

# **PIMA COUNTY REGIONAL FLOOD CONTROL DISTRICT ADMINISTRATIVE PROCEDURE**

POLICY NO.: Administrative Procedure, ADM-212    EFFECTIVE DATE: June 7, 2007

POLICY: A procedure for the processing of digital photographs.

PURPOSE: An internal procedure for documenting and cataloging digital photographs. The purpose of digital photograph cataloging is to properly manage the multitude of photographs being taken, which consume significant amounts of storage space on the network. Additionally, it is important to consistently name and document photographs for future use.

PROCEDURE:

## **A. Processing Digital Photos for Complaints and Permits:**

1. Download the photos to I/Data/FPM-division/DCs or FPUP/07/Temp Photos/your name
2. Separate photos into individual folders, labeled with DC or FPUP Number (hereafter, file number). Use these folders to process the photos. Delete duplicate or unnecessary photos at this time. Rename/convert files in Irfan (see Section C). When naming the files, use the following naming convention—(year-file #-numerical order (##)). Photo number shall be a 2-digit number (01, 02, 03.....10.....etc.). Example: 07-001-01.jpg
3. Create thumbnail contact sheet in Irfan (see Section D). If there are only a few photos, skip this step.
4. Convert contact sheet (or individual photos, if only a few) into a pdf (see Section E). Add necessary commentary to pdf contact sheet/photos (i.e., direction photo was taken, flow arrows, site specific information, etc.) Name the final pdf the following: Photos-year\_month\_day-last name of photographer. Example: Photos-2007\_01\_15-smith.pdf
5. When photo processing is complete, transfer contents of temporary folder to appropriate file folder on the I:\drive (I/Data/FPM-division/DCs or FPUP/07/file #).
6. When the drainage complaint is logged out (i.e., no action, AVAP, achieved compliance), administrative support shall merge the photos with other scanned information and transfer them to the county-wide network for viewing through Mapguide.

Requirements for photo cataloging DC's in PDF format based on enforcement action:

1. No Action, non-regulatory – if a site visit was made and photos taken, delete all photos
2. No Action, other – Contact Sheet Only
3. NOC/NOV – Contact sheet and photos pertinent to the enforcement action

## **C. Batch Conversion of Photos in Irfan:**

1. Open Irfan.
2. Go to File/Batch Conversion Rename. A window will open-up as shown in exhibit A. In the “Batch Conversion” window, adjust settings to match exhibit A. For the first time using Irfan, go to “Set advanced options” and adjust settings as shown in exhibit B.
3. In the “look in” pull down menu, locate the folder containing the photos. Select all photos (ctrl+A). Drag the photos to the window on the left. View sequence of photos

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prior to beginning the conversion/rename, if the photos are out of order, reorganize into correct sequence. Use the naming convention outlined in Section A.2. Click on “start”. Irfan will reduce the size of the photos and rename each photo sequentially (01, 02, 03,...)

4. Depending upon the directory where the converted files were saved (“output directory” box), the photos may need to be transferred to the working folder on the I:\ drive. Delete the pre-conversion photos.

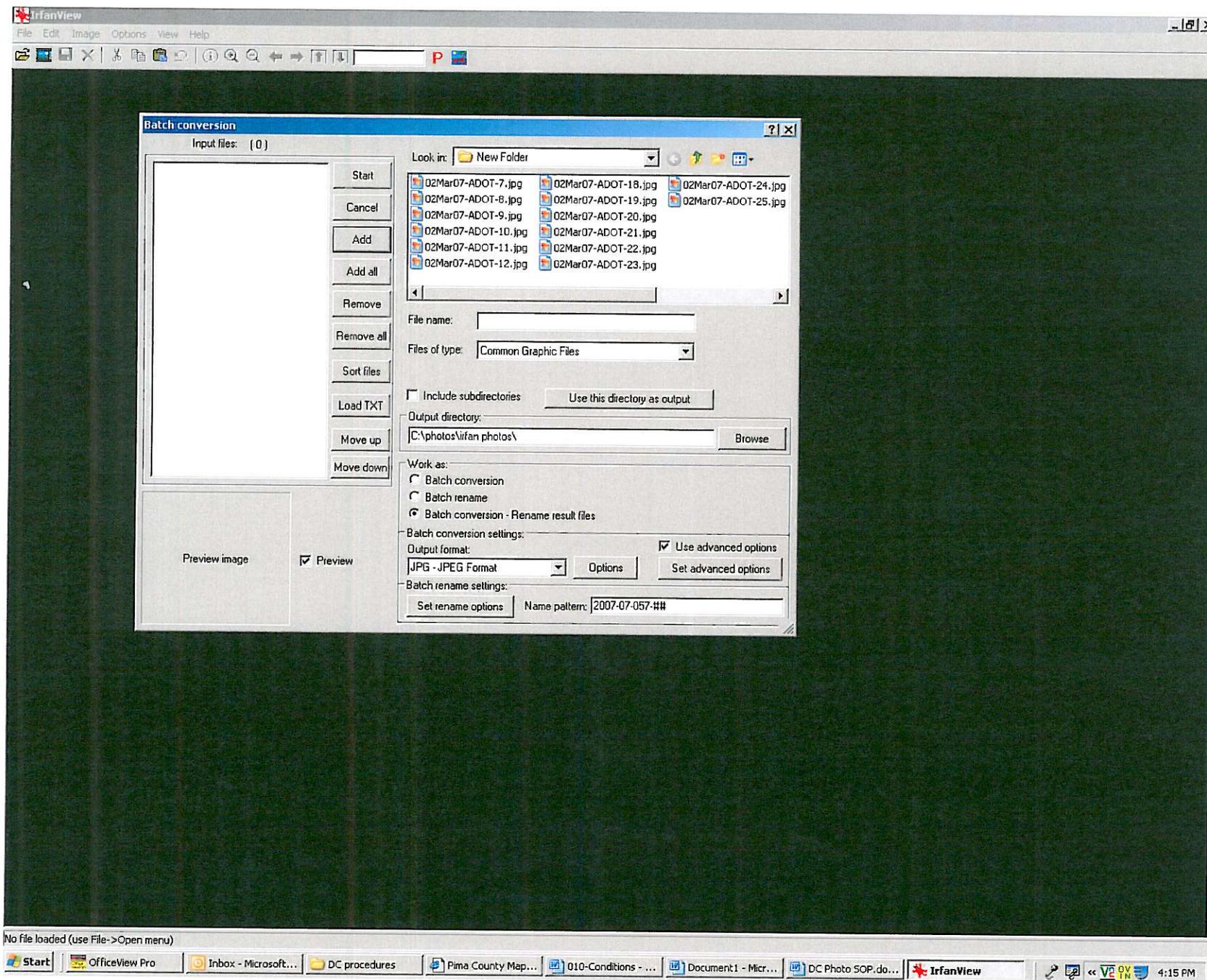
#### **D. Creating a Contact Sheet in Irfan:**

1. For first time use, ensure settings are correct. Open Irfan. Go to File/Thumbnails/Options/set thumbnail options... Adjust settings as shown in exhibit C.
2. To create a contact sheet: Go to File/Thumbnails, select the folder containing photos. Select all photos (ctrl+A). Select File/create contact sheet from thumbnails.
3. A “create contact sheet” window will open. Ensure settings are as shown in exhibit D; a contact sheet with four photos per page will be created. Save contact sheet to working folder on the I:\ drive.

#### **E. Creating Adobe Acrobat PDF:**

1. Go to working file on I:\drive. Select files for final archiving (individual photos and/or contact sheet). Right click mouse and select “combine in adobe acrobat...”. Ensure the sequence of photos/contact sheets is correct. Select “ok”. A PDF file will be created. Save the PDF file to the working file on the I:\drive and name in accordance with Section A.4.

Exhibit A



Batch conversion

Input files: ( 0 )

Look in: 1-23-07 photos

Settings for all images:

CROP:

X-Coord.:  Y-Coord.:   Left top  Right top  
 Left bot.  Right bot.

Width:  Height:

RESIZE:

Set new size:

Set both sides to:

Width:  Height:   pixels  cm  inches

Set long side to:   inches

Set short side to:   inches

Set new size as percentage of original:

Width:  % Height:  %

Preserve aspect ratio (proportional)

Use Resample function (better quality)

Don't enlarge smaller images

Set DPI value:

CHANGE COLOR DEPTH:

16,7 Million colors (24 BPP)

256 Colors (8 BPP)

16 Colors (4 BPP)

2 Colors (black/white) (1 BPP)

Custom colors:  (2 - 256)

Use Floyd-Steinberg dithering

OTHER OPTIONS:

Horizontal flip

Vertical flip

Rotate left

Rotate right

Convert to greyscale

Negative

Sharpen:  (1 - 99)

Brightness:  (-255 - 255)

Contrast:  (-127 - 127)

Gamma correction:  (0.01 - 6.99)

Saturation:  (-255 - 255)

Color balance - R:  (-255 - 255)

Color balance - G:  (-255 - 255)

Color balance - B:  (-255 - 255)

MISCELLANEOUS:

Canvas size

Add overlay text

Overwrite existing files

Delete original files after conversion

Create subdirectories in destination folder

Save files with original date/time

Apply changes to all pages (if TIF saving)

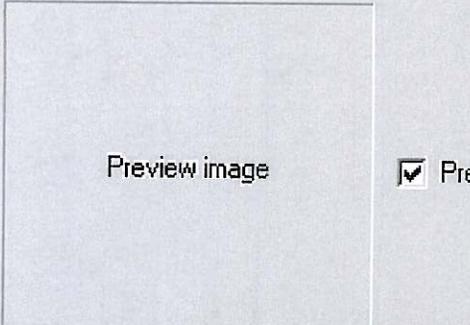
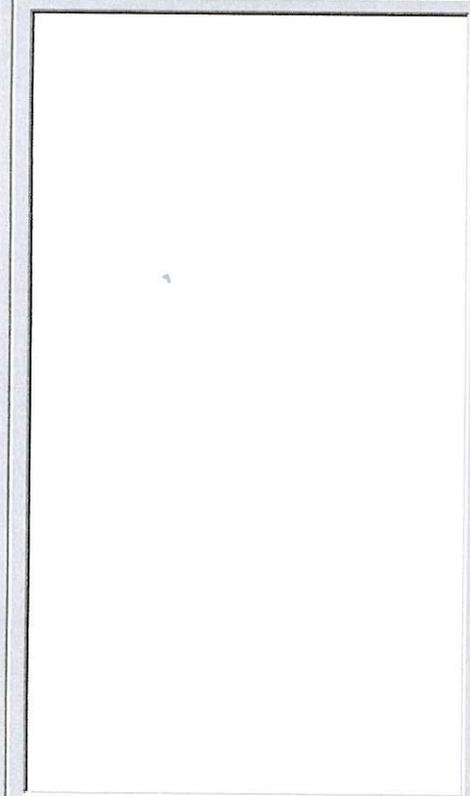
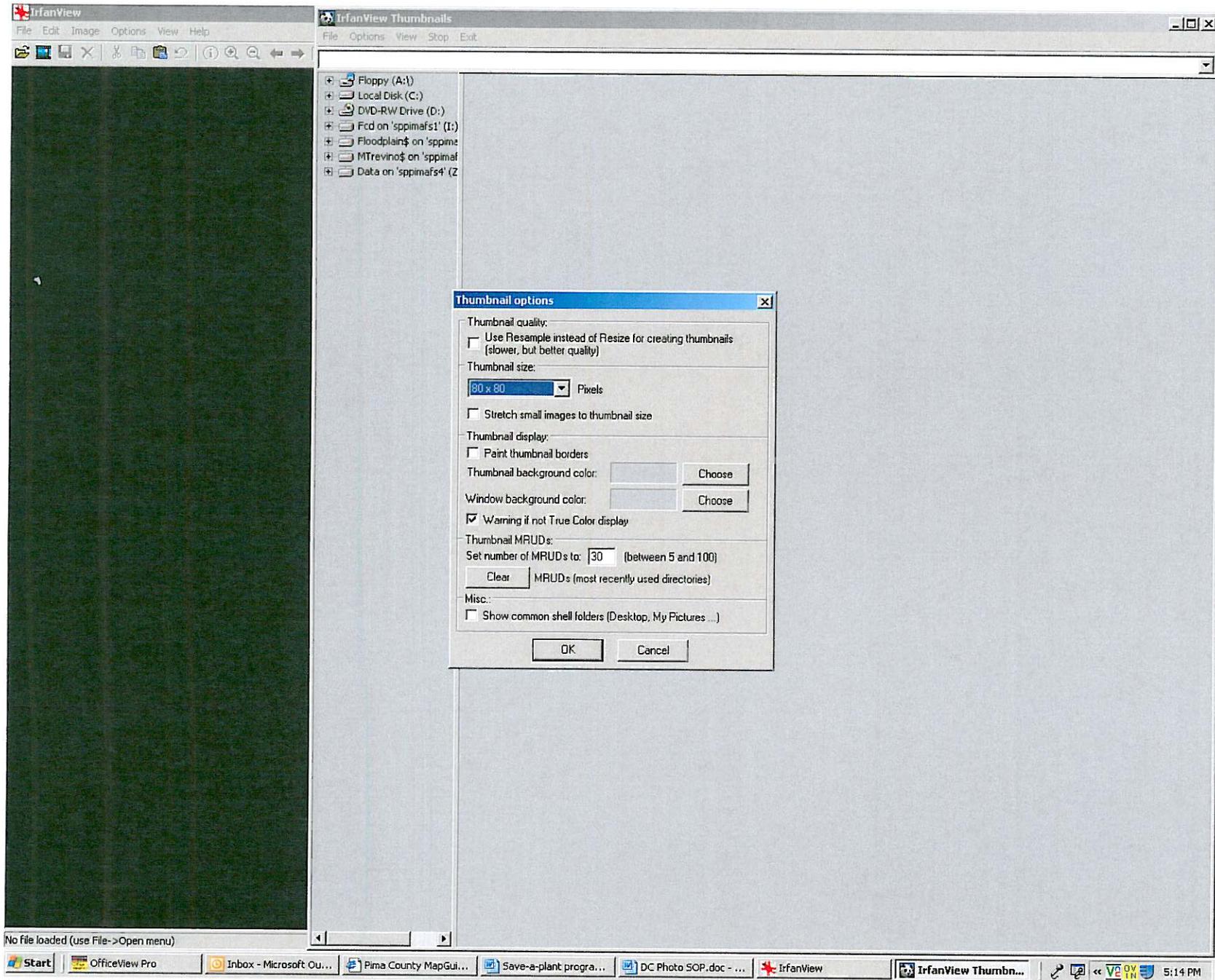


Exhibit C





**Create Contact Sheet** [X]

Sheet dimensions:

Width:  Height:  (in pixels)

Columns:  Rows:  (in images)  
(Columns x Rows = Number of images per sheet page)

Stretch small images to maximal size

Thumbnail spacing:

Horizontal:  Vertical:  (in pixels)

Margins:

Horizontal:  Vertical:  (in pixels)

Color/Text options:

Sheet color:

Write file infos

Hint: \$F = file name ...

Headnote:

Footnote:

Font:

Output:

Create first page only

Print all pages

Save all pages

Directory:

Save as: