



**North Carolina Department of Transportation
Division of Highways**

Location & Survey Unit

DEED DRAFT And ROWGIS CONVERSION MANUAL

Forward Corrections To:

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Overview

The purpose of the Deed Drafting Program is to enable the Location & Survey Unit to generate deed descriptions and parcel maps of each property affected by the construction or rehabilitation of a highway or bridge. The Deed Draft program will automatically generate a meets and bounds point deed description text file and a corresponding Model for each parcel, which may be incorporated in a deed to be recorded in the county tax office. The parcel map may be used as an aid in negotiations with the property owner. At the agent's discretion, the parcel map may display any of the topographical features used in the design process. It will also contain a meets and bounds table and area of each Right-of-Way TAK or Easement. After all the parcel maps have been created, the Base Deed file is then cleaned/renamed and uploaded to the ROWGIS server folder for the final conversion process by ARCGIS. The Engineering Technology System Unit developed the Deed Drafting Program and the ARCGIS Program for the Location & Surveys Unit.

Location & Survey ROW&GIS Tools

Most of the Location & Survey tools are based on visual graphics (on-screen) – as it happens. This also makes it much easier for the user to visually see/check/verify that elements are correctly drawn, moved or Remapped.

Many of the command buttons will perform more than one Microstation function at a time, so it is important to give Microstation time to catch up. When Remapping levels from the standard State Levels to the ROWGIS Levels after compiling the base DEED file, the user will see the Remapped Levels disappear as they are Remapped. What is left still showing on-screen will not be needed for the ROWMS system and can be deleted, but it is the users responsibility to visually check all elements that are still showing on-screen for elements that are needed for the ROWGIS platform, but were not remapped, usually due to elements not being on the correct State Levels.

When drawing Parcel shapes, by default they are the same color as the parcel lines which makes it very difficult to determine which parcels have been drawn and which parcels have not, so there are tools provided to help with this problem.

When drawing Remnant shapes, by default they are not a 'filled' shape and very difficult to see or determine which parcels have Remnants to be labeled for ROWMS and which parcels do not, so there are tools provided to help with this problem.

Deed Drafting Program folder structure

S:\CADD\

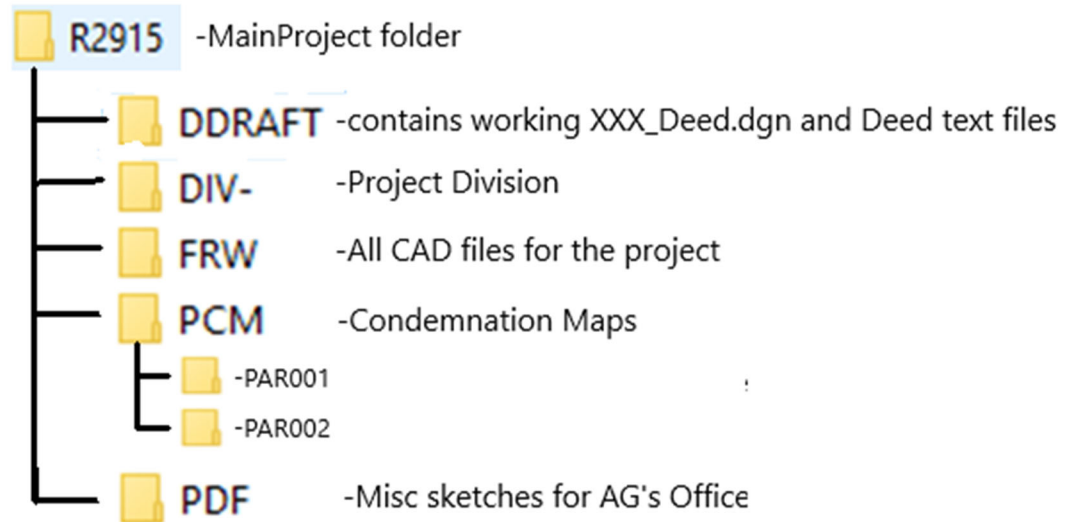


Figure 1 Deed Draft file structure

Required Microstation V8i SS4 Deed Draft System Variables

1. References: default Attachment Dir = MS_RFDIR
2. Ref-Attach: nestMode=none,nestDepth = 1,trueScale=1,attachMethod=world
3. MS_VBAUTOLOADPROJECTS = ROWTOOLS

Restart Microstation after changing system variables

Opening a Project in the Right-of-Way Workspace

When you open any Project using the ROW workspace, several things are automatically done for you to aid you in the Deed Drafting Process:

1. Area Fill is turned ON
2. Linestyles are set ON
3. Lineweights are turned OFF
4. Transparency is set ON
5. Highlighting is set to Cyan
6. All views are turned OFF
7. View 1 is Set Current
8. Active Model is set to DEFAULT
9. Axis Lock is turned OFF
10. Keypoint Snap set
11. View is set to show the entire Project

IMPORTANT DEED DRAFT ISSUES

And things to REMEMBER

1. Deed Draft will NOT accept Splines / Curves or Complex lines.
2. ALL ELEMENTS for Deed Draft must be either a LINE or ARC.
3. All intersections must connect / intersect for Deed Draft to create an Area.
4. Deed Draft will only work from the 'DEFAULT' model.
5. There should not be any 'Models' in the Base Deed file accept the Default and the Parcel models. All other model names should be deleted.
6. Owners Names may not exceed 50 characters.
7. Always restart Microstation after making system variable changes.
8. Parcel Model names can not be duplicated, use the revision date.
9. The user must import the Master ROWGIS.lib library before Remapping levels.
10. Deed Draft will only work from the 'DEFAULT' model.
11. Parcels that are numbered the same, but in different locations must have "-1", "-2" appended to the model name when creating the model.
12. Owners Names may not exceed 50 characters.
13. If a Parcel has been removed from the list of parcels being affected by the project, then you must delete the "Parcel Shape" from the DEED file, but the Model and the text file can remain for State records.
14. Remember the Deed files have been cleaned up for ROWGIS, so if you re-reference either a new DSN, SS, UTIL, Survey or ROW file, using just Microstation to do so, then you will have to Re-map the levels and Re-clean the Deed file before uploading the revised Deed to the ROWGIS server.
15. When revising a parcel, remember to check the "Revision Date" box so that the Parcel Model and the Text file will have the current date appended to them.
16. Any elements in the DGN file being replaced that are not on the correct level will not merge into the Deed file. You will have to merge in those elements separately using Microstation reference manager.
17. If the ROW TAK has changed on a Parcel, make sure (if) the Rem has been drawn that it is updated per the new ROW TAK.
18. Always download all the CAD files for a project initially, so that Condemnation maps can be produced.
19. If anyone has the CT file open while you are trying to over-write the CT file, microstation will not warn you and will finish as if all is ok, but the CT file will not be updated due to the file being open.
20. NEVER SAVE the CT or PCM Set file after making the CT or PCM pdfs.

Deed Draft drawing process:

1. Create the Base Deed File using the reference files or Revised reference files
2. Draw all Parcel Shapes
3. Draw all TAK areas
4. Process the Parcels
5. Create the CT file (CAD TAK pdf)
6. Cleaning the Deed file for ROWGIS
7. Upload the Deed file to ROWGIS server
8. Upload ROWGIS file to ROWMS (using ArcGIS)

ROW&GIS Dialog box notes:

When using the tools provided in the ROW&GIS and other toolboxes, many things may take place using only one button, so give Microstation time to catch up.

Many of the tools provided are for old V7 or earlier versions of Microstation which were developed to update older projects with the current ROWGIS requirements.

Creating the base xxx_Deed file

Always open a project using MSStart and selecting the Right-of-Way Workspace

Step 1.

The first step in developing deed descriptions and parcel maps is to set-up a project folder that will separate the files for this project from all others.

Go to the S:\CADD folder called "01-CADD_FOLDERS", open this folder and select all the subfolders and copy these to your clipboard. Then go Back to S:\CADD and create the project folder named by the TIP number for the project, ie- R5576. Or the WBS number if the TIP is unavailable. Once you have created/named the project folder, paste the subfolders from your clipboard into the project folder you just created. The folder structure should look like Figure 1 above.

Append the DIV- folder name with the Division number, ie DIV-5

Step 2.

The next step is to find the current MicroStation DGN files for the project and copy them into the FRW folder. All CAD files pertaining to this project should be stored in the FRW folder. The current project files will be located in one of several places, either the R drive, a Division drive (1-14) or the Preconstruction website under the division the project is located.

Always download all the CAD files for a project initially, so that Condemnation maps can be produced if needed in the future.

Step 3.

After copying the files to the FRW folder, locate the dsn file and right click on the file name and "open with MS Start" program using the Right-of-Way Workspace. Once Microstation loads the DSN file, perform a SAVE-AS into the Deed Draft folder using the naming convention (TIP#_deed.dgn). This creates the base file for which the other files will be referenced and merged into.

Step 4.

Opening the 2 main dialog boxes – open the Deeddraft program by selecting the Left icon and the ROW&GIS Tools dialog box by selecting the right icon, located in the ROW Tool Box.

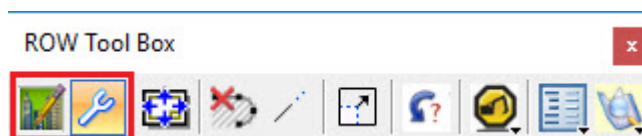


Figure 2 Deed Draft mdl application and Location & Survey ROW&GIS Tools Programs

Step 5.

Select Attach from the ROW&GIS dialog box (which will bring up the reference manage dialog box) and attach the following files from the FRW folder needed for Deed Draft, but DO NOT merge these reference files into the Deed file yet!

LS or PRL – Survey file
DRN – Drainage
UTL – Utilities
ALN – Alignment if not in the DSN file
SS – slope stake
ROW – Right of Way

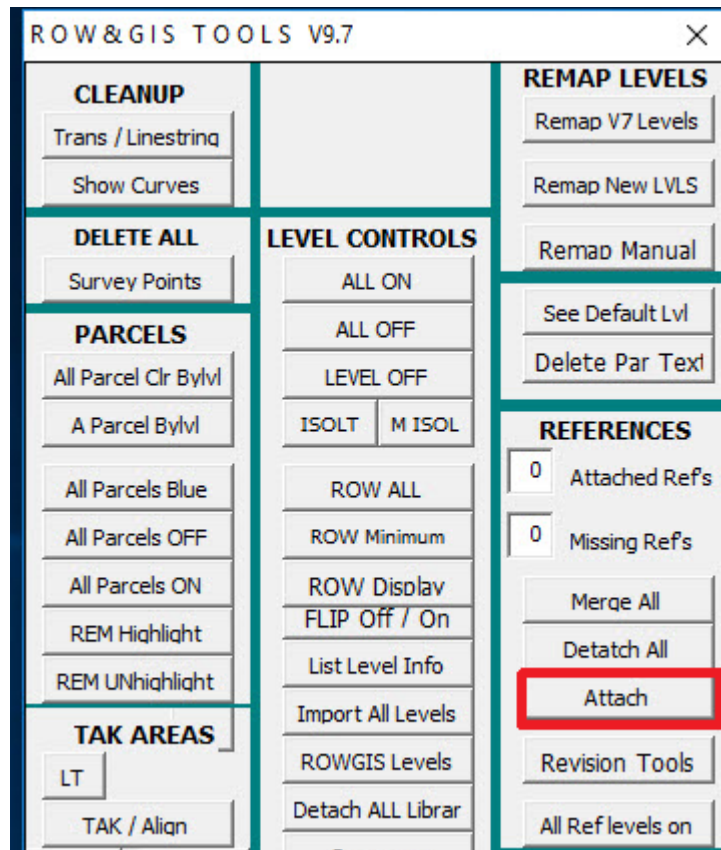


Figure 3 Attach

Step 6.

This next step is critically important before merging the reference files!

Now that all the needed reference files are attached, (but NOT merged) it is time to bring in the "MasterROWGIS" Level Library. Using the ROW&GIS Tool dialog box, select the "Remap New LVLS" button, which will automatically attach the MasterROWGIS library levels for you.

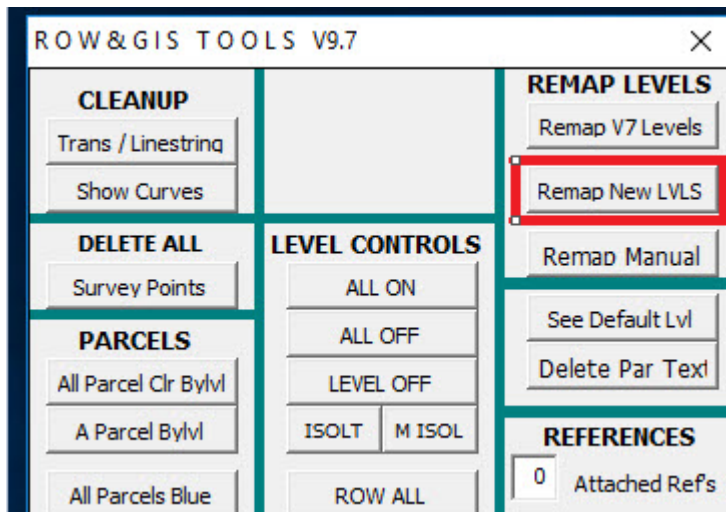


Figure 4 Remap New LVLS

By selecting “Remap New LVLS”, the ROWGIS Remapper dialogbox will appear As shown in step 7.

Step 7.

Next, select “MERGE ALL” in the ReMap New Levels dialog box, then from the “ROW&GIS Tools” dialog box select “ALL ON”



Figure 5 Merge ALL

This will automatically merge all the references and closes the reference dialog box.

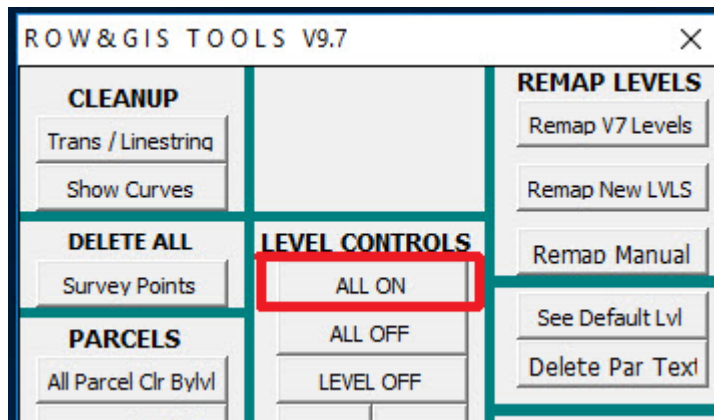


Figure 6 All On

This will make sure ALL elements are turned on for the Re-mapping process to work as designed.

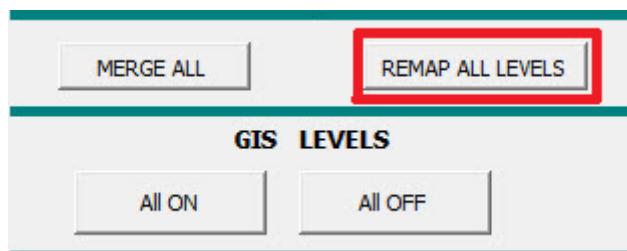


Figure 7 The Search field

This will Re-map all elements from Standard State Levels to the ROWGIS levels.

"It is important that the ROWGIS Library has been attached or the REMAP ALL LEVELS may not work properly due to missing Levels only found in the ROWGIS Level Library"

Step 8.

At this point, the user should verify all elements still displayed on-screen have been Re-mapped correctly and there are NO elements that need to be corrected / Re-mapped to the proper ROWGIS Levels. See Appendix A for a list of ROWGIS Levels and Appendix B for a list of Clean

Deed Draft Program

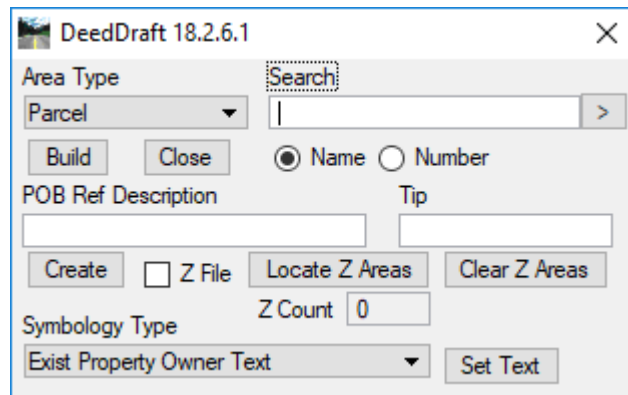


Figure 8 Deed Draft mdl application

The Deed Draft (**Figure 8**) program which is used to create the parcel models and deed descriptions from the xxx_DEED file.

Components of the Deed Draft Dialog Box

The following section will explain each of the Deed Draft dialog buttons and drop down list and why and when they should be used.

Search

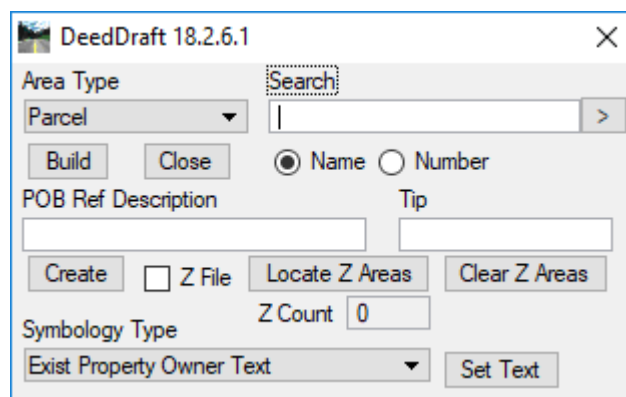


Figure 9 The Search field

The search field (**See Figure 7**) is used to locate a particular piece of property in the design file. It alleviates the problem of having to pan around the design file trying to find a property. It is also handy when a property owner has multiple pieces of property with the same parcel number. To initiate the SEARCH command, simply fill in the search data and click on the '>' button, this will find and zoom to matching search text. Using this search field, a parcel may be located by the owner name or parcel number.

To find parcels by owner name, key the full or partial name of the property owner in the field provided, then click the '>' button. If the user wishes to find the parcel by property number, key the parcel number and click the '>' button.

No matter whether searching by owner or number, once the '>' button has been clicked the program will begin searching the design file for a matching name or number. When a match is found the program will window an area around the name or number and pause execution. If this is not the correct parcel the user may press the '>' button again and the program will continue to search the file starting at the point it was paused. The user may continue to press the '>' button until the correct parcel is located or until the entire design file has been searched. If the owner or number is not found a message is displayed.

AREA TYPE

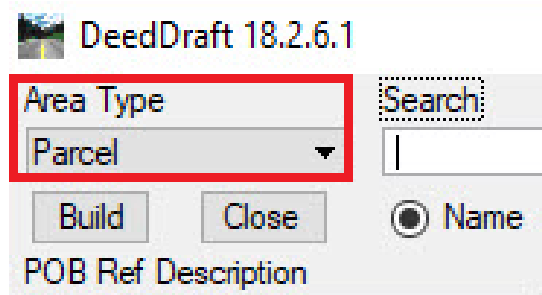


Figure 10 Area Type

The AREA TYPE drop-down is used to set the type of boundary that is being identified. As the user is going through the process of identifying parcels, takings, and easements the item displayed on the Area Type button must reflect the type area being defined.

BUILD

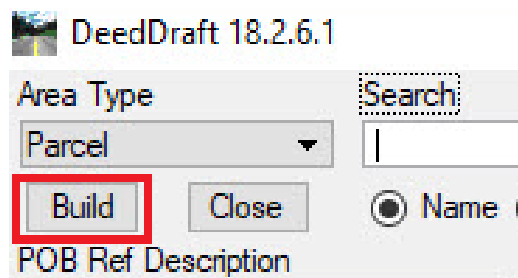


Figure 11 Build button

The Build button will allow the user to build the complex shapes needed to create the deed descriptions based on the Area Type selected from the drop-down selection of the Area Type being built.

Close button

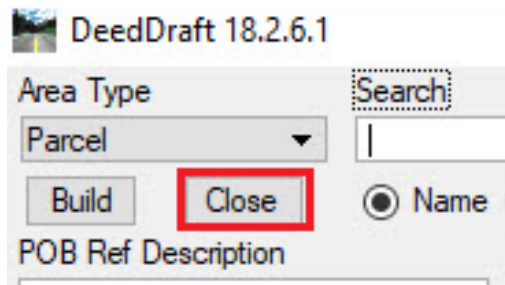


Figure 12 Close button

Once an area is completely identified the user should select the ‘Close’ button to close the area. The following details each item in the option list and what type boundaries are to be defined when each item is active.

PARCELS - The PARCELS item must be displayed in the area type data field when the user is defining Property boundaries. A property boundary includes property lines, existing easement or right-of-way lines, centerline of existing roads, creeks, and railroads, existing edges of pavement lines, and any state, county, or town limits. The PARCELS item must be used to identify each parcel. The parcel must also be closed (i.e. the beginning point must be same as ending point). If a parcel is not closed, the program will generate a “Forced Closure” line which closes the property boundary. Only one (1) forced closure line is allowed. This line will be ignored in all deed descriptions and parcel maps and any areas lying along the forced closure line will not be calculated. This closing line will always be a brown color.

LEFT ROW - The Left Right-Of-Way item is used when the shape or boundary of the right-of-way on the left side of the proposed roadway is being established. When this item is active only those lines with symbology for right-of-way lines or shapes are acceptable. Once the line or shape for the left right-of-way is completely identified the program will outline the shape with a red line and fill the area in green.

RIGHT ROW - The Right Right-Of-Way item is used when the shape or boundary of the right-of-way on the right side of the proposed roadway is being established. When this item is active only those lines with symbology for right-of-way lines or shapes are acceptable. Once the lines or shape for the left right-of-way is completely identified the program will outline the shape with a red line and fill the area in green.

All other TAK types are preformed as described above either Right or Left of CL Alignment used for the POB

LEFT OTHER – RIGHT OTHER

The OTHER TAK must be used when there are no other appropriate TAK types.

Once you have selected all the lines that close an area to be defined, select “CLOSE” button and the area will be filled with the appropriate TAK type.



With these commands, you must tag all lines to complete the shape. When finished, tag on 'CLOSE' to complete and draw the shape. *If you get a message that says "A forced closure can only be done on parcels", then your boundaries do not connect or your symbology is wrong.

If when tagging your boundary lines, you do not keep a continuously highlighted line, then the lines of the boundary do not connect together. You must make sure all the lines intersect. Only make changes to the deed file and not to any of the reference files. Only the designing unit should make changes to the reference files.

Be sure if you alter or add any lines to the parcel, they are included in the boundary selection or else you will have errors in the deed description.

If at any time, while you are selecting boundary lines, you make an error and need to start over, press the 'CLEAR' button to clear away the selections before you continue again. This will only clear away those selections made since the last time the 'CLOSE' button was tagged.

Once you have defined all the areas for the Parcel, located the POB you wish to use and have filled in the POB Ref Description, select the CREATE button

Create button

The P.O.B. is used to establish and define the Point of Beginning reference point to be used in the Deed Description. This point must be located on the parcel map before the deed description or the parcel map can be generated. The user must enter a Microstation data point to the exact location of the POB. (All POB's must be a station on the

alignment that is nearest the parcel, and must appear on the plan sheet. To maintain uniformity, it is suggested that the first even station encountered on the alignment nearest the parcel, should be used. Once you have filled in the POB field the user may click on the 'CREATE' button below the POB data field to create the Parcel Model.

Microstation will FIRST look for a data point to the exact location of the POB. Once the POB has been selected, click on the Parcel Boundary Shape of the Parcel to be built. Once the Parcel has been selected the Parcel Information Dialog box will appear (see below)

Parcel Information

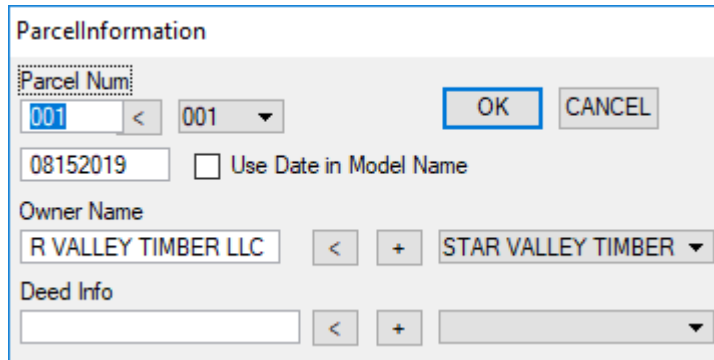
The image shows a software dialog box titled "ParcelInformation". It contains several input fields and buttons. At the top, there's a "Parcel Num" section with a text box containing "001", a "<" button, a dropdown menu showing "001", and "OK" and "CANCEL" buttons. Below this is a date field with "08152019" and a checkbox labeled "Use Date in Model Name". The "Owner Name" section has a text box with "R VALLEY TIMBER LLC", "<" and "+" buttons, and a dropdown menu showing "STAR VALLEY TIMBER". The "Deed Info" section has a text box, "<" and "+" buttons, and a dropdown menu.

Figure 13 *Parcel Information Dialog*

The Parcel Information fields should self-populate correctly (if all the information is located with-in the Parcel Boundary) and the user should verify that all the parcel information is correct. You can see in the figure above that the D.B. information is missing, so you can either manually fill in this information, or delete the Parcel model, return to the “Default View” and correct the DB information, either because it is on the wrong level or it is not located with-in the Parcel boundary.

Parcel Information notes: When either the Owners name or the Deed Book text in the Deed file are separate lines of text, the complete name or DB will not appear and the user must fix these. In the example (Figure 14) the Complete owners name is JOHN TUOHEY AND WIFE, PAMELA TUOHEY

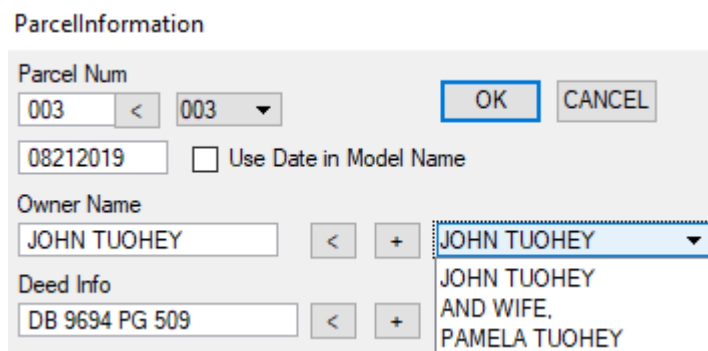
This image shows the same "ParcelInformation" dialog box as Figure 13, but with the dropdown menu for the "Owner Name" section open. The text box on the left contains "JOHN TUOHEY". The dropdown menu on the right shows three options: "JOHN TUOHEY", "JOHN TUOHEY AND WIFE, PAMELA TUOHEY", and "PAMELA TUOHEY". The "Deed Info" section has a text box containing "DB 9694 PG 509".

Figure 14 *Owners Name / Deed Book*

The left field data is what Deed Draft will use for the Owner and DB information when creating the Parcel model. You can use the “<” to replace the entire left side data field “*Owner Name*” with the user selected data from the right data field and the “+” will append the left data field with the user selected data from the pull-down menu in the right side data field. Selecting “AND WIFE,” and then “+” will append JOHN TOUHEY to JOHN TOUHEY AND WIFE, select PAMELA TOUHEY then “+” to add her name also. The same process can be done with the Deed Book information.



In the left data field, you will always see the 'last part' of the Owner name, so if it is not complete, look in the right data field drop down and see if the remaining part of the Owner name in the right data field. Select the remaining part of the owner name from the right dropdown and use the "+" to complete the full name in the left data field.

!!!! Deedraft will fail if the owners name is over 50 characters

Once you have verified all the Parcel information is correct, select "OK" in the Parcel Information dialog box.

Now you will automatically be placed into the Model for the parcel you just built. Verify the Parcel map is correct. The model should appear complete with the POB Stationed on the map. To return back to the Default model, see below

Return to the DEFAULT model

Press the  to return to the default model from the current parcel model



Figure 15 "DEFAULT VIEW"

THE PARCEL MODEL IS COMPLETE. You have just created your first model. There is a text file generated for each model in the DDRAFT folder named exactly as the Parcel model name from which it is built. Repeat the Parcel model building steps for the next parcel to be built until all Parcel models have been created.

!!!! REMEMBER If a Parcel has been removed from the list of parcels being affected by the project, then you must delete the "Parcel Shape" from the DEED file, but the Model and the text file can remain for State records.

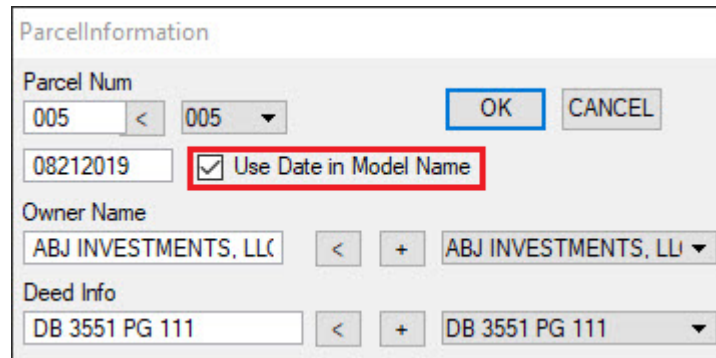
Complete all parcels (revisions) as described above and build or rebuild the CT file. Make sure you verify the date of the CT file changes to the current date.

!!!! REMEMBER If anyone has the CT file open while you are trying to over-write the CT file, mircostation will not warn you and will finish as if all is ok, but the CT file will not be updated due to the file being open.

Making Deed Draft Project Revisions

! Remember the Deed files have been cleaned up for ROWGIS, so if you re-reference either a new DSN, SS, UTIL, Survey or ROW file, using just microstation to do so, then you will have to Re-map the levels and Re-clean the Deed file before uploading the revised Deed to the ROWGIS server.

!!! When revising a parcel, remember to check the “Revision Date” box so that the Parcel Model and the Text file will have the current date appended to them.



ParcelInformation

Parcel Num
005 < 005 OK CANCEL

08212019 ☒ Use Date in Model Name

Owner Name
ABJ INVESTMENTS, LLC < + ABJ INVESTMENTS, LLC

Deed Info
DB 3551 PG 111 < + DB 3551 PG 111

Figure 16 “REVISION DATE”

Step 1.

Identify the type of Revision needed:

Survey elements - Owners name change, Parcel lines change, etc.

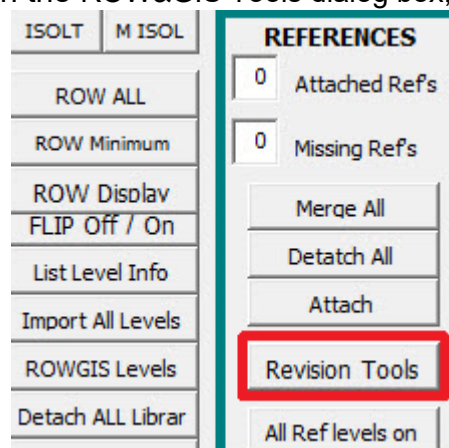
ROW elements – ROW, Easements, Callout markers change, etc.

Step 2.

Download and over-rite the needed CAD file in the FRW folder with the new DGN file

Step 3.

Using the tools provided in the ROW&GIS Tools dialog box, select “Revision Tools”



ISOLT M ISOL

ROW ALL

ROW Minimum

ROW Display

FLIP Off / On

List Level Info

Import All Levels

ROWGIS Levels

Detach ALL Librar

REFERENCES

0 Attached Ref's

0 Missing Ref's

Merge All

Detatch All

Attach

Revision Tools

All Ref levels on

Figure 17 “REVISION TOOLS”

Step 4.

Note: Any elements in the DGN file being replaced that are not on the correct level will not merge into the Deed file. You will have to merge in those elements separately using microstation reference manager.

After selecting Revision Tools (Fig 17) the following dialog box will appear (Fig 18). Check the appropriate button next to the type revision you are needing.

As the buttons are labeled –

ROW LINEWORK - will only replace the ‘TAGS and TAK LINES’ from the ROW file only

PARCEL #s - will only replace the Parcel Numbers from the ROW file only

(select Ex for Deed files using LS parcel numbers)

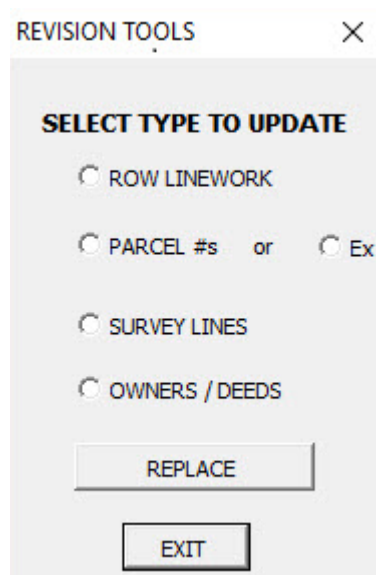


Figure 18 “REVISION TOOLS DIALOG BOX”

Note:

When you select “REPLACE”, the corresponding elements for which type of Update you have selected will be automatically deleted in the current Deed file.

Step 5.

A **Reference Updater** dialog box will appear with the ‘standard naming convention’ of the file name by the type of Reference Update you select. If you are working on project B5703, then the name field will automatically populate with “B5703_RDY_ROW” (the “.DGN” file extension is not needed). If the reference file is found in the current project FRW folder, then the appropriate elements will be automatically merged into the current Deed file replacing the elements that were deleted. If you get an error message stating the file could not be found, then the file name is incorrect. The file name field can be changed simply by renaming in the TYPE FILE NAME BELOW box.

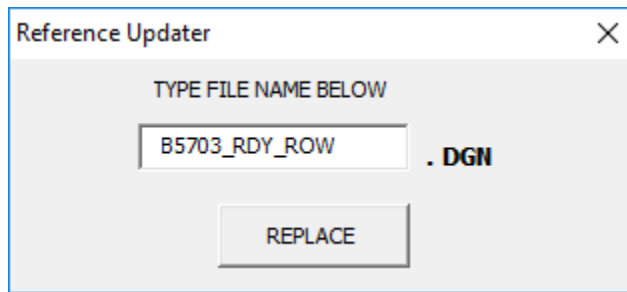


Figure 19 "REFERENCE UPDATER DIALOX BOX"

!!! When revising a parcel, remember to check the "Revision Date" box so that the Parcel Model and the Text file will have the current date appended to them.

‘Z’ (2nd) and ‘Y’ (3rd) TAK Claims

These are processed basically the same as any parcel except for appending the parcel number with “Z” or “Y” and selecting only the added TAK after drawing them.

The screenshot shows a software interface for processing TAK claims. At the top, there are two input fields: 'POB Ref Description' and 'Tip'. Below these are several controls: a 'Create' button, a checkbox labeled 'Z File' which is checked with a red checkmark, a 'Locate Z Areas' button, and a 'Clear Z Areas' button. Below the 'Z File' checkbox is a 'Symbology Type' field. At the bottom right, there is a 'Z Count' box displaying the number '0'. A red rectangular box highlights the 'Locate Z Areas', 'Clear Z Areas', and 'Z Count' elements.

Figure 20 “Z Claims”

Check the ‘Z’ claim box and then select “Locate Z Areas”. This will prompt the user to select the TAK area(s) for the ‘Z’ claim. **Note: each selected TAK area needs to be selected twice to register in the count box.** Each area selected will show in the count box, so keep an eye on the count as you select each area, making sure each one is counted in the count box. The parcel model produced should only show the areas you selected. **Note: the user must select “Clear Z areas” BEFORE you process a different parcel Z claim.** A ‘Y’ claim is a 3rd claim on the same parcel and is done the same as described, but the parcel number is appended with ‘Y’ instead of ‘Z’.

Remember to Uncheck the “Z file box” when you are done processing Z claims or the next parcel model you process will not show anything!

Creating the CT pdf

After Creating all the parcel models, the next step is to create the CT (CAD TAK) file. This is a PDF of all the parcel maps (original TAK's, all revisions and Z claims with the corresponding point charts in 11x17 format.

!!! NEVER SAVE the CT or PCM Print Set when exiting Print Organizer

- Step 1. From the Microstation *FILE* dropdown menu, select **Print Organizer**, This will bring up the Print Organizer dialog box.
- Step 2. From the *Print Organizer* dropdown menu, select *File – OPEN*, The **Open Print Set File** dialog box will appear. From here double click On *CT_.pset* to load the CT SET file.
- Step 3. Select **ADD FILES TO SET** (figure 21 below)

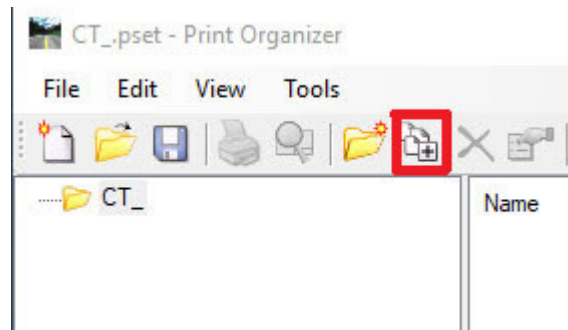


Figure 21 "Print Organizer Dialog ADD FILES"

The Create Print Definitions dialog box will appear where you will add the DEED file to create the list of models. (figure 22 below)

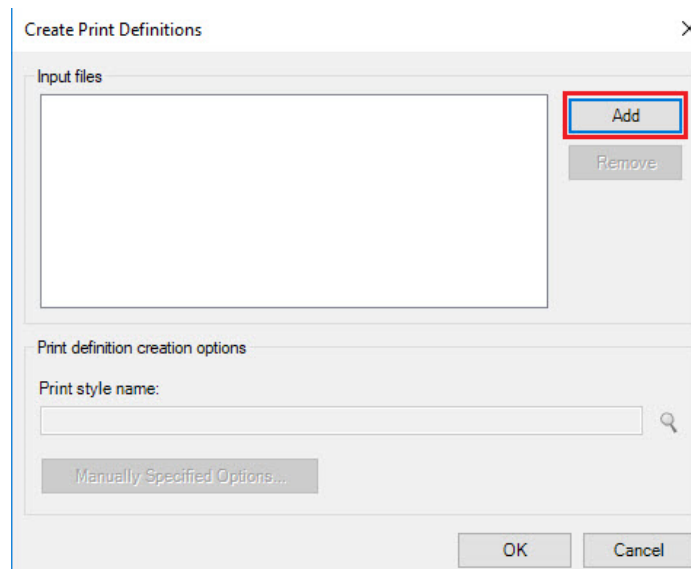


Figure 22 Create Print Definitions Dialog ADD"

Step 4. Double click on the DEED file name you are working on which will put it in the list of Input Files in the *Create Print Definitions* dialog box (Figure 22 above)

Step 5. Next, select the magnifier to the right of Print Style Name (Figure 23 below)

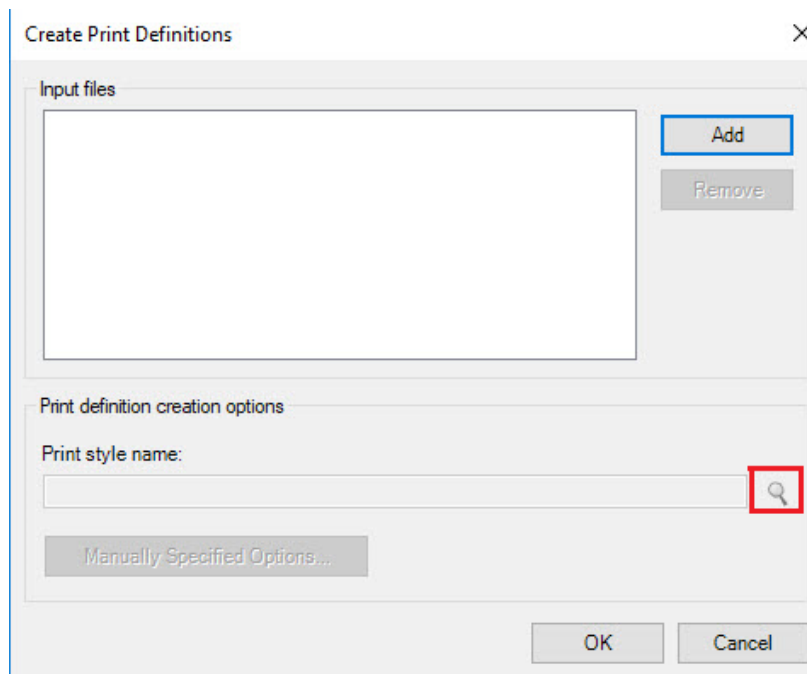


Figure 23 “Print Style Name”

Step 6. Double Click either TAK English or TAK Metric (Figure 24 below)

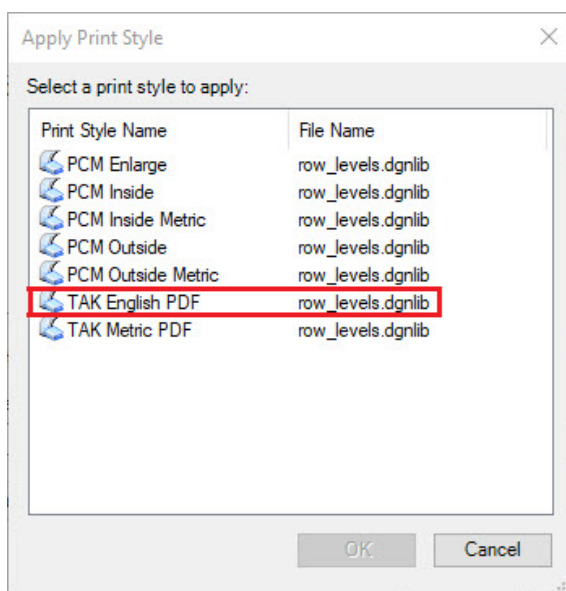


Figure 24 “Print Style Name”

Step 7. Then Select OK in the Create Print Definitions dialog box. This will load all the models into the Print Organizer for creating the CT file.

Step 8. Next, select the print icon (Figure 25 below)

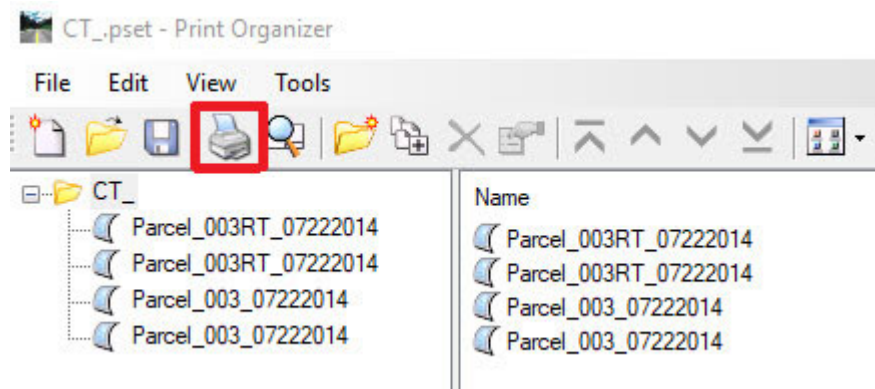


Figure 25 "Print"

Naming the CT file

Step 9. In the *Print* dialog box (Figure 26 below) type in the TIP or project folder name between the "CT_" and the ".pdf".

The example below would be *CT_17BP-2-R-55.pdf*

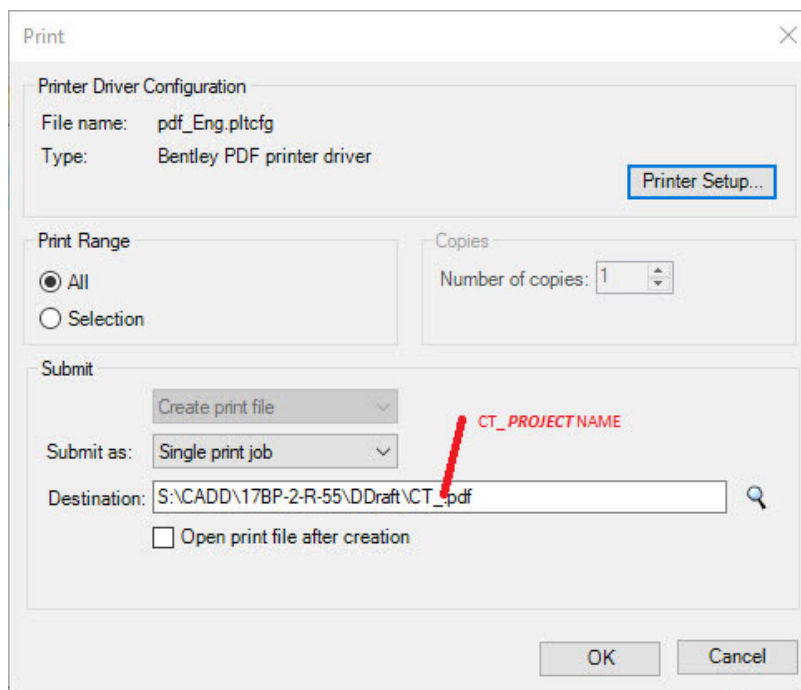


Figure 26 "CT file naming"

Then select *OK* to build the CT file. You're all done, *verify* the CT file has changed to the current Date / Time in the project folder using window Explorer.

Condemnation Maps

When creating Condemnation (C-Maps), it is best to open the plan sheet(s) from the FRW folder to make sure all revisions are shown, because the references are still active in these files. If you make a copy of a C-map that has already been created, then you may not have the current linework showing as the references are no longer active as they are in the FRW folder.

!!! NEVER SAVE the CT or PCM Print Set when exiting Print Organizer

Step 1. Open the plan sheet from the FRW folder for the parcel C-map to be created. From the Microstation *FILE* dropdown menu, select **Save As**

Step 2. Important – BEFORE you click SAVE, select *Options* in the SAVE AS dialog box. (Figure 27 below)

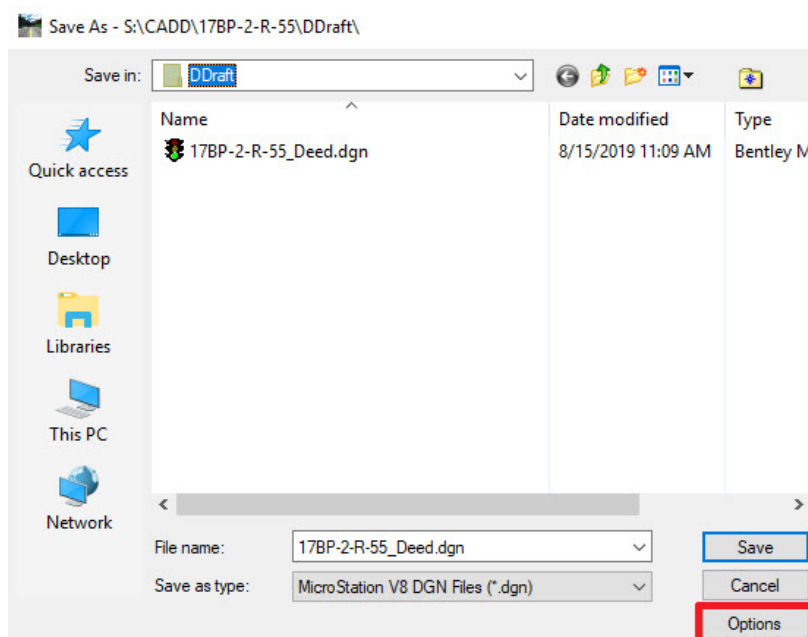


Figure 27 “Save As Options”

Step 3. Change all of the following parameters marked by the arrows below

- A. Self Attachments from *Retain* to *Merge*
- B. External Attachments from *Retain* to *Merge*
- C. Check all 4 boxes as below (Convert..Allow..Unnest..Merge...)

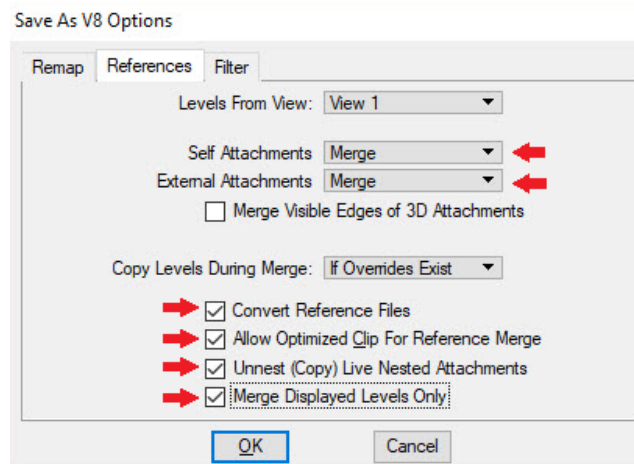


Figure 28 “Save As Options”

Step 4. Select *OK*

Step 5. Create the Parcel folder by using the “*up one folder*” icon in the Save as dialog box and selecting the PCM folder. Create a new folder inside the PCM folder named by the parcel number you are working on and then select *Save*. The file will then merge all references into the current PCM file in the folder you just created for the Parcel.

Step 6. Next shade in all the TAK areas for the parcel just as you would using the Deed Draft program with the EXCEPTION for the TCE areas. Locate any TCE areas that are showing any SS (slope staking lines) within the TCE area. (SLOPE AREA) shown below (figure 29 below)

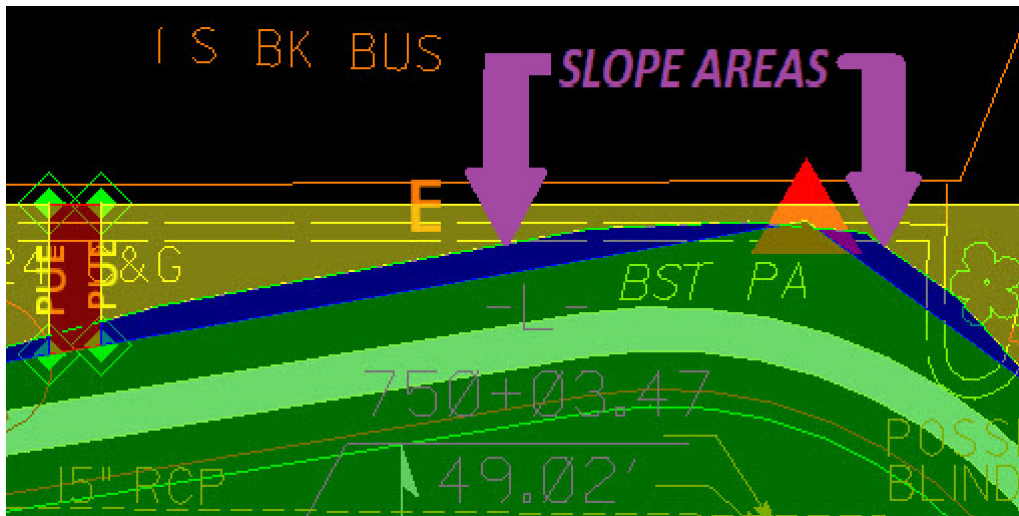


Figure 29 "Slope Area"

1. Only shade in the "Blue Slope Area" using the Deed Draft "TSE" area type *between* the ROW and the SS lines within any TCE area.
2. TCE areas that are outside the Slope Stake lines are shaded as normal TCE color.
3. Slope Stake lines located inside ANY other TAK area are *NOT* shaded blue, only Slope areas inside a TCE area are to be BLUE
4. Remove ALL Seals, notes or signatures from within the plan sheet box.

PROJECT REFERENCE NO.	SHEET NO.
U-3301	8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PROJECT REFERENCE NO.	SHEET NO.
U-3301	8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

5. Place the Legend Box on the plan sheet and fill out all the information for the Condemnation Map. (Figure 31 below)



Figure 30 "Place Legend Box"

The "Legend *Trim* box" will appear as an empty box attached to your

cursor. You can use the *X scale/ Y Scale* in the Place Active Cell dialog box to change the size of the Legend box. Pick an “empty spot” on the plan sheet or somewhere “not too busy” and place the legend trim box onto the plan sheet. Microstation will automatically trim / delete elements within the Legend box trim box so the Legend box will have a nice empty spot on the plan sheet.

6. Fill in the Project Number / WBS / County / Parcel # and Owner name in the Legend box.

Now you are ready to print your C-Map.

Step 7. From the *Print Organizer* dropdown menu, select *File – OPEN*, The ***Open Print Set File*** dialog box will appear. From here double click On *PCM_.pset* to load the PCM SET file.

Step 8. Select *ADD FILES TO SET* (figure 31 below)

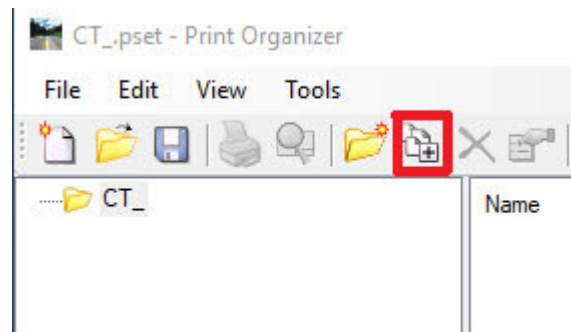


Figure 31 “Print Organizer Dialog ADD FILES”

The Create Print Definitions dialog box will appear where you will add the PCM file to create the list of models. (figure 32 below) Select “ADD”

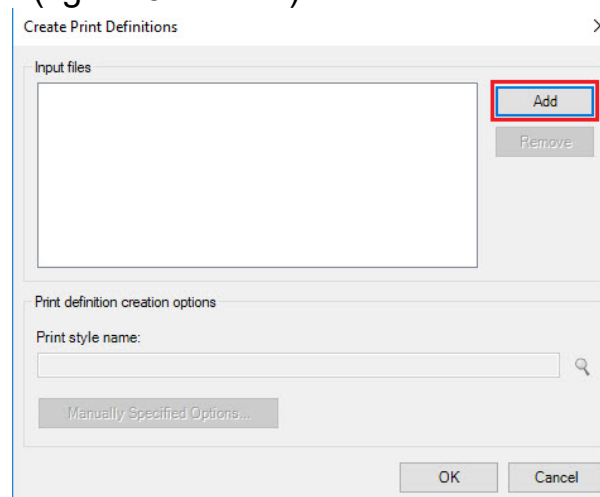


Figure 32 Create Print Definitions Dialog ADD”

Step 9. Double click on the PCM file name you are working on which will put it in the list of Input Files in the *Create Print Definitions* dialog box (Figure 22 above)

Step 10. Next, select the magnifier to the right of Print Style Name (Figure 33 below)

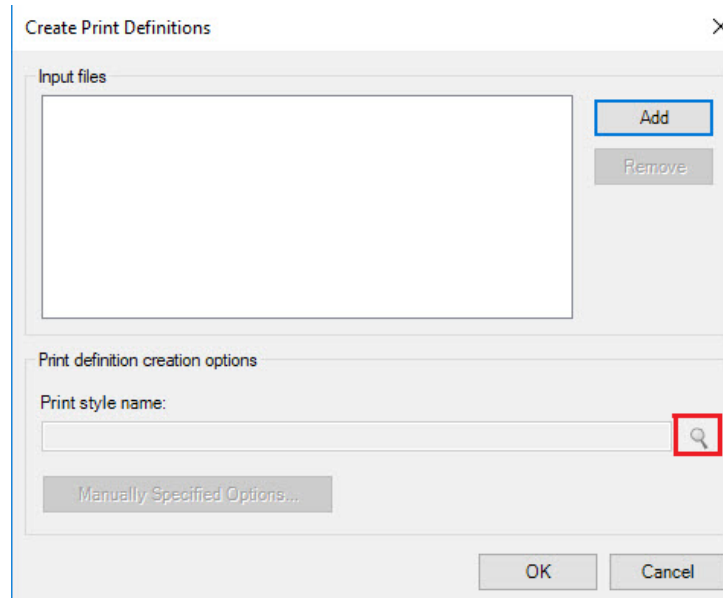


Figure 33 “Print Style Name”

Step 11. Double Click either PCM Inside or if you are doing an enlargement area select PCM Enlarge (Figure 34 below)

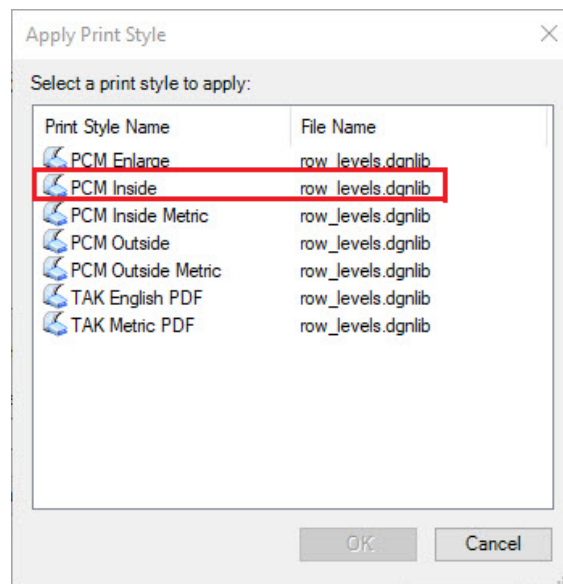


Figure 34 “Print Style”

PCM Enlarge Area - You must first insert the “Enlarged PCM Border cell” from the same pull-down menu as the Legend Box before you can select and print a PCM Enlargement area.

Step 12. Then Select OK in the Create Print Definitions dialog box. This will load the plan sheet into the Print Organizer for creating the PCM or PCM Enlargement PDF. Next select the “Print” icon. See Figure 35

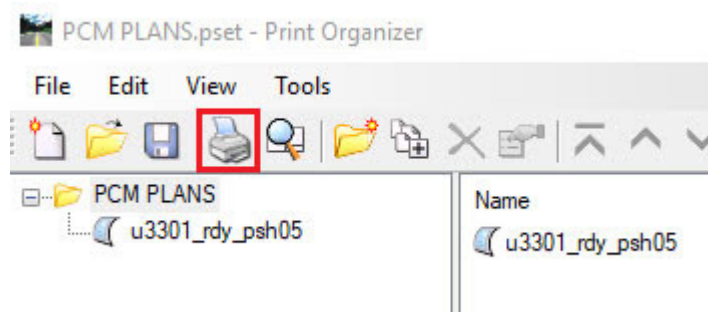


Figure 35 “Print”

Step 13. Then Select Printer Setup in the Print Driver Configuration dialog box.

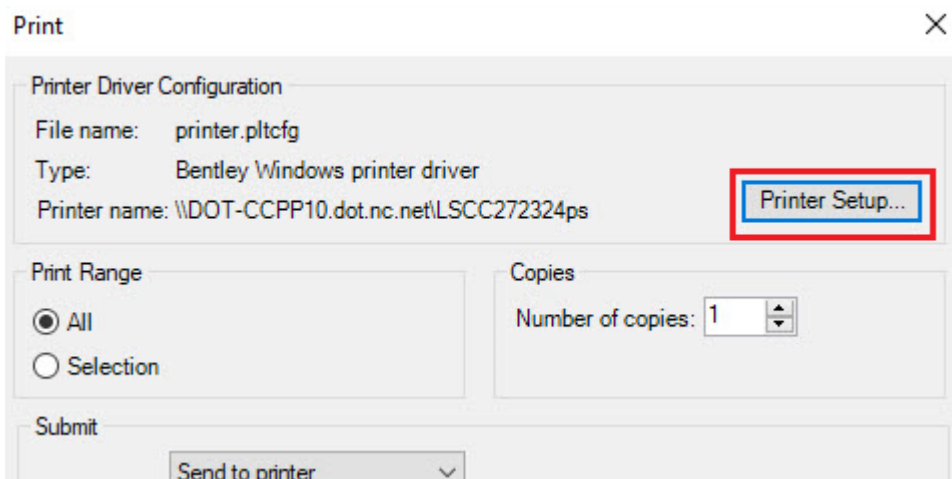


Figure 36 “Print Driver Configuration”

Step 14. Then Select the magnifier in the Printer Setup dialog box.
See figure 38 below

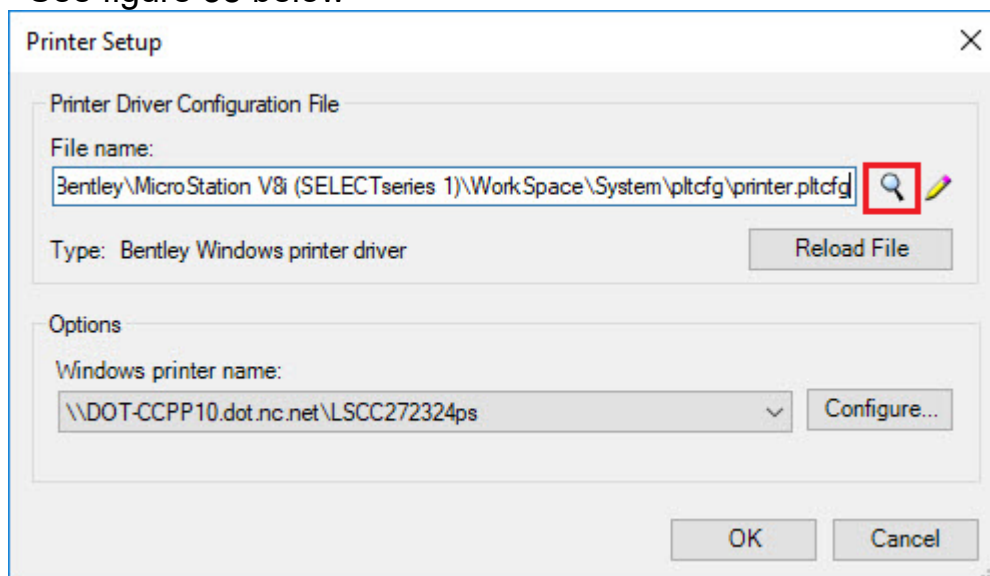


Figure 38 "Print Setup"

Step 15. Then Select PCM_PDF in the plot configuration dialog box.
See figure 39 below

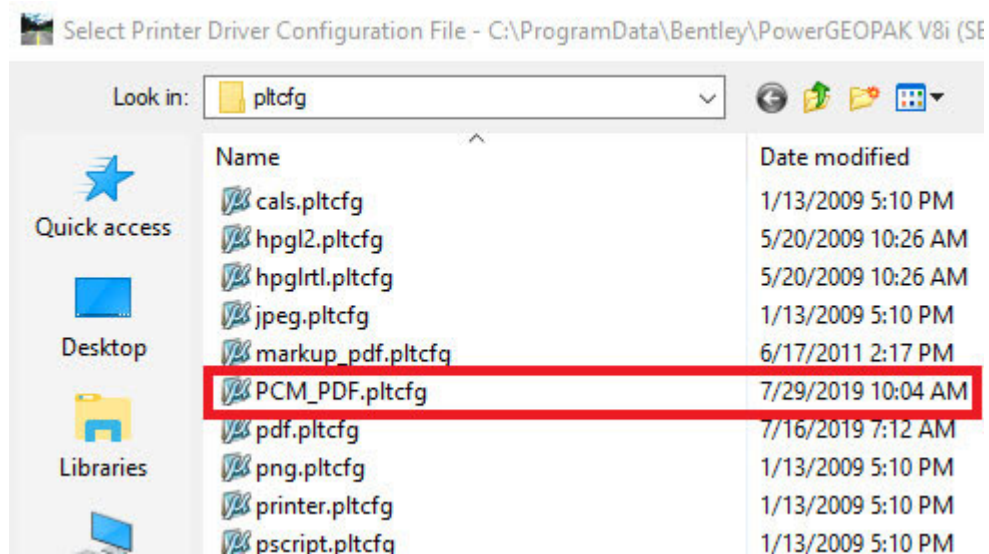
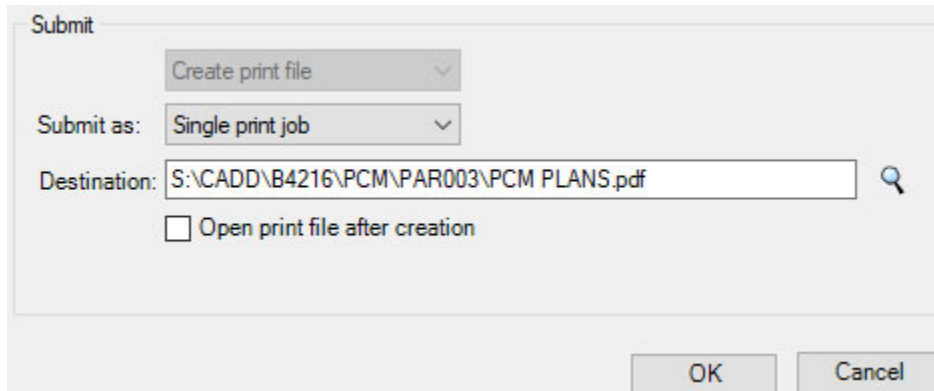


Figure 39 "Print Driver Configuration"

Step 16. Select PCM_PDF in the plot configuration dialog box then select "Open". Then Select OK

Step 17. Change the “*PCM PLANS*”.pdf name in the Destination data field to *PARxxx* (xxx being the parcel number) as the pdf file name before you press OK. See figure 40 below



Submit

Create print file

Submit as: Single print job

Destination: S:\CADD\B4216\PCM\PAR003\PCM PLANS.pdf

☐ Open print file after creation

OK Cancel

Figure 40 “Submit”

Step 18. Email the *PARxxx.pdf* you just created to Teresa Bailey for review

ROWGIS Project Cleanup

- All elements not located closely within the project limits “Start – End Sta” are deleted
- All plan sheet borders deleted
- All adjoining Owner names / D.B.’s NOT located in a Parcel boundary are to be deleted
- No Text elements on Property Owner or Parcel Number Levels that are NOT pertinent
- All Duplicate Elements are to be deleted (texts, lines, parcel shapes, TAK areas, etc.)
- Text, Textnodes and zero length lines are all to be deleted
- All Property Owners names and DB’s are located inside to appropriate Parcel boundary
- All GIS forced closure lines (if applicable) are drawn
- All elements like Details, Utility Owners, Enlargements, DENR notes are deleted
- No copied/moved parcel shapes or CL elements accept as the project is laid out
- No Reference files attached
- No image files attached
- No Parcel information Owner name charts
- No blank parcel shapes (meaning no TAK’s on Parcel)
- Delete all Owner Street Address’, Tract #’s or PIN #’s if needed
- No Parcel acreage text or TAKing text
- No plan sheet borders, prelim stickers, Seals, elevations, profiles or details
- No lost L or Y lines
- No enlargement details showing L or Y line or other information
- No incorrectly drawn parcels
- All Proposed TAK areas line work and Tags are present
- No parcel indexes
- Correct any incorrectly drawn parcels
- All Parcels have all TAK areas colored
- All ROW linework and Tag’s on correct levels
- All parcels with TAK’s have parcel boundaries
- All Remnant areas labeled A, B, C etc on Remnant Text level
- All models are deleted

ROWGIS LEVELS

Exist Deed Draft Remnant Left
Exist Deed Draft Remnant Right
Exist Deed Draft Remnant Text
Exist Deed Draft Temporary Slope Easement Left
Exist Deed Draft Temporary Slope Easement Right
Exist Deed Draft Danger Tree Easement Left
Exist Deed Draft Danger Tree Easement Right
Exist Deed Draft Property Line
Exist Deed Draft Drainage Utility Easement Left
Exist Deed Draft Drainage Utility Easement Right
Exist Deed Draft Aerial Utility Easement Left
Exist Deed Draft Aerial Utility Easement Right
Exist Deed Draft Other Left
Exist Deed Draft Other Right
Exist Deed Draft Permanent Utility Easement Left
Exist Deed Draft Permanent Utility Easement Right
Exist Deed Draft Right of Way Left
Exist Deed Draft Right of Way Right
Exist Deed Draft Permanent Conservation Easement Left
Exist Deed Draft Permanent Conservation Easement Right
Exist Deed Draft Temporary Utility Easement Left
Exist Deed Draft Temporary Utility Easement Right
Exist Deed Draft Permanent Easement Left
Exist Deed Draft Permanent Easement Right
Exist Deed Draft Permanent Drainage Easement Left
Exist Deed Draft Permanent Drainage Easement Right
Exist Deed Draft Temporary Construction Easement Left
Exist Deed Draft Temporary Construction Easement Right
Exist Deed Draft Forced Closure
Exist Deed Draft Forced Closure GIS
Exist Deed Draft Temporary Drainage Easement Left
Exist Deed Draft Temporary Drainage Easement Right
Exist Deed Draft Permanent Construction Easement Left
Exist Deed Draft Permanent Construction Easement Right
Exist Building
Exist Building Text
Exist Contamination Known - Area
Exist Fence Barbed Wire
Exist Fence Chain Link
Exist Fence Woven Wire

Exist Guardrail
Exist Guardrail CELL
Exist Guardrail Text
Exist Horizontal Alignment
Exist Other Cultural
Exist Other Cultural Text
Exist Property Corner CELL
Exist Property Corner Leader
Exist Property Corner Text
Exist Property Deed Book Text
Exist Property Iron Pin CELL
Exist Property Iron Pin Leader
Exist Property Iron Pin Text
Exist Property Line
Exist Property Line Leader
Exist Property Line Text
Exist Property Monument CELL
Exist Property Monument Leader
Exist Property Monument Text
Exist Property PL Symbol CELL
Exist Property Same Owner Line CELL
Exist Property Tie Line
Exist Property Tie Line Leader
Exist Property Tie Line Text
Exist Railroads
Exist Railroads Text
Exist Right of Way Control of Access CA Symbol CELL
Exist Right of Way Control of Access Line
Exist Right of Way Control of Access Line Leader
Exist Right of Way Control of Access Line Text
Exist Right of Way Easement Line
Exist Right of Way Easement Line Leader
Exist Right of Way Easement Line Text
Exist Right of Way Line
Exist Right of Way Line Leader
Exist Right of Way Line Text
Exist Right of Way Monument CELL
Exist Right of Way Monument Leader
Exist Right of Way Monument Text
Exist Right of Way Symbol CELL
Exist Right of Way Width CELL
Exist Roads

Exist Roads Text
Exist Utilities Storm Structure
Exist Utilities Storm Pipe Line
Exist Utilities Storm Text
Exist Utilities Gas Line
Exist Utilities Gas Structure
Exist Utilities Gas Text
Exist Utilities Other Located Object
Exist Utilities Other Located Object Text
Exist Utilities Power Line
Exist Utilities Power Structure
Exist Utilities Power Text
Exist Utilities Sewer Line
Exist Utilities Sewer Line FM
Exist Utilities Sewer Structure
Exist Utilities Sewer Text
Exist Utilities Telephone Line
Exist Utilities Telephone Structure
Exist Utilities Telephone Text
Exist Utilities TV Line
Exist Utilities TV Structure
Exist Utilities TV Text
Exist Utilities Water Line
Exist Utilities Water Structure
Exist Utilities Water Text
Prop Roads
Prop Roads Text
Prop DSN Text
Prop Dimension
Prop Dimension Text
Prop Easement Aerial Utility
Prop Easement Aerial Utility Station Offsets
Prop Easement Conservation
Prop Easement Conservation Station Offsets
Prop Easement Construction
Prop Easement Construction Station Offsets
Prop Easement Danger Tree Area
Prop Easement Danger Tree Area Text
Prop Easement Permanent Drainage
Prop Easement Permanent Drainage Station Offsets
Prop Easement Permanent Drainage Utility
Prop Easement Permanent Drainage Utility Station Offsets
Prop Easement Permanent Utility

Prop Easement Permanent Utility Station Offsets
Prop Easement Temporary Drainage
Prop Easement Temporary Drainage Station Offsets
Prop Easement Temporary Utility
Prop Easement Temporary Utility Station Offsets
Prop Fence Barbed Wire
Prop Fence Chain Link
Prop Fence Woven Wire
Prop Utilities Gas
Prop Utilities Gas Structure
Prop Utilities Gas Text
Prop Guardrail
Prop Guardrail CELL
Prop Guardrail Text
Prop Horizontal Alignment
Prop Lane Lines
Prop Lane Line Mini Skip
Prop Parcel Number CELL
Prop Parcel Number Text
Prop Parcel Owner Text
Prop CA Symbol CELL
Prop Roadway Bridge
Prop ROW CA Lines
Prop ROW English Dual Dimension Text
Prop ROW Marker CELL
Prop ROW Mitigation Shape
Prop ROW Permanent Easement CELL
Prop ROW RW CA Lines
Prop ROW RW Lines
Prop ROW Station Offsets
Prop ROW Symbol CELL
Prop ROW Text
Prop Utilities Power Line
Prop Utilities Power Structure
Prop Utilities Power Text
Prop Utilities Sewer Line
Prop Utilities SewerFM
Prop Utilities Sewer Structure
Prop Utilities Sewer Text
Prop Utilities Water Line
Prop Utilities Water Structure
Prop Utilities Water Text

Prop Structure
Prop Utilities Storm Pipe Line
Prop Utilities Storm Structure
Prop Utilities Storm Text
Prop SS Cut Line
Prop SS Cut Text
Prop SS Fill Line
Prop SS Fill Text
Prop SS Transition Line