

Electronic Submittal Requirements and File Naming Standards **(See Submittal Requirements Section B for Summary of Required Plans and Documents)**

Submittal Requirements (Quick Checklist):

(please read all of the following pages for complete guidelines and helpful tips)

General Submittal Guidelines:

- Submit each review round on a flash drive or disc. PDF files are provided for all plan sheets, documents and reports. PDF file content must be included within not more than one file folder; no subfolders.
- All site plan, landscape plan and civil construction plan sheets are grouped into individual plan sets, and not separate PDFs for each sheet.
- All jpegs and other images embedded into the drawing are of high resolution, with raster images and text clearly legible. 300 DPI is recommended.
- Maximum file size limit for each PDF: 150 MB.

Preparing PDF Plans from CAD software:

- All plans are saved as optimized/flattened PDFs to reduce file size and remove layers.
- AutoCAD SHX attributes have been removed from the PDF's.
- Bookmarks are provided for each page (drawing sheet) in the PDF plan sets, listing the sheet number and sheet title.
- All PDF plan pages are properly oriented, with the top of the page oriented to the top of the computer screen.
- All PDF plan pages are provided at 24x36 inches and are at 'full size' and 'to-scale' to ensure proper measuring of lines and areas electronically.
- Plans must include a scale bar on each sheet. When more than one scale is used on a sheet, an independent graphic scale must accompany the applicable detail.
- Vector-based PDF files are provided. Raster-based PDF files are accepted only if generating vector-based files is infeasible. Images provided within the PDF sheets (such as photographs) will remain raster-based.
- If raster-based PDF files are provided for 24x36 linework drawings, files are printed at not more than 100-150 dpi, monochrome and compressed.

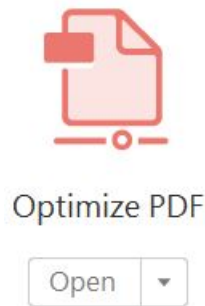
File Naming:

- PDFs meet file naming standards, with no consultant project file numbers, subfolders, or added characters provided in the file naming.
- The file names clearly convey the review content of the file. Site plan sheets are named "site plan.pdf". Landscape plan sheets are named "landscape plan.pdf", Utility plan sheets are named "Utility Plan.pdf", etc.

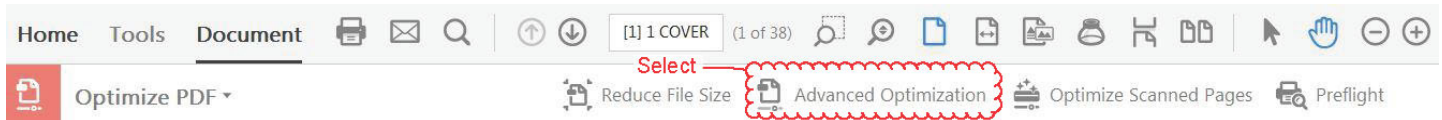
A. General Submittal Guidelines:

- 1) **Submittal:** All electronic submittals for each round of review must be submitted on a disc or flash drive.
- 2) **PDFs Only:** Only PDF files shall be accepted for plan sheets, documents and reports.
- 3) **Submit Only the Files to be Reviewed:** Files shall only include the digital files that are being submitted for review. Discs or flash drives that include small extraneous or residual files such as plot files shall be rejected.
- 4) **One Folder:** Contents of the disc or flash drive must be included within not more than one digital file folder. Subfolders that divide the submittal into subtopics such as “Civil Plans”, “Planning Documents”, “Photometrics Plan”, etc. are not necessary and will be rejected.
- 5) **File Naming:** For all electronic files submitted, each file name should only include information related to the subject of the file as outlined in the file naming examples below. No consultant project file numbers, subfolders, or added characters should be provided in the file naming. Acronyms should also not be used.
- 6) **Maximum PDF File Size:** The maximum file size limit for each PDF is 150 MB (megabytes).
- 7) **Grouping Sheets Together:** All site plan, landscape plan and civil construction plan sheets shall be grouped into individual plan sets, and not provided as individual PDF’s for each plan sheet within the plan set. For example, if the project is broken up into multiple 20-scale site plan sheets and a cover sheet, it is not necessary to provide a PDF for each individual site plan sheet (“site plan sheet 01.pdf”, “site plan sheet 02.pdf”, etc.). If the grouped plan set is greater than the 150 MB maximum file size limit, then the set can be grouped into subsets as needed.
- 8) **Organizing Planning File Names:** For review purposes, the “Planning Package” should be divided up into individual PDF sets based on subject matter, such as “Site Plan”, “Neighborhood Context Plan”, “Lighting Plans and Details”, “Trash Enclosure Plans and Details”, “Building Elevations”, etc. If required details are incorporated into a particular plan sheet, they may be grouped into the PDF and file name, such as “Site Plan and Details” “or Landscape Plans and Details”. This communicates to staff to look for other documents in the PDF other than plans, such as trash enclosure details or hardscape details. Although the “Planning Package” may be divided up into PDF’s based on subject matter for review purposes, a Sheet Index is required on the cover page indicating all sheets provided in the Planning Package, with sheet numbers provided for each sheet in the Planning Package, ([See Section D for cover page explanation](#)). PDF file naming for review purposes should be based on review content, and not the sheet numbers provided with any sheet index.
- 9) **Images:** All jpegs and other images embedded into the drawing must be of high resolution. 300 DPI is recommended. Please take note of this requirement when saving images (such as lighting specification cut sheets, site furniture images, material images, etc.). When printing PDF sheets, image quality for jpegs and other images should be adjusted within the software as needed to provide high quality images. Submittals that include images that are not readable or reproducible may be rejected or not fully reviewed, requiring additional rounds of review.

c) Second method to access the PDF Optimizer: Go to 'Tools' and select 'Optimize PDF'.

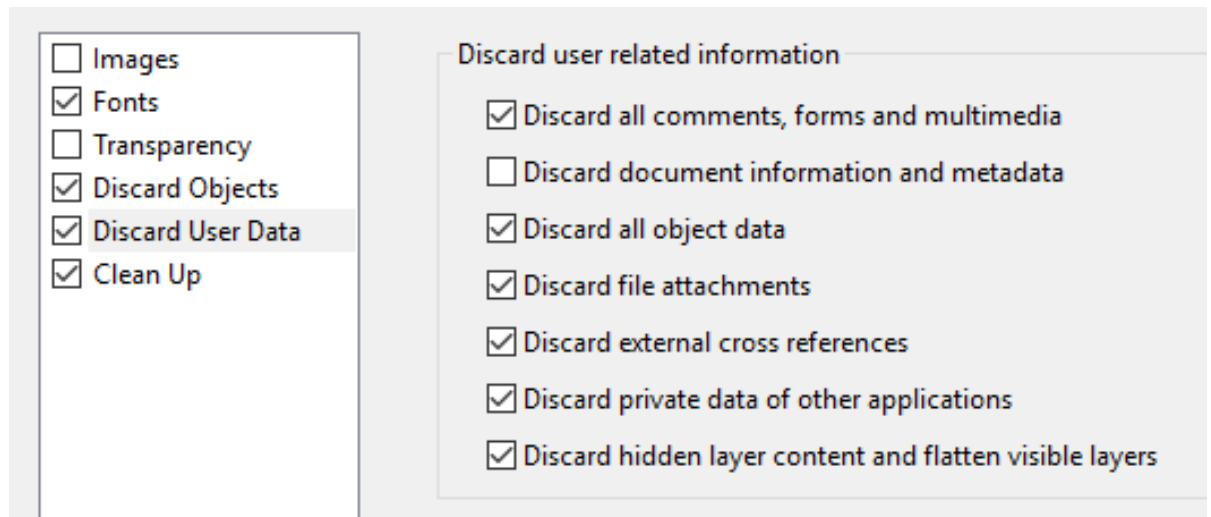


d) Select 'Advanced Optimization' or prior versions may say 'Optimize PDF'.

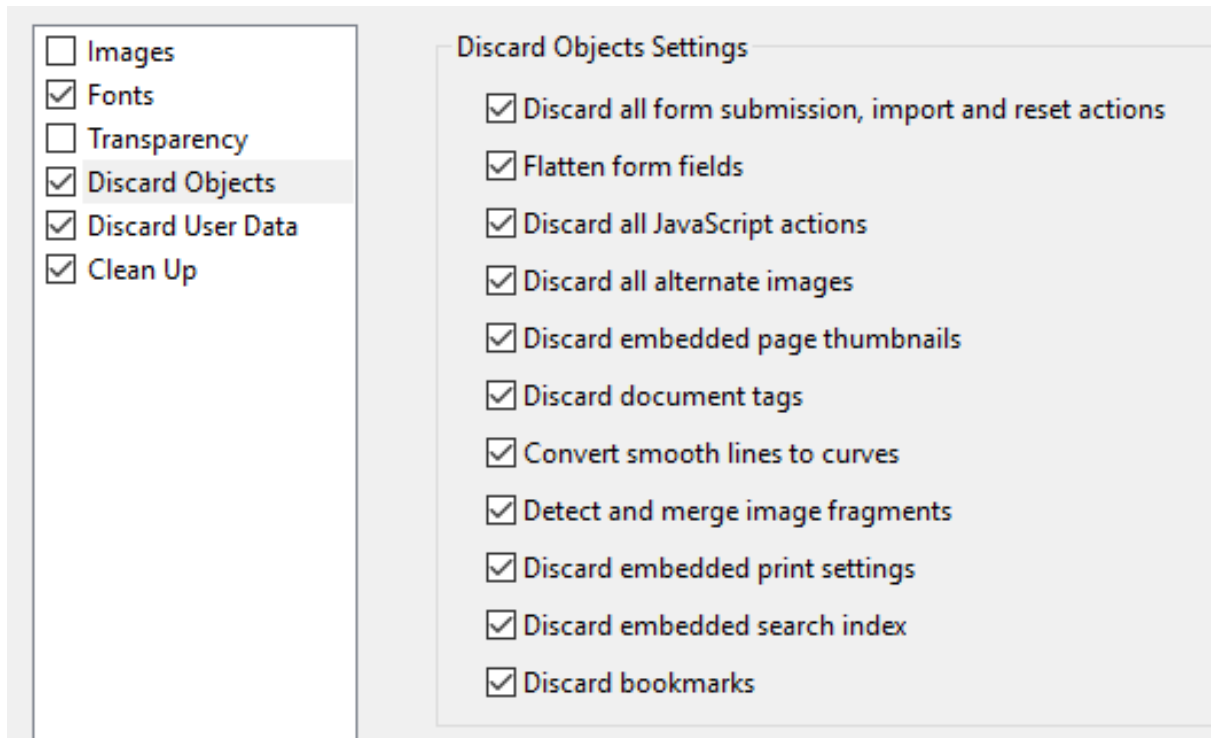


e) OPTIMIZATION SELECTIONS – STEP 1: Once the PDF Optimizer window has been accessed, select "Discard User Data", then select ALL but the second option, but do not click "OK" yet. The most important selections are the first, third, and last options:

- Discard all comments, forms and multimedia.
- Discard all object data.
- Discard hidden layer content and flatten visible layers.



f) OPTIMIZATION SELECTIONS – STEP 2: Next, in the PDF Optimizer window, select 'Discard Objects' and check all boxes in this section, then select 'OK'. In most cases, after selecting 'OK', a window will appear stating 'Save Optimized As'. When this occurs, change file name and select 'save' (if this message appears, skip step h):



g) Select 'File' then 'Save-as' and give the PDF file a new name (important to rename file).

- 2) **IMPORTANT – Remove AutoCAD SHX comments from the PDF's:** This avoids having AutoCAD drawing text turned into comments in a PDF. The default setting is "1" in AutoCAD for this feature. To change the setting and remove this feature, type "EPDFSHX" in the command line and enter "0". PDF's that are submitted with this feature must be resubmitted with the SHX text comments removed. Read this article at Autodesk.com for more tips on this topic:
<https://knowledge.autodesk.com/support/autocad/troubleshooting/caas/sfdcarticles/sfdcarticles/Drawing-text-appears-as-Comments-in-a-PDF-created-by-AutoCAD.html>

Following the optimization instructions above should also remove these SHX comments from the PDF without changing the AutoCAD default setting.

- 4) **Bookmarks:** Plan sets are required to have bookmarks for each page (drawing sheet), listing the sheet number and sheet title, to facilitate the electronic plan review process.
- 5) **Merging and Grouping Files:** All site plan, landscape plan and civil construction plan sheets shall be grouped into individual plan sets, and not provided as individual PDF's for each plan sheet within the plan set. For example, if the project is broken up into multiple 20-scale site plan sheets and a cover sheet, it is not necessary to provide a PDF for each individual site plan sheet ("site plan sheet 01.pdf", "site plan sheet 02.pdf", etc.). If each plan set consists of multiple files for each page (drawing sheet) they must be merged into a single PDF file sets per the above guidelines. If multiple PDF's are merged, verify that bookmarks are consistent and that the merged files are less than 150 MB. If the merged plan set is greater than the 150 MB maximum file size limit, then the set can be merged into subsets as needed.
- 6) **Page Orientation:** Pages (sheets) must all be properly oriented, meaning upright, not sideways or upside down, so that the document can be viewed without rotation. Failure to submit correctly oriented plans may result in a request for resubmittal which will delay the review. To check that pages are properly oriented, open the document in a PDF application (Adobe Reader or Pro) and

do a 'print preview'. Scroll through each page in the preview window to make sure the pages are properly oriented. Make sure the correct paper size is selected and look for incorrectly rotated pages. The top of the drawing sheet must be oriented to the top of the computer screen.

- 7) **Scale and Page Size:** Plans must be saved at 'full size' and 'to-scale' to ensure proper measuring of lines and areas electronically. Plan sets must not have a page size larger than 24x36 inches.
- 8) **Scale Bar:** Plans must include a scale bar on each sheet. When more than one scale is used on a sheet, an independent graphic scale must accompany the applicable detail.
- 9) **Raster images embedded in the AutoCAD drawing:** If sketches, photographs, product specification sheets or other raster images are incorporated into the plan sheets, these images should be set to be saved at 300 DPI when creating vector-based PDF sheets of the plans. A lower resolution setting may be possible, but could create fuzzy images within the plan set. To ensure that these images load quickly in the PDF reader, be sure to set image transparency 'off' before plotting. Transparent raster images require considerable resources to display. Even though the source image is not transparent, your CAD software may be plotting it with transparency (white pixels plotted as see-thru).
- 10) **Vector vs. Raster files:** Vector-based PDF files must be provided if this option is available when creating the PDFs. Vector based PDF's are preferred because they can be scaled by any amount without any degrading image quality. This allows the plans to be reviewed in a much higher level of clarity on a computer screen. The optimization instructions above create a vector-based PDF.

Helpful Recommendations for Raster-based scans:

- Raster-based PDF files are images of the plans which contain a specific number of pixels. These images are typically created by scanning paper copies of plans, and then converting the scan to a PDF format. Raster image PDF's are only accepted if vector-based PDF's cannot be created. An example of this would be an old plan is used as a base sheet, where a scanned image is the only document available and reconstructing the plan linework in a CAD application is not feasible.
- If plan sheets must be provided as raster images, set the scanner to around 100-150 dpi resolution. This should create a clear, legible PDF but keeps the file size to a minimum. This also reduces regeneration time when loading the plan on a computer screen.
- The following processing steps are recommended if creating raster PDF files:
 - a) Saving the plan sheets as 8-bit (grayscale) or 24-bit (full-color) raster files will drastically increase the file size. Even if the images contain only black and white objects, 8-bit and 24-bit files still contain all of the shade and color data. Linework plans should be saved as 1-bit (monochrome).
 - b) Uncompressed files are much larger than compressed files. When creating or saving PDF files specify "compressed." A lossless compression (such as LZW) is recommended. Typically, plan sheets contain mostly white space. The data required to store this white space can be significantly reduced using compression when saving the plans to PDF.

C. File Naming:

- 1) No consultant project file numbers, dates or added characters should be provided in the file naming. Acronyms should also not be used, such as TIS or ECS.
- 2) The file name must clearly convey the review content of the file. The site plan should be named “site plan.pdf”. The landscape plan should be named “landscape plan.pdf”, etc.
- 3) Providing the project name in addition to the review subject of the file is not necessary. Sufficiently describing the contents of the file and the review subjects of the sheets that are included is the priority.
- 4) Examples of suitable file naming conventions ([See Section B for Summary of Plans and Documents](#)):

Examples of Plan Names:

- a) Site Plan.pdf, or Site Plan Sheets.pdf
- b) Utility Plans.pdf or Civil Construction Plans.pdf
- c) Prelim Plat.pdf or Final Plat.pdf
- d) Architectural Plans and Details.pdf
- e) Landscape Plan and Details.pdf
- f) Lighting Plans and Details.pdf
- g) Trash Enclosure Plans and Details.pdf
- h) Existing Tree Inventory Plan.pdf
- i) Neighborhood Context Plan.pdf

Examples of Reports and Supporting Document Names:

- j) Project Narrative.pdf or Statement of Planning Objectives.pdf
- k) Existing Tree Removal Feasibility Letter.pdf
- l) PDP 2nd Round Comment Responses.pdf
- m) Prelim (or Final) Drainage and Erosion Report.pdf
- n) Soils Report.pdf
- o) Ecological Characterization Study.pdf
- p) Traffic Impact Study.pdf
- q) Engineering Variance 1.pdf
- r) Alternative Compliance Landscaping.pdf
- s) Parking Plan Vignettes.pdf or Parking Garage Plans.pdf
- t) Building Floor Plans.pdf
- u) Fire Circulation Diagram.pdf
- v) Parking Impact Study.pdf