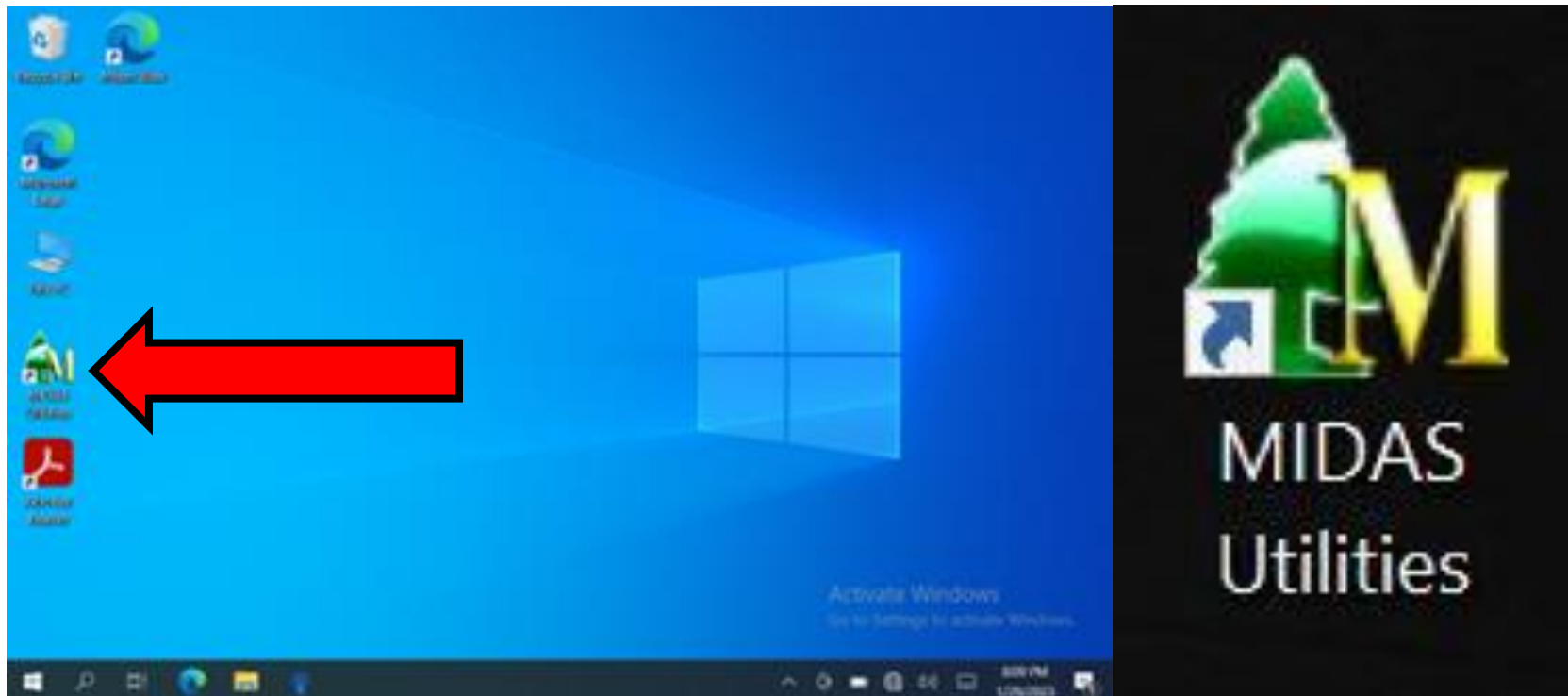# HOW TO USE MIDAS PLOTSHEET ON THE RANGER 7

1. Double-click the MIDAS UTILITIES shortcut on the Ranger 7 desktop (**remember to wait at least seven seconds for the program to open**).

2. Once opened, any Midas files that are saved to the download folder will be automatically unzipped (clicking on UNZIP DOWNLOADED FILES is done only when Midas Utilities is already running when Midas files are downloaded). Next, open MIDAS PLOTSHEET with a single-click.
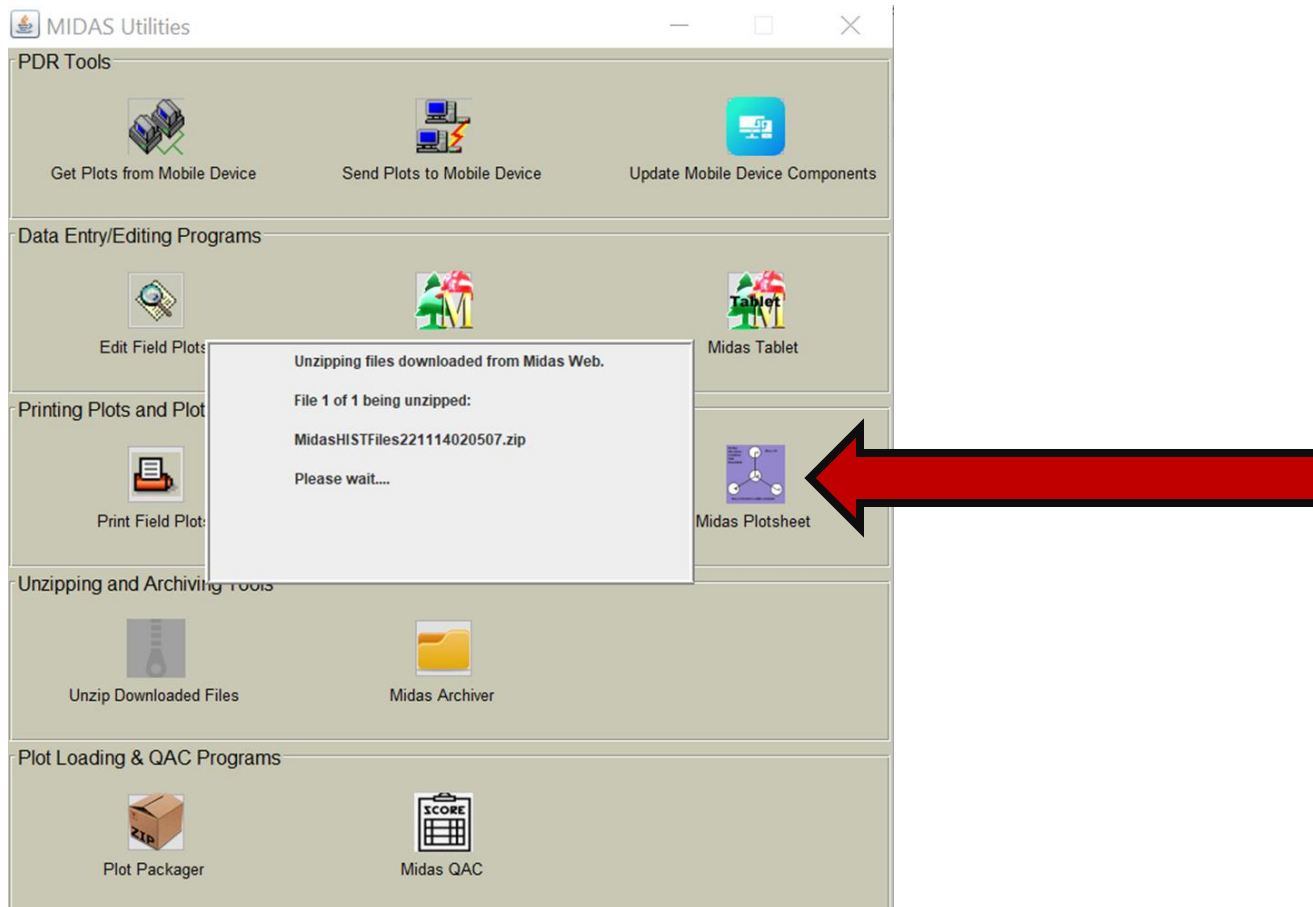
3. Maximize the Screens - Like Midas Tablet, Midas Plotsheet should be run with the screens maximized. After running Midas Plotsheet from Midas Utilities, if either the Initial Plot Packet Selection Screen is not maximized, or the Plotsheet Window is not maximized after opening a Draw Page, then MAXIMIZE the window, and click on the DISPLAY menu at the top. There are two options in the Display menu to set the default window size and location to the current setting as shown in the images below. Click on both functions (one at a time, clicking on the Display menu again between the two functions) to save the maximized setting as the default.

- **PLOT PACKET SELECTION SCREEN**
- MAXIMIZE
- DISPLAY
- SET DEFAULT WINDOW SIZE TO CURRENT
- DISPLAY
- SET DEFAULT WINDOW LOCATION TO CURRENT
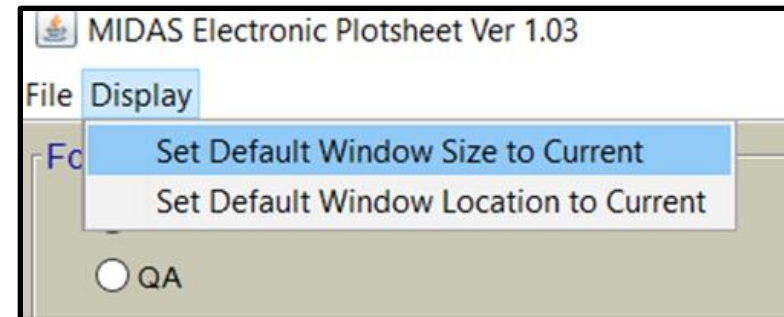
- **PLOTSHEET WINDOW**
- MAXIMIZE
- DISPLAY
- SET DEFAULT WINDOW SIZE TO CURRENT
- DISPLAY
- SET DEFAULT WINDOW LOCATION TO CURRENT
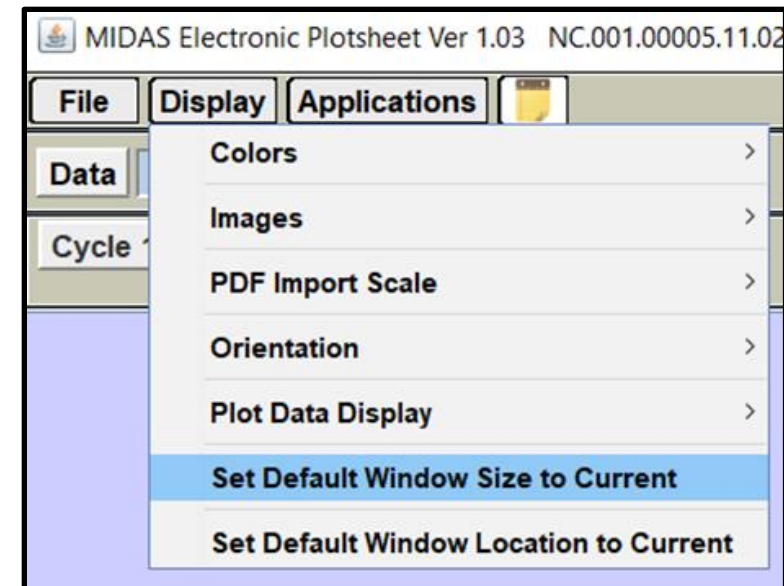
4. In Midas Plotsheet, select PREFIELD from Folder Selection, input the appropriate information into Plot Packet Selection, and select the correct plot in Selected Plot Packets. Select OPEN PLOTSHEET.

5. Draw Pages can be completed directly in Plotsheet. Alternatively, they can be hand drawn and imported as pictures (using the camera on the Ranger7 is easiest) or as scans (preferably with a flatbed scanner). These three methods will each be covered separately in the slides that follow.

6. METHOD 1 - Completing Draw Pages directly in Midas Plotsheet:
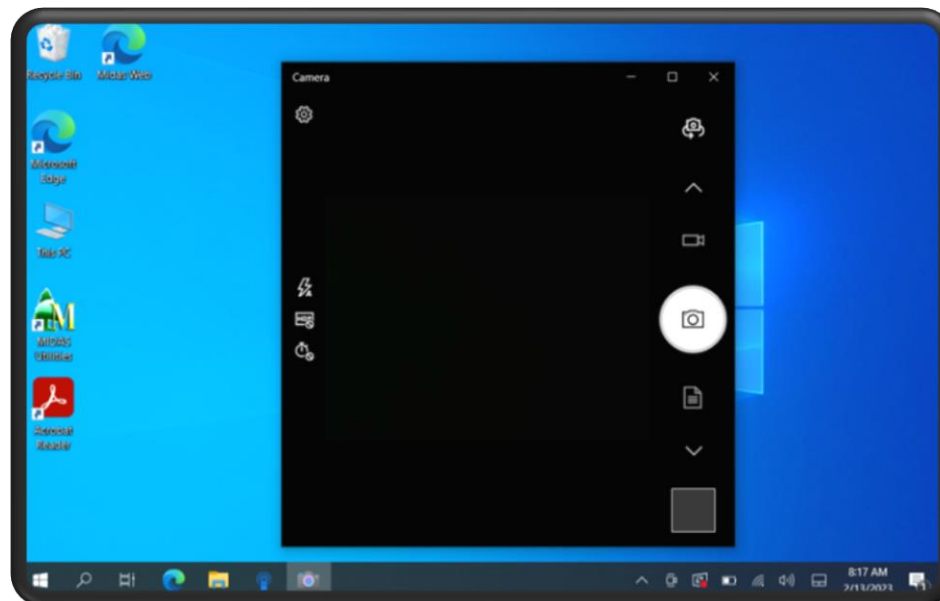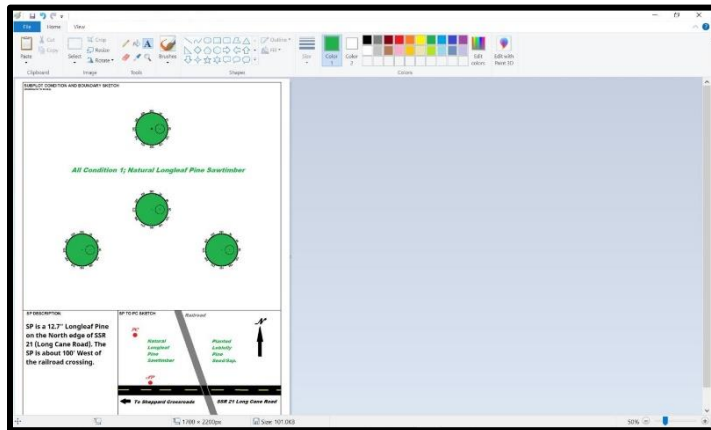
A. Midas Plotsheet provides a blank Draw Page for the present inventory. To show the present blank Draw Page select PRESENT F2 and then select IMAGES. Alternatively, select SPLIT F3 and then select IMAGES to view in split-screen mode as shown below.
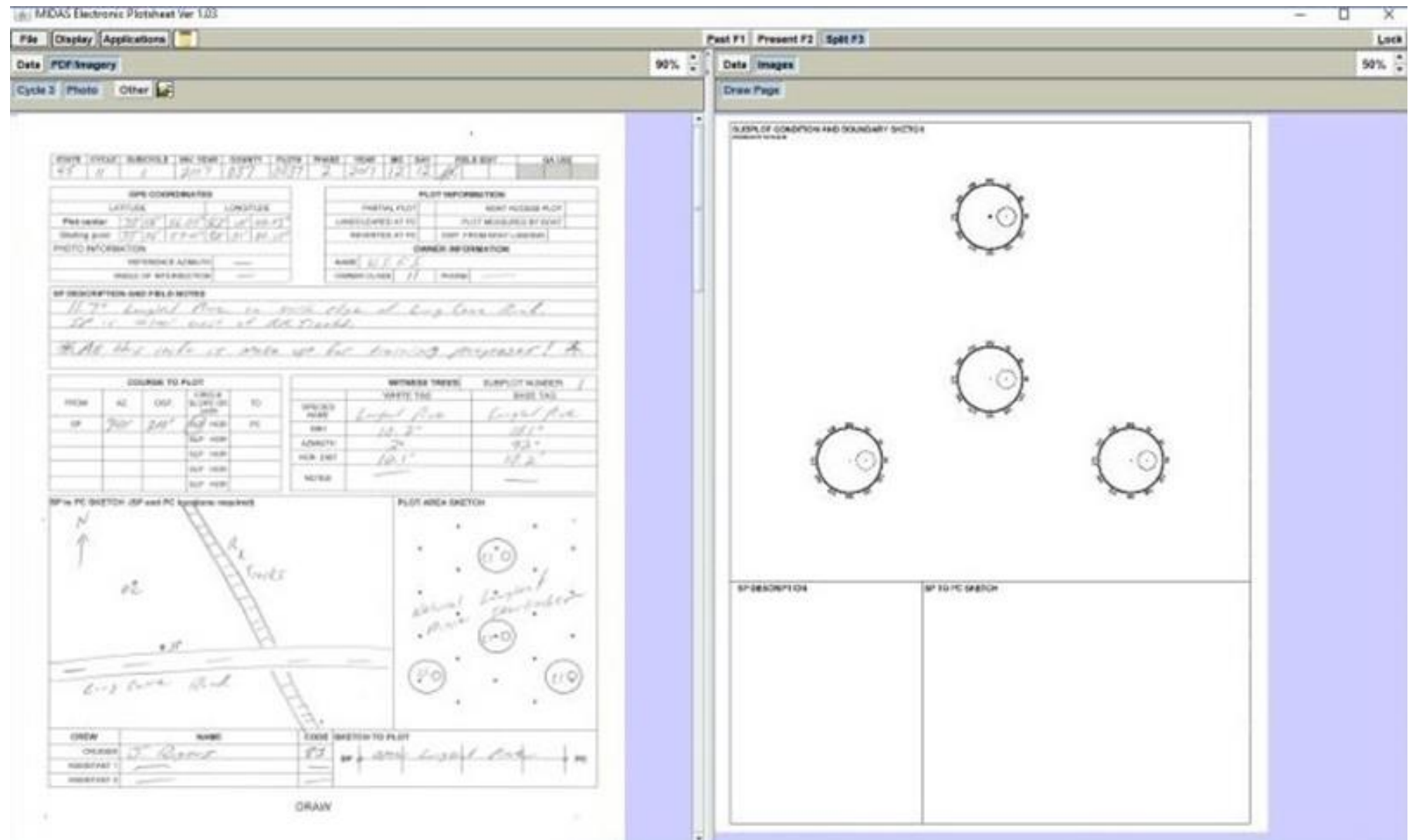
B. There are two options to open the present blank Draw Page in the Graphics Editor. The first is to RIGHT-CLICK on the blank Draw Page and select OPEN IN EDITOR. The second way is to DOUBLE-CLICK on the blank Draw Page to open MS Paint directly (**holding the stylus down on the image counts as a double-click in Plotsheet**).
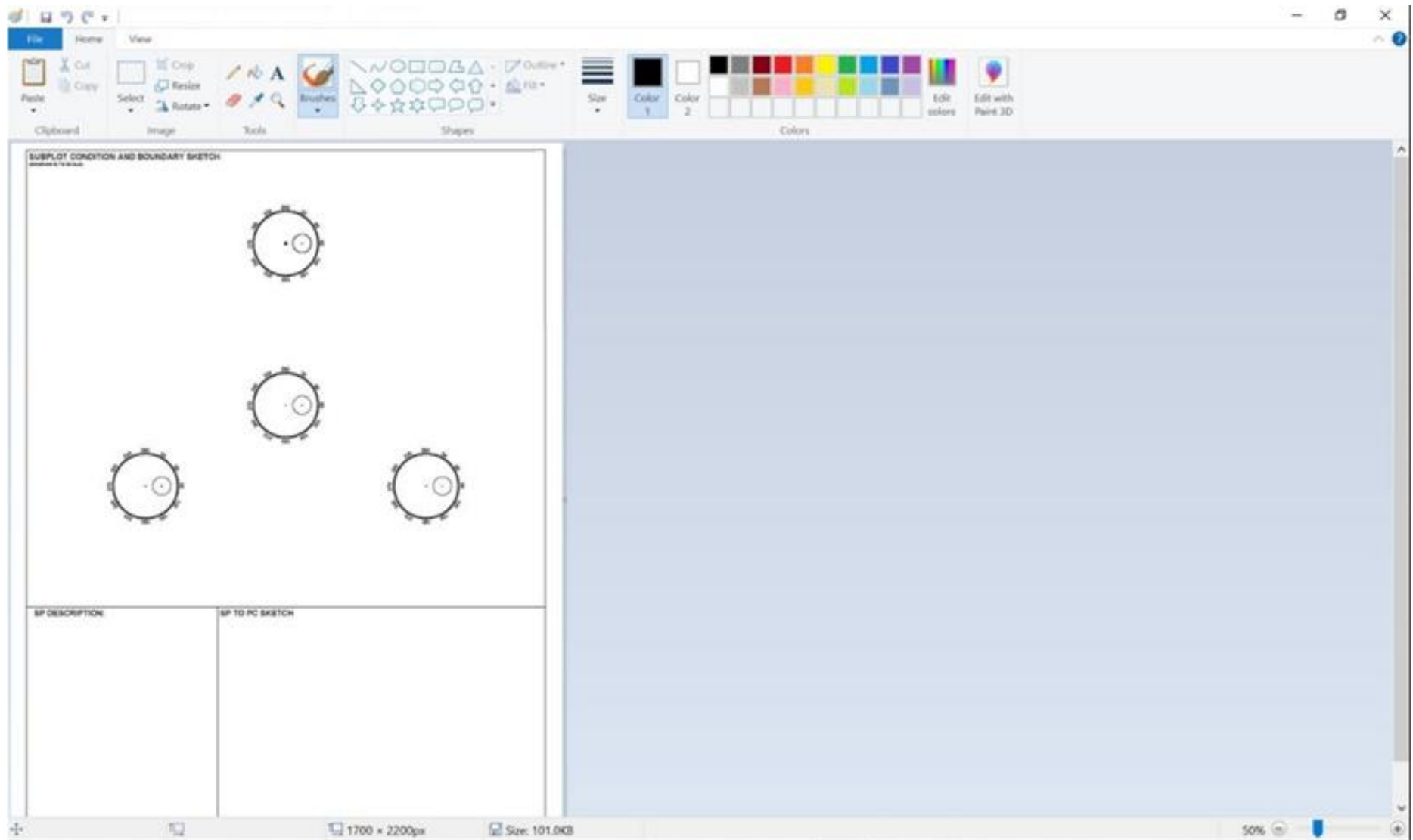
C. The new Draw Page can be completed in MS Paint. On the Trimble Ranger 7, this is much easier with a mouse rather than the stylus. When finished click SAVE in the top left and then **X** in the top right.
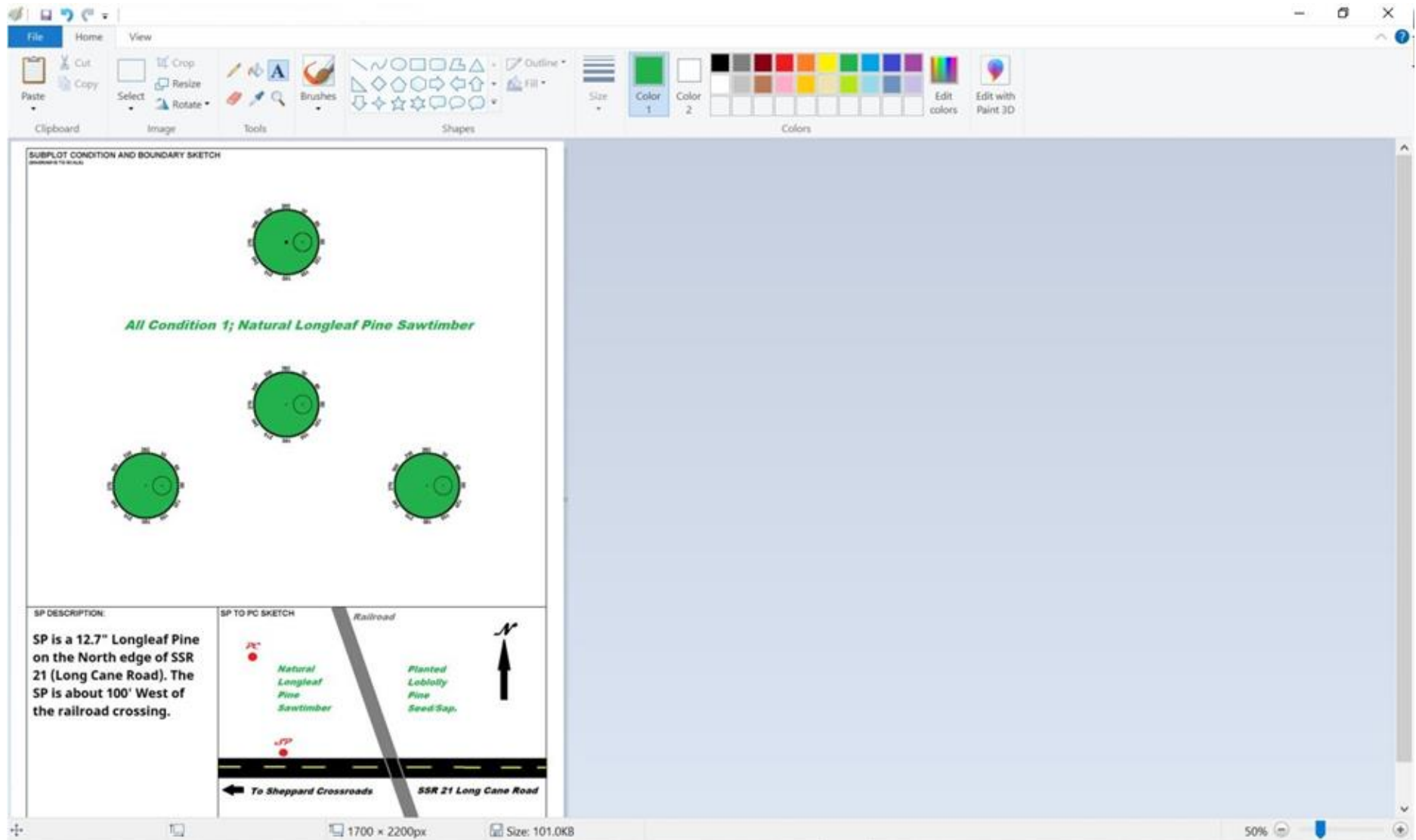
D. Back in split-screen mode, the new Draw Page now shows on the right while the old is on the left.

All Condition 1; Natural Longleaf Pine Sawtimber

SP is a 12.7" Longleaf Pine on the North edge of SSR 21 (Long Cane Road). The SP is about 100' West of the railroad crossing.

To Sheppard Crossroads   SSR 21 Long Cane Road

DRAW

7. METHOD 2 - Using the Ranger 7 to take a scanned document picture of a Draw Page to load into Midas Plotsheet:

A. To run the camera program, press FUNCTION+9 (in the picture below, the view image is blacked out).
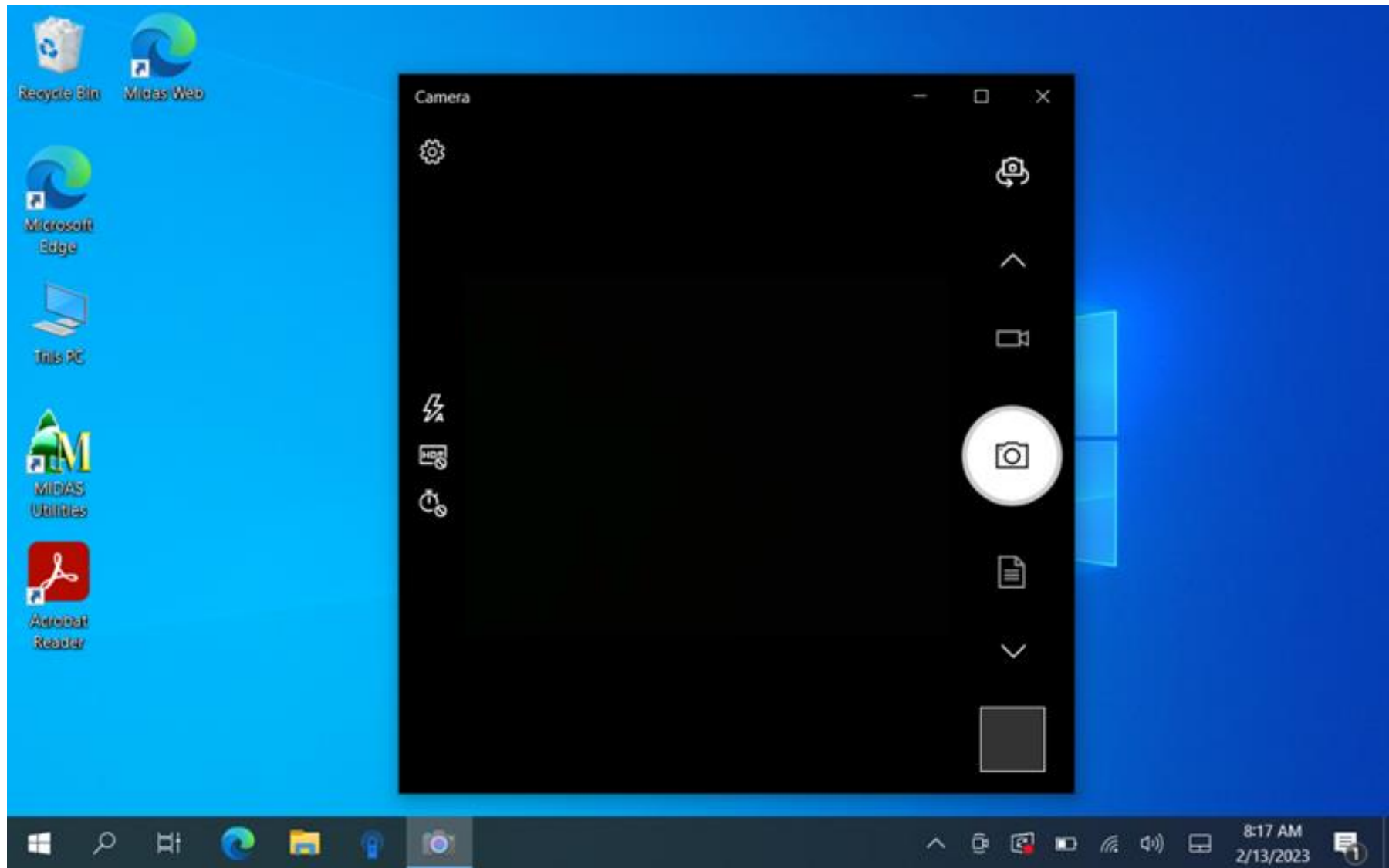
B. The first time the camera program is run, the following setup steps are needed to establish the recommended settings:

- Click the MAXIMIZE button at the top right to utilize the full screen

- Change the camera from front facing to rear facing by clicking this icon at the top right:

- When the flash is on, taking a picture of a document can create a glare. Make sure the flash is set to either OFF or AUTO (in case the ambient lighting is low) by clicking this icon on the left:

- Switch from CAMERA to DOCUMENT mode by pressing this icon on the right:
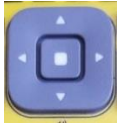
- Enter the settings mode by clicking this icon at the top left:

- Click the PHOTO QUALITY drop-down and select **5.0MP 4:3 (2592x1944)**:

Photos

Photo quality

5.0MP 4:3 (2592x1944)
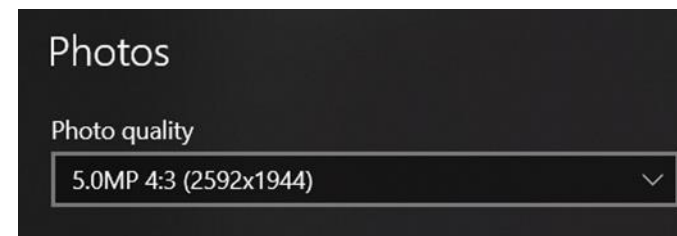
C. Follow these steps to take a document scan picture with the Ranger 7:

- Lay the Draw Page sideways so it matches the 4:3 camera perspective

- The document setting allows the camera to home-in on the Draw Page without the need for any manual cropping. A blue overlay will show the image that will be captured

- For best results, do not hold the Ranger 7 too close to the Draw Page. The Draw Page should take up about ¾ of the camera view in each direction

- Take the picture by pressing the square ACTION KEY in the middle of the NAVIGATION WHEEL or by pressing the ENTER/RETURN key or the DOCUMENT icon on the screen:

- The Ranger 7 will save these document pictures to This PC → Pictures → Camera Roll

- After opening the image in Midas Plotsheet but prior to copying it to the right side, select it and then use the ROTATE menu in the popup context menu to rotate it 90 degrees.

Example of Image quality with Ranger 7 camera scanning at recommended settings (image has been rotated 90 degrees):

STATE	CYCLE	SUBCYCLE	INV. YEAR	COUNTY	PLOT#	PHASE	YEAR	MO	DAY	FIELD EDIT	QA USE
45	11	1	2017	037	0037	2	2017	12	12	AR	

GPS COORDINATES

	LATITUDE		LONGITUDE	
Plot center	33° 56′ 56.00″	82° 01′ 00.05″		
Starting point	33° 56′ 57.00″	82° 01′ 00.10″		

PHOTO INFORMATION

REFERENCE AZIMUTH	—
ANGLE OF INTERSECTION	—

PLOT INFORMATION

PARTIAL PLOT		BOAT ACCESS PLOT	
LANDCLEARED AT PC		PLOT MEASURED BY BOAT	
REVERTED AT PC		DIST. FROM BOAT LANDING	

OWNER INFORMATION

NAME	U.S.F.S.
OWNER CLASS	11	PHONE	—

SP DESCRIPTION AND FIELD NOTES

11.7" Longleaf Pine on North edge of Long Cove Road.
SP is ≈100' west of RR Tracks.

✶All this info is made up for training purposes! ✶

COURSE TO PLOT

FROM	AZ.	DIST.	CIRCLE SLOPE OR HOR	TO
SP	340°	200'	SLP HOR	PC
			SLP HOR	
			SLP HOR	
			SLP HOR	
			SLP HOR	

WITNESS TREES — SUBPLOT NUMBER: 1

	WHITE TAG	BASE TAG
SPECIES NAME	Longleaf Pine	Longleaf Pine
DBH	10.2"	10.1"
AZIMUTH	2°	92°
HOR. DIST	10.1'	10.2'
NOTES	—	—

SP to PC SKETCH (SP and PC locations required)

PLOT AREA SKETCH

CREW	NAME	CODE	SKETCH TO PLOT
CRUISER	J. Rogers	83	SP ⊢ Open Longleaf Pine ⊣ PC
ASSISTANT 1	—	—	
ASSISTANT 2	—	—	

DRAW

8. METHOD 3 - Using a scanner to load a Draw Page into Midas Plotsheet:

- Connect the scanner to the Ranger 7 via the USB port at the base of the unit

- Windows Fax and Scan usually recognizes an attached scanner without having to install drivers

- If that fails and administrator privileges are required to install scanner drivers, the password can be provided

- State field personnel should request the password from their State Coordinator who can request the password from the SRS FIA Training Supervisor

- Federal field personnel should request the password from their Supervisor who can request the password from the SRS FIA Training Supervisor

- It's best to establish a NEW PROFILE and set it to DEFAULT so that scans will always be done with the recommended settings of Color, 150 DPI, and TIF file type

- The Ranger 7 will save these scans to This PC → Documents → Scanned Documents

Add New Profile ✕

Scanner: Canon MF642/643/644 ⌄

Profile name: Draw Page

☑ Set this profile as default

Source: Flatbed ⌄

Paper size: ⌄

Color format: Color ⌄

File type: TIF (TIF File) ⌄

Resolution (DPI): 150 ⬍

Brightness: |———●————| 0

Contrast: |————●———| 0

☐ Preview or scan images as separate files

Preview | Save Profile | Cancel

9. Shortcut keys were added to make using Midas Plotsheet on the Ranger 7 a little more user friendly. Below is a list. Note the CTRL+ and ALT+ hot keys all must be pressed simultaneously.

- F1 – Maximizes the past data/imagery side.

- F2 – Maximizes the current data/imagery side.

- F3 – Shows both the past and current sides in the split view.

- CTRL+D – Switches the past side to the data view.

- CTRL+I – Switches the past side to the imagery view.

- CTRL+Up – Increase the past side zoom control (zooms in) by 10%.

- CTRL+Down – Decreases the past side zoom control (zooms out) by 10%.

- CTRL+n – Changes the view to/turns on the nth data/image button in the past side.

- ALT+D – Switches the present side to the data view.

- ALT+I – Switches the present side to the imagery view.

- ALT+Up – Increase the past side zoom control (zooms in) by 10%.

- ALT+Down – Decreases the past side zoom control (zooms out) by 10%.

- ALT+n – Changes the view to/turns on the nth data/image button in the present side.

Example of Image quality with flatbed scanner using recommended settings:

STATE	CYCLE	SUBCYCLE	INV. YEAR	COUNTY	PLOT#	PHASE	YEAR	MO	DAY	FIELD EDIT	QA USE
45	11	1	2017	037	0037	2	2017	12	12	JR	

GPS COORDINATES

	LATITUDE			LONGITUDE		
Plot center	33	56'	56.00"	82°	01'	00.05"
Starting point	33°	56'	57.00"	82°	01'	00.10"

PLOT INFORMATION

PARTIAL PLOT		BOAT ACCESS PLOT
LANDCLEARED AT PC		PLOT MEASURED BY BOAT
REVERTED AT PC		DIST. FROM BOAT LANDING

PHOTO INFORMATION

REFERENCE AZIMUTH	—
ANGLE OF INTERSECTION	—

OWNER INFORMATION

NAME	U.S.F.S.		
OWNER CLASS	11	PHONE	—

SP DESCRIPTION AND FIELD NOTES

11.7" Longleaf Pine on North edge of Long Cave Road.
SP is ≈100' west of RR Tracks.

✱ All this info is made up for training purposes! ✱

COURSE TO PLOT

FROM	AZ.	DIST.	CIRCLE SLOPE OR HOR	TO
SP	340°	200'	SLP HOR	PC
			SLP HOR	
			SLP HOR	
			SLP HOR	
			SLP HOR	

WITNESS TREES   SUBPLOT NUMBER: 1

	WHITE TAG	BASE TAG
SPECIES NAME	Longleaf Pine	Longleaf Pine
DBH	10.2"	10.1"
AZIMUTH	2°	92°
HOR. DIST	10.1'	10.2'
NOTES	—	—

SP to PC SKETCH (SP and PC locations required)

PLOT AREA SKETCH

CREW	NAME	CODE
CRUISER	J. Rogers	83
ASSISTANT 1	—	—
ASSISTANT 2	—	

SKETCH TO PLOT

DRAW

9. Whether using the camera on the Ranger 7 or an external scanner connected to the Ranger 7, the image will have to be imported into Midas Plotsheet. To do this, select the FOLDER icon adjacent to the OTHER button, navigate to the folder designated for pictures/scans of Draw Pages, and select the desired file. Remember, the Ranger 7 saves pictures to This PC → Pictures → Camera Roll and scans to This PC → Documents → Scanned Documents
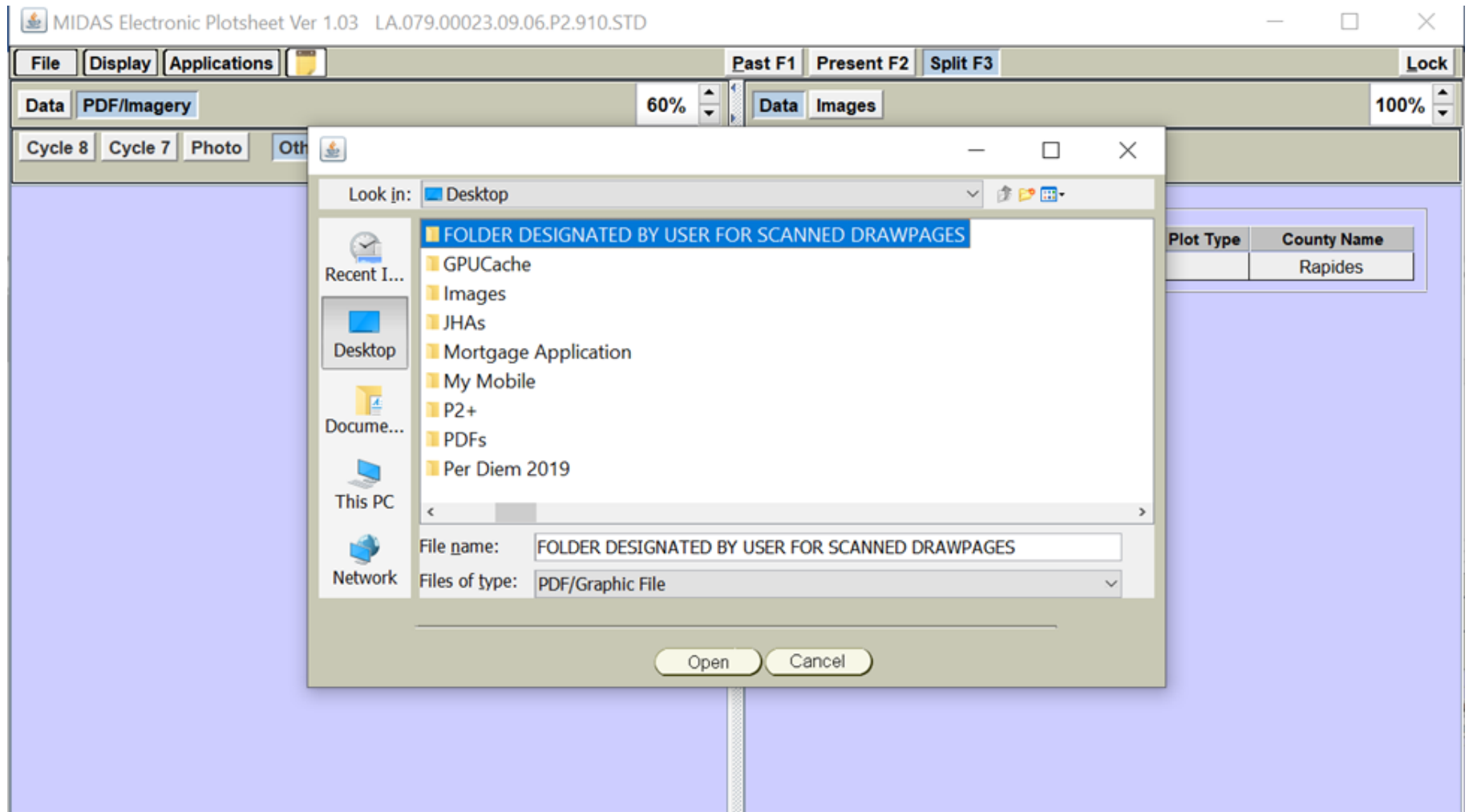
10. The image you imported will appear on the left. Double-click on the left image, select DRAW PAGE, and select REPLACE CURRENT DRAW PAGE from drop-down list. **In the Ranger 7, holding the stylus on the image will also serve as a double-click.** If edits to the new Draw Page are necessary, double-click the image on the right to open it in Paint.
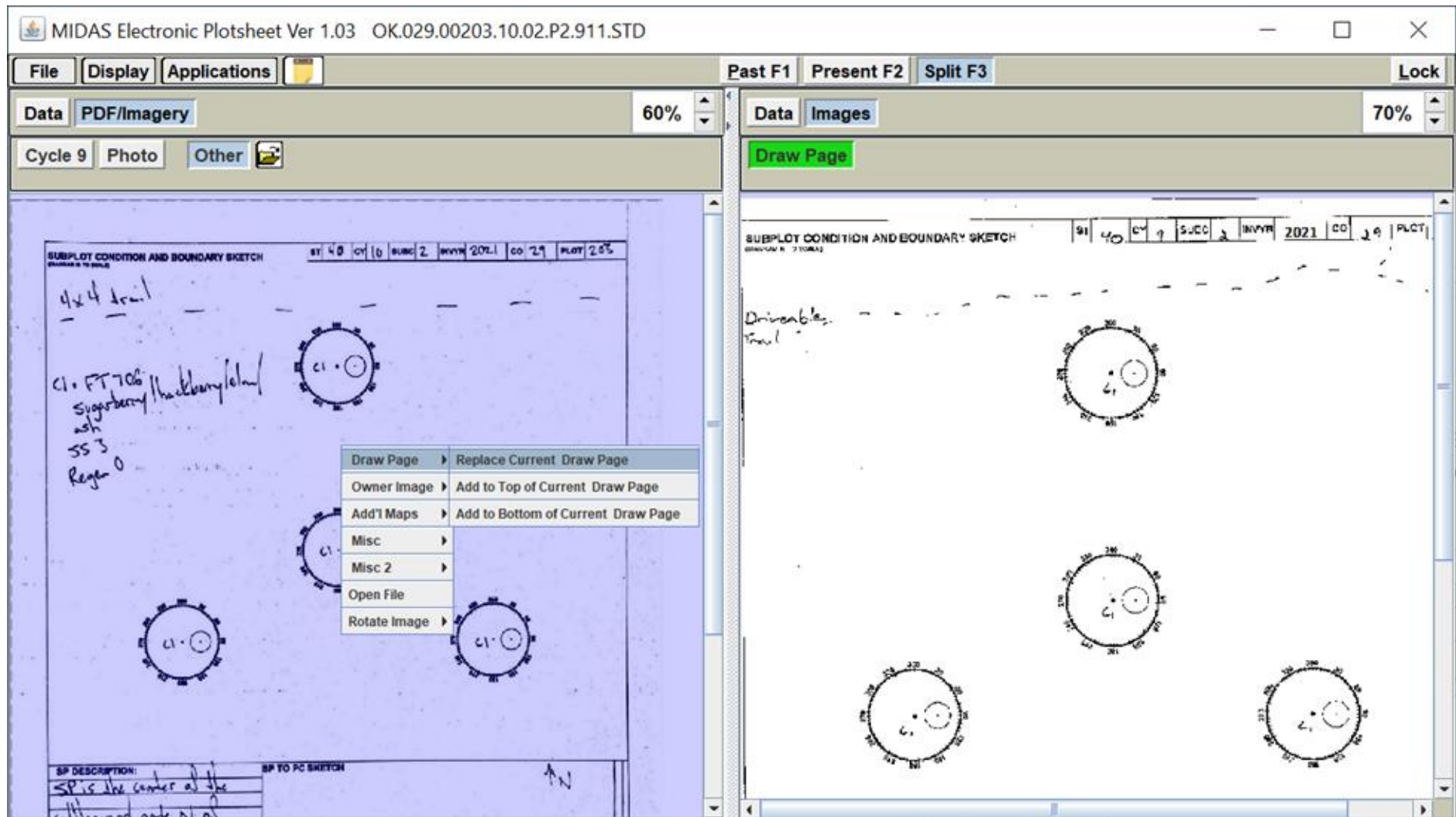
11. Once you are done with the new Draw Page, click FILE, EXIT to return to the Plot Packet selection screen. Then click FILE, EXIT again to return to Midas Utilities. In Midas Utilities, open PLOT PACKAGER, select the appropriate plot data file, and select PACKAGE PLOT(S). Address and verify that the plot passes all validations and that the drawpage file is included, then select ZIP PACKAGE. You are now ready to transmit the plot(s).