

AutoCAD Civil 3D 2022 Maryland Templates Overview

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Topics covered:

- Maryland Templates
- Plotting

Maryland Templates

Where do I find them?

- On the Maryland Sharepoint Site
- On the Maryland NRCS Website
- MD CAD Users Website

• Why do we have them?

- Templates are used to help keep all design formats similar throughout the State
- They assist the designer with valuable information and a starting point for the BMP(s) being designed

How do I use them?

- The designer is required to input information into the template to make it site specific
- Drawing Properties
- Attributed Blocks

Maryland Templates

Where do I find them?

- 1. Federal System Maryland Sharepoint Site
- 2. Outside the Federal System (MDA Users) Maryland NRCS Website – Engineering
- 3. MD CAD Users Website

Syncing Maryland Templates

Federal System

You should have access to the Maryland Sharepoint site. This is where all the most up-to-date templates are located. There are directions that explain how to "Sync" the templates. This will allow you to Click File>"New" and it will open the file location on Sharepoint, allowing you to select the template you want to use. Also, it will explain how to change your QNEW to our Blank Template.



Syncing Maryland Templates

How to Sync Microsoft OneDrive

www.marylandcadusers.com

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HOME	CIVIL 3D TRAINING	WEBINARS	CUSTOMIZATION	SURVEY	DESIGN TEMPLATES AND DETAILS	MARYLAND DESIGN DOCUMENTS	FORUM
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Show 10 - entries

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Reference ID
               Title
                                                                        Video + PDF + PDF
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                  Session #1 - NRCS Customization - 2020
MD_VID_0001
                                                                           Video
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MD_VID_0002
                  Session #2 - Maryland Customization - 2020
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                                                                                               PDF-Helpful information for a successful Install
MD_VID_0003
                  Session #1 - NRCS Customization - 2022
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MD_VID_0004
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                  Process to request Civil 3D 2022 software "Above Core"
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MD_VID_0005
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Search:



Syncing Maryland Templates





Syncing Maryland Templates





Syncing Maryland Templates





Syncing Maryland Templates





Syncing Maryland Templates

Federal System (Engineering (sharepoint.com)



A message will display stating that the files are syncing. This may take a few minutes to complete. There will be an icon located on the bottom right of your screen that will show your one drive syncing.





Syncing Maryland Templates

Once the files have been synced, you will have to open Civil 3D and change the template file location

C Options				\times	
C Options	< <c3d_imperial>> Open and Save Plot and Publish System ile names, and file locations: king Support File Search Path sted Locations ice Driver File Search Path ect Files Search Path tomization Files and Miscellaneous File Names t Editor, Dictionary, and Font File Names t File, Spooler, and Prolog Section Names ter Support File Path omatic Save File Location or Book Locations Import Image Location a Sources Location plate Settings Drawing Template File Location > C:\Users\Dan.Polite\USDA\NRCS Maryla Sheet Set Template File Location Default Template File Name for QNEW</c3d_imperial>	Current drawing: User Preferences Drafting 3D Mod	Drawing 1.dwg Jeling Selection Profiles AEC Browse Add Remove Move Down Set Current	2 Editor	 With Civil 3D open: On the command line type "options" Select the Files tab Expand the Templates Setting folder Expand the Drawing Template File Location Select the current location and then select Browse
		OK Can	cel Apply I	Help	



Syncing Maryland Templates



Syncing Maryland Templates



Syncing Maryland Templates

Error 🔁 Color Book Locations	
DF Import Image Location	Move Up
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E Template Settings	MOVE DOWN
🕀 🚰 Drawing Template File Location	Set Current
🗄 📲 Sheet Set Template File Location	
🖃 🔜 Default Template File Name for QNEW	
c:\users\dan.polite\usda\nrcs maryland - 0001-0099 standard templates\md_0034_c3d_blank.dwt	
🗄 📷 Default Template for Sheet Creation and Page Setup Overrides	
🗄 🛲 🔂 Blocks Sync Felder Location	
Tool Palettes File Locations	
🗄 📄 Authoring Palette File Locations	

Now you will have to set the file location of **QNEW**

With Civil 3D open:

On the command line type "options"

Select the **Files** tab

Expand the Templates Setting folder

Expand the Default Template File Name for QNEW

Select the existing file that is shown and then select **Browse** and select the document labeled **MD_0034_C3D_Blank.dwt** (it should point you to the same folder that you synced for your templates) Click **OK**

Maryland Templates



If the .dwg drawings don't show up, make s you change the **file type to .dwg**

Maryland Templates

Outside the Federal System

You can goto the following location on the Maryland Engineering website: MD NRCS Engineering

Scroll down to the bottom of the page and select:

Engineering References

ELECTRONIC FIELD OFFICE TECHNICAL GUIDE

Technical guides are the primary scientific references for NRCS. Partners can find Standard Drawings, Design Guides, and Design Spreadsheets in the eFOTG.

MARYLAND EFOTG

DAM SAFETY GUIDELINES AND POLICIES

Maryland Department of the Environment has developed, adapted or adopted the following documents to support dam owners, engineers and contractors in the shared mission of dam safety.

DAM SAFETY GUIDELINES AND POLICIES

MARYLAND'S DESIGNATED USES/USE CLASS MAP

The interactive map displays the use classes assigned to Maryland's surface waters (rivers, impoundments, and tidal waters) as promulgated in Code of Maryland Regulations (COMAR) Section 26.08.02.08.

MARYLAND'S DESIGNATED USES

MARYLAND CAD USERS

Maryland's AutoCAD Civil 3D Forum site. Share your knowledge, ask questions, and explore Civil 3D topics.

DESIGN TEMPLATES AND DETAILS This link will take you to the **Maryland CAD Users Website**



Maryland Templates

Drawing Properties

• This is used to enter general information into the template



Maryland Templates

acral Cummany Cha	tistics Custom	
neral Summary Sta	tistics custom	
ustom properties:		
Name	Value	Add
Designed By		
Drawn By		Delete
Checked By		
Approved By		
Designed By Date		
Drawn By Date		
Checked By Date		
Approved By Date		
County	County	
State	Maryland	
Drawing Number	MD_0034	
TotalNumberOfSh	2	
ProjectSiteName	LANDOWNER - SITE NAME	
MainPractice	MAIN PRACTICE	
Tract#	Tract #	
JobClass	#	
City		
Phone #	PHONE #	

Maryland Templates Title Blocks

- This is the area that describes the design
- You can enter all the information going through the Drawing Properties
- Anything that has a grey background (Field) will be associated with the **Drawing Properties**

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Shee	⊡ raw	a N el J	USDA	United States	LANDOWNER - SITE NAME		Designed		Date ==
-	MD A	iam o		Department of	####		Drawn		
9	4o.	11 Ling	Noti ral Da		COUNTY Soil Conservation District		Checked		
N			Conservat	lon Service	TRACT#	==. Maryland	Approved		

Maryland Templates

Attributed Blocks

- This are blocks located in the templates that you can add site specific information to
- You can tell that they are attributed because there is a RED note prompting the user to click on the block





Maryland Templates Attributed Blocks

Enhanced A	Attribute Editor	1 1/2" Grating & support angles shall be galvanized steel	Constantia flage
Block: Ag (Tag: HEI	Chem Sump Detail GHT	H20 load rating Thickness and elevation of slabvaries	(see concrete floor detail)
ttribute Text (Options Properties		
Tag	Prompt	# 4 Re-bar @ 12" (both ways in the sump only)	Minimum size 3' x 3' x 2' deep
HEIGHT	ENTER DEPTH OF SUMP	6" Minimum	
WIDTH	ENTER OUTSIDE WIDTH OF SUMP		-++ 6"
THICK		CONCRETE SI	UMP DETAIL SCALE
	This is the availation that you can add	able information d to the block	
Value:			
	Apply OK	Cancel Help	

USER TO CLICK ON BLOCK AND ENTER INFORMATION



Maryland Templates Attributed Blocks





Plotting

Plotting

Once you have your pages set up correctly, you can now plot the design. There are many ways to complete this, but I'm going to explain the process on how to "**PUBLISH**" your project into a .pdf file and then plot it. I will also explain how to make a **Sheet Set** that will add the titles to all your sheets.

Three ways of publishing your job:

- 1. Publish Command
- 2. Sheet Set
- 3. Export PDF



Plotting

Plotting

In order to get the drawings to plot correctly, you need to load the "**NRCS BWgray.ctb**" file. This can be found on the Maryland Sharepoint site or on the Maryland NRCS Website to download.

Plotting

Plotting

How to load the new file:

- Right click in AutoCAD and select
 "Options" or type Options in the command line.
- In the Options display, select the "Files" tab
- Expand the "Printer Support File Path" and then "Plot Style Table Search Path"
- Select "Add" on the right
- A new path link will appear, select it and then select "Browse" and search for "C:\Users\Your.Name\USDA\Engineering – C3D Support Files" (this will only work if you are synced to the MD Engineering Sharepoint Site)
- Otherwise you will have to copy and place the ctb file into:

"C:\Users\Your.Name\appdata\roaming\Auto desk\c3d2020\enu\plotters\Plot Styles

Click Apply





Plotting

Plotting

You need to make sure that your .ctb file is set up correctly and your pages are set up correctly before publishing your design.





Plotting

Plotting

C Page Setup Manager	×	-			
Current layout: INDEX Page setups Current page setup: <none></none>		Select you Select Mo	r page and dify	d then	
INDEX Plan Map - Pipe Drop Profile & Detail* *Swale & Berm Profile - Swale & Plunge Pool Detail* 11x17_hp5550 11x17_PDF 22x34_HP800	Set Current New Modify Import	AutoCAD) Warning		×
Selected page setup details Device name: HP Designjet T520 24in			HP Designjet T520 2 used for one of the the device cannot b None plot device ha	24in: This plotter configurat se reasons: the driver canno e found, or the driver has a as been substituted.	ion cannot be ot be found, problem. The
Plotter:HP Designjet T520 24inPlot size:22.00 x 34.00 inches (Landscape)Where:199.145.7.71Description:					ОК
Display when creating a new layout Close	Help				



Plotting

Plotting

Make sure that all the areas shown in RED are set to what is shown

Click OK

Page setup			Plot style table (pen assignments)
Name:	<none></none>	DWG	NRCS BWgray.ctb 🗸 🕎
Printer/plotter	r		Display plot styles
Name:	🖨 None	✓ Properties	Shaded viewport options
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aper size			Plot options
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Paper size Previous pap Plot area What to plot: Extents Plot offset (or	per size (22.00 x 34.00 Inches)	Plot scale Fit to paper Scale: 1:1 1 inches ~ =	Plot options Plot object lineweights Plot transparency Plot with plot styles Plot paperspace last Hide paperspace objects Drawing orientation
Paper size Previous pape Plot area What to plot: Extents Plot offset (or X: 0.8133	rigin set to printable area)	Plot scale Fit to paper Scale: 1:1 1 inches 1 unit	Plot options Plot object lineweights Plot transparency Plot with plot styles Plot paperspace last Hide paperspace objects Drawing orientation Portrait I andscape



Plotting

Plotting

Publish– Publish the job to a .pdf file



C Publish				×
Sheet List: None Publish to: PDF DWG To PDF Automatically load all open drawings	Publish Option Location: \\U File type: Mu Naming: Pron Layer inform Merge contro Publish C	ns Information SDA.NET\VRCS\Home\MDELK Iti-sheet file npt for name ation: Include vi: Lines overwrite ptions	WRCS\Dan,Polite\Do	ıc
Sheet Name Bayard_PipeDrop#7-Model Bayard_PipeDrop#7-INDEX Bayard_PipeDrop#7-INDEX Bayard_PipeDrop#7-Plan Map - Pipe Drop Profile & Detail Bayard_PipeDrop#7-Swale & Berm Profile - Swale & Plunge Pool Detail	3D DWF	Page Setup Coefault: None> Coefault: None> Coefault: None> Coefault: None> Coefault: None>	Status No errors No errors No errors No errors	,
Selected Sheet Details C R Publish Output Source drawing Number of co	ut opies:	Indude pla	it stamp	2
Drawing location Layout name Plot device Plot size Plot scale		✓ Publish in t	ewer when done	C.
Page setup detail Hide Details 		Publish Ca	ncel	Help



Plotting

Plotting

Publish





Plotting

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Publish

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	Brown, Wayne 8/10/202			
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History 🗸	Files of type: PDF Files (*,pdf)	 ✓ Cancel 		





Plotting

Publish

Publish - Save Sheet List
X

Do you want to save the current list of sheets?

Always perform my current choice

Yes

No

Cancel

Your design has now been saved as a .pdf file in the location that you selected



Plotting

Plotting

Sheet Set – You will have to create a "Sheet Set" in order to have the Sheet Titles automatically be placed in the title block

A **Sheet** is a selected layout from a drawing file. You can import a layout from any drawing into a sheet set as a numbered sheet.

A **Sheet Set** is an organized and named collection of sheets from several drawing files. You can manage, transmit, publish, and archive sheet sets as a unit.



Plotting

Plotting

Sheet Set – If you have created a sheet set you can publish to a .pdf directly from there.





Plotting

Plotting

Export PDF– Once you have completed your drawing you can plot it by typing in the command line "**exportpdf**"

Save in:	CAD	🛉 🔩 🗙 🎴 Views 🔻 Tools 👻	
Working CAD	Name Recordings TRAINING Troubleshooting Workspaces 2020 May SCD Directory PDF.pdf AUTOCAD2020-with-activation.pdf Autodesk AutoCAD Civil 3D 2018 - English_c	Date r PDF Preset: 1/6/20 9/13/2 DWG To PDF 2/17/2 Current Settings 3/15/2 Layer Information: Include 8/23/2 Merge Control: Lines overwrite 6/21/2 Hyperlink: Include 9/21/2 Options	You can select current layout or all layouts
C3D TEMP Templates History Documents Desktop	CAD STOFF.pdf CAD STOFF.pdf CAD TRAINING.pdf CAD computer recommendations NRCS EFH2_NOAA_computer-upgrade_instructio GeoCellPlanExample2022.pdf How to Annotate PDF Maps in Adobe Acrob MDE Permit Stuff-Ponds.pdf SturdiWallDesignGuide.pdf ThrustBlockExample.pdf ThrustBlockExample2.pdf Turning Map Off.pdf File name: DNR_PipeDrop.pdf	10/0/2 Output Controls 2/18/2 Open in viewer when done 11/18/2 Include plot stamp 3/11/2 Precision: 10/6/2 Export: All layouts 6/2/20 6/2/20 Page Setup: 9/2/20 Page Setup Override	Select the file location and click Save. You must have your page setup correctly for this to work for each layout

Things to Know

- If you have a question ASK!
- There are always multiple ways to do the same thing use the one(s) that work best for you
- Keep in mind the goal of what you are using AutoCAD/Civil 3D for
- Use help sources
- This program can be as simple or as complicated as you would like it to be
- Spend time using the program and, whenever possible, with other people who use the program

ONE KEY SHORTCUTS [SEE PRINTABLE KEYBOARD STICKERS ON PAGE 11]

		Display Help		Toggle text screen	Toggle object		Toggle 3DOsnap	Toggle Isoplane	Toggle Dynamic UCS	Toggle grid mode	Toggle ortho mode	Toggle snap mode	Toggle polar mode	Toggle object snap tracking	Toggle dynamic input mode				
Esc		F1		F2	F3		F4	F5	F6	F7	F8	F9	F10	F11	F12		PrtScn SysRq	ScrLK	Pause Break
~ .	1		@ 2	#		\$ 4	% 5	^ 6	& 7	* 8	(9) 0	-	+	Ва	ackspa	ace	Home	End
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Ctrl		Sta	art	1	Alt							A	lt		Ctrl		-		Þ

- Q QSAVE / Saves the current drawing.
- A ARC / Creates an arc.
- Z ZOOM / Increases or decreases the magnification of the view in the current viewport.
- W WBLOCK / Writes objects or a block to a new drawing file.
- S STRETCH / Stretches objects crossed by a selection window or polygon.
- X EXPLODE / Breaks a compound object into its component objects.
- E ERASE / Removes objects from a drawing.
- D DIMSTYLE / Creates and modifies dimension styles.

- C CIRCLE / Creates a circle.
- R REDRAW / Refreshes the display in the current viewport.
- F FILLET / Rounds and fillets the edges of objects.
- V VIEW / Saves and restores named views, camera views, layout views, and preset views.
- T MTEXT / Creates a multiline text object.
- G GROUP / Creates and manages saved sets of objects called groups.
- B BLOCK / Creates a block definition from selected objects.

- H HATCH / Fills an enclosed area or selected objects with a hatch pattern, solid fill, or gradient fill.
- J JOIN / Joins similar objects to form a single, unbroken object.
- M MOVE / Moves objects a specified distance in a specified direction.
- I INSERT / Inserts a block or drawing into the current drawing.
- O OFFSET / Creates concentric circles, parallel lines, and parallel curves.
- L LINE / Creates straight line segments.
- P PAN / Adds a parameter with grips to a dynamic block definition.

TOGGLES AND SCREEN MANAGEMENT

Toggle General Features

Ctrl+d	Toggle coordinate display				
Ctrl+g	Toggle Grid				
Ctrl+e	Cycle isometric planes				
Ctrl+f	Toggle running object snaps				
Ctrl+h	Toggle Pick Style				
Ctrl+Shift+h	Toggle Hide pallets				
Ctrl+i	Toggle Coords				
Ctrl+Shift+i	Toggle Infer Constraints				

Toggle Drawing Modes

F1	Display Help
F2	Toggle text screen
F3	Toggle object snap mode
F4	Toggle 3DOsnap
F5	Toggle Isoplane
F6	Toggle Dynamic UCS
F7	Toggle grid mode
F8	Toggle ortho mode
F9	Toggle snap mode
F10	Toggle polar mode
F11	Toggle object snap tracking
F12	Toggle dynamic input mode

Manage Screen

Ctrl+0 (zero)	Clean Screen
Ctrl+1	Property Palette
Ctrl+2	Design Center Palette
Ctrl+3	Tool Palette
Ctrl+4	Sheet Set Palette
Ctrl+6	DBC onnect Manager
Ctrl+7	Markup Set Manager Palette
Ctrl+8	Quick Calc
Ctrl+9	Command Line

Manage Workflow

Ctrl+c	Copy object
Ctrl+x	Cut object
Ctrl+v	Paste object
Ctrl+Shift+c	Copy to clipboard with base poin
Ctrl+Shift+v	Paste data as block
Ctrl+z	Undo last action
Ctrl+y	Redo last action
Ctrl+[Cancel current command (or ctrl+\)
ESC	Cancel current command

Manage Drawings

New Drawing				
Save drawing				
Open drawing				
Plot dialog box				
Switch to next				
Switch to previous drawing				
Switch to previous tab in current drawing				
Switch to next tab in current drawing				
Exit				
Select all objects				



Questions?

