

CED CAD Standards Synopsis

CED STANDARD LINEWEIGHTS AND SCREENING

	BLACK		GRAY 1		GRAY 2		GRAY 3		GRAY 4		GRAY 5		GRAY 6		YELLOW		RED		CYAN
--	-------	--	--------	--	--------	--	--------	--	--------	--	--------	--	--------	--	--------	--	-----	--	------

1	13	25	37	49	61
2	14	26	38	50	62
3	15	27	39	51	63
4	16	28	40	52	64
5	17	29	41	53	65
6	18	30	42	54	66
7	19	31	43	55	67
8	20	32	44	56	68
9	21	33	45	57	69
10	22	34	46	58	70
11	23	35	47	59	71
12	24	36	48	60	72

121-255
PER OBJECT
COLOR AND
LINEWEIGHT
[UNASSIGNED]

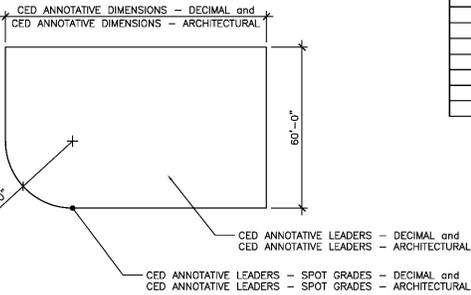
CED STANDARD LINETYPES

- HIDDEN2
- - - - - HIDDEN
- DASHED
- DASHEDX2
- CENTER2
- CENTER
- DASHDOT2
- DASHDOT
- BORDER2
- BORDER
- DASH3DOT2
- DASH3DOT
- PHANTOM2
- PHANTOM
- ○ ○ FENCELINE1
- □ □ FENCELINE2
- DOT2
- DOT

CED STANDARD TEXT AND DIMENSIONS

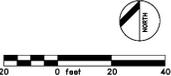
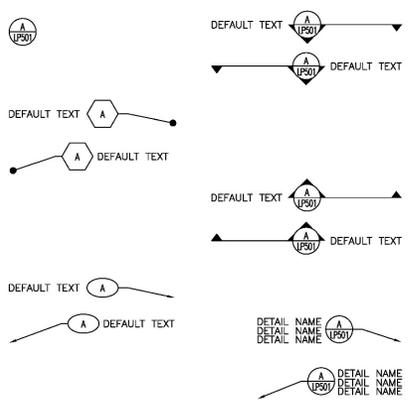
ROMANS.SHX IS THE STANDARD FONT, AND IS DEFINED BY THE TEXT STYLE "CED ANNOTATIVE TEXT - DECIMAL" AND "CED ANNOTATIVE TEXT - ARCHITECTURAL" DEPENDING ON TEMPLATE CHOSEN. 0123456789 _-!@#%&*^&*0<>[]{}

ROMAND.SHX IS THE TITLEBLOCK FONT, AND IS DEFINED BY THE TEXT STYLE "CED TITLEBLOCK" IN BOTH TEMPLATES. 0123456789 _-!@#%&*^&*0<>[]{}



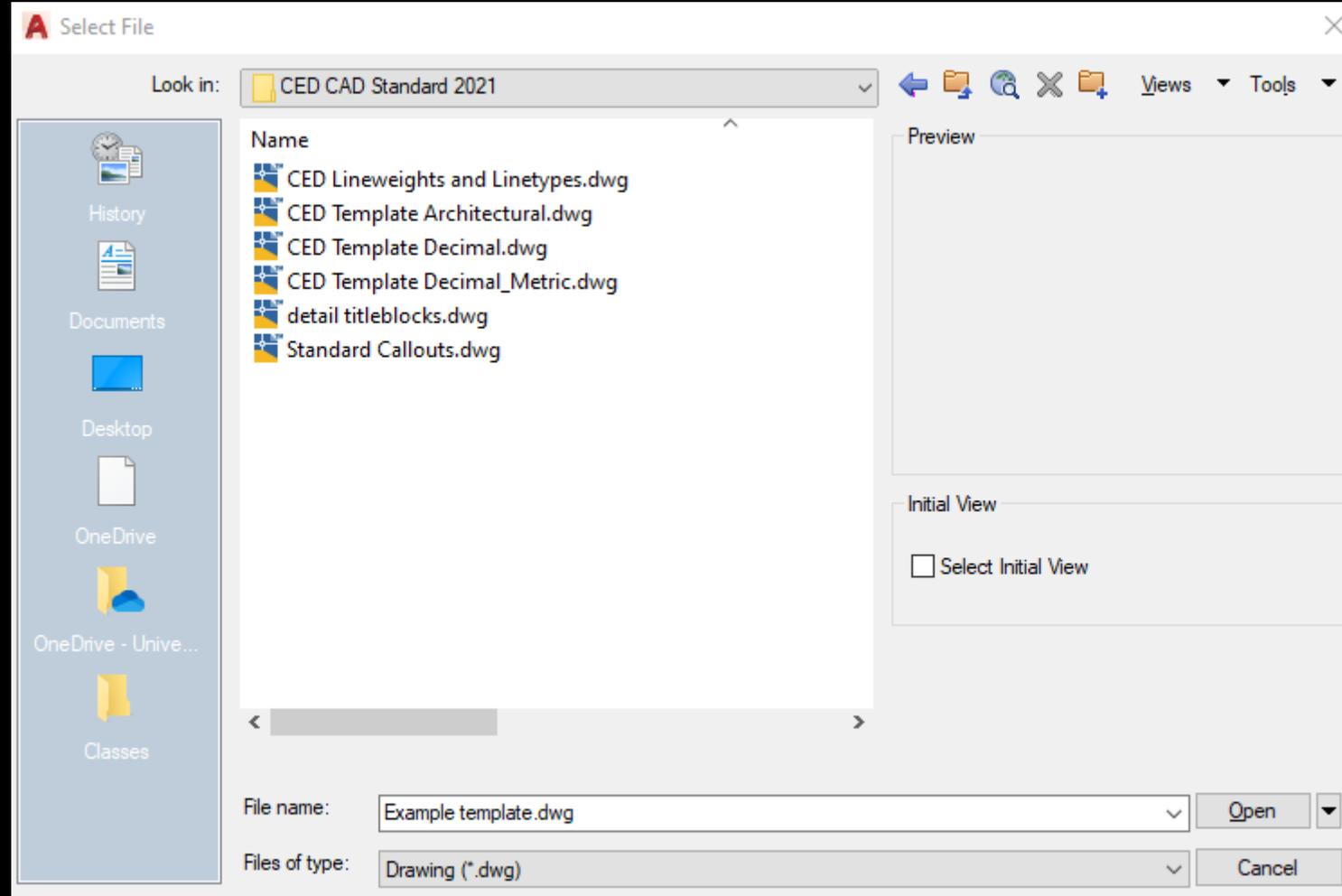
ARCHITECTURAL SCALE FACTORS	
1/32"=1'-0"	3072
1/24"=1'-0"	1536
1/16"=1'-0"	768
1/8"=1'-0"	384
3/16"=1'-0"	192
1/4"=1'-0"	128
3/8"=1'-0"	96
1/2"=1'-0"	64
5/8"=1'-0"	48
3/4"=1'-0"	32
7/8"=1'-0"	24
1"=1'-0"	16
1 1/2"=1'-0"	8
2"=1'-0"	4
3"=1'-0"	2

CED STANDARD CALLOUTS



<p>UNIVERSITY OF GEORGIA College of Environment + Design</p>	<p>CED / UGA</p>	<p>COLLEGE OF ENVIRONMENT AND DESIGN CAD STANDARDS</p>	<table border="1"> <tr><th>NO.</th><th>NOTES</th><th>DATE</th></tr> <tr><td> </td><td> </td><td> </td></tr> </table>	NO.	NOTES	DATE																<p>DRAWN: TJ DATE: 6/24/2014 SCALE: 1"=20'</p>	<p>SHEET TITLE: STANDARD LINE WEIGHTS, LINE TYPES, TEXT STYLES, DIMENSION STYLES, AND GENERAL EXAMPLES</p>	<p>SHEET NUMBER: 1</p>
			NO.	NOTES	DATE																			

Templates and included CAD files

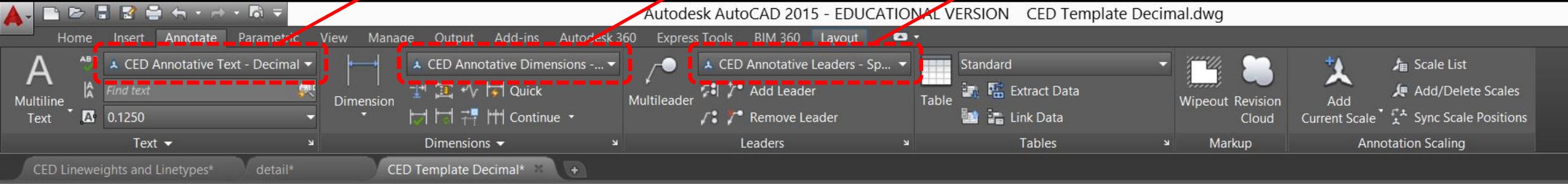


Text Styles

Text Styles

Dimension Styles

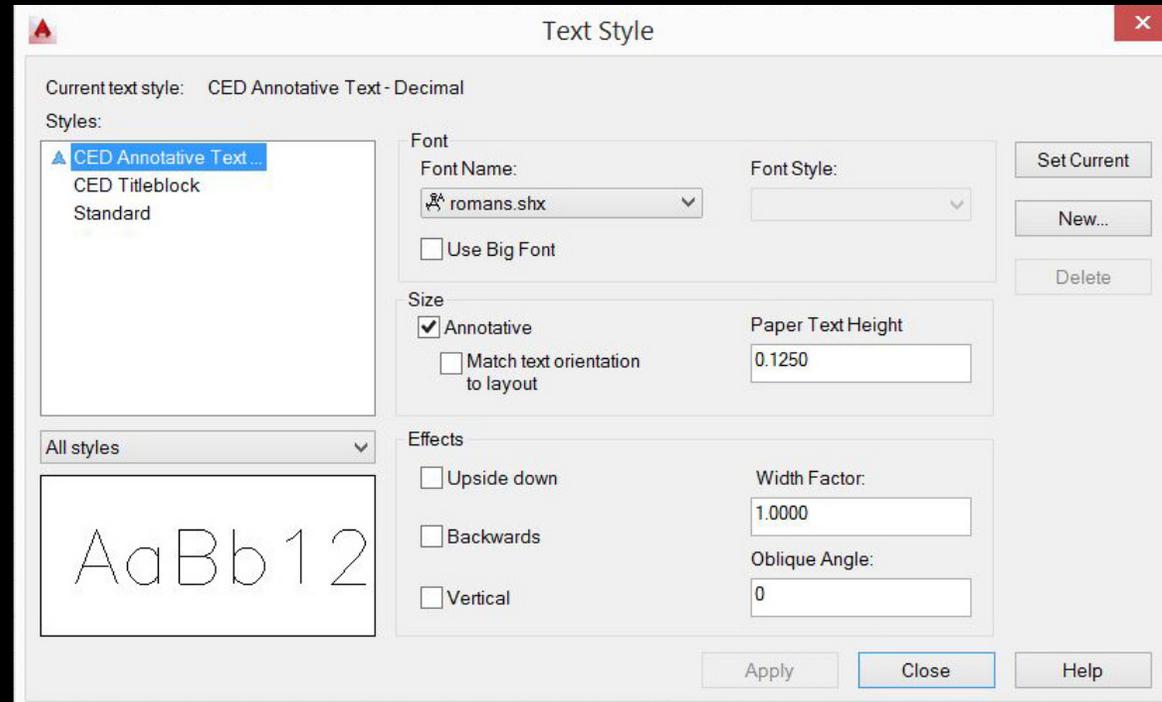
Multi-leader Styles



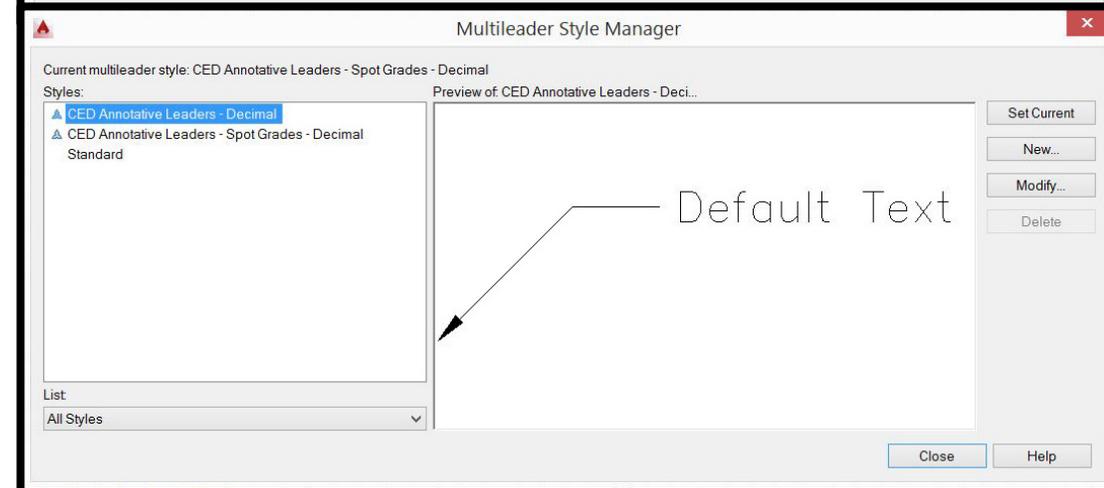
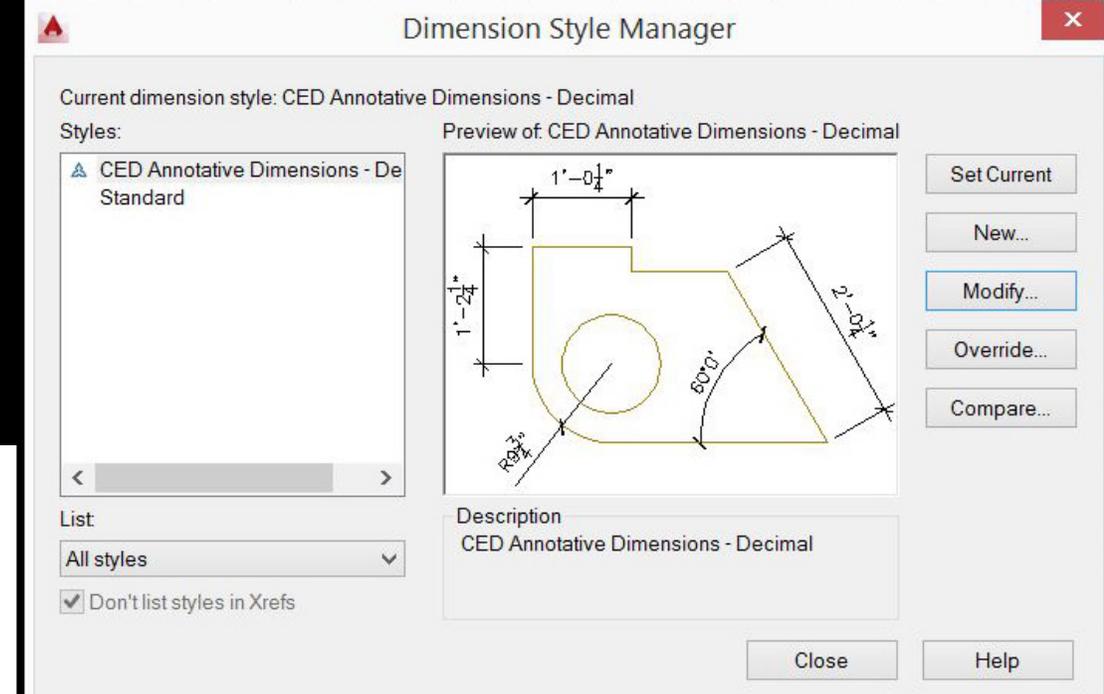
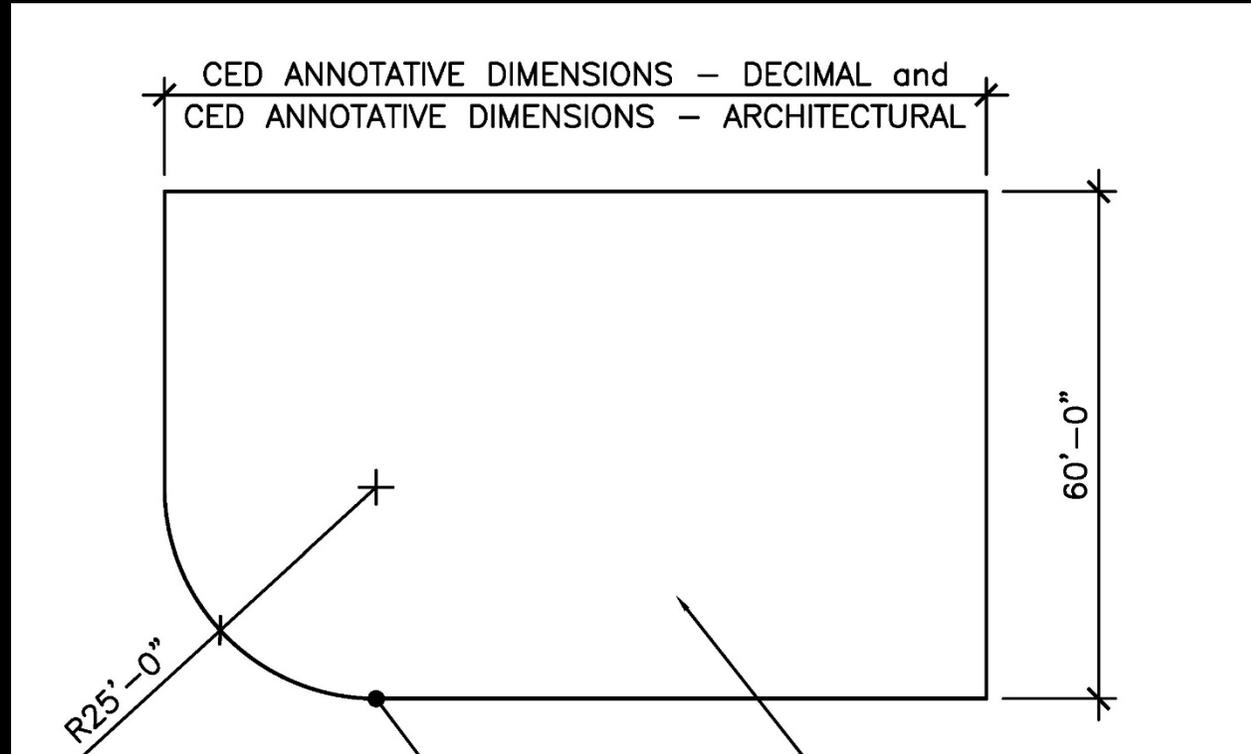
CED STANDARD TEXT AND DIMENSIONS

ROMANS.SHX IS THE STANDARD FONT, AND IS DEFINED BY THE TEXT STYLE "CED ANNOTATIVE TEXT – DECIMAL" AND "CED ANNOTATIVE TEXT – ARCHITECTURAL" DEPENDING ON TEMPLATE CHOSEN. 0123456789 _-!@#\$\$%^&*()<>[]}}

ROMAND.SHX IS THE TITLEBLOCK FONT, AND IS DEFINED BY THE TEXT STYLE "CED TITLEBLOCK" IN BOTH TEMPLATES. 0123456789 _-!@#\$\$%^&*()<>[]}}



Dimension / Multi-leader Styles



CED ANNOTATIVE LEADERS – DECIMAL and
CED ANNOTATIVE LEADERS – ARCHITECTURAL

CED ANNOTATIVE LEADERS – SPOT GRADES – DECIMAL and
CED ANNOTATIVE LEADERS – SPOT GRADES – ARCHITECTURAL

Titleblocks

Logo in block as CAD entities



All titleblock text information included as editable attributes of the block:

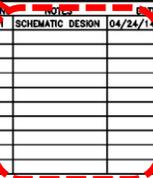
Student Information



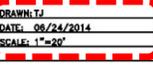
Project Information



Revision / Issue box



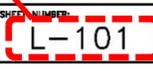
Drawn / Date / Scale box



Sheet Title



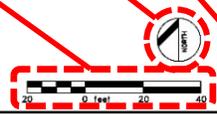
Sheet Number



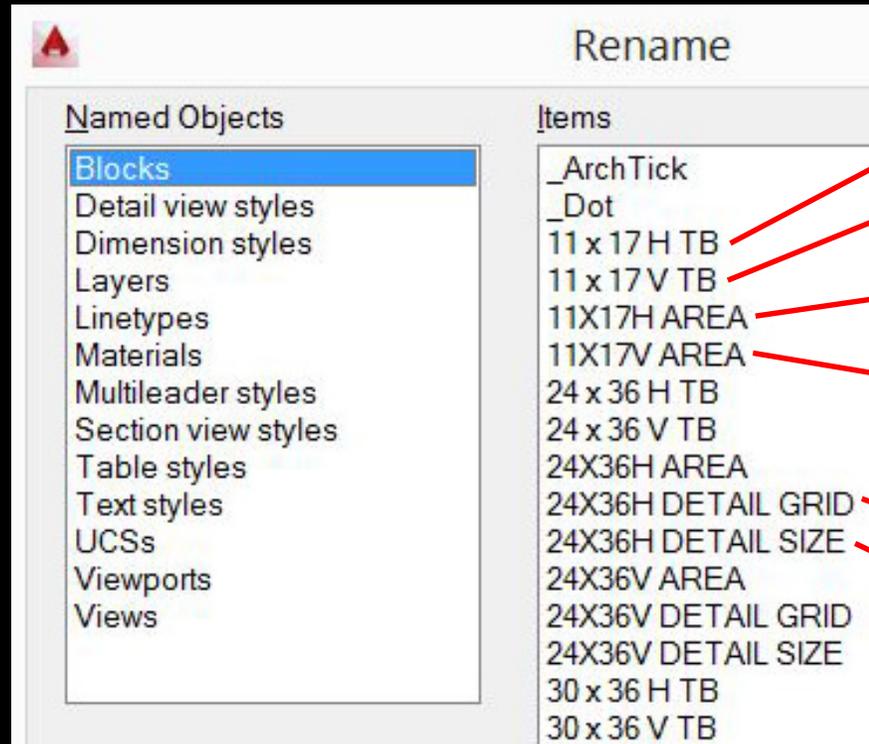
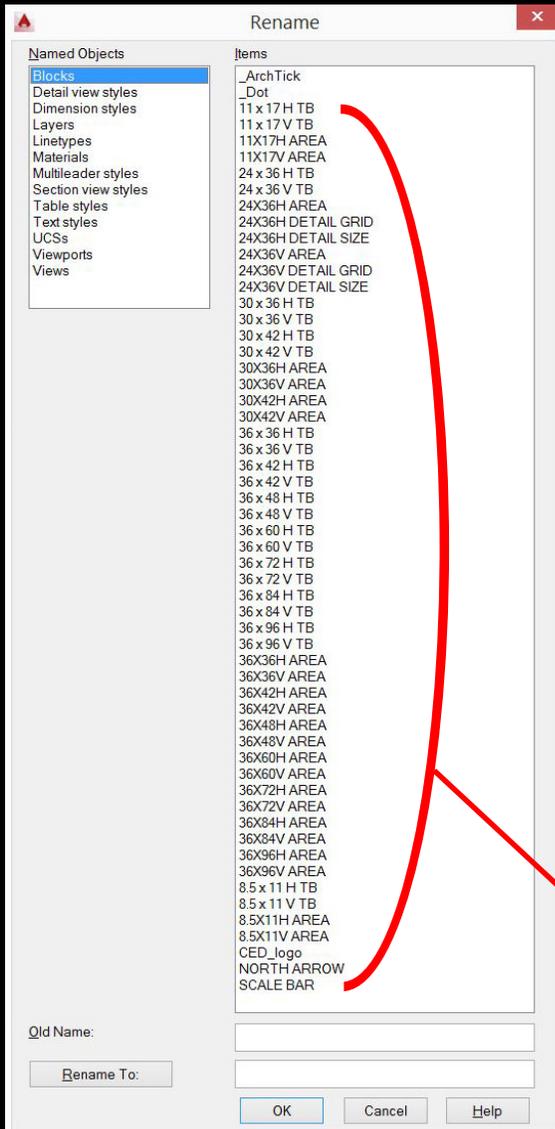
North arrow is a separate block



Scale is a separate block, with editable attributes



Blocks



11x17 horizontally-oriented titleblock

11x17 vertically-oriented titleblock

Plot area (use to create a saved view) for 11x17 horizontally-oriented titleblock

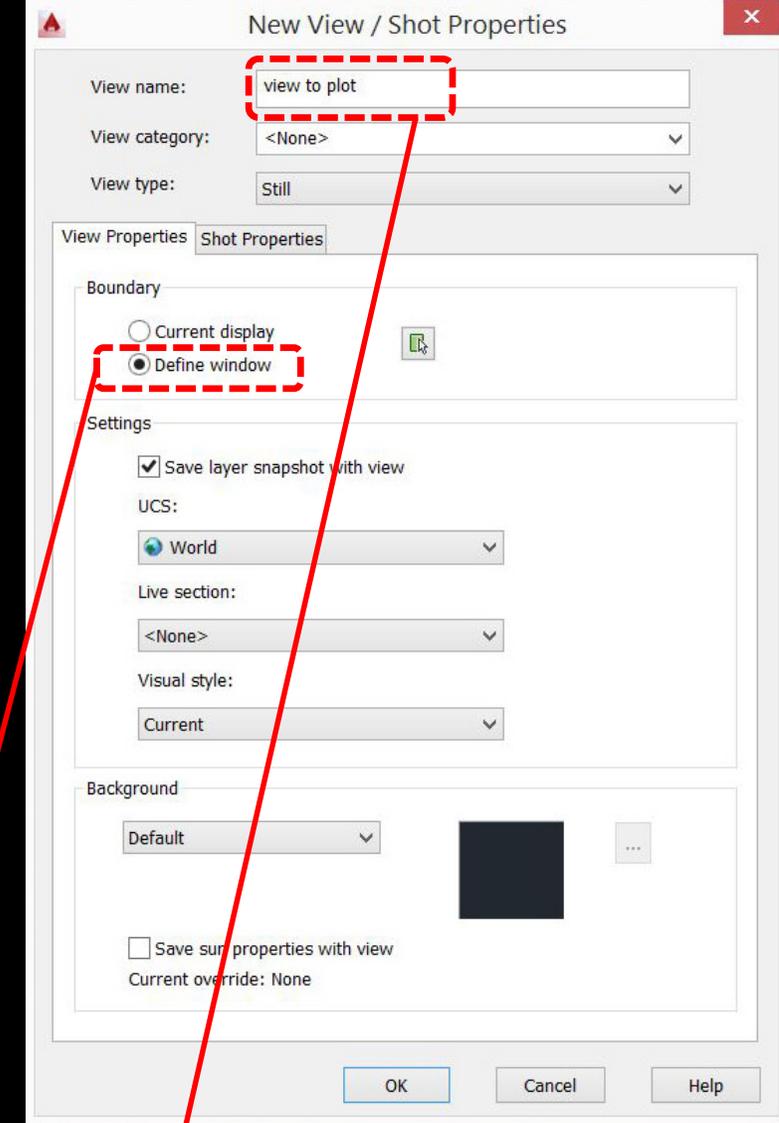
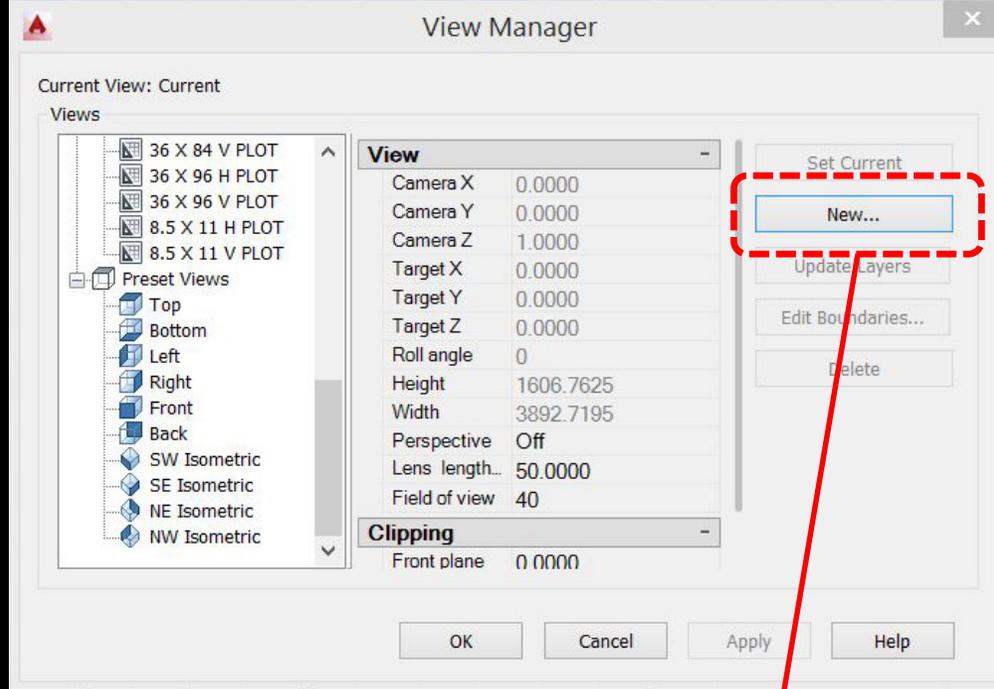
Plot area (use to create a saved view) for 11x17 vertically-oriented titleblock

Grid to aid in laying out details on a sheet

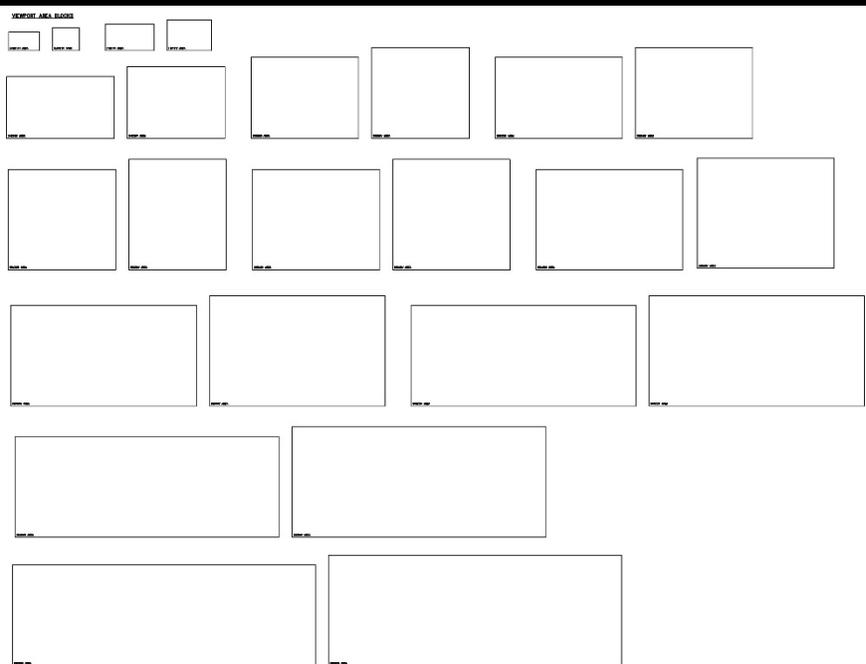
Detail size, corresponds to detail grid

Standard blocks included in CED Templates

Viewport Sizes Plot Views



Viewport size blocks



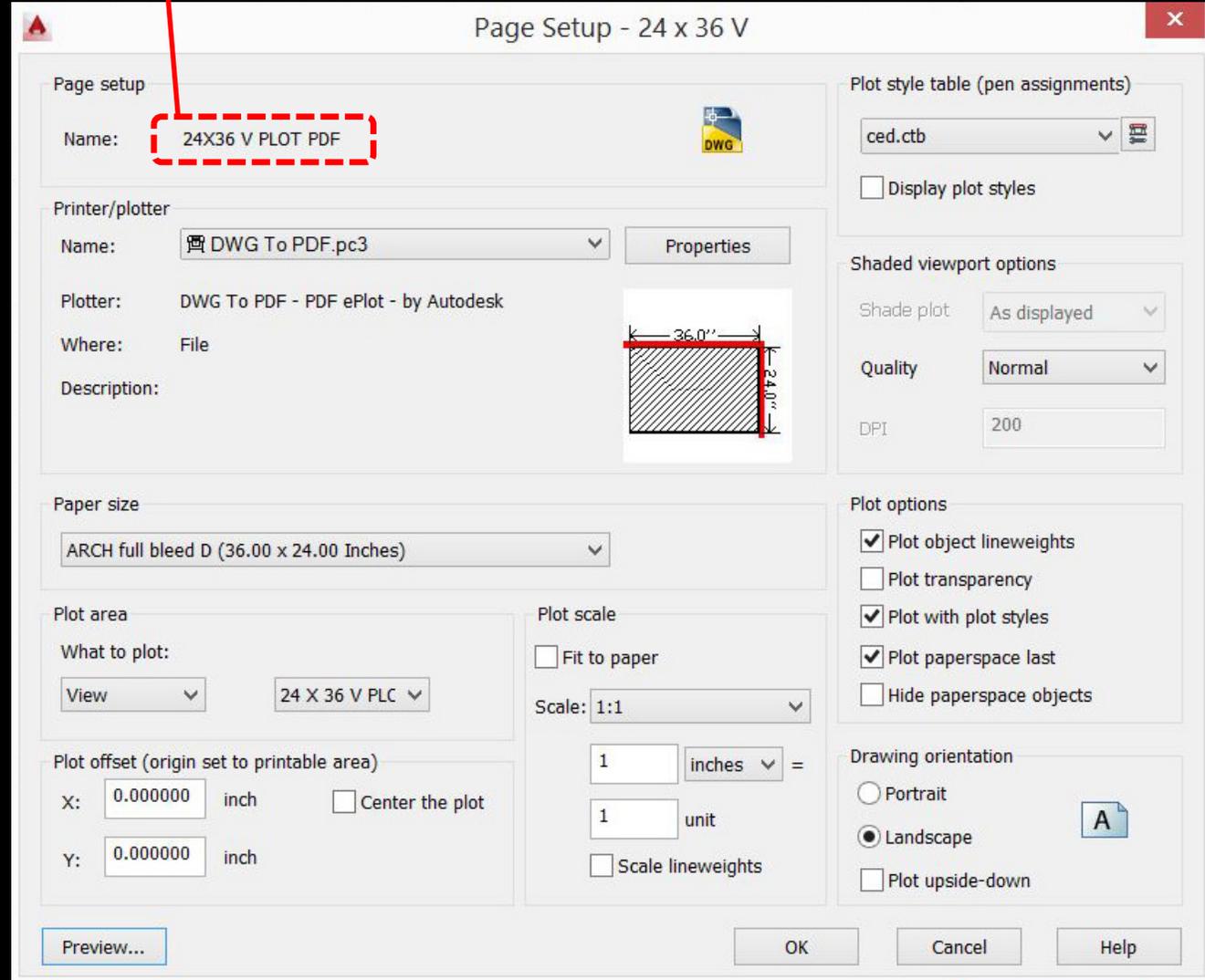
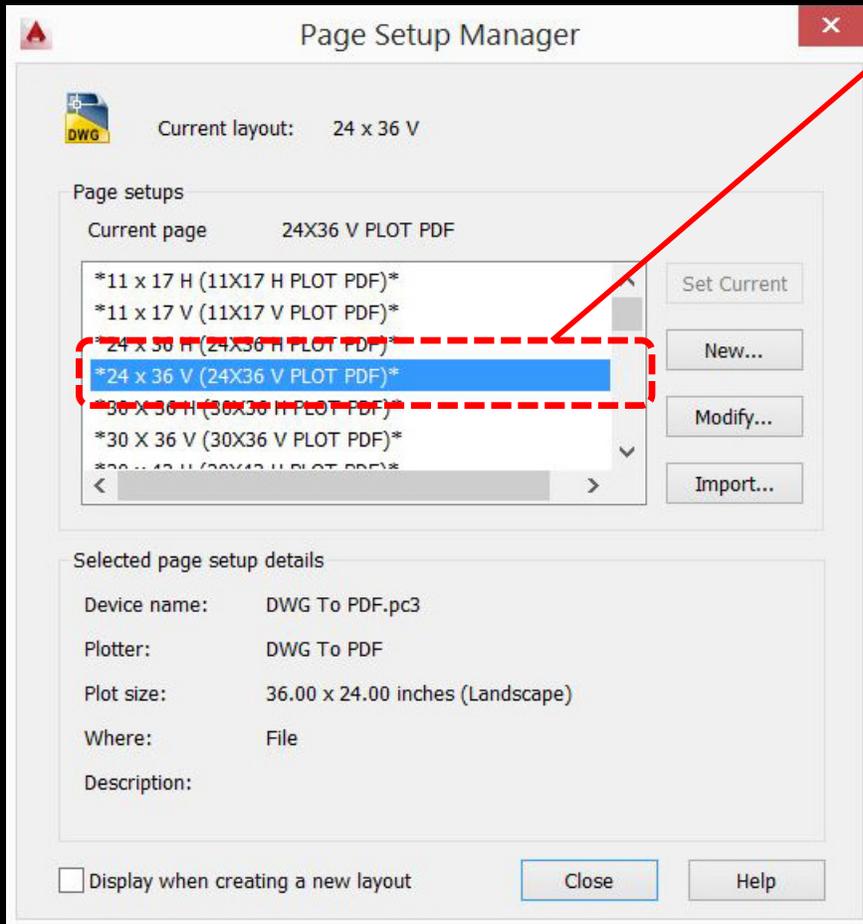
Create a new view...

...by picking a window using the
viewport size block corners...

...and giving it a unique name that
will be used in the page setup.

Page Setups

Named page setups for all sheet sizes and titleblock orientations in template

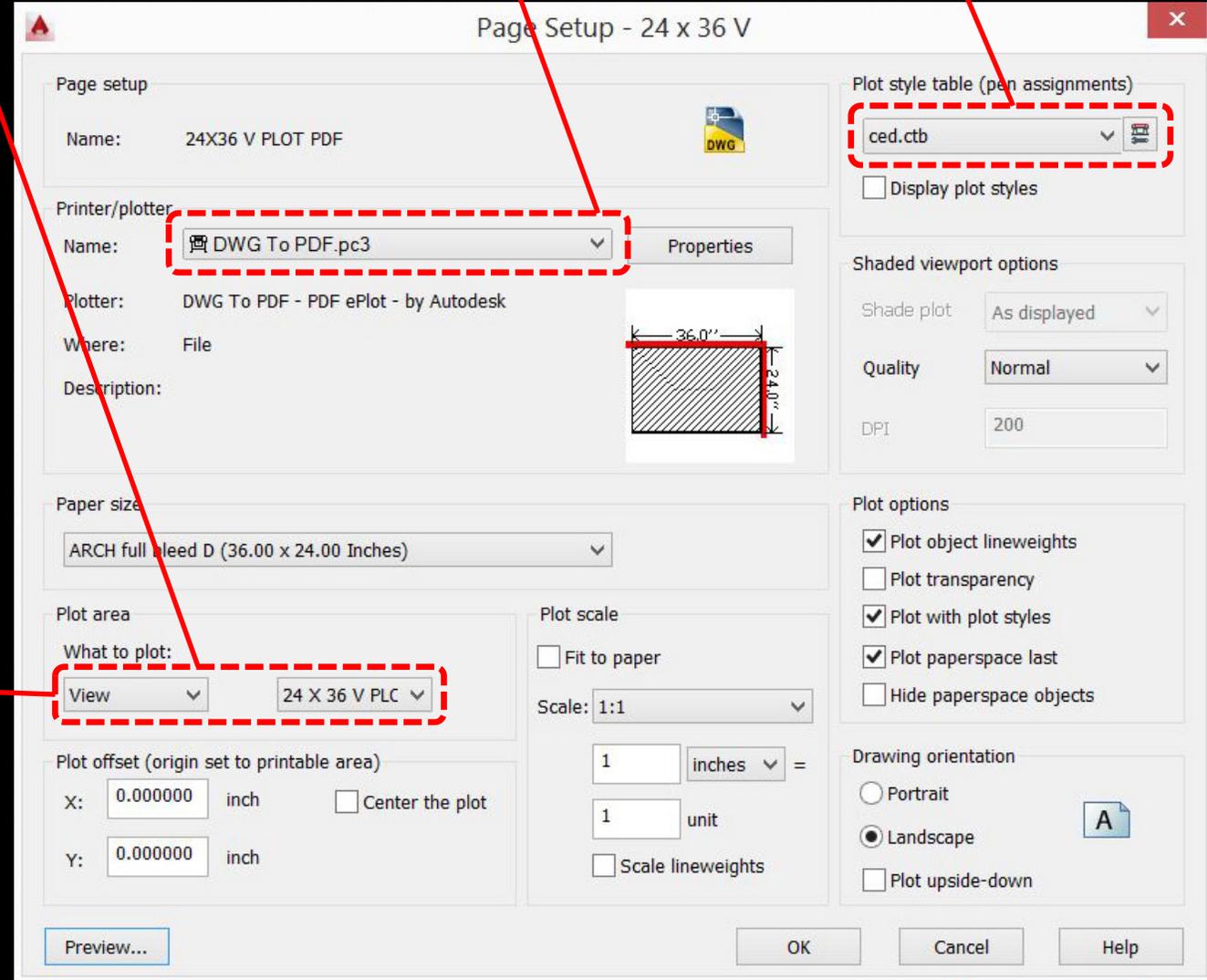
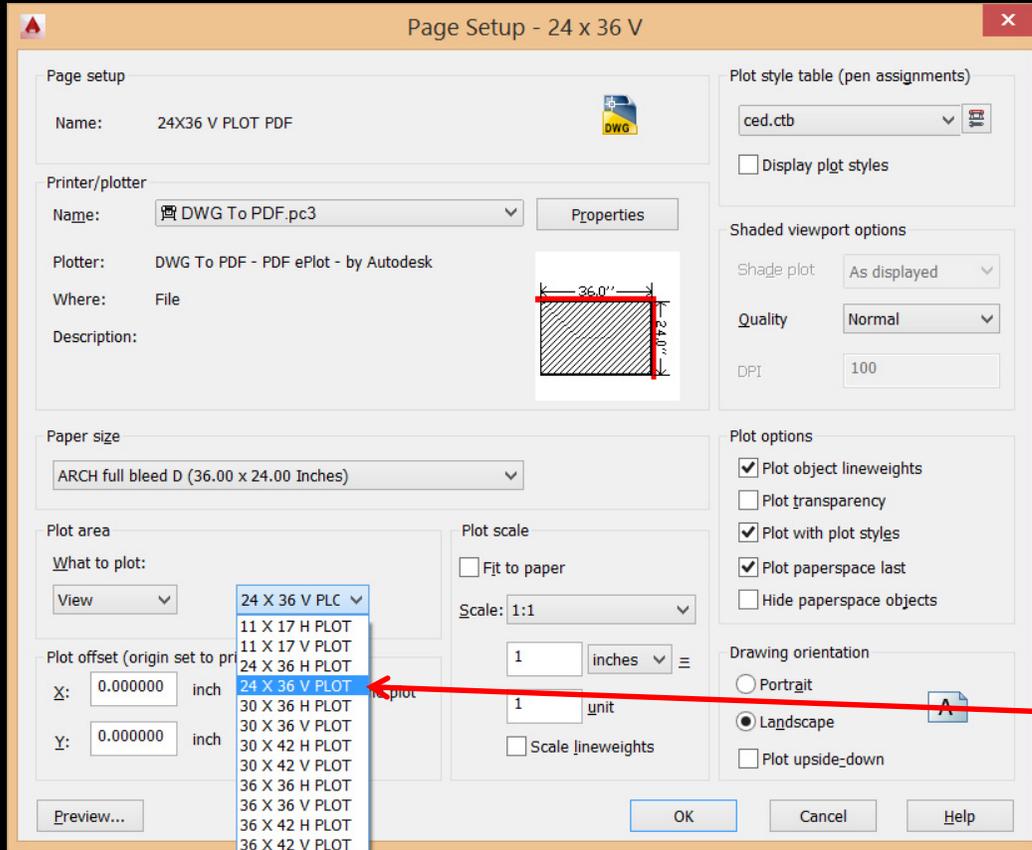


Page Setups

Set plot area to View, use named view that matches sheet orientation

CED standard plotter (DWG to PDF.pmp; DWG to PDF.pc3)

CED standard plot style table (CED.ctb)



CTB file

Sequence of 12 lineweights repeats...

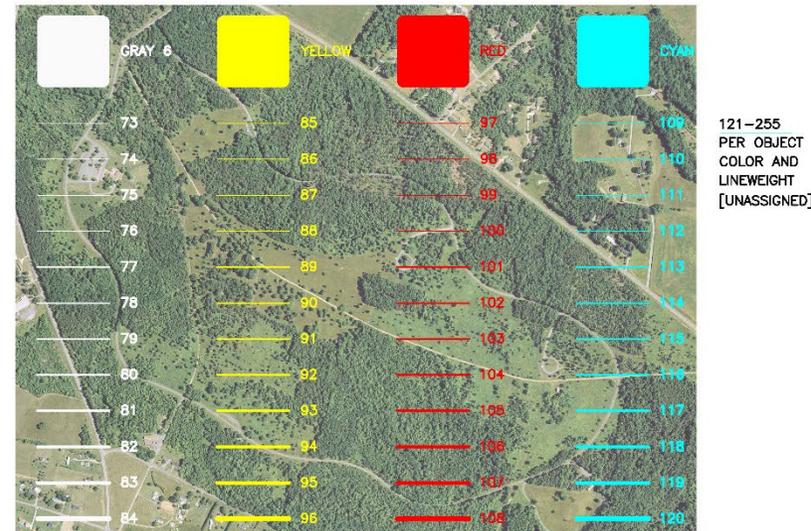
Plot Style Table Editor - ced.ctb

General Table View Form View

Name	Color 1	Color 2	Color 3	Color 4	Color 5	Color 6	Color 7	Color 8	Color 9	Color 10	Color 11	Color 12	Color 13	Color 14	Color 15
Description	Description_1	Description_2	Description_3	Description_4	Description_5	Description_6	Description_7	Description_8	Description_9	Description_10	Description_11	Description_12	Description_13	Description_14	Description_15
Color	Black	84,84,84	84,84,84	84,84,84											
Enable dithering	On														
Convert to grayscale	Off														
Use assigned pen #	Automatic														
Virtual pen #	Automatic														
Screening	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Linetype	Use object linetype	Use object linetype	Use object linetype	Use object linetype	Use object linetype	Use object linetype	Use object linetype	Use object linetype	Use object linetype	Use object linetype	Use object linetype	Use object linetype	Use object linetype	Use object linetype	Use object linetype
Adaptive adjustment	Off														
Lineweight	0.0508 mm	0.1778 mm	0.2794 mm	0.3810 mm	0.5080 mm	0.5588 mm	0.6096 mm	0.7112 mm	0.7874 mm	0.9906 mm	1.1938 mm	1.5748 mm	0.0508 mm	0.1778 mm	0.2794 mm
Line End Style	Use object end style	Use object end style	Use object end style	Use object end style	Use object end style	Use object end style	Use object end style	Use object end style	Use object end style	Use object end style	Use object end style	Use object end style	Use object end style	Use object end style	Use object end style
Line Join style	Use object join style	Use object join style	Use object join style	Use object join style	Use object join style	Use object join style	Use object join style	Use object join style	Use object join style	Use object join style	Use object join style	Use object join style	Use object join style	Use object join style	Use object join style
Fill Style	Use object fill style	Use object fill style	Use object fill style	Use object fill style	Use object fill style	Use object fill style	Use object fill style	Use object fill style	Use object fill style	Use object fill style	Use object fill style	Use object fill style	Use object fill style	Use object fill style	Use object fill style

CED STANDARD LINEWEIGHTS AND SCREENING

Color	Lineweight	Color	Lineweight	Color	Lineweight	Color	Lineweight	Color	Lineweight	Color	Lineweight
BLACK	1	GRAY 1	13	GRAY 2	25	GRAY 3	37	GRAY 4	49	GRAY 5	61
BLACK	2	GRAY 1	14	GRAY 2	26	GRAY 3	38	GRAY 4	50	GRAY 5	62
BLACK	3	GRAY 1	15	GRAY 2	27	GRAY 3	39	GRAY 4	51	GRAY 5	63
BLACK	4	GRAY 1	16	GRAY 2	28	GRAY 3	40	GRAY 4	52	GRAY 5	64
BLACK	5	GRAY 1	17	GRAY 2	29	GRAY 3	41	GRAY 4	53	GRAY 5	65
BLACK	6	GRAY 1	18	GRAY 2	30	GRAY 3	42	GRAY 4	54	GRAY 5	66
BLACK	7	GRAY 1	19	GRAY 2	31	GRAY 3	43	GRAY 4	55	GRAY 5	67
BLACK	8	GRAY 1	20	GRAY 2	32	GRAY 3	44	GRAY 4	56	GRAY 5	68
BLACK	9	GRAY 1	21	GRAY 2	33	GRAY 3	45	GRAY 4	57	GRAY 5	69
BLACK	10	GRAY 1	22	GRAY 2	34	GRAY 3	46	GRAY 4	58	GRAY 5	70
BLACK	11	GRAY 1	23	GRAY 2	35	GRAY 3	47	GRAY 4	59	GRAY 5	71
BLACK	12	GRAY 1	24	GRAY 2	36	GRAY 3	48	GRAY 4	60	GRAY 5	72



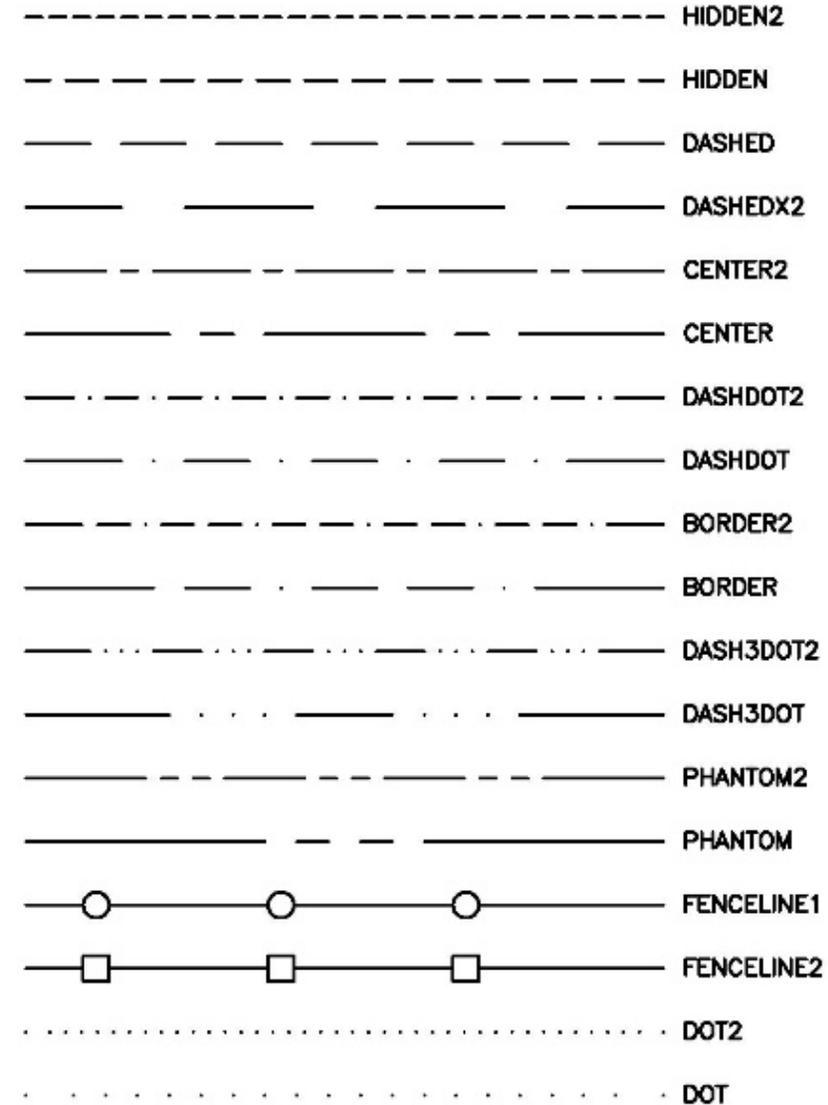
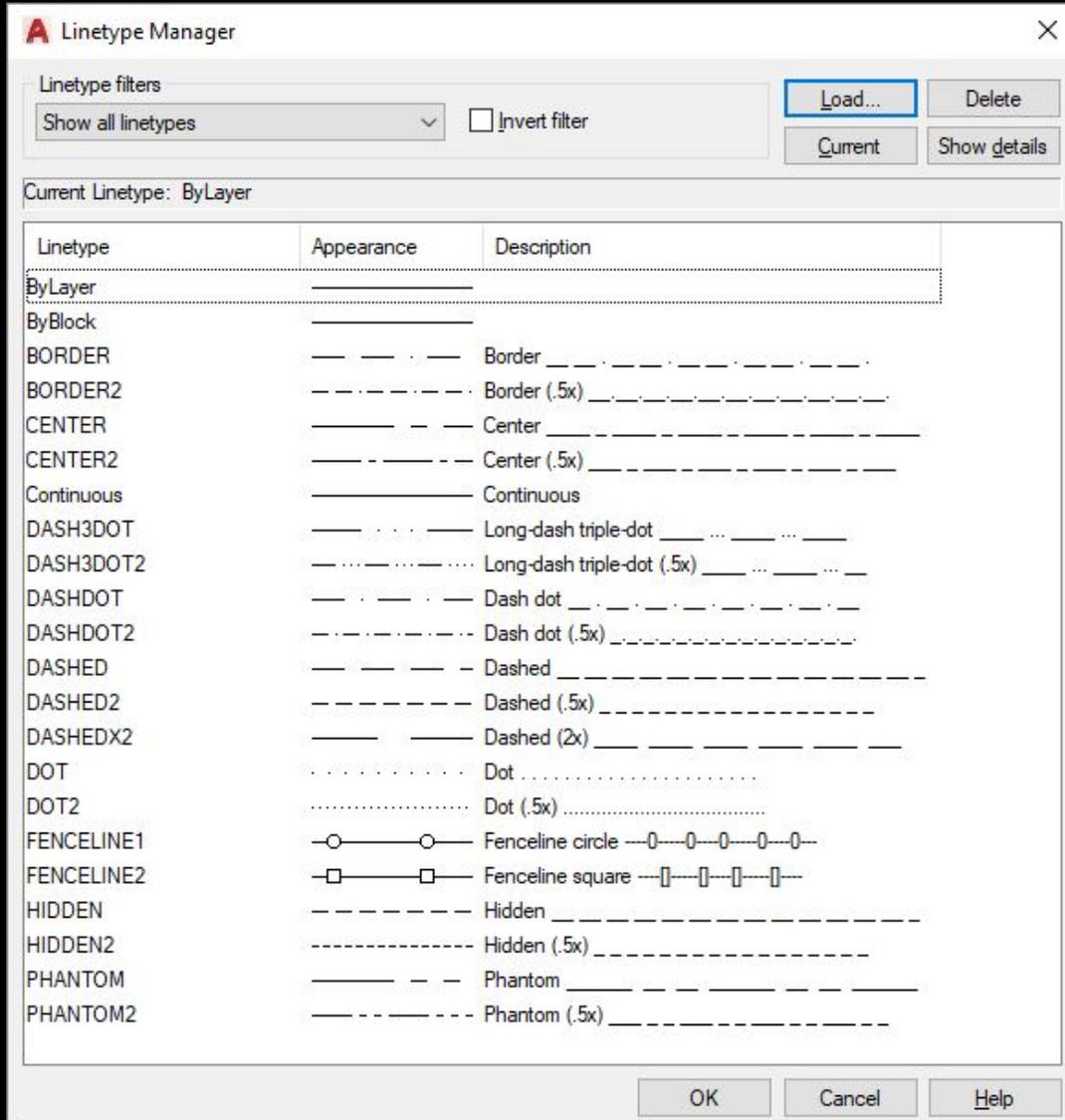
...in 100% black, 6 incrementally lighter shades of gray, and 3 colors.

Line types

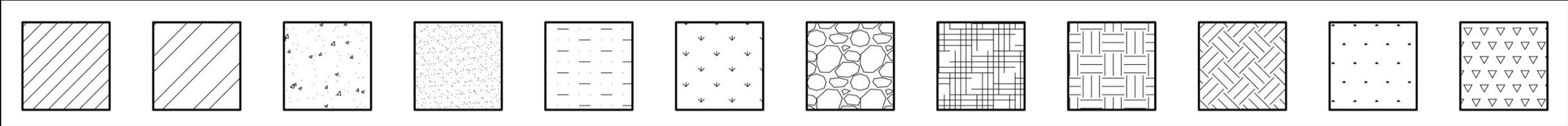
Linetypes preloaded in templates.

Use universal ltscaling.

CED STANDARD LINETYPES



Hatch Patterns



Hatch patterns in templates with
annotative scaling

Logo



**UNIVERSITY OF
GEORGIA**

**College of
Environment + Design**

Logo in templates as CAD entities

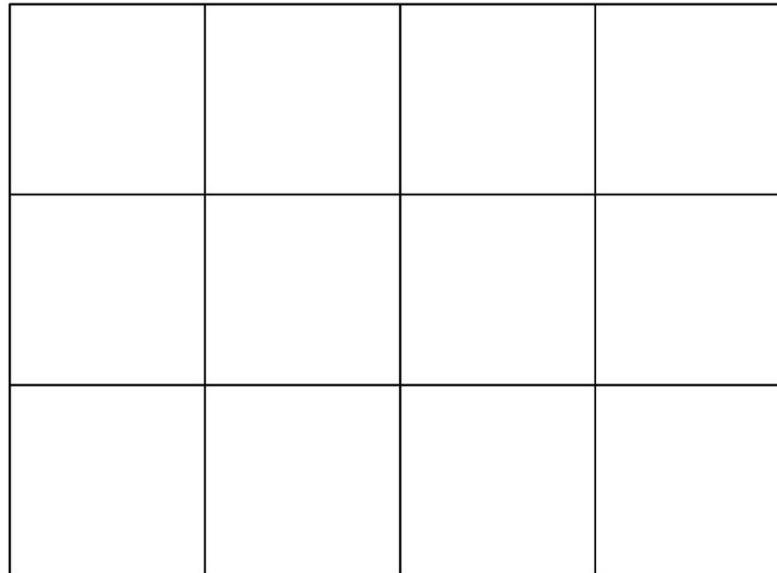
Details

Scale up detail size template in model space based on desired detail scale and associated scale factor.

Use Detail Reference Grid as an alignment tool for placing details into a titleblock sheet.



24x36 V DETAIL SIZE



24x36 V DETAIL GRID

ARCHITECTURAL SCALE FACTORS	
$\frac{1}{256}''=1'-0''$	3072
$\frac{1}{128}''=1'-0''$	1536
$\frac{1}{64}''=1'-0''$	768
$\frac{1}{32}''=1'-0''$	384
$\frac{1}{16}''=1'-0''$	192
$\frac{3}{32}''=1'-0''$	128
$\frac{1}{8}''=1'-0''$	96
$\frac{3}{16}''=1'-0''$	64
$\frac{1}{4}''=1'-0''$	48
$\frac{3}{8}''=1'-0''$	32
$\frac{1}{2}''=1'-0''$	24
$\frac{3}{4}''=1'-0''$	16
$1''=1'-0''$	12
$1\frac{1}{2}''=1'-0''$	8
$3''=1'-0''$	4
$6''=1'-0''$	2

Detail Reference Grid for
24x36 sheet with vertical TB

Details

ARCHITECTURAL SCALE FACTORS	
$\frac{1}{256}''=1'-0''$	3072
$\frac{1}{28}''=1'-0''$	1536
$\frac{1}{64}''=1'-0''$	768
$\frac{1}{32}''=1'-0''$	384
$\frac{1}{16}''=1'-0''$	192
$\frac{3}{32}''=1'-0''$	128
$\frac{1}{8}''=1'-0''$	96
$\frac{3}{16}''=1'-0''$	64
$\frac{1}{4}''=1'-0''$	48
$\frac{3}{8}''=1'-0''$	32
$\frac{1}{2}''=1'-0''$	24
$\frac{3}{4}''=1'-0''$	16
$1''=1'-0''$	12
$1\frac{1}{2}''=1'-0''$	8
$3''=1'-0''$	4
$6''=1'-0''$	2

DETAIL AREA BLOCKS

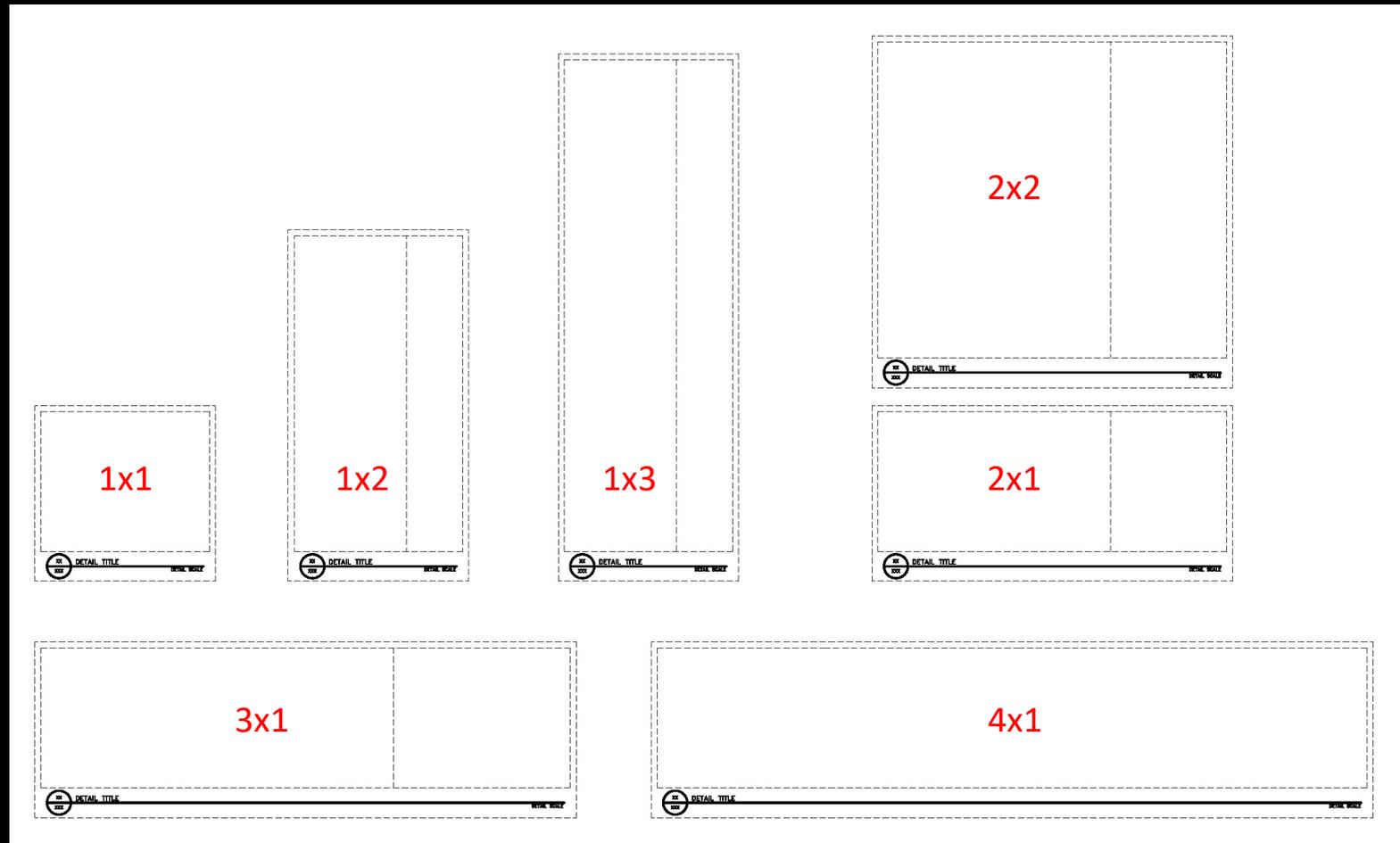
USE THESE BLOCKS TO DETERMINE THE SIZE OF YOUR DETAIL. TO DO THIS, COPY THE BLOCK YOU NEED, PASTE IT INTO YOUR DRAWING (CREATED USING ARCHITECTURAL UNITS) IN MODELSPACE, THEN SCALE IT UP BASED ON YOUR DETAIL SCALE, USING THE SCALE FACTORS IN THIS TABLE.

THE TITLEBLOCK INFORMATION IS INCLUDED AS EDITABLE ATTRIBUTES, JUST LIKE OUR CED STANDARD TITLEBLOCK, SO DOUBLECLICK TO EDIT THE TEXT.

Detail size templates and titles.

Based on Detail Reference Grid, choose the template based on detail size and complexity. More complex details may require more than one grid block. Remember, these are scaled up in model space based on desired detail scale and associated scale factor. Titles are blocks with editable attributes, so edit the text just as you would the CED Standard titleblock.

Dashed lines are non-printing.



Layer Names

Standard layer names created in templates

Follow naming patterns for new layers

Use an X to indicate existing information. For example, L-PLNT-TREE-X for existing tree information. Make layers as needed, following the patterns.

Current layer: 0

Filters: All, All Used Layers

S...	Name	O...	Fr...	L...	Color	Linetype	Lineweight	Tran...	Plot ...	P...	N...	V...	VP ...	VP Linetype	VP Lineweight	VP T...	VP Plot Style
✓	0	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	Defpoints	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-ANNO-DIMS	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-ANNO-KEYN	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-ANNO-LEGN	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-ANNO-NOTE	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-ANNO-NPLT	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-ANNO-REDL	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-ANNO-REVS	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-ANNO-SYMB	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-ANNO-TEXT	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-ANNO-TTLB	☹	☀	☹	green	Continuous	Default	0	Color...	☹	☹	☹	g...	Continuous	Default	0	Color_3
☹	L-ANNO-TTLB-BORD	☹	☀	☹	10	Continuous	Default	0	Color...	☹	☹	☹	10	Continuous	Default	0	Color_10
☹	L-ANNO-TTLB-LOGO	☹	☀	☹	red	Continuous	Default	0	Color...	☹	☹	☹	red	Continuous	Default	0	Color_1
☹	L-ANNO-TTLB-TEXT	☹	☀	☹	blue	Continuous	Default	0	Color...	☹	☹	☹	bl...	Continuous	Default	0	Color_5
☹	L-ANNO-TTLB-VPRT	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-BLDG	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-IRRG	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-IRRG-COVR	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-IRRG-EQPT	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-IRRG-PIPE	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-IRRG-SPKL	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-LITE	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-LITE-IDEN	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-LITE-SITE	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-PLNT	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-PLNT-BEDS	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-PLNT-GRND	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-PLNT-PLAN	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-PLNT-TREE	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7
☹	L-PLNT-TURF	☹	☀	☹	white	Continuous	Default	0	Color...	☹	☹	☹	w...	Continuous	Default	0	Color_7

Layer Properties Manager

All: 50 layers displayed of 50 total layers

Detail Layer Names

Standard layer names created in template

Follow naming pattern for new layers

The screenshot displays the Layer Properties Manager interface. The current layer is 0. The list of layers includes:

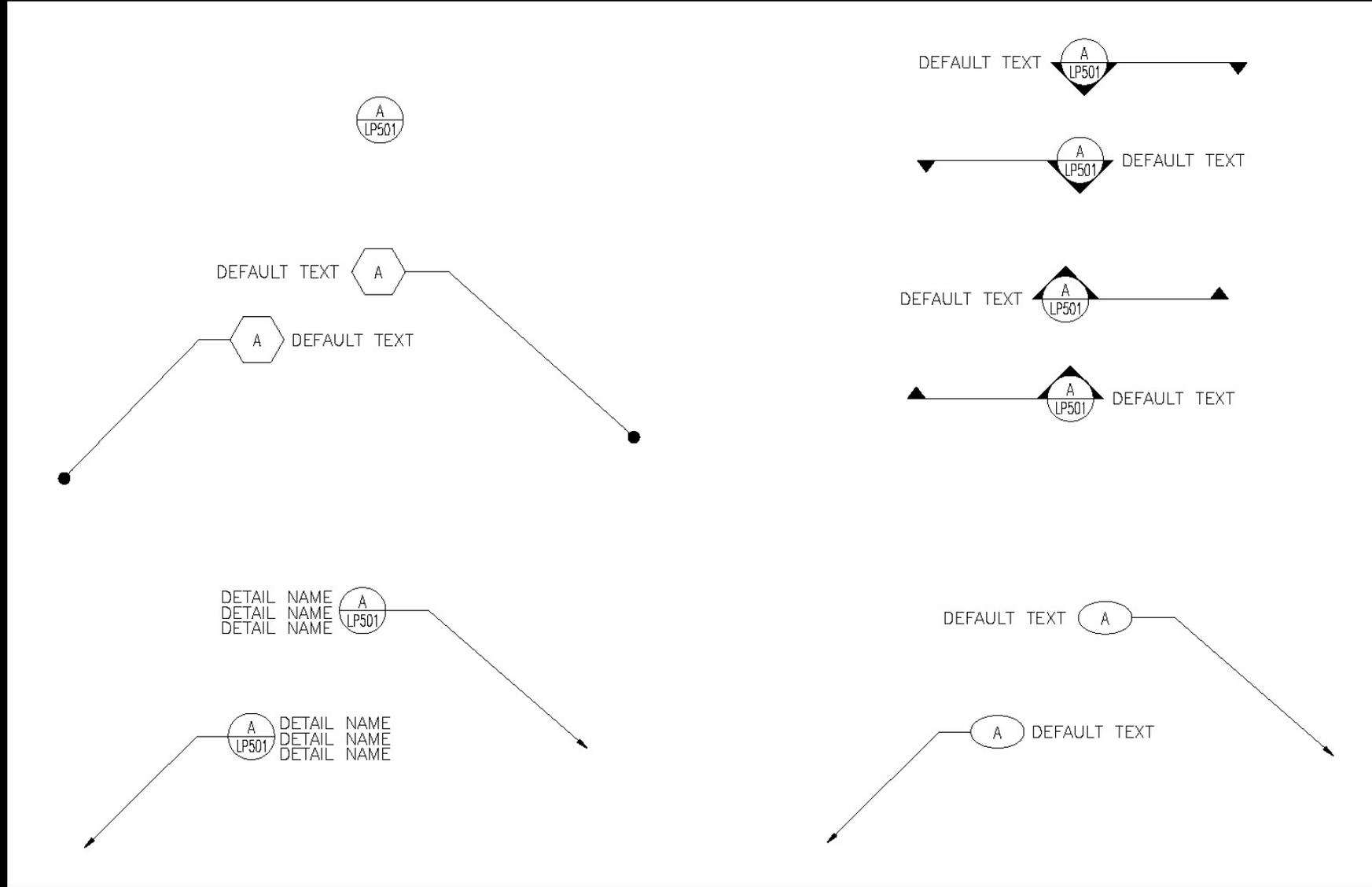
S.	Name	On	Fr...	VP Freeze	Lock	Plot	Color	VP Color	Linetype	VP Linetype	Lineweight	VP Lineweight
✓	0	☑	☑	☑	🔒	☑	white	white	CONTINUOUS	CONTINUOUS	Default	Default
	L-DETL-MEDM	☑	☑	☑	🔒	☑	green	green	CONTINUOUS	CONTINUOUS	Default	Default
	L-DETL-THCK	☑	☑	☑	🔒	☑	blue	blue	CONTINUOUS	CONTINUOUS	Default	Default
	L-DETL-THIN	☑	☑	☑	🔒	☑	yellow	yellow	CONTINUOUS	CONTINUOUS	Default	Default
	L-DETL-XTHK	☑	☑	☑	🔒	☑	red	red	CONTINUOUS	CONTINUOUS	Default	Default
	L-DETL-XTHN	☑	☑	☑	🔒	☑	10	10	CONTINUOUS	CONTINUOUS	Default	Default

At the bottom left, it states: "All: 6 layers displayed of 6 total layers".

Callouts

Standard callout and reference blocks are included in the download.

These are annotatively scaled blocks, so they adjust automatically based on your annotation scale.



Download

Navigate to
https://ced.uga.edu/tech_services/ced_cad_standard/

Or from the CED home page, go to Resources, Tech Services, then scroll to the link for the CED CAD STANDARD near the bottom of the page.

The CED CAD STANDARD page includes the download package, installation instructions, and a video overview of the elements of the standard.

College of Environment + Design
UNIVERSITY OF GEORGIA

ABOUT PROGRAMS STUDENT LIFE PUBLIC SERVICES + OUTREACH DIRECTORY ALUMNI GIVING NEWS + EVENTS RESOURCES

CED TECHNOLOGY SERVICES

CORONAVIRUS (COVID-19) INFORMATION PAGE FOR THE CED COMMUNITY

REMOTE/ONLINE TEACHING RESOURCES AT CED

SERVICE REQUEST CATALOG
CED maintains a catalog of requests for service (requires your UGA MyID) for things such as building and computer access, Quattris account setup, etc. A few common service requests include...

Computer & Building access
GIS Desktop and Online student access
Large format print submission

Location
31 JACKSON STREET BUILDING (OFFICE)
22 JACKSON STREET BUILDING (PRINT/SCAN SHOP)
(706) 542-6463
cedwp@uga.edu

Spring Hours
Due to COVID distancing needs, please email cedwp@uga.edu

Print/Scan Shop and Copy/Prints Checklist
Monday: 10am - 6pm
Tuesday: 10am - 6pm
Wednesday: 10am - 6pm
Thursday: 10am - 6pm
Friday: 10pm - 1pm
Saturday: 10pm - 6pm

KNOWLEDGEBASE		
GENERAL	POLICIES	HARDWARE *Setup is required for all CAD programs
SOFTWARE	GIS RELATED	PRINTING, PLOTTING, SCANNING
FABRICATION	NETWORK	PORTFOLIO DEVELOPMENT

CED CAD STANDARD
Access this page to learn about the standard, and download everything needed to install on your computer.

TECH SERVICES OVERVIEW

YOUR PATH SCORE
College of Environment + Design / Technology Services

UGA HOME PAGE SUPPORT DESIGN EDUCATION PUBLIC SERVICE REQUEST CED INTRANET TEXT ONLY SITE PRIVACY STUDENT COMPLAINTS

Contact Us
College of Environment + Design
285 South Jackson Street
The University of Georgia
Athens, GA 30602 USA
PH: (706) 542-1816
Fax: (706) 542-6483
Owens Library + Circle Gallery
(706) 543-8382

Email us to request a meeting or tour
BLA - Landscape Architecture Undergraduate program
BLA+ - Landscape Architecture Graduate program
MUP - Master of Urban Planning program
MUPD - Master of Urban Planning and Design program
PHD - Doctor of Philosophy in Environmental Design and Planning program

ALL RIGHTS RESERVED, CE+D © 2021

UNIVERSITY OF GEORGIA
Athens and College
Diversity | M.F.S.A.
Employment Opportunities | Copyright and Trademarks
Privacy

#UGA on f t i y t u

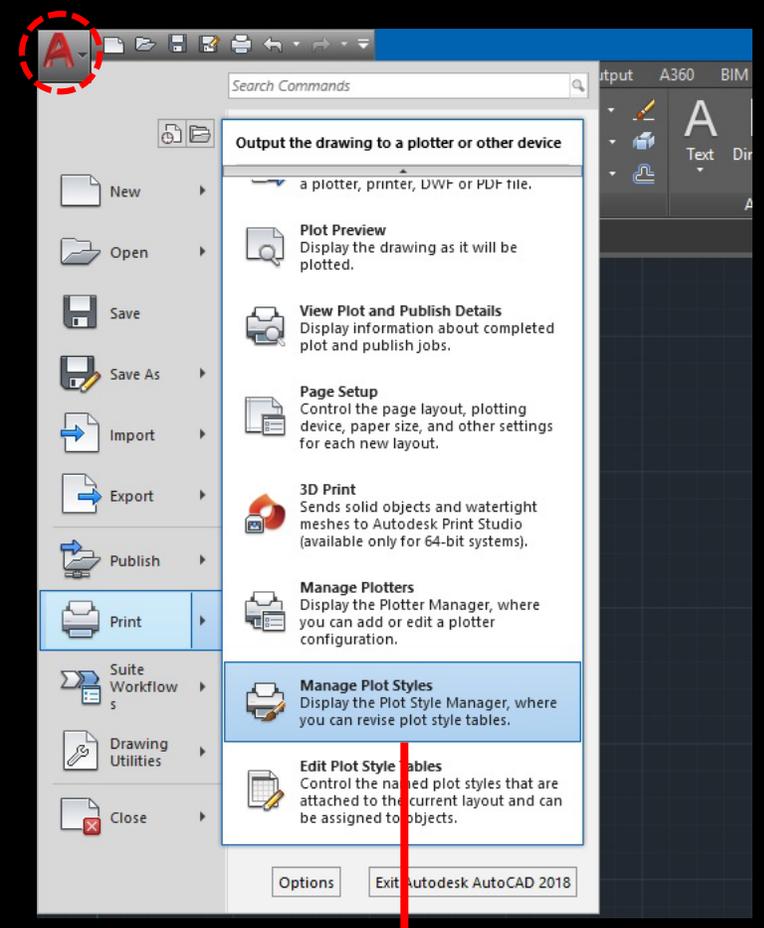
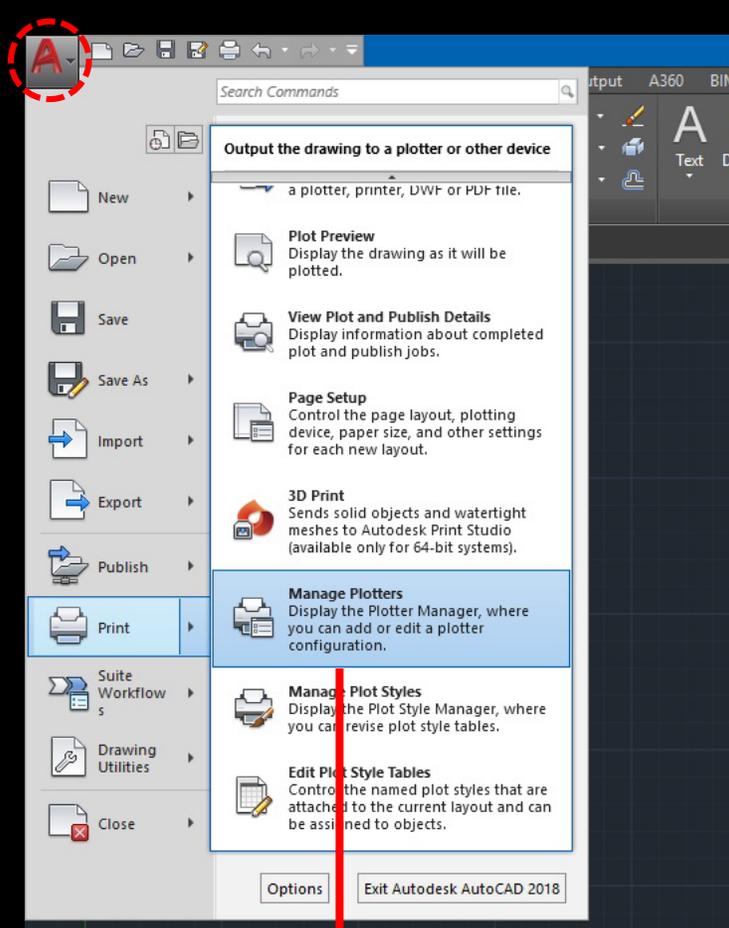
© University of Georgia, Athens, GA 30602
The UGA logo

File Locations

Option A

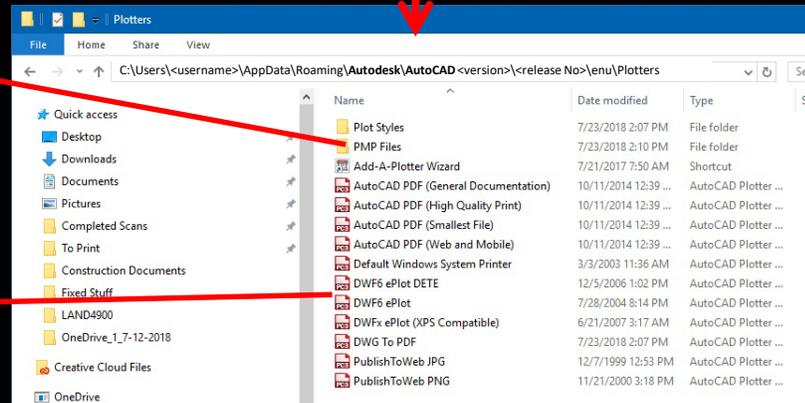
Three files need to be placed in specific locations on your computer.

Launch **MANAGE PLOTTERS** and **MANAGE PLOT STYLES** from AutoCAD to navigate to these locations.

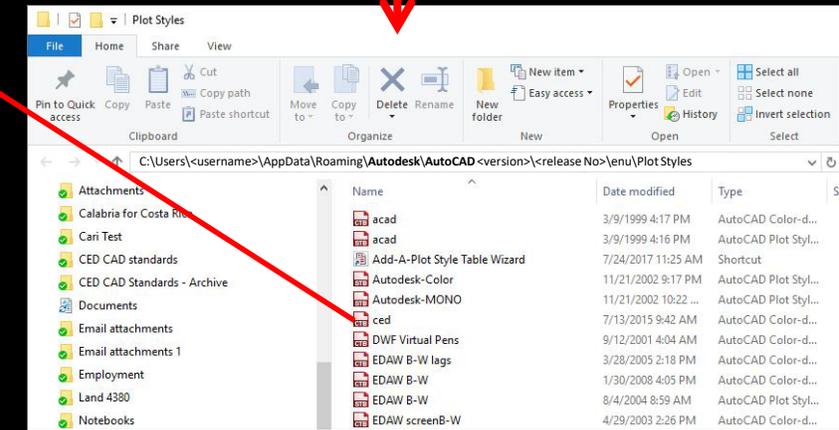


DWG to PDF.pmp placed in PMP Files folder

DWG to PDF.pc3 placed in Plotters folder



CED.ctb placed in Plot Styles folder



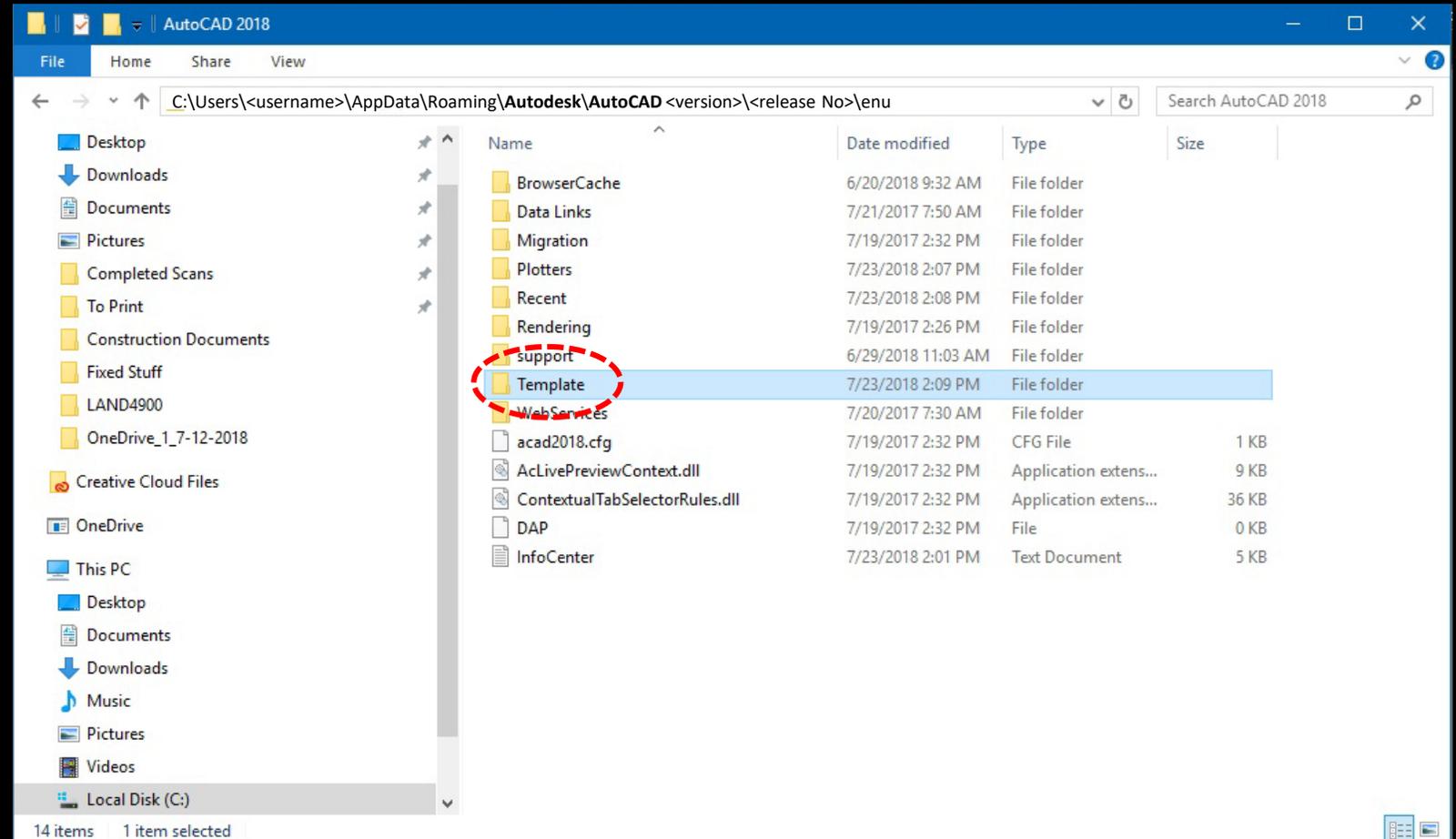
File Locations

AutoCAD Templates

The template files (.dwt) can be copied into place, allowing you to create new files with all the standard components.

From either the PLOT STYLES or PLOTTERS windows you opened in the previous step, navigate up one level to the enu folder, then to the TEMPLATE folder.

Copy the three template files (CED TEMPLATE ARCHITECTURAL.dwt, CED TEMPLATE DECIMAL.dwt, and CED TEMPLATE DECIMAL_METRIC.dwt) into the TEMPLATE folder.



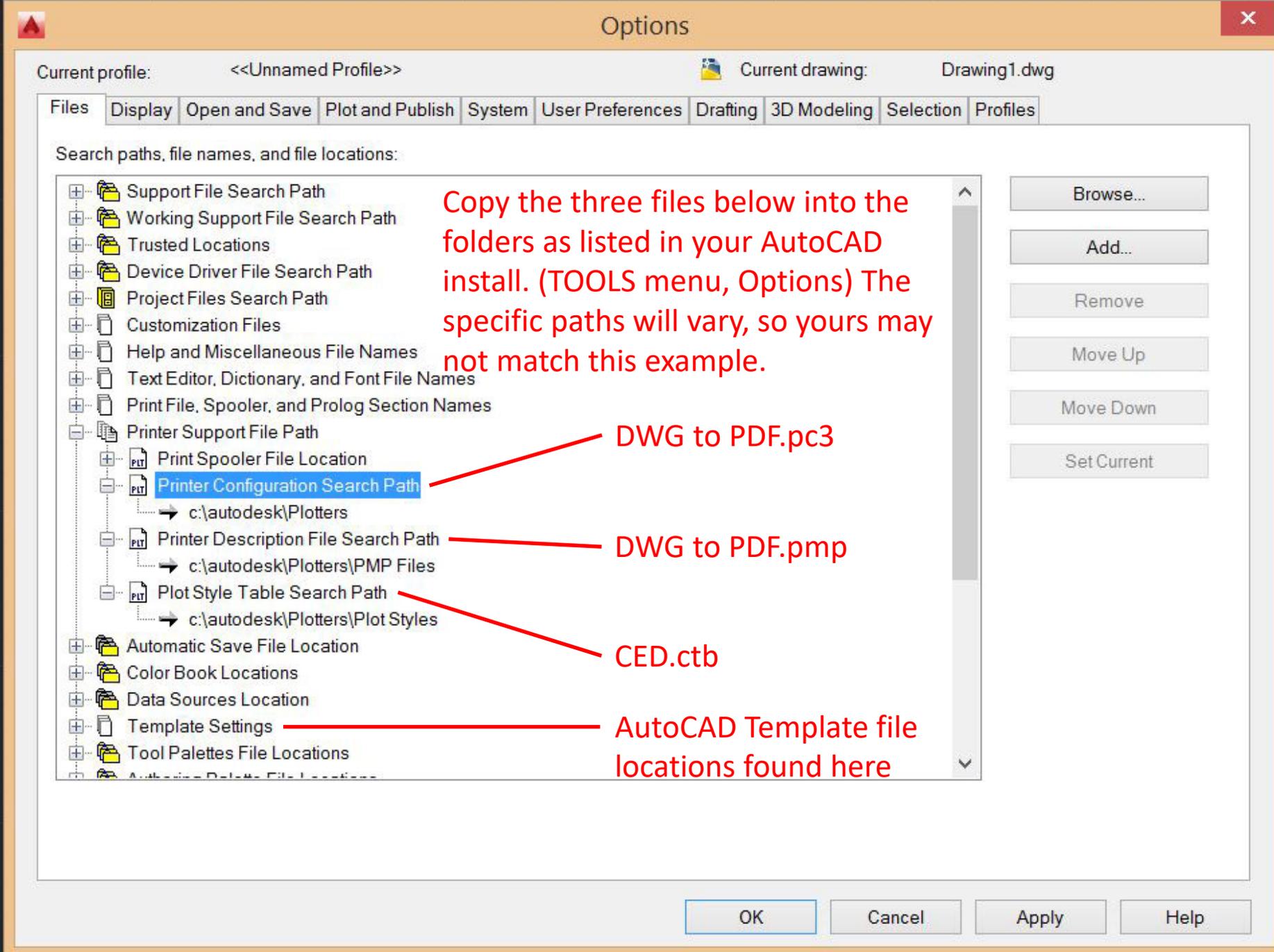
Note that template in this case denotes an AutoCAD file saved with a .dwt extension. These function differently than files saved as a standard .dwg, such as those seen on the second slide of this presentation.

File Locations

Option B

Three files need to be placed in specific locations on your computer.

The AutoCAD OPTIONS command opens this screen, which you can use to manually locate file locations, as well as view or modify many other settings.



Copy the three files below into the folders as listed in your AutoCAD install. (TOOLS menu, Options) The specific paths will vary, so yours may not match this example.

DWG to PDF.pc3

DWG to PDF.pmp

CED.ctb

AutoCAD Template file locations found here