

Superseded

Alberta  Government
**Digital Plan Submission Standards and
Procedures**

October 22, 2015

Revision History

Version	Date	Author	Revision Description
1.0	2006-05-08	P. Peterson	Draft
2.0	2007-02-26	M. Weiss	Reformatting/Geo-referencing
3.0	2009-03-09	M. Weiss	Shape File Standards Document Reformatting PCS procedure changes DDiPS integration with PCS
4.0	2009-10-01	M Weiss	Enhanced Geo-referencing
5.0	2010-09-01	M. Michaud	Introduction updated to reference and link to the Enhanced Approval Process (EAP).
6.0	2011-05-03	A Crosland	Updated Level/Layer 35 on table under Section 5.1.2.
7.0	2012-02-03	A Crosland	Multi-page requirements (Page 5)
8.0	2012-05-08	A Crosland	Correct tables (Page 8)
9.0	2013-02-07	A Crosland	Update Contact (Page 4), Correct TWP Integer (Page 8), Naming Conventions (Page 9) and Reset Password and Account Audit Information (Page 12)
10.0	2013-06-11	A Crosland	Updates to ESRI link (Page 7 and 11)
11.0	2013-09-19	M. Delumen	Added new CAD validation error messages Added new Shapefile validation error messages
12.0	2015-07-07	D. Yee	Corrected the DGN, DWG formats. Updated the required CAD levels/layers

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1.0 Introduction

Operations Division (OD) of Alberta Environment and Parks (AEP) manages Industrial, Commercial and Agricultural surface dispositions on public land in accordance with the *Public Lands Act* and related legislation and policies are available on Queen's Printer website in the Laws Online/Catalogue section.

Each application/amendment for a surface activity on public land requires a plan (sketch/survey) be included indicating the extent of the activity being applied for and its proximity to existing dispositions. All activity plans identified for digital submission must be submitted to the secure Plan Confirmation Service (PCS) website for metadata input, virus checking, level checking, zipping and encrypting, prior to submitting to the department through the Electronic Disposition System (EDS).

Plan packages uploaded in PCS is validated and encrypted for the submitted to download. The submitter is also provided with a confirmation number and a link to download an encrypted zip file. Dispositions requiring digital plans are indicated in Disposition Plan Types/Formats available in eap.alberta.ca and search the "Disposition Plan Types/Formats Manual".

On September 1, 2010 submission of upstream oil and gas dispositions were enhanced as part of the Enhanced Approval Process (EAP). EAP details can be found on the department website and searching for the Enhanced Approval Process.

For inquiries regarding Digital Plan Submissions please contact:

General	Ravi Shrivastava
GoA/PCS	Business Operations Unit Division Coordination Section Provincial Programs Branch Email: EDS.Support@gov.ab.ca
Plan Standards	Ted Dunaj

To use the government's toll-free RITE service, dial 310-000 and enter the phone number.

Important Links

- [Queen's Printer](#)
- [Alberta Environment and Parks](#)

2.0 Digital Plan Submissions

On June 5, 2006 all disposition plans submitted digitally need to be confirmed using PCS and submitted through EDS. Disposition plans required to be submitted digitally are indicated in Disposition Plan Types/Formats available on the department website and searching for “Disposition Plan Types/Formats”.

About 95 per cent of all disposition plans submitted with applications or amendments for surface dispositions are currently in digital format. The spatially referenced plans support the compilation of the Digital Integrated Dispositions (DIDs) mapping data and approving surface activities. Information on DIDS can be found at eap.alberta.ca and search for Digital Integrated Dispositions.

3.0 Requirement for Data Layers

The data layers required as part of a digital submission are used for location validation, discrepancy clarification, and accuracy validation during integration.

4.0 Lands Website

The Operations Division website will keep you informed of any events and commonly asked questions, project status and contacts. The website also includes downloadable formats for required documentation, as well as links to other websites.

5.0 Digital Plan Standards

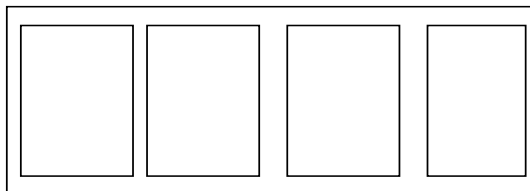
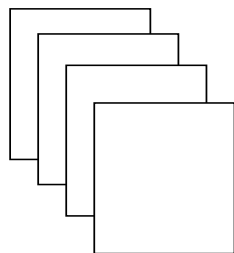
5.1 File Formats and Specifications

5.1.1 PDF File

The PDF plan submitted must be in accordance with the Disposition Plan Types/Formats and relevant Content Requirements available at the department website and searching for Plan Information.

PDF files should be created from vector files or layout view to obtain the best clarity. If your process differs, the PDF should be a Group IV, 300 dpi or higher resolution.

If plans have been formatted as multi-page documents, they should be left as is, and not combined into a single page. Multi-page PDF files must have borders on each page.



Acceptable Multi-page format**Unacceptable Multi-page format**

- The PDF file must not contain colored linework, fill or shading. Linework must be black (grey tones, fuzzy linework and fill or shading will not be accepted).
- The plan must not be more than 75 cm in width or 300 cm in length. No plan shall be smaller than letter size.
- A margin outline 1 cm from the edge of the plan is to be drawn around all sides of the plan. Large white areas outside of the plan margin must be cropped out.
- No company logos are permitted on the plans.
- The Alberta Land Surveyor must use and sign the Sustainable Resource Development affidavit, which references the *Surveys Act*, for all survey plans.
- Plans in a scale smaller than 1:10 000 are only acceptable for CNT and PNT applications or as authorized by the department. Details may be shown in any scale.
- The file size shall not exceed five (5) megabytes.
- The disposition extent boundary must be identical in the PDF and CAD or Shape files.
- The prefix for the PDF must be the same format as the DWG/DGN submitted or same format as the shape files submitted excluding the first 2 characters.

5.1.2 CAD Files:

The following are AutoCAD and Microstation versions and file extensions.

Name
DGN 7 – preferred
DGN J - acceptable
DGN SE - acceptable
DWG 2007 – preferred
DWG 2006 - acceptable
DWG 2004 - acceptable
DWG 2002 - acceptable
DWG 2000 - acceptable

The file level/layering specifications and conventions are an enhanced version of the specification currently used to submit digital plans to the Land Titles Office, Alberta Registries. Features required by Land Dispositions Branch (LDB) shall be placed on the following levels/layers:

Level/Layer	Required or Optional	Feature
9	Optional	Property, R/W, and Adjacent Dispositions Contains the line work of adjacent existing property, r/w and surface activities/dispositions as indicated per content requirements for that disposition. Typically outside area of interest. ATS (section) line work broken for plot purposes.
10	Optional	Text (Optional) Contains the text for adjacent surface activities / dispositions, property and r/w. Leaders and arrows are acceptable.
17	Optional	ATS (Section) (Optional) Line work is not to be broken and must be topologically clean. ATS line work must be complete for the entirety of all 1/4 sections affected by the surface activity. There must not be any text element on this layer/level.
28	Required	Disposition Boundary (Required) This line work shows the limits/boundaries of the disposition. It must be bold enough to eliminate any possible confusion and not be dashed. In the case of an MSL and LOC on the same plan, the line work is not to be duplicated. This line work must be topologically clean, no duplicated line work and no dangles or undershoots. There must not be any text element on this layer/level.
35	Required	Geo-Reference Point (RP) (Optional) Symbol and Text. The point must be identified by a symbol. The centre of the symbol must have the correct absolute coordinates. The symbol consists of a concentric circle around the appropriate (planted or found) IP symbol. Place the “RP” text next to the RP symbol.
40	Required	Surface Activity Code Text (Required) i.e. MSL, PLA (not required to be displayed on plot or image file). Insertion point must fall within the limits of the disposition in each Crown parcel or ATS land. There must be text elements on this layer/level. The text nodes on this layer represent the Disposition Type(s) such as MSL, LOC, REC, etc. Each text node must contain 3 alphabetic characters (no whitespaces or other characters). Exactly one text node must be located within the boundaries of each area comprising a surface activity. In other words, each polygon must have a single text node located within its boundary. Therefore, the number of text nodes must match the number of surface activity polygon areas. No other text is allowed on Layer 40 except for Disposition Type codes (i.e. MSL, LOC, PIL, PLA, etc.)

- As indicated above, layers/levels 28, 35 and 40 must exist and should have data. Other layers/levels are optional
- Each required layer/level must be named correctly

Coding of all other graphical data and text is left to the discretion of the surveyor or plan author.

Refer to Appendix A for a sample CAD file indicating line work with level designations

- Layer 28, 35 and 40 must exist and should have data. Other layers are optional.
- Each required layer/levels must be named correctly.

5.1.3 Shapefiles:

Unless otherwise stated in this document, shapefiles must correspond to, ESRI Shapefile Technical Description, An ESRI White Paper – July 1998.

- [ESRI Canada](#)

Shapefiles store both geometry and attributes for features. A shapefile consists of three files. Geometry (.shp), attributes (.dbf) and index (.shx). Examples can be found on the department website.

Shapefiles must be submitted in geographic coordinates based on NAD83 datum.

The following shapefiles are required:

Boundary Shapefile

Contains the polygon(s) of the limits/boundaries of the disposition and the description of the disposition type. In the case where two (2) dispositions are present or when a linear disposition crosses a surveyed road allowance two (2) polygons are required. The polygons must be topologically clean. Boundary polygons must be coincident to ATS v4.1

Field Name	Data String	Valid Values
DISP_TYPE	String (3)	Eg CNT, LOC, PNT

ATS Shapefile:

Contains the polygons in their entirety of all 1/4 sections affected by the surface activity and the associated attribution. Polygons must be topologically clean and coincident to ATS v4.1.

Field Name	Data String	Valid Values
QS	String (2)	NE, NW, SE, SW
SEC	Integer (2)	1 - 36
TWP	Integer (3)	1 - 126
RGE	Integer (2)	1 - 30
MER	Integer (1)	4 - 6

Adjacent Shapefile

Contains the polygons and attributions for adjacent active surface activities/dispositions as defined in the Content Requirements for that disposition available on the department website. Search for Plan Information.

Field Name	Data String	Valid Values
ADJ_DISP	String (10)	Eg MSL080101

Refer to [Appendix B](#) for a sample of the Shape file designations.

5.1.4 Naming

The prefix for the 3 files, .shp, .dbf, and .shx must be the same and a maximum of (8) eight characters. The first (2) two characters of each file must be as follows:

B_ for boundary shapefile

A_ for ATS shapefile

J_ for adjacent activities (file only required if a requirement in Content Requirements Document for that activity)

E.G.

B_XXXXXX.shp

B_XXXXXX.dbf

B_XXXXXX.shx

For CAD type files, file names should not contain spaces. Use of special characters such *, -, (,), @, % or \$ are not allowed.

E.G.

13_1234Q01.dwg

13_1234Q01.pdf

Or,

13_1234Q01.dgn

13_1234Q01.pdf

5.2 Geo-referencing

5.2.1 Surveys

CAD file must be geo-referenced to the NAD83 (Original) or NAD83 (CSRS) datum.

CAD file must be prepared either on the UTM or 10TM projection

Identify the geo-referencing point in the CAD file.

It is preferred that the geo-referenced coordinate be derived from a survey control marker (Provincial or Federal); however, they can also be tied to ATS v4.1 or to an autonomous Global Navigation Satellite System (GNSS) position via NRCAN's Precise Point Positioning (PPP). The actual observed position rather than the published coordinates of any other survey monuments (not the geo-referenced point) should be shown or listed.

The following indicates the priorities for geo-referencing the CAD file related to the Reference Point and the Orientation Point.

Prioritized Selection Criteria for Reference Point

1. Canadian Base Network, High Precision Network Survey Control (ASCM NAD83(CSRS) subset) or GNSS (i.e., GPS) base stations(s) that have been formally designated as ASCM(s).
2. ASCM or PPP (See Natural Resources Canada and search for Online Global GPS Processing Service (CSRS-PPP)
 - o [Natural Resources Canada – Geodetic Reference Systems](#)
3. ATS v4.1

Prioritized Selection Criteria for Orientation Point

1. GNSS (GPS) – derived grid bearing.
2. Grid bearing based on the published values for Alberta Survey Control.
3. Assumed from a previous plan or derived from ATS or from the SDW Cadastral Base.

Note: The annotated plan bearings may differ from the CAD file, but the CAD file must be orientated to grid and the source of orientation described in the submitted DIPS or LD metadata file.

5.2.2 Non-Surveys

CAD file must include a start point and orientation point. The digital plan must be provided in NAD83 coordinates, geo-referenced to the v4.1 March 2005, ATS coordinate file. The geo-referencing point must be indicated in the CAD file. All line work in the file is to be represented on the proper mapping plane (UTM or 10TM).

The v4.1 March 2005 ATS coordinates file is available for free on the Sample Tab at VOD.

Clients wishing to only view the March 2005 coordinates for a specified section can do so by going to:

- [Altalis](#)

5.2.3 Tips

- Make sure there is only 1 Text (Layer 40) per Disposition Boundary Area (Layer 28). Eg. if there are 3 polygons in Layer 28, there MUST be only 3 Text in Layer 40
- Make sure the Text Node in Layer 40 is **INSIDE** the polygon of Layer 28
- Documents should be reviewed ensuring that they meet the requirements indicated in the Digital Plan Submissions Standards and Procedures document prior to proceeding to Section 6.1 CAD Submission Package.
- Geo-referenced file should be checked to ensure that file has been geo-referenced correctly. CAD files created in formats other than DGN or DWG and then converted to these formats should be checked to ensure the converted file meets all requirements.

- Shape files created from DWG or DGN files should be checked to ensure they meet requirements
- Clients converting files to DWG or DGN can view and check their files using Bentley View. The software is available as a free download at Bentley Products and search for Bentley View.
 - [Bentley](#)
- *Polygons with linework less than 0.8m threshold apart will not be accepted by the process. DWG or DGN files below this threshold may need to be modified to meet this requirement. However, the PDF plan which governs the plan of record must reflect true measurements.*
- The align command can be used to geo-reference AutoCAD files if they have been created using local or other coordinates.

In command field key in align

Select an area that encloses all elements in the file and press enter

Select first ATS point

Enter coordinates for that point from the March 2005 ATS coordinate file

Select second ATS point

Enter coordinates for that point from the March 2005 ATS coordinate file

Press enter to end coordinate process

Select Yes when asked to scale objects

6.0 Digital Submission Requirements

6.1 CAD Submission Package

Two (2) files are required to be submitted with each digital CAD submission. The files must be contained within a zipped (.zip) file before submitting to PCS.

1. Drawing (CAD) file .dgn or .dwg must be geo-referenced as indicated in Section 5.2 geo-referenced and structured according to the layer and content requirements in Section 5.1.2 CAD files.
2. PDF file is the plan of record and must contain all data listed in the plan standards documents and be formatted as described in section 5.1.1 PDF file.

6.2 Shape Submission Package

Ten (10) files are required to be submitted with each digital shape submission. Refer to Content Requirements available at the department website and searching Plan Information for exact file requirements and refer to the Digital Plan Submission Standards and Procedures. The files must be contained within a zipped (.zip) file before submitting to PCS.

1. Three (3) shape files (.shp) structured according to the “ESRI Shape File Technical Description” document dated July 1998 and as per section 5.1.3. Shape file are located on the ESRI website and by searching for library and then the document.
 - [ESRI Canada](#)
2. Three (3) index files (.shx) One (1) for each of the shape files.
3. Three (3) dBASE tables (.dbf) One (1) for each of the shape files.

4. PDF file is the plan of record and must contain all data listed in the plan standards documents and be formatted as described in section 5.1.1 PDF file.

6.3 Plan Confirmation Service (PCS)

This service will allow for input of metadata, check the submission package for viruses and add a confirmation text file (.txt). Once the digital file is validated the service will zip all the files and encrypt the package.

The web application checks that the submission has a ZIP extension. If the extension is not available the submission is not accepted by the system and the submitter must try again.

Note: PCS does not check to ensure that the geo-referencing was completed correctly. The geo-referencing should be checked for correctness prior to submitting submission package to PCS

6.4 Internet Requirements

There are no special internet requirements to connect to the URL for a submission.

To access the PCS system you must have Internet access and a Web browser that supports SSL 3.0 (ie Netscape or Internet Explorer). Although older versions may work the Department supported standard is Internet Explorer 7.0. Some browsers have security features that prohibit the downloading of cookies. Your browser must be set to allow session cookies. The session cookie is removed once you have logged out or closed your browser.

6.5 Hours of Operation

The Plan Confirmation Service is not available for 15 minutes daily between 4:00 and 4:15 a.m.

6.6 Getting a GoA Account

You will require a GoA account/username and password to log into ESRD SecureXNET in order to access PCS. The GoA User ID Request Form is available at the department website. To view, click the tab for Forms, Maps, Services and search for User IDs & Client IDs for access to Industry Online Services for access to PCS, EDS, LAT, IWCP and PHAP. Please allow 7 to 10 business days for processing.

Every 60 days email notification will be sent to the account holder's email address requesting the password be changed.

Phone enquiries regarding accounts should be directed to:

Business Operations Unit

- o eds.support@gov.ab.ca

Note: AEP performs account audits semi-annually. You are required to respond accordingly to these audits via email to retain your account access.

6.7 Online Service Login Page

Plan Confirmation Service clients will be required to perform the following steps to access the PCS:

Open a Web Browser (Internet Explorer, Netscape or Mozilla Firefox). The web application will place a cookie in your system during your session. The cookie is removed once you have logged out.

Within the address bar of your browser type the following URL:

https://securexnet.env.gov.ab.ca/pcs_login.html

An ESRD SecureXNET window is displayed:

Click 1) Please proceed to...the Plan Confirmation Service

The user must enter their assigned GoA **Username** and **Password**.

Select **GoA CLIENT** from the Account Type drop-down box.

Select the **LOGIN** button to continue.

The system will return an error message if either the password or GoA username is incorrect.

SECURE ACCESS TO ESRD APPLICATIONS
SECUREXNET

You are not logged in to SecureXNET.

User Name

Password

Account Type

- GoA Employee
- GoA Client
- External Client

[Manage Your External ADS ID](#)

Legal Notice

This private network is the property of the Province of Alberta, and all usage may be monitored. Approved users accessing this network will do so in accordance with existing policies and the Alberta Public Services values.

Once logged in to PCS, an active session is opened. The user can leave the current session inactive to a maximum of fifteen (15) minutes. After 15 minutes of idle time or inactivity, the session expires and you may have to re-login to continue. The cookie expires once four hours have lapsed; you will also be prompted to re-login to connect to the PCS upload area.

6.8 Web Application Upload Page

Target File - You may key in the digital submission file name including the path to the file or choose to browse your system for the file. Ensure that there is no use of space or any special characters as part of the file name path.

Submission Type – You must select either CAD or Shape

Projection/Datum – *You must select the correct Projection/Datum for your submission.* If you selected Shape as your submission type projection defaults to geographic and CAD version will be blank.

CAD Version – If you selected CAD as your submission type you must select the correct CAD version of your submission. Please check 5.1.2 for a list of valid CAD versions.

Legal Land Description – *You must add a minimum of one (1) legal land description that is occupied by the submitted activity.*

Section/TWP/RGE/Mer – Once you have selected your land description you can add it by clicking on the add button. Added lands can be removed one at a time by highlighting the land and clicking remove or can all be removed by clicking clear.

Next – When you have completed all requirements click on the next button
The submission is checked for viruses and required files.

Cancel – Pressing the button will clear your selections

Target File:

Submission Type: CAD Shape

Projection:

CAD Version:

Legal Land Description:

Section:

Township:

Range:

Meridian:

Section/TWP/RGE/Mer:

If the submission is successful a metadata window will open.

The metadata is required to help coordinate and manage the plan and files submitted digitally to LD in support of an application for a disposition on public land. The application collects the metadata about the digital file. This tool is similar to the Digital Submission Software (DiPS) used by surveyors to create metadata that is submitted to Land Titles for registering plans.

Survey/Author Company: Author:

Remember My Information

Digital Files:

CAD Version:

Municipal Type:

Plan Location:

Final Plan (After Construction)

Combined Scale Factor:

Comments:

Legal Description:

Territory Type:

Projection:

Datum:

Geo-Referenced To:

Sketch/Survey Completed Date:
 (YYYY-MM-DD)

Sep 18, 2015, 03:45PM

Once you have completed identifying all the metadata about the submission, click next. PCS displays the Northing/Easting data which can be used to confirm the geo-reference used to create part of the design file. If these values coincide, click 'Proceed' to submit.

Location: [Alberta Government](#) > [Alberta Environment and Parks](#) > [Plan Confirmation Service](#)

Survey/Author Company: Author:

Digital Files:

CAD Version:

Municipal Type:

Plan Location:

Comments:

Legal Description:

Projection:

Datum:

Sketch/Survey Completed Date:
(YYYY-MM-DD)

Geo-Referenced To:

Final Plan (After Construction)

Combined Scale Factor:

Territory Type:

Running 1234_v7.dgn through graphics check v2.0 using Projection UTM83-12

Warnings / Errors

If the below Northing and Easting are not correct please fix your submission before proceeding

"Northing:" 5555411.365 "Easting:" 533701.985

When the submission is successful the service assigns a sequential confirmation number. The number will be six numeric digits long and will be prefixed with the year. For example, the confirmation number would appear as 2015019728.

Location: [Alberta Government](#) > [Alberta Environment and Parks](#) > [Plan Confirmation Service](#)

Your confirmation number is: **2015019728**

Your file is ready for pickup [HERE](#).

Filename:

Sep 18, 2015, 03:54PM

You must click on the **HERE** link to download a copy of the zip file. The package will contain a copy of the PDF plan and an encrypted file to submit to the EDS system. The file will have an extension of *.ENC*. Submitters must not open the encrypted file as it could corrupt its contents. Should you wish to submit another package using PCS, click the ‘**New Submission**’ button. To end your PCS session, you can use the logout link as shown.

6.9 Unsuccessful Submission

CAD Processing Error Messages and Abnormal Termination Criteria

During FME processing when one or more validation conditions are not met, the processing stops and an error message gets generated. The error message appears on a PCS screen as a result of validation. The conditions with their corresponding error messages are as follows:

- 1) Condition: No existing Disposition Boundary Area features on Layer 28 and/or no line work could be converted to a Disposition Boundary Area;
PCS ERROR MESSAGE: No Disposition Boundary Area could be found and/or converted from line work found on Layer 28.
The system will terminate processing
- 2) Condition: There exists no valid Disposition Text Node located on Layer 40.
PCS ERROR MESSAGE: There exists no valid Disposition Type Text Node available for processing on Layer 40.
The system will terminate processing
- 3) Condition: No Disposition Boundary Area intersects any ATS section entered through PCS Entry Screen.
PCS ERROR MESSAGE: The Disposition Boundary does not intersect with the following <legal description>.
The system will terminate processing
- 4) Condition: There exists a Disposition Boundary Area that doesn't have a Text Node located within its boundary.
PCS ERROR MESSAGE: There exists a Disposition Boundary Area (Layer 28) that doesn't have a corresponding Text Node (Layer 40) located within its boundary.
The system will terminate processing
- 5) Condition: There exists a Disposition Type Text Node that is not located within any Disposition Boundary Area.
PCS ERROR MESSAGE: There exists a Disposition Type Text Node (Layer 40) that is not located within any corresponding Disposition Boundary Area (Layer 28).
The system will terminate processing
- 6) Condition: The number of valid Disposition Type Text Node(s) doesn't equal the number of Disposition Boundary Area(s).
PCS ERROR MESSAGE: The number of valid Disposition Type Text Nodes (Layer 40) must equal the number of Disposition Boundary Areas (Layer 28).
The system will terminate processing
- 7) Condition: On Layer 28 there exists an invalid geometry that cannot be fixed.
PCS ERROR MESSAGE: Invalid Geometry found on Layer 28 – <reason for failure>.
Please ensure that all area and/or line work is topologically clean.
The system will terminate processing

FME CAD Processing Warning Messages

During FME processing a warning message can be generated. The warning message later appears on a PCS screen as a result of validation. Generating a warning message doesn't cause the processing to stop. The conditions with their corresponding warning message are as follows:

- 1) Condition: There exists line(s) on Layer 28 that couldn't be converted to a Disposition Area.

PCS WARNING MESSAGE: There exist(s) unused lines line(s) found on Layer 28 that could not be converted a Disposition Boundary Area. This may result in an incorrect representation of the Disposition Boundary.

- 2) Condition: In the submitted CAD file on Layer 28 there exists an invalid geometry that can or cannot be fixed.

PCS WARNING MESSAGE: Invalid Geometry found on Layer 28 – <reason for failure>. This may result in an incorrect representation of the Disposition Boundary.

FME Shapefile Processing Error Messages and Abnormal Termination Criteria

During FME processing when one or more validation conditions are not met, the processing stops and an error message gets generated. That error message later appears on a PCS screen as a result of validation. The conditions with their corresponding error messages are as follows:

- 1) Condition: No Disposition Boundary Area is available for processing.

PCS ERROR MESSAGE: There is no Disposition Boundary Area available to be processed.
The system will terminate processing

- 2) Condition: No Disposition Boundary Area intersects any ATS section entered through PCS Entry Screen.

PCS ERROR: The Disposition Boundary does not intersect with the following <legal description>.
The system will terminate processing

- 3) Condition: Disposition Type is not alphabetic.

PCS ERROR: Invalid attribute <disposition type> contained within field "DISP_TYPE".
The system will terminate processing

- 4) Condition: Disposition Type length is longer than 3 characters (whitespaces removed).

PCS ERROR: Invalid attribute <disposition type> contained within field "DISP_TYPE".
The system will terminate processing

- 5) Condition: In the submitted shape file there exists a Disposition Area(s) with invalid geometry that cannot be fixed.

PCS ERROR: Invalid Geometry found in the submitted shapefile - '<reason for failure>'. Please ensure that all geometry is topologically clean.
The system will terminate processing

FME Shapefile Processing Warning Messages

During FME processing a warning message can be generated. The warning message later appears on a PCS screen as a result of validation. Generating a warning message doesn't cause the processing to stop. The conditions with their corresponding warning message are as follows:

- 1) Condition: In the submitted shapefile there exists a Disposition Area with invalid geometry that can or cannot be fixed.
PCS WARNING MESSAGE: Invalid Geometry found in the submitted shapefile - '<reason for failure>'. Please ensure that all geometry is topologically clean. This may result in an incorrect representation of the Disposition Boundary.

7.0 Quality Assurance

7.1 Technical Check

The service uses Feature Manipulation Engine (FME) to perform CAD layer/level and Shape validations. The following shows the element type and the PCS validations performed:

AutoCAD DWG v.2006

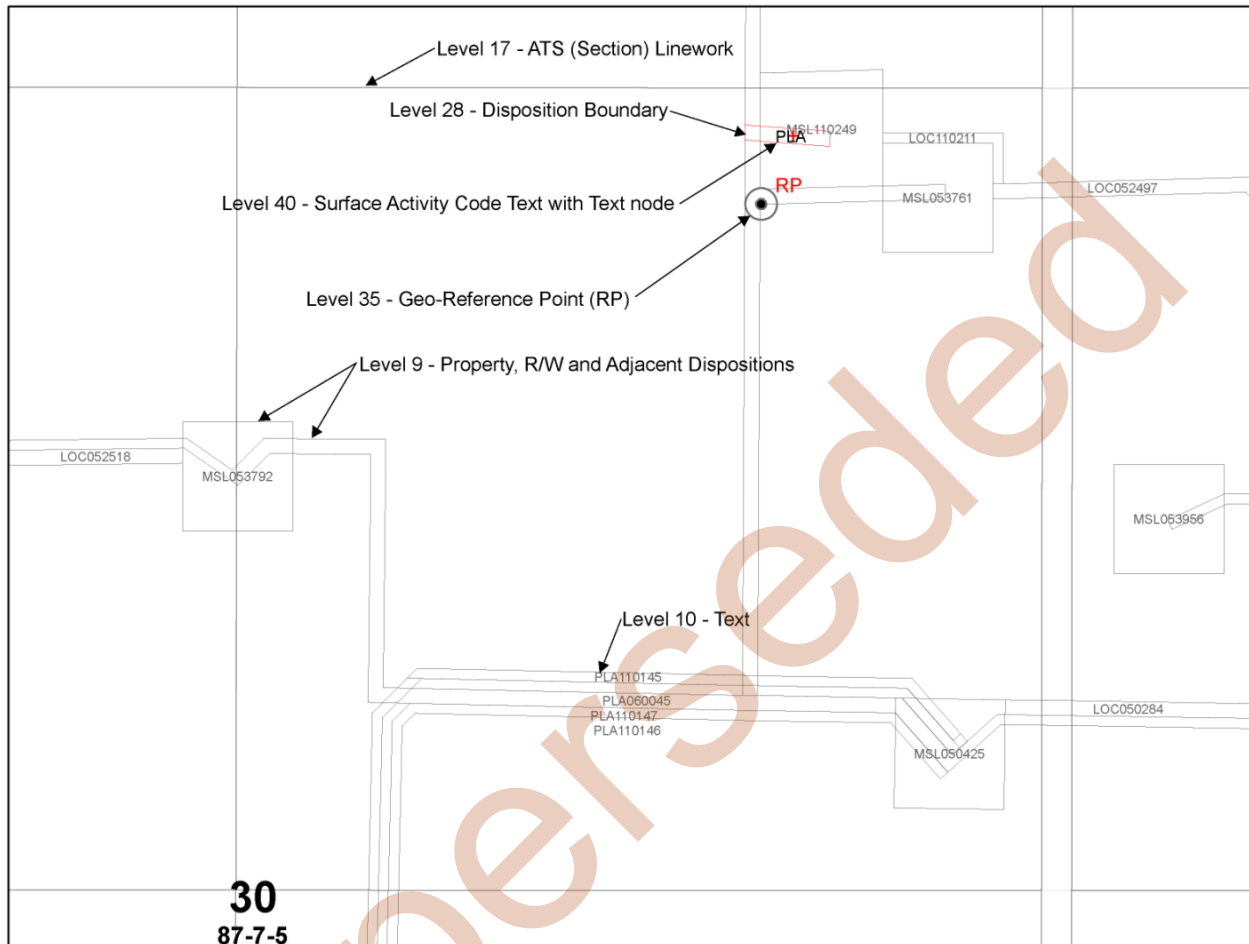
AutoCAD 2006 Element Types	Bentley View	PCS
Line	Line	Line
Construction Line	Line	Line
Polyline	Line String	Line
Polygon	Arc	Area
Rectangle	Shape	Area
Arc	Arc	Arc
Circle	Circle	Ellipse
Revision Cloud	Complex Shape, Arc	Area
Spline	BSpline Curve	Line
Ellipse	Ellipse	Area
Ellipse Arc	Arc	Ellipse
Point	Shared Cell Point Display	Point
Multi-line Text	Text Node, Text	Text
Single-line Text	Text	Text

Bentley MicroStation DGN v.8

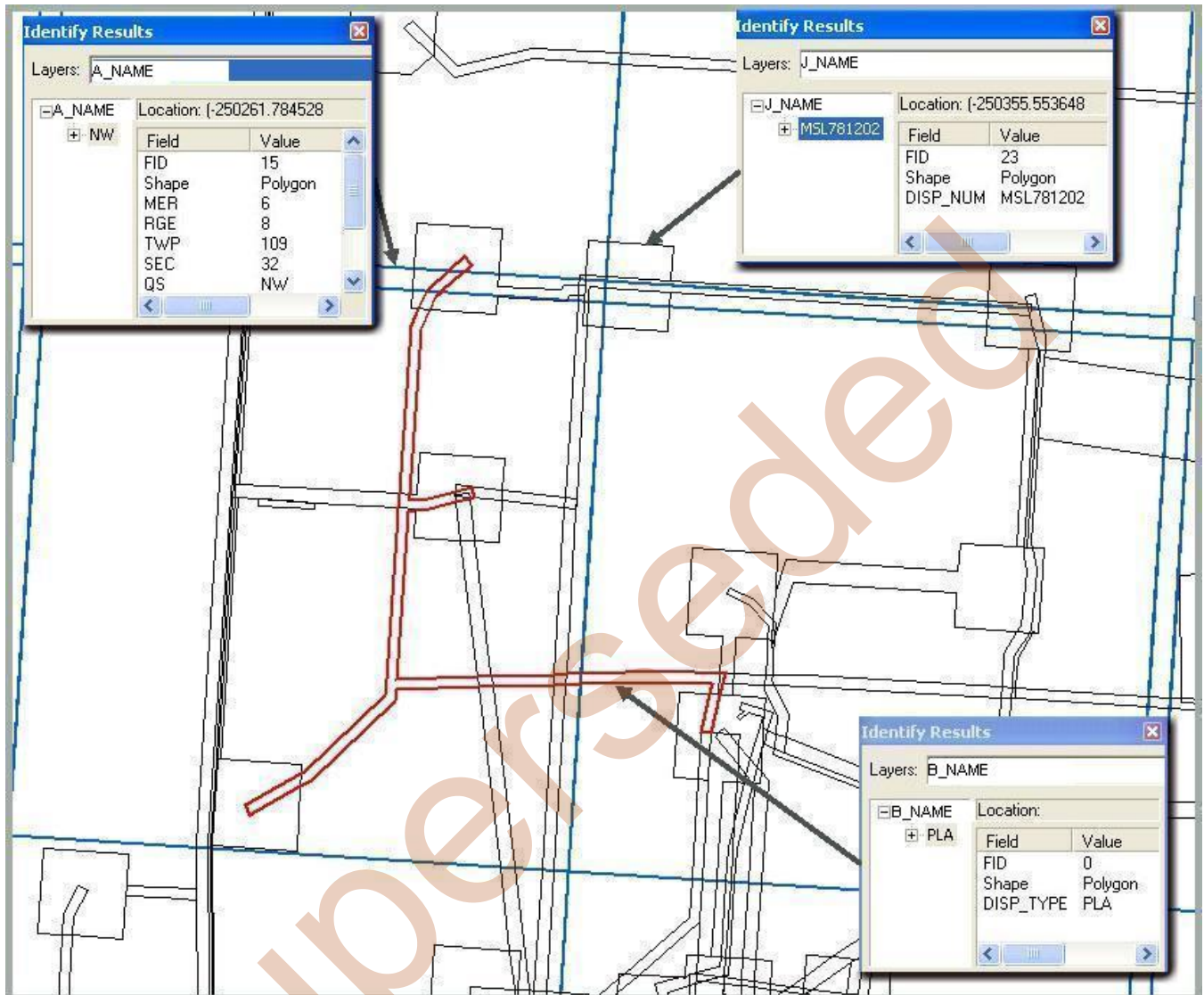
MicroStation 2006 Element Types	Bentley View	PCS
Line	Line	Line
Line String	Line String	Line
Arc	Arc	Arc
Polygon	Shape	Area
Circle	Circle	Ellipse
Complex Shape	Complex Shape	Area
BSpline	BSpline Curve	Line
Ellipse	Ellipse	Area
Point	Point	Point
Text Node	Text Node	Text
Text	Text	Text

Superseded

8.0 Appendix A Sample CAD Showing Required Levels



9.0 Appendix B Sample Shape File



10.0 Appendix C Glossary of Abbreviations

10TM – 10-degree Transverse Mercator
ALS – Alberta Land Surveyor
ASCM – Alberta Survey Control Marker
ATS – Alberta Township System
CNT – Consultative Notation
CSRS – Canadian Spatial Referencing System
DIDs – Digital Integrated Dispositions
DiPS – Digital Plan Submission (Land Titles)
EDS – Electronic Disposition System
FME – Feature Manipulation Engine (Safe Software)
LD - Lands Division
LDB – Land Dispositions Branch
LOC – Licence of Occupation
LSAS – Land Status Automated System
M&B – Metes and Bounds description
MSL – Mineral Surface Lease
PCS – Plan Confirmation Service
PDF – Portable Document Format
PLA – Pipeline Agreement
PNT – Protective Notation
PPP – Precise Point Positioning
R/W – Right-of-Way
URL – Uniform Resource Locators
UTM – Universal Transverse Mercator