Consolidated Policy and Procedures Manual for the Submission of Digital Plans of Survey for Registration

Alberta
REGISTRIES

Policy and Procedures Manual for the Submission of Digital Plans of Survey for Registration

Prepared By:
Registration Services, Registries
Alberta Government services

March 31st, 2000

Preface Note:

This document consolidates key information related to the digital submissions process published in Bulletins and Notices since the initial release of the Policy & Procedures in March of 1998. This document therefore supercedes previous versions of the Policy and Procedures which should no longer be used as an accurate reference.

Revisions / Notifications

Date:

1) May 1st, 2000 **-** Date of planning approval is not required on plan for LTO registration purposes. If date is indicated it must match the date on the attached Planning Authority affidavit.

2) May 1st, 2000 - The $100.00 mapping integration fee for Descriptive Plans will be implemented the later part of May.

3) May 15th, 2000 - The map area shown on the SPIN Radius search is fixed and therefore does not match the distance and plan list requested by the user. This issue will be corrected shortly.

4) June 19th, 2000 - Important submission information has been added to Section 2.6 - Transmission of Digital Survey Plan Data

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Introduction

To achieve internal operation and distribution efficiencies Alberta Registries initiated the Surveys Automation Project in the late spring of 1997. Its primary goal is to move the entirely manual survey plan registration, archiving, printing and distribution process into a modern digital environment over a 2 to 3 year period. This effort will allow clients direct online search, view and download of surveys data via the Internet as well as it's use in updating the provincial cadastral mapping of the province through Spatial Data Warehouse (SDW).

To assist in this transition process the Digital Submission Standards Committee was formed by Alberta Registries to facilitate the development of standards and specifications for submission of digital plans of survey for registration. The committee was made up of representatives from the Alberta Land Surveyors Association, Director of Surveys, the Cities of Edmonton and Calgary, Surveyor General's Office, Spatial Data Warehouse (SDW), AltaLIS and Alberta Registries. The committee met on five occasions, beginning on March 30th, 1998, to review the needs of digital submission and the related requirements of cadastral mapping. In follow up to the Committee, Alberta Registries held a series of regional meetings throughout the province in the summer of 1998, to better inform the survey community of the proposed changes. There have also been further direct meetings with the ALSA council representatives. During this consultation process no significant technical issues were identified that would prevent the digital survey plan submission standards from being distributed so as to begin the preparation process for submissions.

Example issues that did arise from these meetings, as well as those submitted through verbal or written communication to Registries, are summarized in point form in the first section of this document. The second section provides the policy and procedures that detail the submission process for surveyors. The third section provides the detailed technical specification and processes relevant to the program implementation while the fourth section details Registries data transfer facilities. Registries intends to put in place a long term consultation process with the survey community via the standing Digital Submissions Committee, an External Advisory Group and/or directly with the Alberta Land Surveyors' Association. Comments or questions regarding the policy and procedures document should be communicated directly to the following Registries staff:

Bill Elliott - Technical Services Administrator, Registration Services:
(780) 422-8121 Email: **Bill.Elliott@gov.ab.ca**

Stan Gushulak - Senior Technologist, Application Support, Registration Services:
(780) 427-6816 Email:**Stan.Gushulak@gov.ab.ca**

Moez Murji - Senior Technologist, Surveys, Registration Services
(780) 427-6130 Email: **Moez.Murji@gov.ab.ca**

Questions regarding the level conversion software should be addressed to:
AltaLIS - # (403) 294-1028 EMail - bill@martinnewby.com

Section 1.0 - Addressing Identified Surveyor Issues

1.1 - Clarification of the Involvement of SDW/AltaLIS in the Digital Plan of Survey Process

- Spatial Data Warehouse is a "not for profit" company formed by the Government of Alberta and the major utility companies to assume, under license from the Crown, the management of the cadastral databases of the province. AltaLIS is a company made up of QC Data and Martin Newby Consulting of Calgary that have been chosen by SDW through an RFP process to perform the administrative roles of updating, storing and distribution of the cadastral mapping products. **AltaLIS will not compete in the value added market place nor will its principals have any preferred advantage over any other user of the cadastral mapping products.** License agreements with the Crown will secure the public interest in this regard and stipulate that the registered plan CAD files transferred to SDW/AltaLIS will be for updating the cadastral mapping only. **Following completion of the map update process the registered plan CAD files will be deleted by AltaLIS.**

- Registries, as with the balance of the provincial government, fully supports the efforts of SDW/AltaLIS to maintain and distribute a quality map product. Registries would require digital submission regardless of whether Alberta Environment or an agency other than SDW / ALTALIS was providing the mapping service. Registries further requires the digital mapping as part of its new digital plan index to replace the hardcopy index system currently used. This same system will become part of the new online Survey Plan Index System that will replace the plan index in the failing LRIS System currently used extensively by the Survey community.

1.2 - Collection of an Integration Fee for the Updating of Cadastral Mapping

- The provincial government has leveled a fee of $100.00 at the time of plan registration to be applied specifically to the cost of updating cadastral mapping. This fee is a pass through cost directly to the party who in effect is causing the change to the cadastral map fabric with the registration of the new plan. Discussions have been held with the development community, municipalities and government caucus to inform them of this change. An explanation document was provided by Environmental Protection to the survey community to clarify to their clients the purpose of this specific fee.

1.3 - Increased Expense to Surveyors

- The implementation of digital plan submissions will require a “one time” drafting level change for the survey community since almost all survey plans are created in CAD file format today. Software and instructions will be provided to convert a surveyor’s existing CAD file structure to the layering required for submission. Benefits, such as the ability to search and order plans online, or accessing, cadastral mapping for plotting surround data for the preparation of new plans, and a standard data (CAD) exchange format , are seen as potentially offsetting temporary costs to Surveyors in meeting submission requirements.

1.4 - Increased Technical Requirements

- Technical requirements (e.g. digital correctness of line work, dimensioning) will remain the same as current standard drafting practices used by surveyors. Drawings must be to scale and to a good standard of draftsmanship.

1.5 - Data Access Cost to Surveyors

Registries has made a commitment to the survey community that it will not increase the current costs for accessing hardcopy or online TIFF image plan data, unless otherwise directed by Alberta Treasury. Other agencies and provinces are charging significantly more (e.g. Registries $3.00 per plan vs Petroleum Information Dwight’s $15.00 per digital plan, Province of B. C. up to $12.95 per survey digital plan). Registries will also not be charging any fee for a search or low resolution view of the plan of record at it’s service counters or on the Internet site. Surveyors can either use a SPIN account tied to their ALTA account for payment or use the general public’s access using Electronic Commerce. This internet facility allows customers to use a credit card to pay for purchases.

Please Note:

- The $5.00 access fee to SPIN will not be applied unless Registries determines the system is over taxed by users who are not actively making purchases.
- The 10 cents a record LRIS search fee will not be charged on the new online system.
- Paper and mylar print charges will remain at current cost.
- CD’s will be $10.00 (including “copy” time) plus the cost of the number of plans ordered.
- 3.5” 1.4mgb diskettes $1.00 plus the cost of the number of plans ordered.
- If you are an existing ALTA account holder and have not already requested a SPIN account access ID you may do so by contacting **Emily Ng (780) 422-7877 or Yasmin Murji (780) 422-7875.** If you do not have an existing ALTA account contact **Ken White at (780) 422 - 7810** to apply.

1.6 - Implementation Timeline for Digital Plan Submissions

A gradual implementation period beginning January, 1999 was put in place leading to digital submission compliance for the required CAD file by June 1st, 1999. In order to allow for resolution of issues with regard to use of the signing affidavits, line weights and font capture, Registries extended the period during which the current hardcopy submissions would be used as the plan of record to December 1st, 1999. There has been a further extension of the use of the hardcopy plan as plan of record to February 29th, 2000 for those surveyors who were not able to provide the required plot file or TIFF image.

1.7 - Distribution of Registered Survey Plan Data

- At the point of registration a survey plan becomes an instrument of public record administered by Alberta Registries who is responsible under legislation to archive and distribute registered plan data. A raster image TIFF file of the newly registered plan is now the plan of record for archiving and distribution purposes. **As per written agreement, the CAD file transferred to SDW to update the cadastral mapping files will be destroyed after the update process has been completed.**

1.8 - Ties to Control / Geo-referencing

- The digital plan submission process will not introduce any new requirements regarding ties to local control. The only requirements are those as established by the Alberta Land Surveyors Association (see the ALS Manual of Standard Practice). Adherence to these requirements will be part of the plan review process. The benefits of geo-referencing each plan are still being evaluated and may be reviewed by the Digital Submissions Working Committee and the ALSA at a later date.

1.9 - Access to Scanned Plans of Survey via SPIN

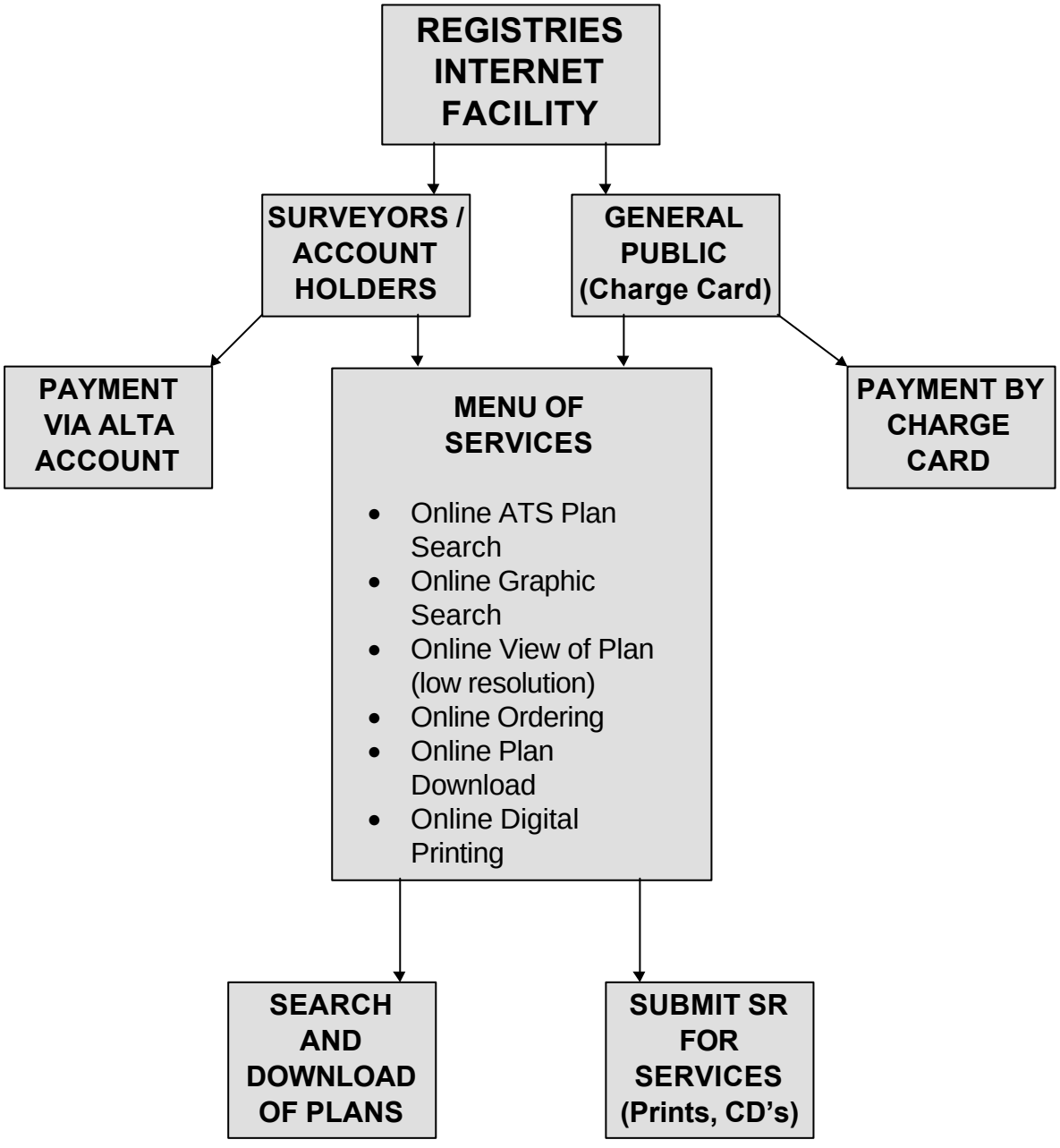
Registries complete archive of registered survey plans is available via the Internet based Survey Plan Index System (SPIN @ http:///139.142.31.91/spin1). SPIN has greatly expanded Registries ability to serve its clients in both speed of data access and convenience of not having to leave their office to access virtually all registered plan data in the province. The primary system features include:

SPIN Release 1 Features

- **Plan Number Search, Map View & Selection - Multiple plan numbers may now be sequentially entered.**
- **Plan Number Search, Map View & Selection by ATS (with Printable Plan Listing)**
- **Plan Number Search & Selection by Map Search - Plan numbers may now be selected directly from the map using the new "Select" button. Water bodies have now been added to the Regional Map selection as a location identifier.**
- **Plan Number Search, Map View & Selection by "Rural Plan Map" (via Entire Township) when using the Map Search**
- **Plan Number Search, Map View & Selection by Settlement Plan**
- **Plan Number Search, Map View & Selection by Hudson Bay (HB) Lot, Shore Line (SL) Lot or River Lot (RL) Plan Search**
- **Plan Number Search, Map View & Selection by Radius (from Plan Location or ATS)**
- **Corrected Plan Listing Search & Selection**
- **Online (Low Resolution) Preview of Plans**
- **Internet Download of Plans Either Individually, by Zipped File (for multiple plans) or Email**
- **Purchase by Account or Credit Card (ECommerce)**
- **Plans available on CD, Diskette or Paper Print by requests to Registries Counter Service**
- **A quantity box has now been added for ordering multiple paper prints of plans..**

Users logon to the system from their office and perform legal description searches as well as search graphically through a drill down of the cadastral mapping database of the province. They may then click on the individual plans that they are interested in to view a low resolution image of the plan for confirmation. Once they have selected the plans required for purchase, they may either download them directly to their computer or fill out an online Service Request (SR) form to have prints, CD's or diskette's made at the Calgary or Edmonton Land Titles Office.

Schematic of Survey Plan Index Internet Ordering Facility



Please Note:

- Clients should not keep this site up all day long performing extensive browsing and downloads. Users should assemble their plan needs, logon, do their transactions and logoff the system. The facility will be monitored on a daily basis, if it is determined that the site is overtaxed by inappropriate activities, stricter guidelines and costs will have to be put in place. As a general rule over 20 plans should be requested on a CD to avoid lengthy download times for the users.

- Access performance to the site for search and download will directly relate to the speed of a user's Internet service, modem, activity on the web and number of users using the system at any given time.

- It is recommended that clients use MicroSoft Internet Explorer as the browser for accessing the new system. This software is available free from the MicroSoft Internet site or as part of Windows 98. The current version of Netscape cannot access certain graphic functions of the site.

- The Cities of Edmonton and Calgary, who are responsible for cadastral mapping within their corporate boundaries, will shortly be allowing Registries to run their mapping on the SPIN site for search purposes. In the mean time clients are still able to search by ATS within these cities and view the low resolution image of the plan for confirmation before ordering plans.

- **In order to continuously upgrade the system users of SPIN are requested to notify the Surveys Help Desk if they identify missing plans or other errors on the system.**

  Northern Land Titles Office
  Email: Surveys.Edmonton@gov.ab.ca
  Telephone: (780) 427 - 4542
  Fax: (780) 429 - 4885

  Southern Land Titles Office
  Email: Surveys.Calgary@gov.ab.ca
  Telephone: (403) 297 - 6511
  Fax: (403) 297 - 6580

- Large/long survey plans (e.g. railway plans) have been broken into manageable pieces and sequentially numbered for ordering purposes.

- For further details on SPIN see the Operational Guidelines on the Internet site.

Note: The Edmonton and Calgary Surveys counter service will not be closed. Hardcopy prints of survey plans will still be available from both Registries sites or via the submission of an online Service Request (SR).

1.10 - Registries Redistribution Clause

Data products purchased from Alberta Registries are intended for the sole use of the individual purchaser and may not be commercially redistributed or shared without specific written permission by Registries. Any person or body found to be in conflict with this policy may, at a minimum, have their Registries purchase privileges removed. Re-instatement of these privileges will be at the discretion of Registries management. As well, the cadastral mapping files used in the graphical search are the copyrighted property of the Government of Alberta and administered under license by Spatial Data Warehouse / AltaLIS. No system user should attempt to copy these files from the system in any fashion.

Members of the public may act as designated agents for clients purchasing registered plans of survey from Registries. In this capacity an agent may purchase the plan(s), in either digital or hardcopy form, at the current price and pass that cost directly to a client as a disbursement. No additional value-added charges may be applied to the base cost of the plan in the disbursement process. In all cases the Client and agent are bound by Registries copyright and redistribution conditions.

Access Closure Notice

As a result of this automation process and the implementation of SPIN, access to the "hard copy" archive of compiled plans and the associated index cards will be discontinued July 7th, 2000.

1.11 - Surveyor Benefits to Working in a Digital Survey Plan Environment

- Convenience of online plan submissions.
- Access to online list of plans through ATS or graphic map search via the SPIN System.
- Access to online digital survey plans (TIFF Images) for downloading or ordering copies in hardcopy or digital form via the SPIN System.
- Lower data access costs.
- Expanded front counter services (e.g. Data on CD's / diskettes, high speed digital printing).

- Access to Parcel and MISAM files through SDW (in a variety of projections) for the purposes of survey plan preparation and submission to Registries for registration.
- Access to level conversion and checking software.
- Access to the Digital Submissions “Help Desk” and training (Till September 30th/99).
- Potential future access to current and historical cadastral coordinate data.
- Expanded business opportunities for surveyors in having access to inexpensive digital mapping and survey data.

Section 2.0 - Policy and Procedures

2.1 - Plan Submission Requirements

- The requirements of digital plan submission remain the same as current practice, as defined in the Land Titles Procedure Manual, except where specifically noted or impractical given a digital environment.

2.2 - Registration Process Overview

1. Software has been provided to the survey community that will assist in converting existing CAD files into the level structure required for submission. Following delivery (on diskette) or by online FTP transmission of a digital plan submission files and documentation to the Calgary or Edmonton Registries sites, error checking will be done against the plan prior to the registration review process beginning. If errors are detected, the files will be deleted and the documentation will be returned to the surveyor to make the required changes.

2. If the plan is acceptable, Registries survey technologists will perform the registration processes in an "online" environment using the cadastral map fabric as a plan index (including Edmonton and Calgary) and the scanned registered plans to verify the surround data.

3. If the plan is rejected the submission files will be deleted and the documentation will be returned to the surveyor to make the required changes.

4. Once examination is complete, the newly registered plan will then be captured as a TIFF file (to "freeze" the plan). The plan will then be stored on a file server for later digital distribution via SPIN or digital printing. A copy of the CAD file will then be sent to SDW for map updating purposes.

2.3 - Digital Submissions Timeline:

January 1st, 1999 to June 1st, 1999

- Submission of a hardcopy plans and voluntary submission of CAD and associated plot file.

June 1st, 1999 to December 1st, 1999

- Hardcopy plan submission with CAD file compiled to digital submission specifications and a plot file. Plot file submission were required for testing purposes only.

February 29th, 2000 (extended from December 1st, 1999)

- Full digital plan submission with CAD, attribute and plot file (or alternate method to capture a true TIFF image) compiled to digital specifications, and signatures on affidavit attachments.

  Note: The only plans to be exempted are those that meet the grandfather exemption requirements as described in Clause 2.8.

2.4 - Digital Survey Plan Submission File Formats:

- Submissions will be accepted in either MicroStation .dgn, AutoCAD .dwg or .dxf formats in their true scale.

- All plan submissions must be accompanied by an attribute file (DiPS) containing detailed specifications on the CAD file (e.g. file type, scale, NAD etc.). The software to create this file is available for free, together with the layer checking software.

- All plan submissions must be accompanied by a plot file suitable for direct conversion into the "plan of record" TIFF Group IV image using an hpgl2 plotter driver. As an alternate Registries will accept a TIFF file whose format has previously been approved by this office.

2.5 - Handling of Registered Plan Submission Documentation

- Only hardcopy versions of required affidavits will be excepted at this time.

  Note: See example affidavits in Section 5.

2.6 - Transmission of Digital Survey Plan Data

A File Transfer Protocol (FTP) system that allows direct transfer of survey plan CAD files between surveyors and Registries was put in place in July, 1999. Access information, along with User ID's and passwords to the system were distributed during that period. Directions for the use of the FTP site appear in Section 4.

Surveyors using the FTP site must submit the appropriate files before or concurrently with the hard copy documentation. Registries will not proceed to examine any plans of survey unless the proper documentation is submitted to the Surveys Section.

Please Note:
- Surveyors must clearly identify on the DRR whether they are submitting by FTP or diskette.
- If submitting by FTP clearly identify the FTP site number the files have been transferred to.
- The digital file name on the FTP site must be the same as on the DRR and Surveyors affidavit.

- If the plan is not being registered by the Surveyor, then the Surveyor should advise the registrant to indicate on the DRR the FTP site number and the digital file name.

Files may also be submitted via 1.44mgb 3.5" floppy disk. If the files exceed the capacity of a disk they may be "zipped" using industry standard compression software or supplied on CDROM.

2.7 - Corrections or Amendment of Digital Registered Plans

- If a registered survey plan must later be corrected, the TIFF file will be altered using raster-editing software. The error will be crossed through and the new value (e.g. dimension or bearing) entered as another layer of information onto the TIFF image of the plan. Other changes such as road closures will be added as a text notation to the file. No original surveyor information will be removed from the plan.

- In the case where AltaLIS finds alleged plan errors it will contact the surveyor. If it is a minor CAD file error (e.g. wrong level assignment of a feature) AltaLIS will make the adjustment. If it is more serious alleged error the surveyor would follow existing plan correction routines through the director of surveys Office, the ALSA and Registries.

2.8 - Plan Submission Grandfather Exemption

- Item 2.3 of this document details the current timelines for digital submissions. However, plans submitted for registration after June 1st, 1999, with a field survey that was completed prior to February 15th, 1999, may be grandfathered and accepted in hardcopy form. This is a change from the original date of January 1st, 1999.

- The general number of plans that qualify under this "grandfather" exemption was identified by ALSA through a polling of the Association membership the 1st week of April/99.

- The grandfather exemption provision is to cease after 3 years (i.e. June 1st, 2002).

2.9 - Data Segregation

- Data must be segregated according to the LTO Layer chart; Surveyors are encouraged to segregate other miscellaneous data onto other CAD file levels rather than collect them all on level 34.

2.10 - Condominium Plans

- Bare land condominium plan line work should be represented in the same fashion as normal subdivision line work; linework for unit boundaries should be placed on level 24.

2.11 - Public Land Plan Submissions

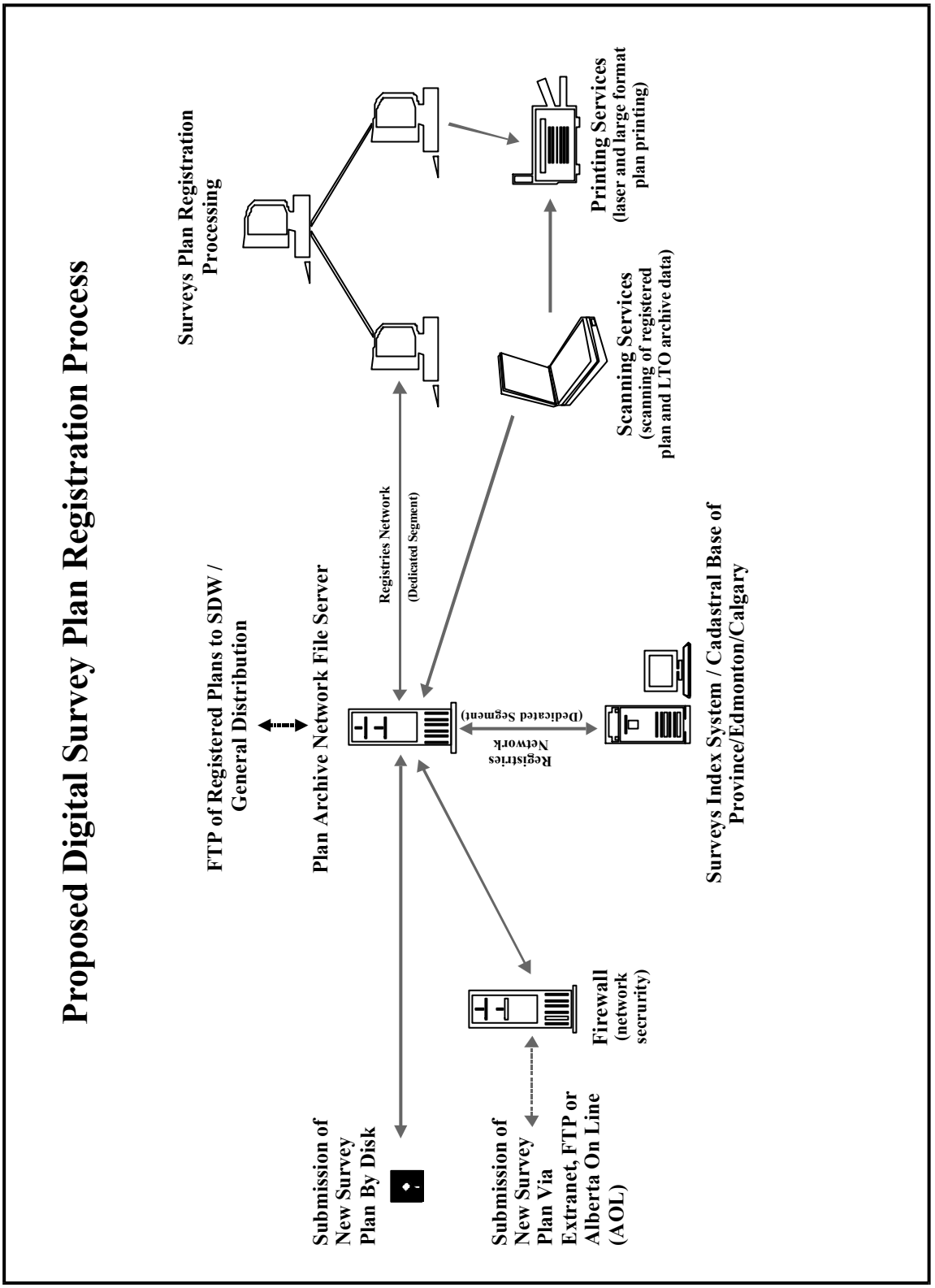
- Environmental Protection is currently developing standards in consultation with the ALSA for the digital submission of survey plans on public lands. Although the specifications and level structure for these plans has yet to be confirmed, surveyors should be aware that this may have an impact on CAD level assignments above the initial 33 levels used for digital submissions to Registries.

2.12 - General Processing Issues

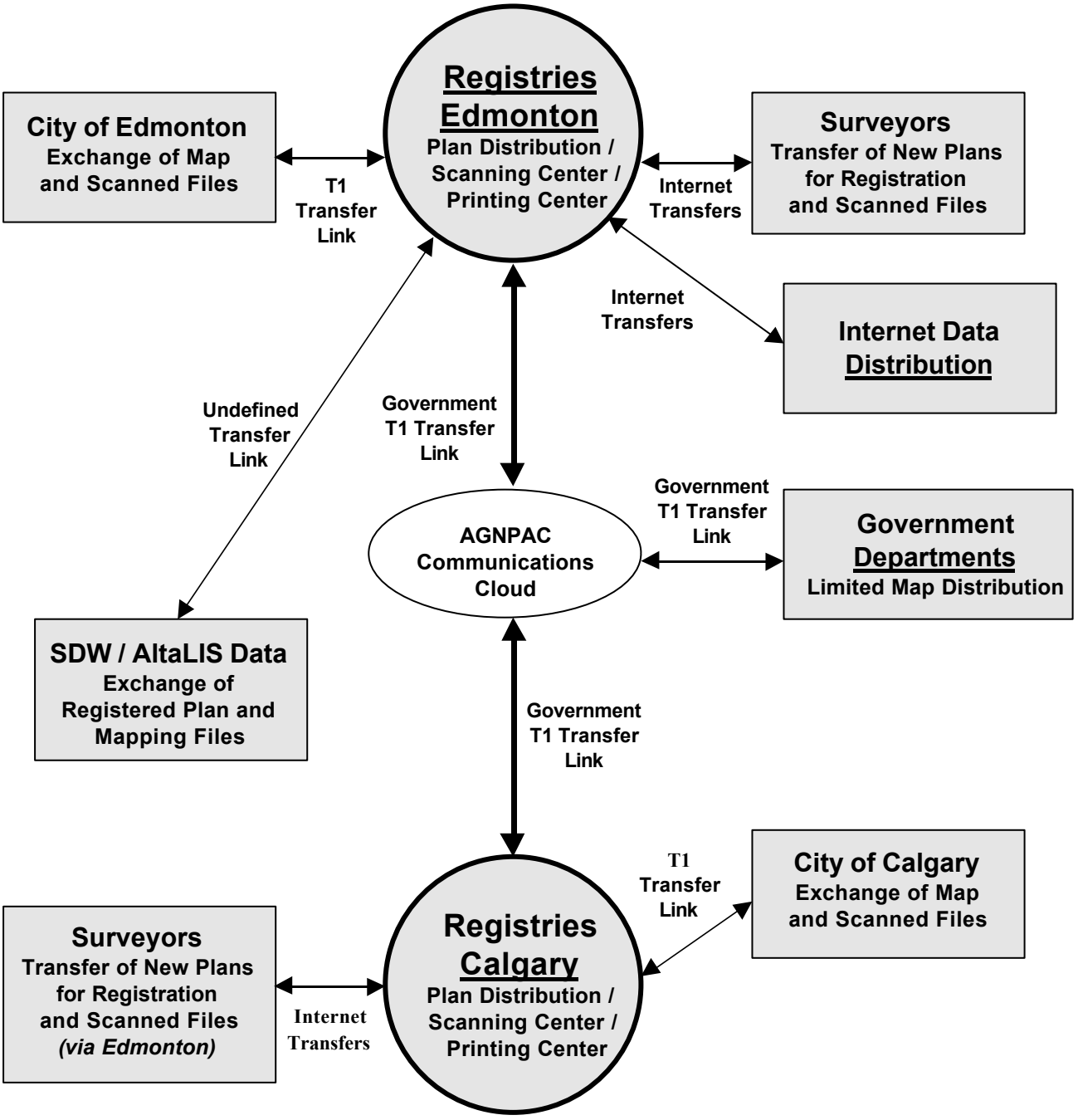
- All information bulletins related to digital submissions will be posted on the Registries web site at: http://www.gov.ab.ca/gs/services/lrs

2.13 - Canada Land Plans

- Canada Land Plans should be submitted in either specified CAD format. They are not required to have the specified layering structure.


Proposed Digital Survey Plan Registration Process
Surveys Plan Registration Processing
Printing Services (laser and large format plan printing)
Scanning Services (scanning of registered plan and LTO archive data)
FTP of Registered Plans to SDW / General Distribution
Plan Archive Network File Server
Registries Network (Dedicated Segment)
Registries Network (Dedicated Segment)
Surveys Index System / Cadastral Base of Province/Edmonton/Calgary
Submission of New Survey Plan By Disk
Submission of New Survey Plan Via Extranet, FTP or Alberta On Line (AOL)
Firewall (network secrurity)

Registries Communication Infrastructure Schematic for Data Transfer



Section 3.0 - Technical Specifications - Level Conversion Software

3.1 - Introduction

This program changes AutoCAD layer names (alpha-numeric) to numeric values for MicroStation.

3.2 - Program Structure

The LTOLAYER software includes the following three files:

1. **LTOLAYER.EXE** *(ver. 2.2, 63,399 bytes – 01/22/98, 11:02)*
   - This executable creates the "list" file for the "LTO.LSP" program to convert the AutoCAD drawing.

2. **LTO.LST**
   - This is the output of the executable, which is a mapping of the AutoCAD layer names to a numeric value for MicroStation. **Do Not edit this file**, this file is modified by the ltolayer program and used by the LISP program.

3. **LTO.LSP** *(6681 bytes – 10/14/98, 14:54)*
   - This is the LISP program that AutoCAD uses to load then read the "LTO.LST" file for the layer name conversion

3.3 - Basic Steps of Operation

The following are the steps that must be taken to operate the conversion program:

1. Map out the layer names of data contained in the drawing file. All your layer names must be mapped to a number for proper conversion.

2. Relate your layer names to the "Feature Description" listed on page four (4). Any extra information in the drawing files may be placed on level numbers 34 to 63.

3. Launch the executable "LTOLAYER.EXE" and follow the instructions that are presented on the screen. At the completion of the layer mapping, push "F10" to save the results into "LTO.LST'.

4. Open the drawing file in AutoCAD and load the LISP program "LTO.LSP". At the command line in AutoCAD type "LTO" to launch the conversion (all of the layer conversion takes place inside of AutoCAD).

5. The layer names being converted should appear on the command line and the colors of the elements in the drawing file will be changed to white. The conversion time is dependent on computer speed and the size of the drawing file.

6. Review the layers in the drawing file to confirm that they were all mapped to a numeric value. If there is a problem, confirm that all the layer names were properly mapped to a numeric value and also confirm if the problem elements are AutoCAD Blocks. During the conversion process, AutoCAD Blocks will be moved to the new layer number (as specified in the table); however, their color will not be changed to white. The original layer name will remain; however, there will not be any data on this layer.

7. You will note that a text file ***("DRAWING_NAME.TXT")*** has been created. This file contains a list of all the information (symbology) in the drawing file. It contains the layer name, color, line types, all fonts loaded, all line types loaded and all block names loaded. This is very useful information and can be used to generate a list of layer names to do the mapping.

3.4 - Software Parameters

- All of the AutoCAD layers must be identified for the "LTOLAYER" conversion to work correctly.

- The program was designed to function in AutoCAD Versions 10, 11, 12, 13 & 14

- The software will allow multiple layer names to be placed onto one new layer number (e.g. your file could have lot and block lines on two layers, say "lot-lines" & "block-lines", these would be combined onto layer "18").

- The software will convert layers that are turned off, locked and/or frozen.

- The original drawing file is converted through this process. It is advisable to make a backup of the original file prior to running the LTOLAYER software.

- Block and attribute data will have the layer name changed (if it is identified in the "LTOLAYER" lisp program), however, you will notice that the original layer name still remains. The elements have been moved to the new layer. The color of the element will likely not change (most elements will change to white).

3.5 - Future

The text file ***("DRAWING_NAME.TXT")*** that is created from the process may be used to reverse the process. Future developments are to enable a bi-directional conversion of

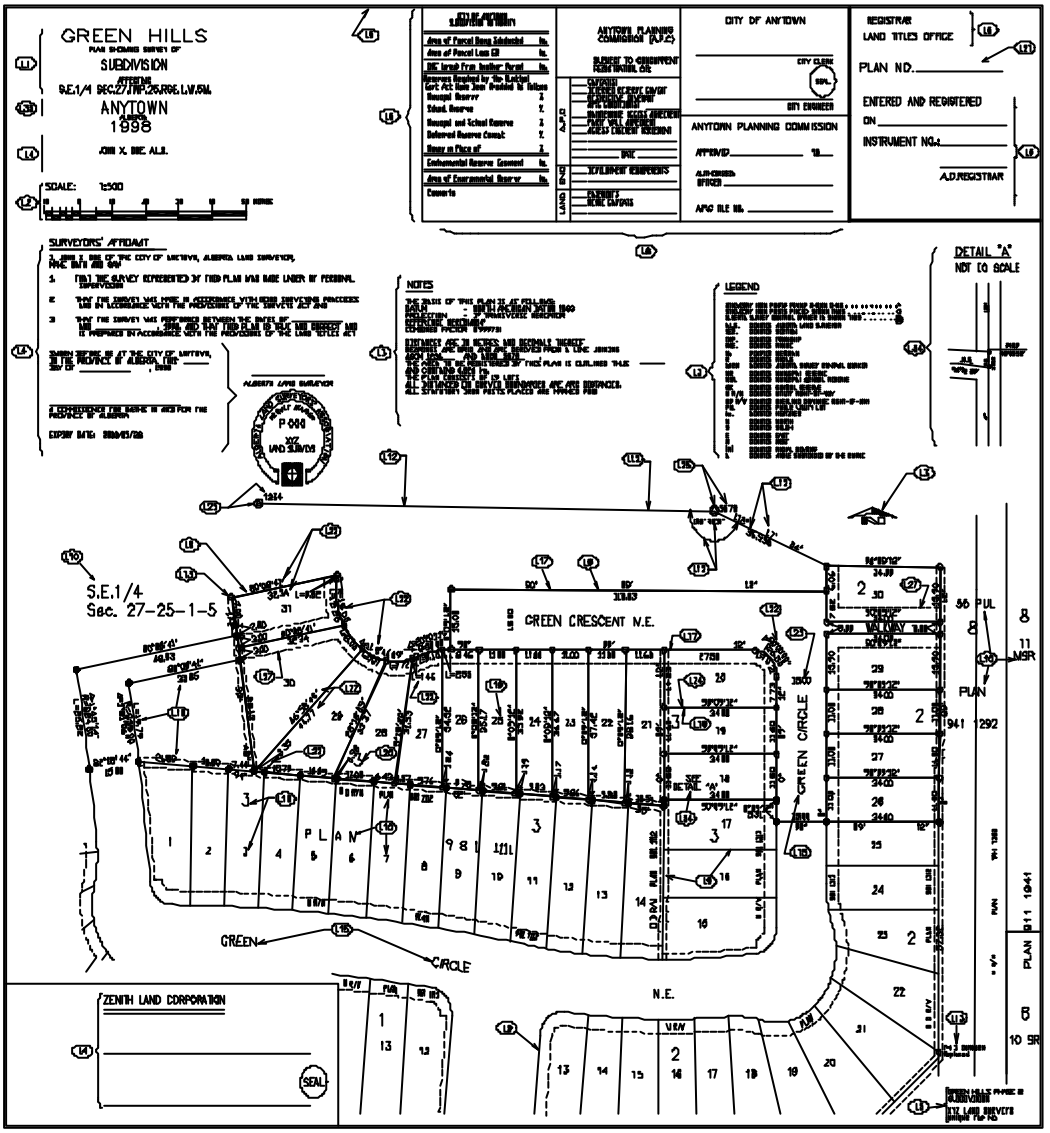
data. The major issue is to capture all the drawing file symbology and link that to the MISAM & Parcel symbology for a reverse process.

The software has been tested; however, problems may occur. These should be documented and sent, together with the drawing files, to:
bill@martinnewby.com
A response and/or a solution will be provided for all inquiries.

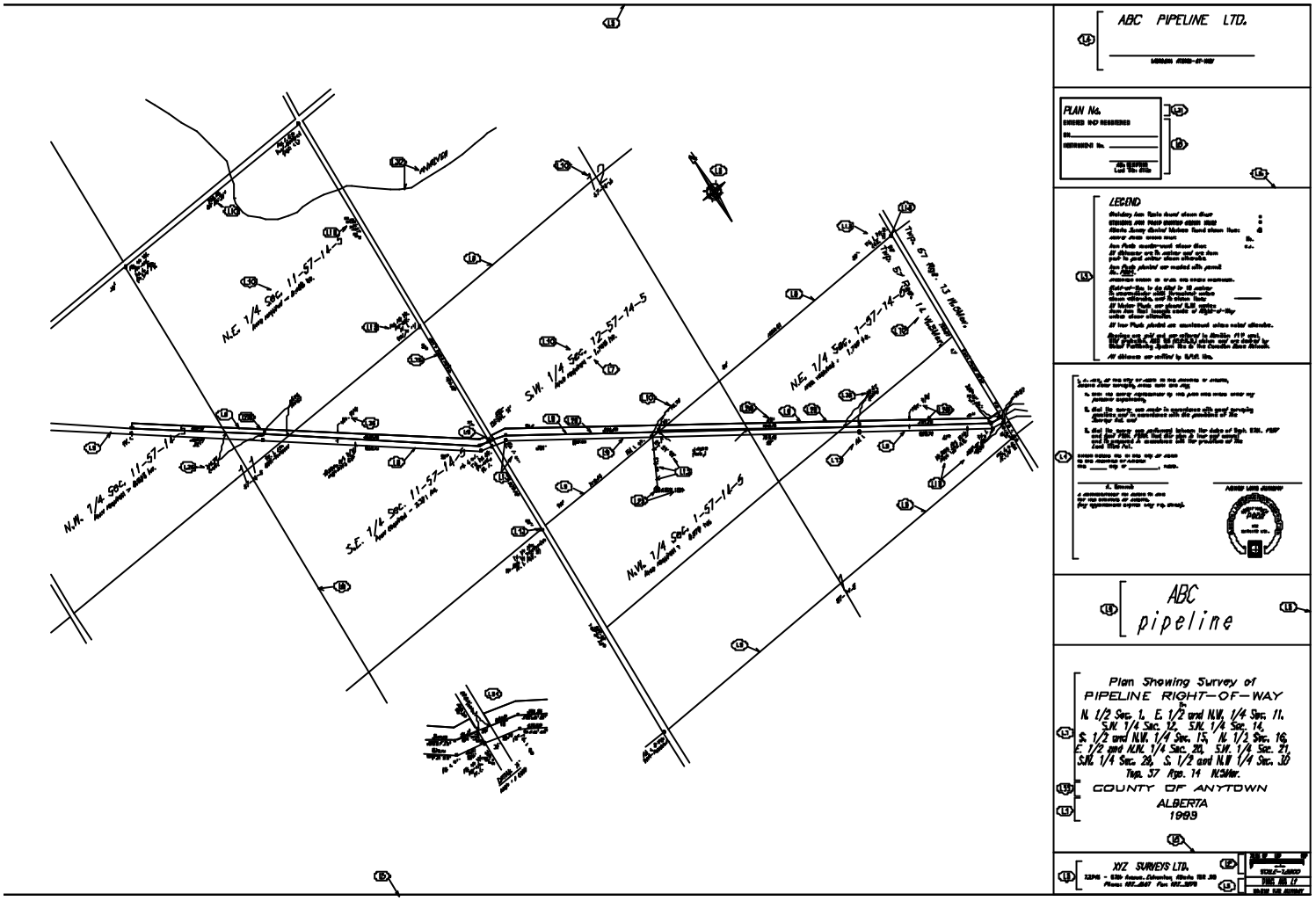
LTO LAYER/LEVEL SPECIFICATION

LTO LAYER/LEVEL SPECIFICATION DESCRIPTION	Level
Type Of Survey, Condominium Drawing Title(Floor Plan or Cross Section) and Location (Section, Township, Range, Meridian)	1
Scale Bar And Scale Text	2
Legend and North Arrow	3
ALS Affidavit, Surveyors name and Registration Number, (John Smith A.L.S. Registration Number 1234) and Owners Name	4
Map Sheet Border, Company Name And File Number	5
Linework and Text for Local Authority Approvals, LTO Approvals and Condominium Corporation Address	6
Subdivision/RW Plan Area (Area To be Registered)	7
Outline / Inline Area To Be Registered	8
Property And RW Linework **Outside Area To Be Registered**	9
Text For Linework **Outside Area To Be Registered** (bearings, distances, lot and block numbers, etc.)	10
Phantomized Linework For Superceded Plans and Phantomized Lot, Block and Plan Numbers	11
MASCOT Number and Symbol and ASCM tie linework and text; lines may be broken for plot purpose, not to scale	12
Symbols (IP Planted, IP Fd., Drill Holes, Etc.) and associated text	13
Dimension Arrows and Lines	14
Street Name, Lane, Road Allowance and WalkWay Text	15
Condominium Unit Factors Table, Individual Lot and Parcel Areas, Certificate of Title Number in Lot/Parcel	16
Section, Block Lines, Unbroken **Within Area To be Registered**	17
Section,Lot,Block Lines **up to** Survey Post **Within Area to be registered (trimmed linework)**	18
Lot/Condo Unit Numbers **Within Area To Be Registered**	19
Block Numbers **Within Area To Be Registered**	20
Registered Plan Number, (generally blank, number added after registration)	21
Line Bearings, Distances, Lot Dimensions, Arc, Radius, Chord Info B and E of Curve, Delta (Text) **within area to be Reg.** and associated lead lines, arrowheads and dimension linework	22
Street And Lane Widths **Within Area To Be Registered**	23
Lot Lines Unbroken **Within Area To Be Registered;** including Bareland Condominium Unit Boundary	24
ASCM Symbols and text identifier at true coordinates or to scale	25
Right-Of-Way Plan - Dimensions And Distances include assoc. lead lines, arrowheads and dimension linework **within area to be**	26
Right-Of-Way Dashed Line, (generally used on Subdivision plans) **for new R/W plans**	27
Right Of Way Linework, intersecting/unbroken At IP Symbols **for new R/W plans**	28
Right Of Way Descriptor (e.g. Utility R/W)	29
Lot Line And Text In Hydrology - Within Hydrology	30
Section,Block Line In Hydrology, Block Nos., Dimension Within Hydrology	31
Hydrographic Features Linework and Feature Names	32
Location/Place Name (City, Town, County, Municipal District)	33
Misc. Information	34

Coding of all other graphic data and text is left to the discretion of the surveyor.



Subdivision Sample Drawing



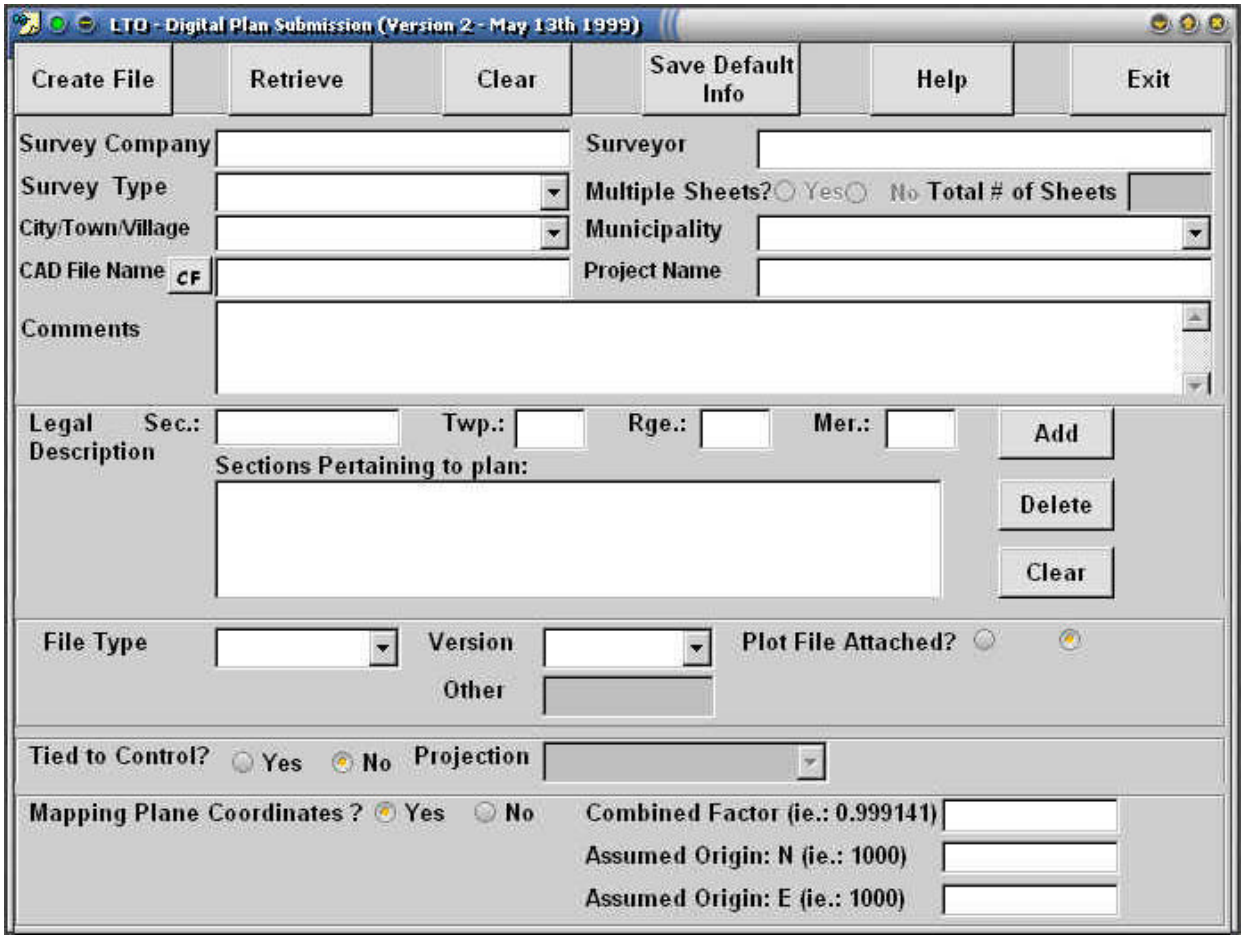
Right of Way Sample Drawing

Note:

The “sample” drawings are only to be used to identify how the data within the AutoCAD drawing files is to be segregated. There is no requirement for specific colors, line types, line weights or font types. Drawings for submission to Land Titles should be created using your internal standards (e.g. color, fonts, line, types,…) and Land Titles Plan Submission requirements (plan boundary outlines, scales, north arrows, affidavit,…).

3.6 - CAD File Submission Form

- All submissions must be accompanied by a completed plan attribute "dips" file that is provided with the layering software as shown in the example below:



Section 4.0 - Registries Data Receipt & Distribution Facilities

FILE TRANSFER PROTOCOL (FTP) SITE

As part of the digital plan submission process that Registries has implemented a File Transfer Protocol (FTP). This service allows surveyors to submit digital plans of survey for registration across the Internet. The process includes the use of encryption software which basically encodes your digital plan file(s) on your PC then decodes them once they reach the Registries FTP server. This will ensure secure transmission of the plan(s) across the Internet.

Please note, if you use the FTP service you should place a brief notice to that effect in your hardcopy documentation package which accompanies a registration submission. You may also continue to submit your plans on diskette or CD-ROM if you choose.

ABR FTP Server Information

The following is the information required to allow access to the Alberta Registries (ABR) File Transfer Protocol (FTP) server. This involves a two step process. The first process is to go to the FTP site and download the encryption software and the readme file. The second process is to install this software on your local PC. Depending on the speed of your Internet connection, the download of the files may take several minutes.

Basic Requirements

- You will need to be connected to the Internet either through an Internet Service Provider (ISP) or through your network.
- 3MB of disk space.
- You will need a Microsoft FTP client loaded on your desktop. (You can download FTP software free from the Internet)
- You will need to know what operating system you are running (win95/98 or win NT)
- You will need the winzip software to be able to extract the file. This can be obtained from www.winzip.com if you don't already have it.

Here is your personal account information:

User ID:
Password:
Group:

1) Once connected to the Internet, establish an FTP session to the ABR FTP server (ftp.reg.gov.ab.ca) and type the following.

ftp ftp.reg.gov.ab.ca

2) Use your User ID and password to log onto the FTP server when prompted to do so.
3) Enter “cd public” and hit enter.
4) From the public directory, type the following:

a) bin <enter>
b) get 4005des95abr.zip <enter> (If your workstation is win95/98)
Or
get 4005desntabr.zip <enter> (If your workstation is win NT)
c) get abrreadme.txt <enter>
d) quit <enter>

5) The files should now be downloaded to your PC. To view the “abrreadme.txt” file click on Start|Programs|Accessories|Notepad to open the Notepad program. Then click on File|Open and select the directory that “abrreadme.txt” file is located and then select the file . This file will explain what needs to be done to install the encryption software on your PC.
6) If you encounter problems with the FTP process, please call the ABR Help Desk at:
Help Desk: 1 800 318 1434
HOURS OF SUPPORT: Monday - Friday 8:00am to 5:00pm(MST)Part

SecuRemote Client Installation Procedures

Overview

This software is used to connect up to the Alberta Registries FTP server through an encrypted session. Once installed this software runs in the background on your PC and when an FTP session to the FTP server is actioned, the software takes control of the packets going to that FTP server and encrypts the data. Data destined for other devices is not encrypted.

Here are the minimum requirements for each PC that is running the software.

Platforms	Windows 95, Windows 98 and Windows NT (intel only)		
Disk Space	6 Mbytes		
Memory	Windows 95/98	-	16Mbytes
	Windows NT	-	32Mbytes
TCP/IP Stack	Microsoft		
FTP Software	Microsoft FTP software is only supported.		

For best results, the IP address of your PC should not be translated into another address. If this is a requirement, then it should be a static translation.

Outline of this Document

Section A: Windows 95/98 Installation Procedure
Section B: Windows NT Installation Procedure
Section C: Uninstalling the Client
Section D: Adding a SecuRemote Site
Section E: Using the SecuRemote Client
Section F: Product Support Information

Section A: Windows 95/98 Installation Procedure

1) Confirm that (TCP/IP) is working properly.
(This can be done by sending a ping packet to another host (eg. default router). At a DOS prompt type "ping" space "(IP address of server)".)

2) To unzip the file 4005des95abr.zip(win95/98)open the WINZIP program. Once WINZIP is open click on OPEN and select the directory and the file to unzip. Once the file is open click on EXTRACT and extract to C:\temp directory. This will unzip all the appropriate files into three subfolders called "disk1", "disk2", and "disk3" under the C:\temp directory.

3) Click on the START menu and choose the SETTINGS menu.

4) Click on CONTROL PANEL from the SETTINGS menu.

5) Double click on ADD/REMOVE PROGRAMS and choose INSTALL. Follow the instructions. The install file is C:\temp\disk1\setup.exe.
Alternatively, you can click on the START menu and choose RUN, and then type C:\temp\disk1\setup.exe.

6) Answer Yes to accepting the license terms.

7) Click on Next after reading the warning about closing down other programs. This is a recommended procedure.

8) The Choose Destination Location window allows you to specify a different directory in which Check Point SecuRemote Client will be installed by selecting BROWSE or you can select the default directory as shown.

9) Once the directory has been selected, click on Next.

10) As part of the install, you will be asked to install the software on all your network adapters, or only the dialup adapter. If this installation is for dialup purposes only, then select dialup adapters only. Otherwise select network adapters.

11) You will then be prompted to read the README file for the SecuRemote software. This is not necessary.

12) You will then be asked to reboot the workstation to allow the changes to take place. If you haven't already shutdown the other applications, do so now.

13) When the system comes back up you should have a little envelope in the lower right hand part of the screen. This indicates that the SecuRemote server has been started and is ready to go. If you need to kill the process, double click on the envelope. When the window opens up, click on File and then kill. This will stop the process until it is restarted, or the PC reboots.

Section B: Windows NT Installation

1) Confirm that TCP/IP is working properly.

(This can be done by sending a ping packet to another host (eg. default router))

2) To unzip the file 4005desntabr.zip(win NT)open the WINZIP program. Once WINZIP is open click on OPEN and select the directory and the file to unzip. Once the file is open click on EXTRACT and extract to C:\temp directory. This will unzip all the appropriate files into three subfolders called "disk1", "disk2", and "disk3" under the C:\temp directory.

3) Click on the START menu and choose the SETTINGS menu.

4) Click on CONTROL PANEL from the SETTINGS menu.

5) Double click on ADD/REMOVE PROGRAMS and choose INSTALL. Follow the instructions. The install file is C:\temp\disk1\setup.exe.
Alternatively, you can click on the START menu and choose RUN, and then type C:\temp\disk1\setup.exe.

6) Answer Yes to accepting the license terms.

7) Click on Next after reading the warning about closing down other programs. This is a recommended procedure.

8) The Choose Destination Location window allows you to specify a different directory in which Check Point SecuRemote Client will be installed by selecting BROWSE or you can select the default directory as shown.

9) Once the directory has been selected, click on Next.

10) You will then be prompted to read the README file for the SecuRemote software. This is not necessary.

11) You will then be asked to reboot the workstation to allow the changes to take place. If you haven't already shutdown the other applications, do so now.

12) When the system comes back up you should have a little envelope in the lower right hand part of the screen. This indicates that the SecuRemote server has been started and is ready to go. If you need to kill the process, double click on the envelope. When the window opens up click on File and then kill. This will stop the process until it is restarted, or the PC reboots.

Section C: Uninstalling the Client

If for any reason after installing the software your PC is not functioning properly, it may be necessary to uninstall the software.

To uninstall the SecuRemote Client

1) Open the Windows START menu and choose CONTROL PANEL.
2) Double-click on ADD/REMOVE PROGRAMS.
3) Select SecuRemote.
4) Click on ADD/REMOVE.
5) Click on OK.

This will remove the program from the system.

Section D: Adding a SecuRemote Site

After the SecuRemote client has been installed it is now necessary to configure the client software.

NOTE: If you have downloaded the software from the ABR FTP server this step should already be completed. This step is only required if you have deleted the icon, or need to regenerate the encryption keys. The icon will be labeled 139.142.5.70. You can view the icon by clicking on the envelope in the lower right hand corner of the screen. When the window opens, you will see the icon on the screen. If it isn't there, then follow the instructions below.

Adding a Site

1) Make sure you are online to the network.
2) Open the Sites menu and select Make New Site.
3) In the Site window, type 139.142.5.70 and click OK.
4) Authenticate yourself if you are asked to do so. Use the ID and password that were provided to you.
5) If the query is successful, you will be reminded to verify that the information in the Site window is correct.
6) If there are any questions, contact the support personnel.

7) Click on OK.
8) After you have added the site it will appear in the Sites window. If for any reason this doesn't happen, confirm the steps and if necessary contact the support personnel.

The client should now be installed and configured to work with the ABR FTP server.

Section E: Using the SecuRemote client

Starting an Encrypted Session

To start an encrypted session do the following:

1) Open the FTP client and establish an FTP session to ftp.reg.gov.ab.ca (The FTP server)

2) This action should initiate the launch of a SecuRemote window on your PC requesting a user ID and password. Use the ID and password that has been provided.
NOTE: The window will only pop up once. If you FTP to the server and then exit out and try to FTP again, the window will not come back up. If you restart the PC, then you will be forced to authenticate again.

3) After entering the appropriate ID and password, the FTP session should be allowed to continue. The FTP server will then prompt you for an ID and Password. Use the same ID and password.
NOTE: If it takes a long time to authenticate the session, the FTP session may time out. If this happens, just restart the FTP session after you have been authenticated.

4) Once a connection with the FTP server has been established it is now necessary to switch to the appropriate home directory. By default when you establish an FTP session to the FTP server you will be put in the root directory, not the home directory.
NOTE: Do not put any files in the root directory of the FTP server. All files should be placed in the home directory.
To get to the home directory type in the following:

cd \<group-name>\<ID>

where "<group name>" is the group specified on the ABR FTP Server Information sheet that you originally received with your ID and password. "<ID>" is the user ID that was provided to you.
Type in the following to verify that you are in the correct directory.

pwd

The output of this command should show your group name and ID.
IF for some reason you get an error and can't access your home directory, please call the support phone number.

5) After entering into the proper home directory, type "BIN" and then <enter> now you should be able to type "put" or "get" the appropriate FTP files.

6) Once done with the FTP, you can exit out of your FTP application and continue working on the PC. There is no requirement to log off the authenticated session.

Section F: Product Support Information

If you are having problems with the installation, or with the FTP procedures, please call the Alberta Registries Help Desk at:

Help Desk: 1 800 318 1434
Hours of support: Monday - Friday 8am to 5pm(MST)

Section 5.0 - Appendix

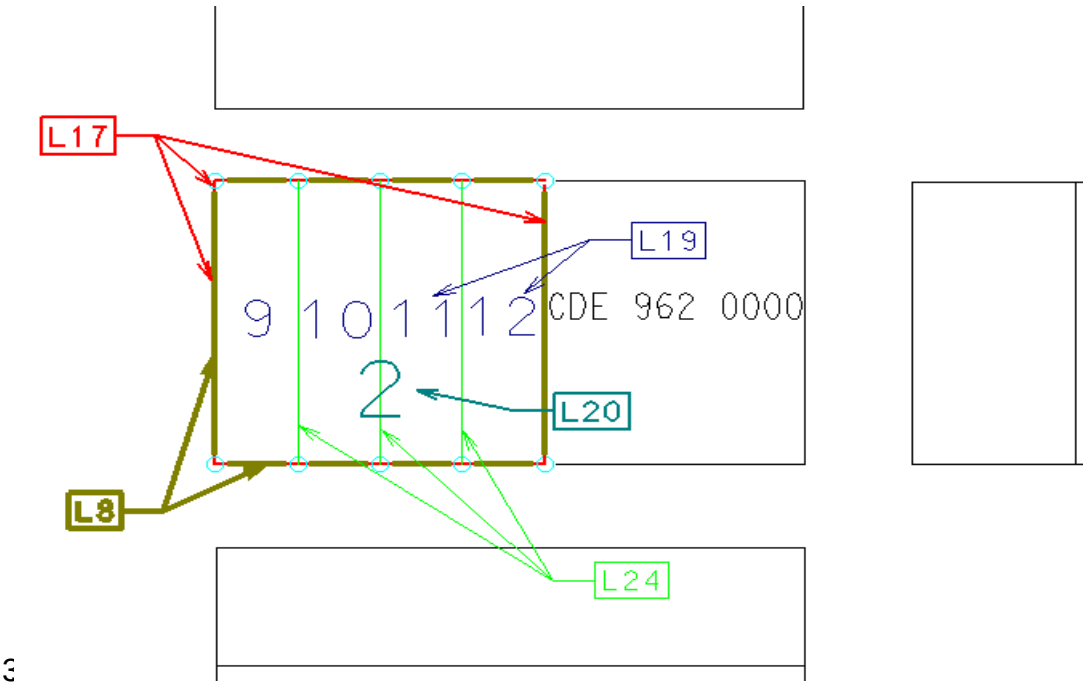
Appendix A - Frequently Asked Questions

1. ASCM information is assigned to two layers, which one should we use?

ASCM symbols, ties and linework, at true coordinates or to scale, should be on layer 25. If it is necessary to "break" the linework for plotting purposes, the information can be placed on layer 12; the use of this layer is optional. If ties have been made to control, the symbols and linework must appear on layer 25.

2. I had a plan rejected because I did not have linework on layer 17, even though I had linework for the new lot on layer 24. Why was it rejected?

There has been confusion over the distinction between lot and block lines. In general: lot lines are boundaries, ***common to two lots***, each having separate lot numbers, the same block number, and the same registered plan number. If this does not apply, then the linework should be considered a block line (excluding R/W linework). Condominium plans, Descriptive plans, and some Subdivision plans (one lot) will only contain block linework (on layer 17) as there is only one parcel being created. This parcel is actually treated as a "block" with the linework on layer 17 and the block descriptor on layer 20. In some cases, the new parcel may be labeled "Lot 1" but this designator should be treated as block text (on layer 20). It is strongly recommended for all parcels to have a **lot and block** identifier (as opposed to only one or the other).



3. Do Road Plans use the same layers as R/W's?

In general, road surveys and road widenings have the effect of either creating a new block boundary or moving an existing block boundary. Linework, defining the limits of a new road, should go on layer 17; all other linework and text outside the area to be registered should go on layers 9 and 10. Road, street and lane widths, within the new survey (portion to be registered) should go on layer 23. The outline of the area or portion to be registered should go on layer 8.

Street names and road identifiers (i.e. government road allowance), for every type of survey/plan, should go on layer 15.

4. We are using a CAD package that does not create a plot (plt) file; will my plan be rejected without it?

As of February 29th, 2000 all plan registration submissions must be accompanied by a plot file suitable for conversion to the plan of record TIFF image. Further discussions will be held shortly with the ALSA on simplifying the plot file generation process.

5. Placing linework on layer 8 (outline/inline of area to be registered) seems to be redundant, is this layer necessary and must it be "continuous or unbroken"? What width of line should we use?

This is actually a critical layer, the linework from this layer is used to populate the SPINS system at LTO which tracks the location of all registered plans. The plan will be rejected if this information is not provided.

It does not have to be "continuous or unbroken"; it may be broken or trimmed to accommodate the IP symbols.

The width has not been specified, surveyors are free to use their own discretion for displaying the outline. The width must be wide enough to clearly identify the area to be registered. It may be necessary for LTO to specify a width (which may be a function of the scale) in the future, but for the present time it is being left to the discretion of the surveyor.

6. How are we to show "building" outline and cross-section information for Condominium plans?

Presently, specifications have not been developed to accommodate the building information (outline and profiles). The specifications only address the "property or boundary" information. The surrounding property linework is shown as block lines (layer 17). Information outside this area is placed on layers 9 and 10. Building (outline and profile) linework and text can be placed on layers 35 and greater or on a named/alpha layer.

Bareland Condominiums are treated the same as regular subdivisions; the unit lines

are shown the same as lot lines.

Whenever more than one sheet or drawing is submitted, a separate CAD and plot file is required for each sheet; however, only one DiPS file is required. The name of each sheet or drawing file must be the same except for an additional extension. For example, a file containing 3 sheets would be named as follows: 11673A-1.dwg, 11673A-2.dwg, 11673A-3.dwg.

7. Can we use alphanumeric names for labeling layer names?

Layers 1 to 34 must follow the standard numbering scheme and must be in significant digit format, i.e. 1, 2, 3, etc. and not 01, 02, 03. Numbers greater than 34 are open to use at the surveyors discretion and alphanumeric layer names may be used; however, these layers cannot contain information required by layers 1 to 34. Layers identified by alphanumeric names are not utilized by LTO.

8. Where should the "total area to be registered" by the plan go?

The text stating the total area to be registered, usually indicated in the legend, should be on layer 7. Individual parcel and lot areas, including any table of areas, should be on layer 16.

9. Which plan numbers are to be placed on layer 21?

Layer 21 should contain only the text "Plan No._____"; it was originally intended for the registered plan number to be inserted by LTO after registration. To-date, this layer is not being utilized by LTO.

10. How can I create the visual effect of trimmed linework around the IP symbols, without actually trimming the linework?

Numerous methods are being used by surveyors to delete or hide the linework which passes through the IP symbols. These include:

- The use of third-party software which obscures the linework within the IP symbol
- Placing the IP symbol on an elevation above that of the linework. There are other issues to be considered before using this method, eg. polyline widths.
- Placing a solid circle, with a light or dark fill color, on the IP symbol to represent planted or found.
- The intersecting linework from layers 17 and 24 is replicated and trimmed on layer 18.
- The intersecting linework on layers 17 and 24 are critical layers for LTO; if linework is missing from these layers the plan will be rejected. Layer 18 is not important, and is solely for the use of the surveyor, if needed.

11. Why does the layer structure skip all over the number range? Why isn't there better continuity between common features?

The layer structure has undergone extensive reviews and modifications, since it was originally proposed. Initially, the structure did have more continuity but this was lost during the revision process.

12. Can I submit a plan according to the City of Calgary layer structure?

No, the plan will be rejected. The checking software that is being used is dependent upon the data being segregated according to the LTO layer chart; any deviations from this structure may cause the plan to be rejected.

13. Is it possible to edit the "ltolayer.exe" program to rename layers from alphanumeric to alphanumeric (at the moment it is alphanumeric to numeric)?

This is a development planned for future editions of the program; if this would be useful to your firm please contact Martin Newby at the email listed below.

14. My CAD software does not support the lisp routines provided to us on the CD, is there another way of getting the same end result?

The lisp routines are an automation of manual processes; therefore, the same results can be achieved manually. It is not necessary to run the conversion programs (**lto-v10a.lsp or lto-v10b.lsp**) to rename the layers to the LTO numbered structure. The layers may be created directly using numbers.

The lisp routine for checking the layer structure (**ltochk10.lsp**) was developed to view the contents of each layer together with a description of the requirements for each layer. To manually check the plan, turn off all layers and turn on each layer as needed for viewing. This can be enhanced by creating a series of buttons that are programmed to freeze all layers except the one needed. These buttons enable layers to be skipped as desired.

15. I was unable to create a DiPS file when I tried to use negative origin coordinates; is this a bug?

Yes, it was intended for the Visual Basic program to accept negative coordinates; however, this was not implemented in the version distributed. If you are using negative coordinates, input 0,0 as origin coordinates. A future release of the DiPS program will correct this problem.

16. I am not able to see or view all the data fields on my monitor when I am running the DiPS program, what should I do?

The program was designed to fit within the viewing area for monitors set at a resolution of 800 X 600 and higher. If you are running anything less, i.e. 640 X 480, increase the resolution of the monitor. Caution should be used before changing the resolution.

17. I get an error when running the layer checking program, LTOchk10.lsp; I am using AutoCAD Version 12.

The program was designed to run on Version 14 and may cause problems with older versions, i.e. 12 and 13. A compatible checking program is available for older versions, please email a request for file **LTOchk11.lsp** to Martin Newby (martin.newby@cadvision.com) and a copy will be forwarded to you.

18. Are R/W's within a subdivision treated differently than pipeline R/W's?

Subdivision R/W's: For R/W's which parallel a property line within a subdivision: one limit of the R/W is defined by the block (or lot) line, and the other line, representing the limit of the R/W, is placed on layer 28, dimensions & widths are placed on layer 26.

Some surveyors also wish to show the proposed new R/W on the subdivision plan. Layer 27 can be used for this; however, it is not mandatory for information to be on this layer.

It is important to note the registration sequence for R/W plans associated with subdivisions: the subdivision plan will be registered first; therefore, at the time the RW plan is registered, the linework (lot and block lines) for the subdivision will be considered as being outside the area (of the R/W) to be registered. The surrounding linework and text (including block and lot lines) should be placed on layers 9 and 10 respectively.

Pipeline R/W's: The linework representing both sides of the R/W is placed on layer 28, distances and dimensions go on layer 26. If it is necessary to "trim" the linework to facilitate the display of the IP symbols, the linework to be trimmed can be placed on layer 18 or on any layer, 35 and greater.

For both types of R/W's, the surrounding linework and text, outside the area to be registered, should be placed on layers 9 and 10 respectively.

19. How do I show phantomized linework?

Descriptive, subdivision and road plans will often supercede (cancel) the underlying survey fabric (in favor of the new lot/block or road). Surveyors traditionally show the linework and text with a light, dashed linestyle; this information can be placed on layer 11. The use of this layer and the type of linestyle is at the discretion of the surveyor, it is not an "extractable" layer used by LTO.

20. Sometimes there are existing R/W's within the area of a new subdivision, how are these to be shown?

Since these are existing R/W's, the linework and text should be placed on layers 9 and 10; similar to other linework and text outside the area to be registered.

NOTE: The most current information pertaining to digital plan submissions, including: the layer name to number conversion program, the layer checking software and the meta data program (DiPS), can be found on the AltaLIS website at *www.altalis.com*.

Appendix B - Plan Submission Form Packages by Type

CONDOMINIUM PLAN SUBMISSION PACKAGE

CONDOMINIUM PLAN

CURRENT STATUS	DIGITAL SUBMISSION AFTER DEC 1,1999	
HARD COPY PLAN	DRAWING,/PLOT FILE	SEE ATTACHED FORMS/AFFIDAVITS
Land Titles Registration stamp	Land Titles Registration stamp	
Alberta Land Surveyors affidavit	Name of Surveyor File number Dates of Survey	Alberta Land Surveyors Affidavit
Registered owners signature/seal and affidavits	Registered owners name(as per title)	Registered owners signature/seal and affidavits
Consents from parties shown on title having an interest		Consent forms and affidavits
Subdivision Approving Authority stamp and signature	Name of Municipality or Planning Agency File number Date Approved *	Subdivision Approving Authority stamp and signature
Certificate of Local Authority/Architects/ Engineer		Certificate of Local Authority/Architects/ Engineer
Section 43 statement regarding delayed posting	Section 43 statement regarding delayed posting	

* Date of planning approval not required for LTO registration purposes. If date is indicated it must match the date on the attached Planning Authority affidavit.

SURVEYOR'S AFFIDAVIT
FOR CONDOMINIUM PLAN

(Surveyor's file no. _____)

LEGAL DESCRIPTION:_____

I, _____ of _____,
Alberta Land Surveyor, Make oath and say:

1. That the survey represented by this plan was made under my personal supervision;
2. That the survey was made in accordance with good surveying practices and in accordance with the provisions of the Surveys Act;
3. That the survey was performed between the dates of _____ and _____ , year___ and that this plan is true and correct, and is prepared in accordance with the provisions of the Condominium Property Act and the Land Titles Act; and
4. That the building(s) situated on the parcel that is (are) the subject of this plan is (are) wholly within the external boundaries thereof (in case of encroachment, this statement will be varied accordingly) and that the units shown on this plan are the same as those existing at the time of survey.

SWORN before me at the _____
of _____ in the Province _____
of Alberta this ____ day of _____ year _____ Alberta Land Surveyor

_____
A Commissioner for Oaths in and for
the Province of Alberta

My commission expires _____ year _____

CONSENT TO REGISTER A PLAN

I / we, _____

☐ being the registered owner

☐ having a registered interest or claimed interest by virtue of an instrument or caveat registered as instrument no:

_____
_____
_____
_____

☐ being the person who requested the plan of survey to be made pursuant to section 82 of the Land Titles Act

hereby consent to the registration of the plan prepared by _____, A.L.S. (file no. _____) in respect of the following lands:

_____
_____

Dated _____

signed by the above named in the
presence of

_____ _____
witness signature

note: Corporations either sign and seal this form or complete Forms 31 and 31.1. Individuals must complete this form and 3.1

FORM 31

LAND TITLES ACT
(Sections 151 and 152)

AFFIDAVIT OF ATTESTATION OF AN INSTRUMENT

I, _____of _____, in the _____ make oath and say:

1. I was personally present and did see _____ who is known to me to be the person named in the within (or annexed) instrument, duly sign the instrument;

or

I was personally present and did see _____ who, on the basis of the identification provided to me, I believe to be the person named in the within (or annexed) instrument, duly sign the instrument;

2. The instrument was signed at _____, in the _____ and I am the subscribing witness thereto;

3. I believe the person whose signature I witnessed is a least eighteen (18) years of age.

Sworn before me at _____
in the _____ _____
this _____ day of _____ (Signature)
year _____

_____
A Commissioner for Oaths in and for the
Province of Alberta

Print Name_____
My commission expires _____year_____

FORM 31.1

LAND TITLES ACT
(Section 152.3)

AFFIDAVIT VERIFYING
CORPORATE SIGNING AUTHORITY

I, _____ of _____make oath and say:

1. I am an officer or a director of (here set out name of corporation) named in the within or annexed instrument (or caveat).

2. I am authorized by the corporation to execute the instrument (or caveat) without affixing a corporate seal.

SWORN before me at _____
in the _____
this _____ day of _____ _____
year _____ (Signature)
_____

A Commissioner for Oaths in and for the
Province of Alberta

Print Name_____
My commission expires _____year _____

CERTIFICATE OF LOCAL AUTHORITY
(SECTION 8(1), CONDOMINIUM PROPERTY ACT)

RE: CONDOMINIUM PLAN PREPARED BY _____ A.L.S. (Surveyor's file no. _____ and local authority file no. _____)

LEGAL DESCRIPTION:_____

This to certify that the proposed division of the building as illustrated on the plan has been approved.

Dated _____

_____
Name of Municipality
(signature and seal)

SUBDIVISION AUTHORITY APPROVAL

RE: PLAN PREPARED BY _____ A.L.S. (Surveyor's file no. _____ and our file no. _____)

LEGAL DESCRIPTION: _____

Endorse this sheet with the usual approval stamp

or

We, _____, approve for registration the
(name of municipality or planning agency)
above plan.

Dated _____

_____ _____
(signature) (print name and capacity)

The plan is approved subject to the registration of the following:
(if none, say so)

ATTACHMENT # 2B

SUBDIVISION PLAN SUBMISSION PACKAGE

SUBDIVISION PLAN

CURRENT STATUS	DIGITAL SUBMISSION AFTER DEC 1,1999	
HARD COPY PLAN	DRAWING/PLOT FILE	SEE ATTACHED FORMS/AFFIDAVITS)
Land Titles Registration stamp	Land Titles Registration stamp	
Alberta Land Surveyor's affidavit	Name of Surveyor File number Dates of Survey	Alberta Land Surveyor's Affidavit
Registered owners signature/seal and affidavits	Registered owners name(as per title)	Registered owners signature/seal and affidavits
Consents from parties shown on title having an interest		Consent forms and affidavits
Subdivision Approving Authority 's stamp and signature	Name of Municipality or Planning Agency File number Date Approved*	Subdivision Approving Authority's stamp and signature
Section 43 statement regarding delayed posting	Section 43 statement regarding delayed posting	

* Date of planning approval not required for LTO registration purposes. If date is indicated it must match the date on the attached Planning Authority affidavit.

SURVEYOR'S AFFIDAVIT

(Surveyor's file no._____)

LEGAL DESCRIPTION: _____

I,_____of_____,Alberta Land Surveyor, Make oath and say:

1. That the survey represented by this plan was made under my personal supervision;
2. That the survey was made in accordance with good surveying practices and in accordance with the provisions of the Surveys Act; and
3. That the survey was performed between the dates of _____ and _____ , Year ____ and that this plan is true and correct, and is prepared in accordance with the provisions of the Land Titles Act.

SWORN before me at the _____
of _____ in the Province _____
of Alberta this ____ day of _____ year _____ Alberta Land Surveyor

_____
A Commissioner for Oaths in and for
the Province of Alberta

My commission expires _____ year ____

CONSENT TO REGISTER A PLAN

I / we, _____

☐ being the registered owner

☐ having a registered interest or claimed interest by virtue of an instrument or caveat registered as instrument no:

_____
_____
_____
_____

☐ being the person who requested the plan of survey to be made pursuant to section 82 of the Land Titles Act

hereby consent to the registration of the plan prepared by _____, A.L.S. (file no. _____) in respect of the following lands:

_____
_____

Dated _____

signed by the above named in the presence of

_____ witness

_____ signature

note: Corporations either sign and seal this form or complete Forms 31 and 31.1. Individuals must complete this form and 3.1

FORM 31

LAND TITLES ACT
(Sections 151 and 152)

AFFIDAVIT OF ATTESTATION OF AN INSTRUMENT

I, _____of _____, in the _____ make oath and say:

1. I was personally present and did see _____ who is known to me to be the person named in the within (or annexed) instrument, duly sign the instrument;

or

I was personally present and did see _____ who, on the basis of the identification provided to me, I believe to be the person named in the within (or annexed) instrument, duly sign the instrument;

2. The instrument was signed at _____, in the _____ and I am the subscribing witness thereto;

3. I believe the person whose signature I witnessed is a least eighteen (18) years of age.

Sworn before me at _____
in the _____ _____
this _____ day of _____ (Signature)
year _____

_____
A Commissioner for Oaths in and for the
Province of Alberta

Print Name_____
My commission expires _____year_____

FORM 31.1

LAND TITLES ACT
(Section 152.3)

AFFIDAVIT VERIFYING
CORPORATE SIGNING AUTHORITY

I, _____ of _____make oath and say:

1. I am an officer or a director of (here set out name of corporation) named in the within or annexed instrument (or caveat).

2. I am authorized by the corporation to execute the instrument (or caveat) without affixing a corporate seal.

SWORN before me at _____
in the _____
this _____ day of _____ _____
year _____ (Signature)
_____

A Commissioner for Oaths in and for the
Province of Alberta

Print Name_____
My commission expires _____year _____

SUBDIVISION AUTHORITY APPROVAL

RE: PLAN PREPARED BY _____ A.L.S.

(Surveyor's file no. _____ and our file no. _____)

LEGAL DESCRIPTION: _____

Endorse this sheet with the usual approval stamp

or

We, _____, approve for registration the
(name of municipality or planning agency)
above plan.

Dated _____

_____ _____
(signature) (print name and capacity)

The plan is approved subject to the registration of the following:
(if none, say so)

ATTACHMENT # 2C

ROAD / PUBLIC WORKS PLAN SUBMISSION PACKAGE

ROAD/PUBLIC WORKS PLAN

CURRENT STATUS	DIGITAL SUBMISSION AFTER DEC 1,1999	
HARD COPY PLAN	DRAWING/PLOT FILE	SEE ATTACHED FORMS/AFFIDAVITS
Land Titles Registration stamp	Land Titles Registration stamp	
Alberta Land Surveyor's Affidavit	Name of Surveyor File number Dates of Survey	Alberta Land Surveyor's Affidavit
Sec 62 (MGAct) affidavit by the Municipality	Name of Road Authority	Sec 62 (MGAct) affidavit by the Municipality
Signature and Seal of the Minister responsible for the Public Works and statement regarding consents	Name of the Department responsible for the public Works	Signature and Seal of the Minister responsible for the Public Works and statement regarding consents

SURVEYOR'S AFFIDAVIT

(Surveyor's file no._____)

LEGAL DESCRIPTION: _____

I,_____of_____,Alberta Land Surveyor, Make oath and say:

1. That the survey represented by this plan was made under my personal supervision;
2. That the survey was made in accordance with good surveying practices and in accordance with the provisions of the Surveys Act; and
3. That the survey was performed between the dates of _____ and _____ , Year ____ and that this plan is true and correct, and is prepared in accordance with the provisions of the Land Titles Act.

SWORN before me at the _____
of _____ in the Province _____
of Alberta this ____ day of _____ year _____ Alberta Land Surveyor

_____
A Commissioner for Oaths in and for
the Province of Alberta

My commission expires _____ year ____

CERTIFICATE OF DESIGNATED OFFICER
(SECTION 62, MUNICIPAL GOVERNMENT ACT)

RE: ROAD PLAN PREPARED BY _____A.L.S.

(Surveyor's file no. _____and our file no. _____)

LEGAL DESCRIPTION:_____

I, _____, of _____ , Alberta,
Make oath and say:

1. I am the designated officer of the _____
(Name of Municipality)

2. Agreements have been reached with all of the registered owners as to the land to be acquired and the price to be paid.

3. All persons registered on the title affected by the plan of survey as having an interest within 40 metres of the new boundary of the right of way as shown on the plan of survey have been notified by registered mail.

4. The land is to be acquired for the purposes of _____

SWORN before me at the _____
of _____ in the Province _____
of Alberta this ____ day of _____ year _____ Title (if any)

_____
A Commissioner for Oaths in and for
the Province of Alberta

Print Name _____
My commission expires _____year _____

PUBLIC WORKS PLAN

RE: PLAN PREPARED BY _____ A.L.S.

(Surveyor's file no. _____ and our file no. _____)

LEGAL DESCRIPTION:_____

I hereby certify that the plan represents a survey of land required for a public work pursuant to the Public Works Act and that the lands covered by the plan were acquired by agreement with the owner(s) thereof .

The land is under the administration and control of the Minister of
_____

Dated_____

_____
(signature and seal)

ATTACHMENT # 2D

RIGHT OF WAY / SITE PLAN SUBMISSION PACKAGE

RIGHT OF WAY/SITE PLAN

CURRENT STATUS	DIGITAL SUBMISSION AFTER DEC 1,1999	
HARD COPY PLAN	DRAWING/PLOT FILE	SEE ATTACHED FORMS/AFFIDAVITS
Land Titles Registration stamp	Land Titles Registration stamp	
Alberta Land Surveyors affidavit	Name of Surveyor File number Dates of Survey	Alberta Land Surveyors Affidavit
Signature/seal and affidavit of the person requesting the plan	Name of the person requesting the plan	Signature/seal and affidavit of the person requesting the plan

SURVEYOR'S AFFIDAVIT

(Surveyor's file no._____)

LEGAL DESCRIPTION: _____

I,_____of_____,Alberta Land Surveyor, Make oath and say:

1. That the survey represented by this plan was made under my personal supervision;
2. That the survey was made in accordance with good surveying practices and in accordance with the provisions of the Surveys Act; and
3. That the survey was performed between the dates of _____ and _____ , Year ____ and that this plan is true and correct, and is prepared in accordance with the provisions of the Land Titles Act.

SWORN before me at the _____
of _____ in the Province _____
of Alberta this ____ day of _____ year _____ Alberta Land Surveyor

_____
A Commissioner for Oaths in and for
the Province of Alberta

My commission expires _____ year ____

CONSENT TO REGISTER A PLAN

I / we, _____

☐ being the registered owner

☐ having a registered interest or claimed interest by virtue of an instrument or caveat registered as instrument no:

_____
_____
_____
_____

☐ being the person who requested the plan of survey to be made pursuant to section 82 of the Land Titles Act

hereby consent to the registration of the plan prepared by _____, A.L.S. (file no. _____) in respect of the following lands:

_____
_____

Dated _____

signed by the above named in the
presence of

_____ _____
witness signature

note: Corporations either sign and seal this form or complete Forms 31 and 31.1. Individuals must complete this form and 3.1

FORM 31

LAND TITLES ACT
(Sections 151 and 152)

AFFIDAVIT OF ATTESTATION OF AN INSTRUMENT

I, _____of _____, in the _____ make oath and say:

1. I was personally present and did see _____ who is known to me to be the person named in the within (or annexed) instrument, duly sign the instrument;

or

I was personally present and did see _____ who, on the basis of the identification provided to me, I believe to be the person named in the within (or annexed) instrument, duly sign the instrument;

2. The instrument was signed at _____, in the _____ and I am the subscribing witness thereto;

3. I believe the person whose signature I witnessed is a least eighteen (18) years of age.

Sworn before me at _____
in the _____ _____
this _____ day of _____ (Signature)
year _____

_____
A Commissioner for Oaths in and for the
Province of Alberta

Print Name_____
My commission expires _____year_____

FORM 31.1

LAND TITLES ACT
(Section 152.3)

AFFIDAVIT VERIFYING
CORPORATE SIGNING AUTHORITY

I, _____ of _____make oath and say:

1. I am an officer or a director of (here set out name of corporation) named in the within or annexed instrument (or caveat).

2. I am authorized by the corporation to execute the instrument (or caveat) without affixing a corporate seal.

SWORN before me at _____
in the _____
this _____ day of _____ _____
year _____ (Signature)
_____

A Commissioner for Oaths in and for the
Province of Alberta

Print Name_____
My commission expires _____year _____

ATTACHMENT # 2E

MONUMENT PLAN SUBMISSION PACKAGE

MONUMENT PLAN

CURRENT STATUS	DIGITAL SUBMISSION AFTER DEC 1,1999	
HARD COPY PLAN	DRAWING/PLOT FILE	SEE ATTACHED FORMS/AFFIDAVITS
Land Titles Registration stamp	Land Titles Registration stamp	
Alberta Land Surveyor's Affidavit	Name of Surveyor File number Dates of Survey	Alberta Land Surveyor's Affidavit

SURVEYOR'S AFFIDAVIT

(Surveyor's file no._____)

LEGAL DESCRIPTION: _____

I,_____of_____,Alberta Land Surveyor, Make oath and say:

1. That the survey represented by this plan was made under my personal supervision;
2. That the survey was made in accordance with good surveying practices and in accordance with the provisions of the Surveys Act; and
3. That the survey was performed between the dates of _____ and _____ , Year ____ and that this plan is true and correct, and is prepared in accordance with the provisions of the Land Titles Act.

SWORN before me at the _____
of _____ in the Province
of Alberta this ____ day of _____ year _____

_____
Alberta Land Surveyor

_____
A Commissioner for Oaths in and for
the Province of Alberta

My commission expires _____ year _____

ATTACHMENT # 2F

DESCRIPTIVE PLAN SUBMISSION PACKAGE

DESCRIPTIVE PLAN

CURRENT STATUS	DIGITAL SUBMISSION AFTER DEC 1,1999	
HARD COPY PLAN	DRAWING/PLOT FILE	SEE ATTACHED FORMS/AFFIDAVITS
Land Titles Registration stamp	Land Titles Registration stamp	
Name and signature of Alberta Land surveyor	Name of Surveyor File number Date of signing	Name and signature of Alberta Land surveyor
Registered owners signature/seal and affidavits	Registered owners name(as per title)	Registered owners signature/seal and affidavits
Subdivision Approving Authority ‘s stamp and signature	Name of Municipality or Planning Agency File number Date Approved*	Subdivision Approving Authority‘s stamp and signature

* Date of planning approval not required for LTO registration purposes. If date is indicated it must match the date on the attached Planning Authority affidavit.

ALBERTA LAND SURVEYOR'S CERTIFICATION FOR DESCRIPTIVE PLAN

(Surveyor's file no. _____)

LEGAL DESCRIPTION: _____

I,_____ _____, A.L.S. certify that the Descriptive plan has been prepared in accordance with Section 89(1) b of the Land Titles Act.

Dated_____

_____
Signature

(Registries will also accept the certification from Part D, Section 6.5
of the Manual of Standard Practice)

CONSENT TO REGISTER A PLAN

I / we, _____

☐ being the registered owner

☐ having a registered interest or claimed interest by virtue of an instrument or caveat registered as instrument no:

_____
_____
_____
_____

☐ being the person who requested the plan of survey to be made pursuant to section 82 of the Land Titles Act

hereby consent to the registration of the plan prepared by _____, A.L.S. (file no. _____) in respect of the following lands:

_____
_____

Dated _____

signed by the above named in the
presence of

_____ _____
witness signature

note: Corporations either sign and seal this form or complete Forms 31 and 31.1. Individuals must complete this form and 3.1

FORM 31

LAND TITLES ACT
(Sections 151 and 152)

AFFIDAVIT OF ATTESTATION OF AN INSTRUMENT

I, _____of _____, in the _____ make oath and say:

1. I was personally present and did see _____ who is known to me to be the person named in the within (or annexed) instrument, duly sign the instrument;

or

I was personally present and did see _____ who, on the basis of the identification provided to me, I believe to be the person named in the within (or annexed) instrument, duly sign the instrument;

2. The instrument was signed at _____, in the _____ and I am the subscribing witness thereto;

3. I believe the person whose signature I witnessed is a least eighteen (18) years of age.

Sworn before me at _____
in the _____ _____
this _____ day of _____ (Signature)
year _____

_____
A Commissioner for Oaths in and for the
Province of Alberta

Print Name_____
My commission expires _____year_____

FORM 31.1

LAND TITLES ACT
(Section 152.3)

AFFIDAVIT VERIFYING
CORPORATE SIGNING AUTHORITY

I, _____ of _____make oath and say:

1. I am an officer or a director of (here set out name of corporation) named in the within or annexed instrument (or caveat).

2. I am authorized by the corporation to execute the instrument (or caveat) without affixing a corporate seal.

SWORN before me at _____
in the _____
this _____ day of _____ _____
year _____. (Signature)
_____

A Commissioner for Oaths in and for the
Province of Alberta

Print Name_____
My commission expires _____year _____

SUBDIVISION AUTHORITY APPROVAL

RE: PLAN PREPARED BY _____ A.L.S.

(Surveyor's file no. _____ and our file no. _____)

LEGAL DESCRIPTION: _____

Endorse this sheet with the usual approval stamp

or

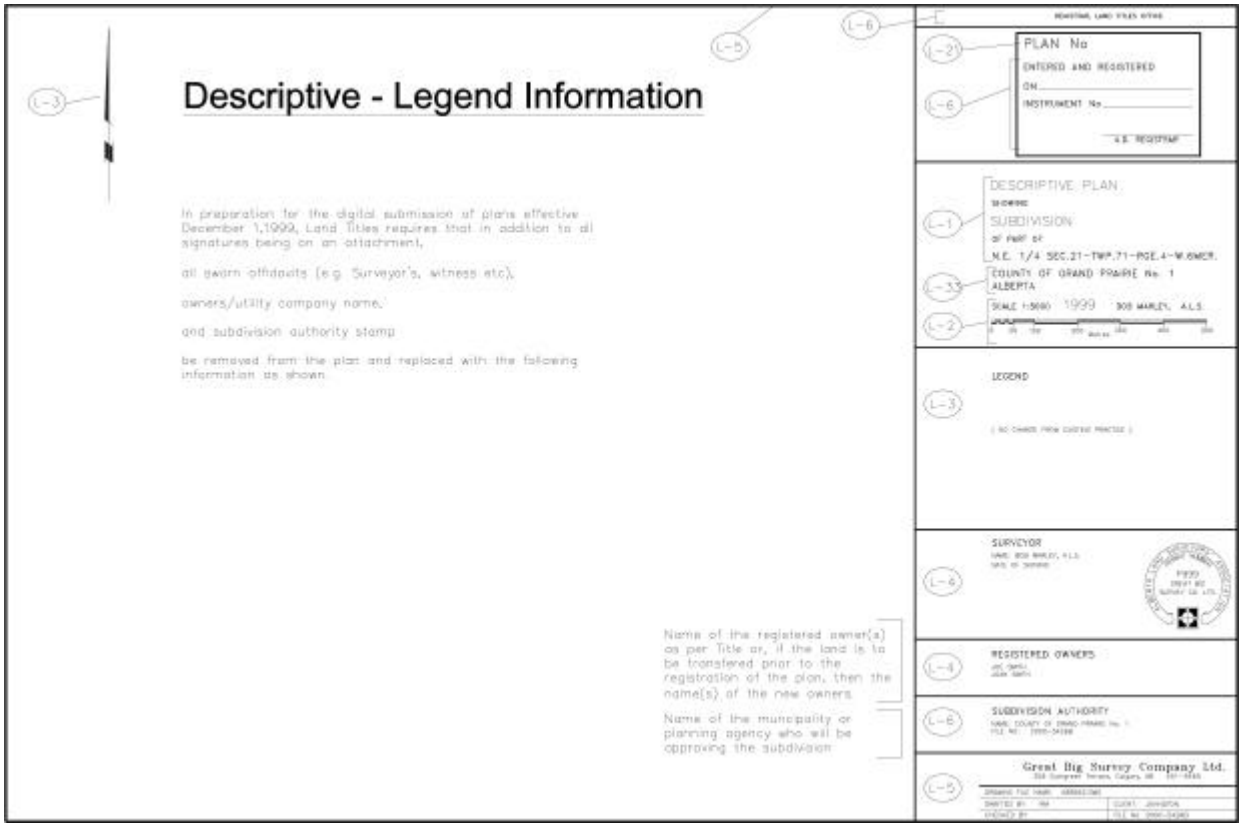
We, _____, approve for registration the
(name of municipality or planning agency)
above plan.

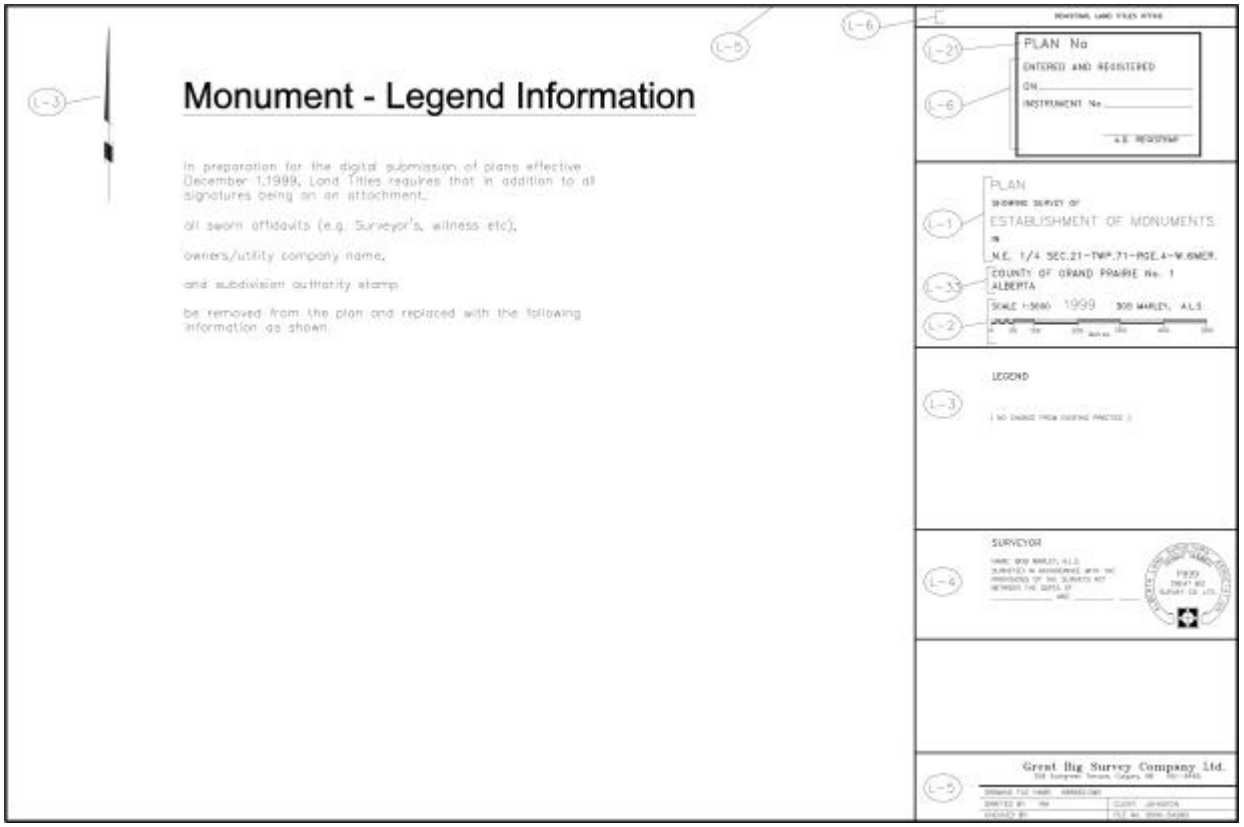
Dated _____

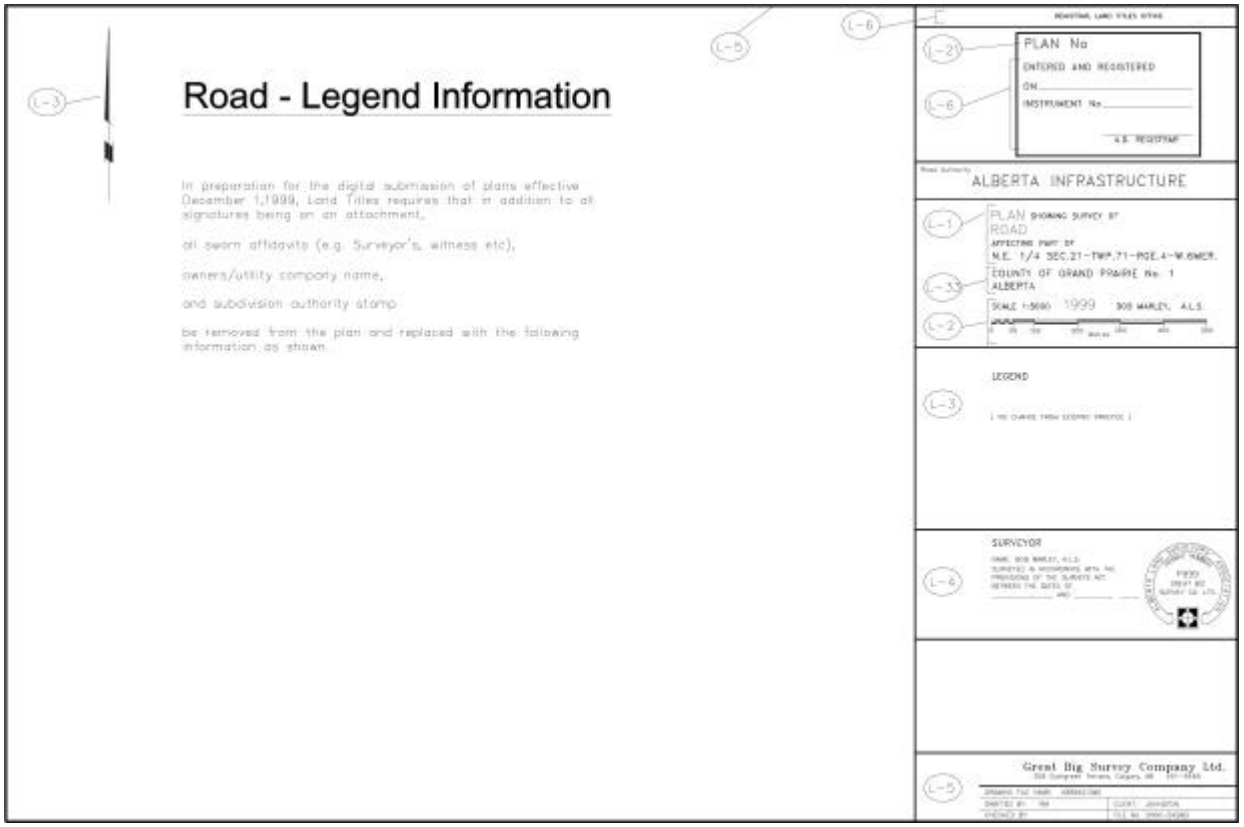
_____ _____
(signature) (print name and capacity)

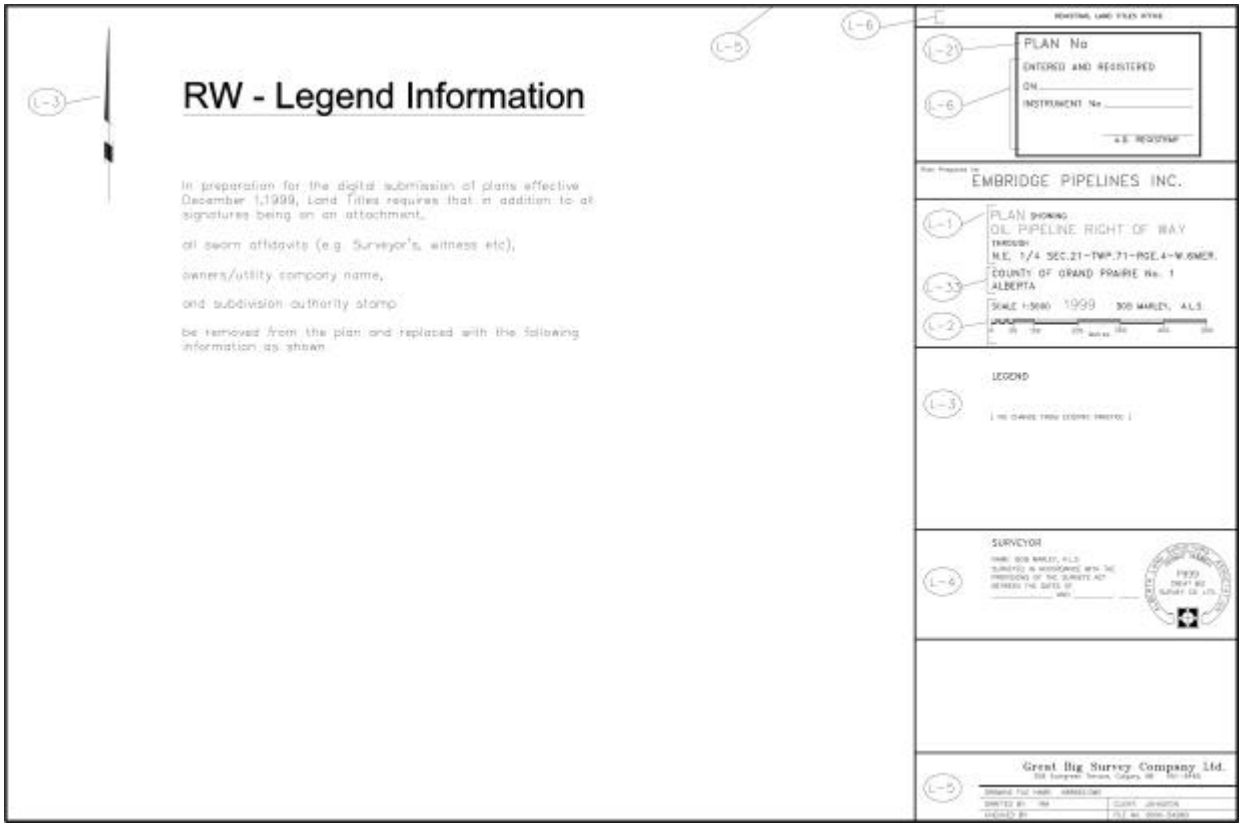
The plan is approved subject to the registration of the following:
(if none, say so)

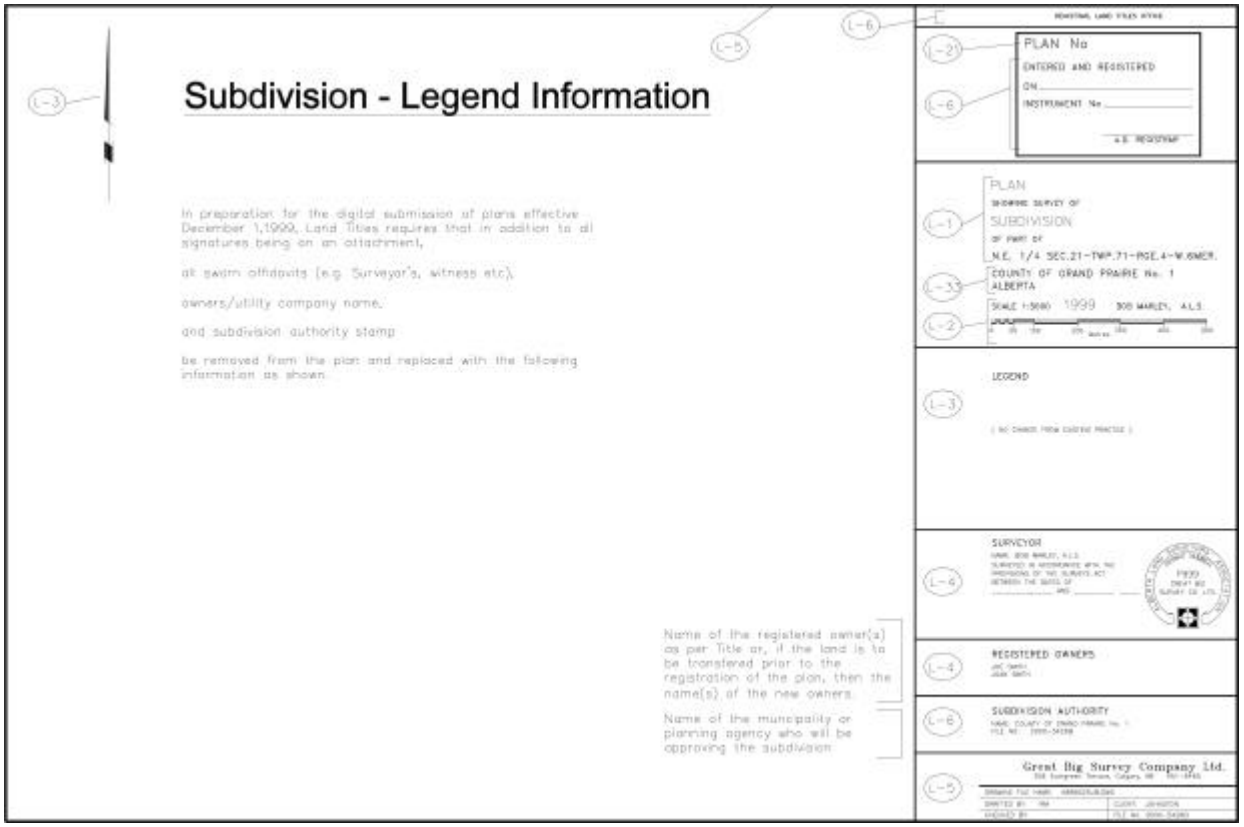
Appendix C - Example Legends by Plan Type

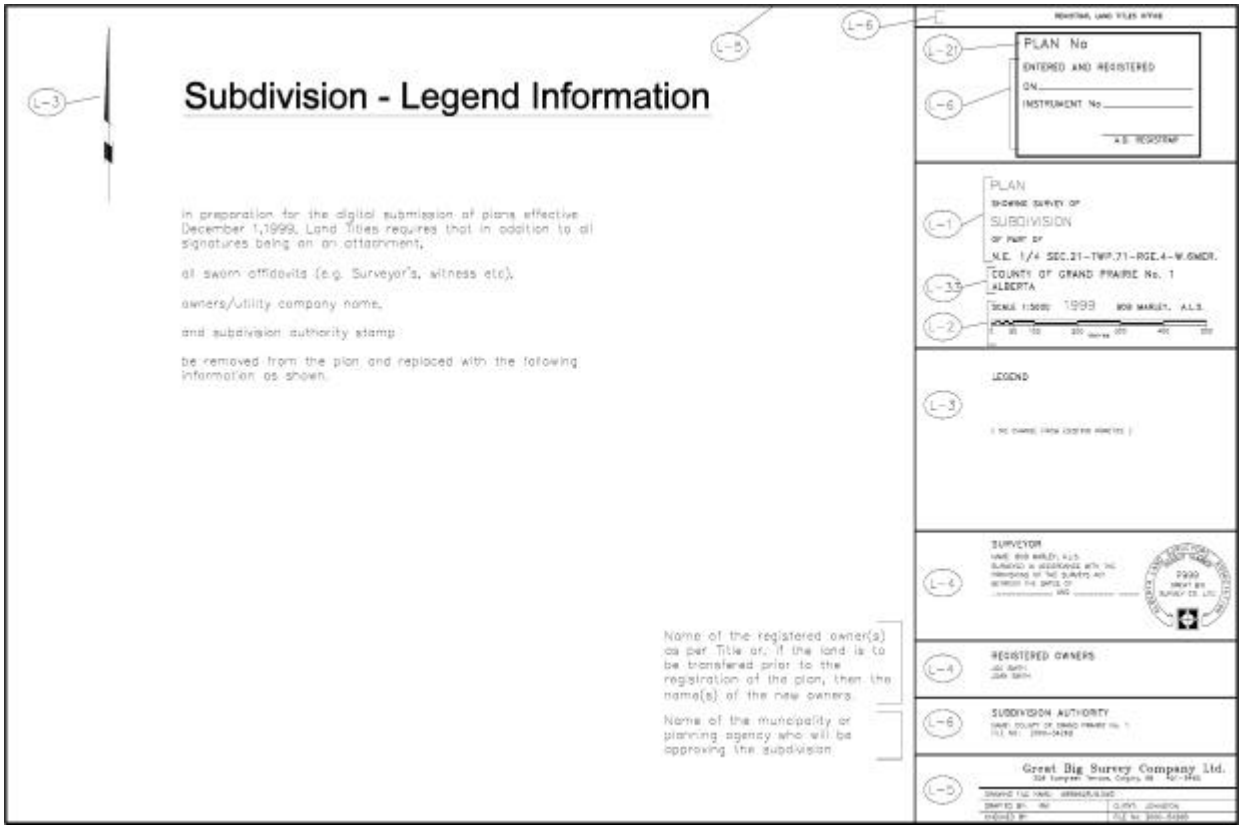


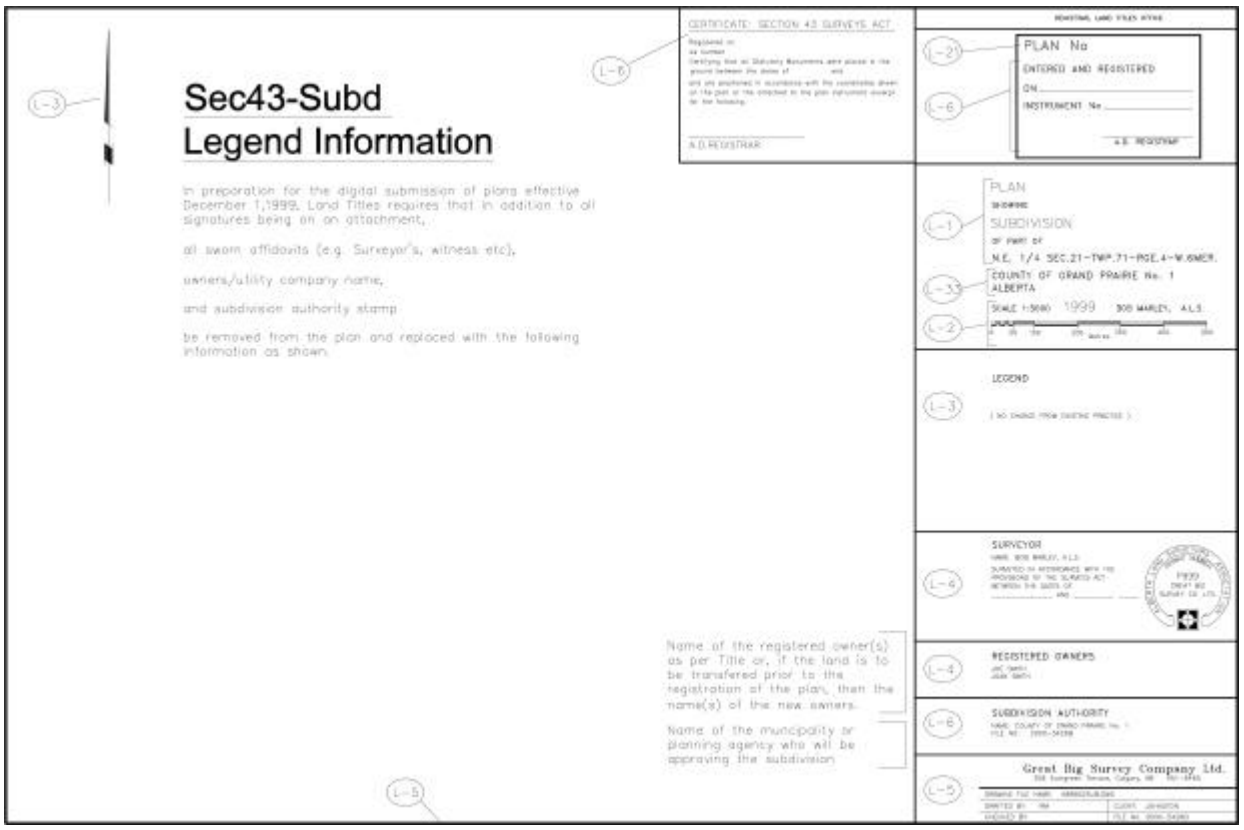

Monument - Legend Information
In preparation for the digital submission of plans effective December 1,1999, Land Titles requires that in addition to all signatures being on an attachment,
all sworn affidavits (e.g. Surveyor's, witness etc),
owners/utility company name,
and subdivision authority stamp
be removed from the plan and replaced with the following information as shown.
PLAN No
ENTERED AND REGISTERED
ON
INSTRUMENT No
PLAN
ESTABLISHMENT OF MONUMENTS
N.E. 1/4 SEC.21-TWP.71-RGE.4-W.6MER.
COUNTY OF GRAND PRAIRIE No. 1
ALBERTA
1999
LEGEND
SURVEYOR
Great Big Survey Company Ltd.


Road - Legend Information
In preparation for the digital submission of plans effective December 1,1999, Land Titles requires that in addition to all signatures being on an attachment,
all sworn affidavits (e.g. Surveyor's, witness etc),
owners/utility company name,
and subdivision authority stamp
be removed from the plan and replaced with the following information as shown.
PLAN No
ENTERED AND REGISTERED
ON
INSTRUMENT No
ALBERTA INFRASTRUCTURE
PLAN
ROAD
N.E. 1/4 SEC.21-TWP.71-RGE.4-W.6MER.
COUNTY OF GRAND PRAIRIE No. 1
ALBERTA
1999
LEGEND
SURVEYOR
Great Big Survey Company Ltd.


RW - Legend Information
In preparation for the digital submission of plans effective December 1,1999, Land Titles requires that in addition to all signatures being on an attachment,
all sworn affidavits (e.g. Surveyor's, witness etc),
owners/utility company name,
and subdivision authority stamp
be removed from the plan and replaced with the following information as shown
PLAN No
ENTERED AND REGISTERED
ON
INSTRUMENT No
EMBRIDGE PIPELINES INC.
PLAN SHOWING
OIL PIPELINE RIGHT OF WAY
THROUGH
N.E. 1/4 SEC.21-TWP.71-RGE.4-W.6MER.
COUNTY OF GRAND PRAIRIE No. 1
ALBERTA
SCALE 1:5000
1999
BOB MARLEY, A.L.S.
LEGEND
SURVEYOR
Great Big Survey Company Ltd.


Subdivision - Legend Information
In preparation for the digital submission of plans effective December 1,1999, Land Titles requires that in addition to all signatures being on an attachment,
all sworn affidavits (e.g. Surveyor's, witness etc),
owners/utility company name,
and subdivision authority stamp
be removed from the plan and replaced with the following information as shown
PLAN No
ENTERED AND REGISTERED
ON
INSTRUMENT No
PLAN
SHOWING SURVEY OF
SUBDIVISION
OF PART OF
N.E. 1/4 SEC.21-TWP.71-RGE.4-W.6MER.
COUNTY OF GRAND PRAIRIE No. 1
ALBERTA
SCALE 1:5000
1999
BOB MARLEY, A.L.S.
LEGEND
SURVEYOR
Name of the registered owner(s) as per Title or, if the land is to be transfered prior to the registration of the plan, then the name(s) of the new owners
REGISTERED OWNERS
Name of the municipality or planning agency who will be approving the subdivision
SUBDIVISION AUTHORITY
Great Big Survey Company Ltd.


Subdivision - Legend Information
In preparation for the digital submission of plans effective December 1,1999, Land Titles requires that in addition to all signatures being on an attachment,
all sworn affidavits (e.g. Surveyor's, witness etc),
owners/utility company name,
and subdivision authority stamp
be removed from the plan and replaced with the following information as shown.
Name of the registered owner(s) as per Title or, if the land is to be transfered prior to the registration of the plan, then the name(s) of the new owners.
Name of the municipality or planning agency who will be approving the subdivision
PLAN No
ENTERED AND REGISTERED
ON
INSTRUMENT No
A.D. REGISTRAR
PLAN
SUBDIVISION
OF PART OF
N.E. 1/4 SEC.21-TWP.71-RGE.4-W.6MER.
COUNTY OF GRAND PRAIRIE No. 1
ALBERTA
SCALE 1:500
1999
BOB MARLEY, A.L.S.
LEGEND
SURVEYOR
REGISTERED OWNERS
SUBDIVISION AUTHORITY
Great Big Survey Company Ltd.


Sec43-Subd
Legend Information
In preparation for the digital submission of plans effective December 1,1999, Land Titles requires that in addition to all signatures being on an attachment,
all sworn affidavits (e.g. Surveyor's, witness etc),
owners/utility company name,
and subdivision authority stamp
be removed from the plan and replaced with the following information as shown.
CERTIFICATE: SECTION 43 SURVEYS ACT
A.D. REGISTRAR
Name of the registered owner(s) as per Title or, if the land is to be transfered prior to the registration of the plan, then the name(s) of the new owners.
Name of the municipality or planning agency who will be approving the subdivision
PLAN No
ENTERED AND REGISTERED
ON
INSTRUMENT No
A.D. REGISTRAR
PLAN
SUBDIVISION
OF PART OF
N.E. 1/4 SEC.21-TWP.71-RGE.4-W.6MER.
COUNTY OF GRAND PRAIRIE No. 1
ALBERTA
SCALE 1:500
1999
BOB MARLEY, A.L.S.
LEGEND
SURVEYOR
REGISTERED OWNERS
SUBDIVISION AUTHORITY
Great Big Survey Company Ltd.