Joint Tenants ?

5. EXPLANATORY NOTES:

Use Schedule

LTSA Application Form

APPLICATION TO DEPOSIT PLAN
AT LAND TITLE OFFICE
PROVINCE OF BRITISH COLUMBIA

CONSENTS AND APPROVALS

Sayward Hill Developments Ltd
Inc. No. BC0540574

WITNESS AS TO ALL SIGNATURES

(signature) Authorized Signatory _____ (signature)

[Fill in name of authorized signatory] _____ [Fill in witness name]

(signature) Authorized Signatory _____ [Fill in witness occupation]

[Fill in name of authorized signatory] _____ [Fill in address (1)]

[Fill in address (2)]

The registered owners declare that they have entered into a covenant agreement in favour of the Corporation of the District of Saanich under Section 219 of the *Land Title Act*.

On behalf of Sayward Hill Developments Ltd Initialled: _____
_____ Approving Officer

[full name of authorized signatory] _____ [full name of Approving Officer]

On behalf of Sayward Hill Developments Ltd The Corporation of the District of Saanich

[full name of authorized signatory]

Royal Bank of Canada

WITNESS AS TO ALL SIGNATURES

(signature) Authorized Signatory _____ (signature)

[Fill in name of authorized signatory] _____ [Fill in witness name]

(signature) Authorized Signatory _____ [Fill in witness occupation]

[Fill in name of authorized signatory] _____ [Fill in address (1)]

[Fill in address (2)]

Approved pursuant to the *Land Title Act* on _____ [date].

Approving Officer

[full name]
The Corporation of the District of Saanich

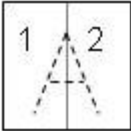
Advantages of Electronic Plans



- Plan numbers are pre-assigned – eases completion of documents.
- Eliminates the need for mylar and paper copies to be couriered to owners and approvers and the Land Title Office.
- Electronic transmission of plans virtually instantaneous.
- Supports filing outside of standard business hours.
- Consents and Approvals for the plan can be gathered concurrently.
- Eliminates the need to store hardcopy plans that deteriorate over time.
- Provides improved access to records (plans and documents)
- Will in the future facilitate the automated update of a cadastral parcel fabric.

Land Surveyor

Legal Plan



Certification Form

Signed

BCLS

Land Surveyor, Lawyer
Notary Public

Application Form

Owner _____

Bank _____

Approving Officer _____


Signed

Subscriber _____

Submitted to LTO
through BC OnLine



LAND TITLE OFFICE



Application Form

Owner _____

Bank _____

Approving Officer _____

Subscriber _____

Application Form

Owner _____

Bank _____

Approving Officer _____

Subscriber _____

Application Form

Owner _____

Bank _____

Approving Officer _____

Subscriber _____

- PDF plans are more secure than conventional hard copy plans.
- Protected by digital signature.
- The Certification Form must be digitally signed by a land surveyor.
- The Application Form must be digitally signed by a notary public, lawyer or land surveyor.
- New Electronic Plan Application Guide released mid-April
- Increased security – all amendments require a new signature

Land Surveyors Adoption of ESP



- Currently there are approximately 323 Practicing BC Land Surveyors
- Juricert Signatures acquired through arm of Law Society that works closely with Secretary / Registrar of ABCLS
- Annual Fee (\$125) Paid as part of Annual ABCLS Dues
- At end of January, 2010 - 243 BC land surveyors had acquired a Juricert Signature
- 190 different BC land surveyors had submitted an Electronic Survey Plan to either the office of the Surveyor General or the Land Title Office

Electronic Survey Plan Uptake



Submissions to the Surveyor General:

- In January 2010 97% (59 of 61) of all eligible plans, submitted to the Surveyor General were electronic
- In February 2010 100% (57 of 57) of all eligible plans, submitted to the Surveyor General were electronic
- In March 2010 98% (43 of 44) of all eligible plans, submitted to the Surveyor General were electronic
- In the 2009/10 fiscal year 91% (147 of 161) plans prepared pursuant to the *Land Act* were submitted electronically
- Between January and March 2010 98% (111 of 113) Well-Site Plans were submitted electronically.

Electronic Survey Plan Uptake



Submissions to the Surveyor General:

Electronic Survey Plan Uptake

Month	Land Act			Mineral Tenure Act			PNG Act			Total Eligible submissions			BCLS		
	Mylar	Digital	%	Mylar	Digital	%	Mylar	Digital	%	Mylar	Digital	%	Submitters for Month	Total	%
April 2009	3	4	57%		1	100%	266	5	2%	269	10	4%	60	326	18%
May 2009	2	3	60%				611	161	21%	613	164	21%	88	328	27%
June 2009	1	14	93%				2	4	67%	3	18	86%	79	332	24%
July 2009	1	14	93%				6	22	79%	7	36	84%	83	334	25%
August 2009	1	9	90%					1	100%	1	10	91%	72	334	22%
September 2009	1	4	80%					1	100%	1	5	83%	66	334	20%
October 2009		15	100%				40	69	63%	40	84	68%	84	334	25%
November 2009		14	100%		1	100%	2	22	92%	2	37	95%	90	335	27%
December 2009	4	24	86%		3	100%	37	3	8%	41	30	42%	94	336	28%
January 2010		15	100%		2	100%	2	42	95%	2	59	97%	85	334	25%
February 2010		16	100%					41	100%		57	100%	92	334	28%
March 2010	1	15	94%					28	100%	1	43	98%	90	334	27%

Electronic Survey Plan Uptake



Submissions to the Land Title Office:

- Pilot project to support submission of Electronic Survey Plan process to Land Title Offices started in May 2007.
- Pilot group expanded from initial single land surveyor to 40 land surveyors by February 2008.
- Originally simple plans (posting plans, right of way plans) not requiring signature.
- Grew to include more complex plans (subdivision and strata plans) with multiple approving authorities, owner and charge holder consents required.
- On February 28, 2008, the Electronic Survey Plan process was rolled out to all land surveyors in the province – for all *LTA* and *SPA* plans.

Electronic Survey Plan Uptake



Submissions to the Land Title Office:

- Total of 1,104 Electronic Plans submitted in fiscal 2008/09
- Total of 2,742 Electronic Plans submitted in fiscal 2009/10

ESP Plan Intake 2009/10					ESP Plan Intake 2008/09				
Month	Electronic Plan Submission	Paper Plan Submission	All Submission Methods	% Electronic Plan Submission	Month	Electronic Plan Submission	Paper Plan Submission	All Submission Methods	% Electronic Plan Submission
Apr	166	767	933	18.0%	Apr	61	930	991	6.0%
May	152	574	726	21.0%	May	68	912	980	7.0%
Jun	220	809	1,029	21.0%	Jun	88	1,030	1,118	8.0%
Jul	200	751	951	21.0%	Jul	86	1,132	1,218	7.0%
Aug	240	652	892	27.0%	Aug	108	824	929	11.0%
Sep	197	760	957	21.0%	Sep	109	883	992	11.0%
Oct	278	744	1,022	27.0%	Oct	93	939	1,032	9.0%
Nov	252	615	867	29.0%	Nov	82	855	937	9.0%
Dec	259	633	882	29.0%	Dec	75	721	796	9.0%
Jan	219	554	773	28.0%	Jan	104	694	798	13.0%
Feb	308	572	880	35.0%	Feb	101	688	789	13.0%
Mar	251	700	951	26.0%	Mar	129	791	920	14.0%
Total	2,742	8,131	10,863	25.0%	Total	1,104	10,399	11,500	10.0%

Electronic Survey Plan Uptake



Sample of Submissions to the Land Title Office:

January 10 LTD Plan Submissions					
	Total All	Paper	% Paper	Electronic	% Electronic
Subdivision	203	189	93%	14	7%
Strata	63	54	86%	9	14%
Other	507	311	61%	196	39%
Total	773	554	72%	219	28%
February 10 LTD Plan Submissions					
	Total All	Paper	% Paper	Electronic	% Electronic
Subdivision	259	221	85%	38	15%
Strata	84	77	92%	7	8%
Other	537	274	51%	263	49%
Total	880	572	65%	308	35%
March 10 LTD Plan Submissions					
	Total All	Paper	% Paper	Electronic	% Electronic
Subdivision	258	229	89%	29	11%
Strata	85	78	92%	7	8%
Other	608	393	65%	215	35%
Total	951	700	74%	251	26%

Electronic Survey Plan Uptake



Submissions to the Land Title Office:

Subdivision	Airspace	Reference/ Explan	Reference/ Explan	Reference/ Explan S100	Reference/ Explan S107	Posting	Statutory Right of Way	Statutory Right of Way Crown Lands	Strata	Strata Phased	Strata Amended	Bylaw or Road Closing	ESP open to all Submitters	
needs consents and approvals	needs consent and approval	require documents	needs consents and approvals, documents	needs consents and approvals	needs consents and approvals	no consent required	no consent required	needs SG approval	needs consent and approval	needs consent and approval	needs consents and approvals	needs consent and approval	Month Totals	2010 Month
14	0	40	1	4	13	85	33	19	7	2	0	1	219	Jan
34	0	61	1	4	30	114	35	20	3	4	0	2	308	Feb
28	0	51	0	1	22	99	26	14	3	5	1	1	251	Mar

- Plans that do not require signatures and consents (i.e. Posting Plans and Statutory Right-of-Way Plans) are seeing greatest level of uptake.
- More than 50% of Posting Plans to New Westminster Land Title Office are Electronic Survey Plans

Electronic Survey Plan Uptake



Submissions to the Land Title Office:

Next Steps:

- Begin Discussions on **requiring** certain types of plans to be submitted electronically
- Survey Rules already require all plans prepared pursuant to the Mineral Tenure Act to be submitted electronically
- Consideration to be given to requiring all Posting Plans to be electronic
- Methodology (Survey Rules, Directors Requirement, Legislation) not yet determined
- Address perceived barriers – primarily Approving Officers and Lawyers

Questions?

THANK YOU

Please see our website at:

<http://www.ltsa.ca/surveyor-general/electronic-filing-of-survey-plans>

Or contact: Jeff Beddoes, Senior Deputy Surveyor General

(jeff.beddoes@ltsa.ca or (250) 952-5324)

for further information