Creating PDF's in MicroStation for Location & Survey Control Sheets

Following is the procedure to be used to create the different PDFS's of RW, right-of -way sheets, 1C Title Sheets, and the sheets containing tables. October 2017 was the date when this requirement was put in place. These new procedures produce a greyscale plots for RW and 1C Title sheets.



UPDATE YOUR WORKSPACE

First, update the NCDOT workspace. A variety of workspace files were created and modified to create this new feature. These changes were added to the NCDOT L&S workspace 10/2017. This procedure continues to be improved. It is best to update your workspace often to ensure that you are using the most current workspace files.

Run MicroStation

Run MicroStation using MS Start with the Location & Survey workspace opening the .dgn file that you wish to create a PDF of.

Displaying the RW or 1C Levels

New display filters have been added to the Location & Survey workspace to facilitate displaying either the RW or the 1C title levels that will be included in the plot. The filters 'LS RW Sheet' and 'LS RW Sheet Topo' were added to help create pdf RW sheets. The filters 'LS 1CTitle Sheet' and 'LS 1CTitle Sheet Topo' were added to help create 1C-1 pdf title sheets. Choose the 'Level Display' option from MicroStation's primary tool bar.



Make sure the 'Level Display' dialog box is set up to display the filters. If you opened the dgn file using MS Start and chose the Location workspace there should be four new filters, 'LS RW Sheet', 'LS RW Sheet' And 'LS 1CTitle Sheet Topo' were. 'LS RW Sheet' displays the RW levels that will be displayed in black. 'LS RW Sheet Topo' contains the RW levels that will be displayed in black. 'LS RW Sheet Topo' contains the RW levels that will be displayed in grey. The 'LS 1CTitle Sheet' filter is used to display the 1-C1 title sheet levels in black in the pdf. The 'LS 1CTitle Sheet Topo' filter is used to display the levels that are displayed in grey in the pdf.





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LS RW Sheet Topo 2 LS Structures Major	-



Save Settings

When the two filters have been chosen, the appropriate levels should be displayed. Once the correct levels are displayed go to the MicroStation main menu and chose 'Save Settings'. There are instances where The 'Print Organizer' function will plot incorrect levels unless the 'Save Setting' option is chosen prior to printing.

Creating the Scale and Plotting Limits

The scale and plotting limits are defined by plotting a cell called 'PDF' at the appropriate scale and position. Use the 'Place Active Cell' tool and choose the 'PDF' cell to plot. Enter the correct scale, typically 50.0. The Active Angle is typically set to 0.0. The sheet border should have already been plotted in the course of drafting the RW sheet. Align the PDF insertion point with the lower left corner of the previously plotted RW border and place the PDF cell. Placing the PDF cell is all that needs to be done to set the correct scale and plotting limits of the pdf.



Using Print Organizer to Create the Greyscale PDF File

The 'Print Organizer' menu option is the tool used to create the greyscale PDF. The 'Print Organizer' tool is found in the main MicroStation menu as shown below.



Use the 'Add Files to Set' button from the main 'Print Organizer' toolbar. Choose the .dgn file that is to be plotted.

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Next, Choose the 'Print style name' 'RW Sheet GS if you are plotting a RW Sheet. Choose '1CTitle Sheet GS if you are plotting a 1-C 1 title sheet.

Creating PDF's For L&S Control Sheets

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When the correct dgn file and print style has been chosen exit the dialog box via 'OK'.

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This is a good time to do a 'Print Preview'. Press the 'Print Preview' button. A preview of the greyscale plot should be displayed.





If there are no apparent problems in the 'Print Preview' choose the 'Print...' menu option.

Creating PDF's For L&S Control Sheets

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A PDF containing all the correct RW levels plotted in black and all other levels plotted in grey should be created.



Creating PDF's For L&S Control Sheets

Displaying & Plotting a Table Sheet

Following is the procedure used to plot a pdf for a sheet containing a table such as the 1C-5, or the 1D-1 sheet. There are no filters developed for displaying the table levels. It is assumed that displaying the levels to be plotted is simple enough without the need for specialized filters.

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First, display the levels that are to be included in the pdf.

The procedure for creating a sheet with tables is the same as the procedure for creating a RW sheet or a 1C Title Sheet except for two minor differences

1) There is no specialized display filter to display the appropriate table levels. It is up to the draftsman to display the levels desired in the pdf plot.

2) There is a different Print style name that needs to be chosen when the Input files are being added. This Print style ensures that there will be no greyscale plotted.

Create Print Definitions	22
Input files	
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APPENDIX

APPENDIX A – RW Levels Plotted in Black

The following levels are the levels plotted in black when creating a RW pdf. When preparing the CADD drawing use the following levels as the levels to be plotted in black. Any other level displayed on the screen will be plotted in greyscale. The '*' represents the wildcard character. *Property* would include any level that had the word 'Property' in its name. 'Sheet pe seal' would only include the level 'Sheet pe seal'. 'EXIST SURVEY STATEMENT CELL*' would include all levels that begin with the text 'EXIST SURVEY STATEMENT CELL'.

Property *Right of Way* *Prop ROW* *Matchline* *Prop Horizontal alignment* *north arrow* *ROW Marker* *Prop Horizontal Alignment* *Prop Easement* *survey statement* Sheet pe seal *Exist Property Owner Number* *Sheet Block Revision CELL* *Sheet Plot Border* *Sheet Plan CELL* **EXIST SURVEY STATEMENT CELL*** *Sheet Data Field CELL* *Sheet PE Seal Cell* *Prop Parcel Number* *Sheet Border CELL* *RW Title Sheet Border* *Sheet Title CELL*

Contact the GTS group if you find any other levels that should be included in the list to be plotted in black.

APPENDIX B – 1C-1 Title Sheet Levels Plotted in Black

The following levels are the levels plotted in black when creating a 1-C 1 Title Sheet pdf. When preparing the CADD drawing use the following levels as the levels to be plotted in black. Any other level displayed on the screen will be plotted in greyscale. The '*' represents the wildcard character. *Property* would include any level that had the word 'Property' in its name. 'Sheet pe seal' would only include the level 'Sheet pe seal'. 'Exist Horizontal Baseline*' would include all levels that begin with the text 'Exist Horizontal Baseline'.

Sheet Professional Seal* Matchline* Exist Horizontal Baseline* Exist Horizontal Alignment* "Sheet Data*

Contact the GTS group if you find any other levels that should be included in the list to be plotted in black.