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Engineer Research and
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*The CAD/BIM Technology Center
for Facilities, Infrastructure, and Environment*

USACE - Civil 3D 2020 Standards

AutoCAD Civil 3D Workstation Standards Setup Guide

Version 1

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Workstation Standards Setup : Network Installation

Purpose

The following sections describe the steps necessary to establish the use of USACE's standards with Civil 3D 2020. Please note that Civil 3D 2020 must be installed prior to the completion of these steps.

Questions and comments may be submitted to the [USACE Civil 3D Template Team](#).

1 Establish a U: Drive

Note: This may require IT approval and/or assistance

In order to establish a clean location for saving and working with the USACE standards, it is necessary to set up a mapped drive letter wherever the files are stored. Follow the steps below to download the standards files and establish this drive:

1. Download "USACE Civil 3D 2020 Standards.zip" file
2. Unzip the entire folder to a shared location with adequate hard drive space (approx. 380MB).
3. Open Windows Explorer
4. On the left-hand side, choose "This PC"
5. From the "Computer" tab of the ribbon, choose "Map Network Drive".
6. In the next dialog, set the drive letter to U:
7. Use the "Browse" button to browse to the location where the standards are saved. Make sure to point to the level that is above the "USACE Civil 3D 2020 Standards" folder.

2 Import Custom USACE Profile

A custom profile has been established which points to USACE standard search paths, templates, and customizations files that correspond to USACE's newly updated standards. To access and use this Profile, follow these steps:

Note: This Profile will only work correctly if the standards drive letter chosen in the previous section is U: and the path is "U:/USACE Civil 3D 2020 Standards"

1. Launch AutoCAD Civil 3D 2020 - Imperial using the standard icon on the desktop or the Start menu.
2. At the command line, type in "OP" and hit <Enter>.
3. On the Profiles tab of the Options dialog, hit the "Import" button.
4. Navigate to "U:\USACE Civil 3D 2020 Standards\Support Files" and choose the ARG File
5. When asked for the name of the Profile, leave the default value of "USACE_Civil 3D" and hit "OK"
6. Make sure the newly imported Profile is selected and hit Set Current.
7. Hit OK to close the dialog box (but leave Civil 3D open for future steps)

3 Check/Set the Pipe Network Catalog Path

USACE's Pipe Network and Pressure Network Catalogs have been customized to include many of the required sizes and shapes for Storm, Sanitary, and Water modeling in Civil 3D. These custom catalogs are stored with the rest of USACE's Civil 3D Standards in the USACE Civil 3D 2020 Standards folder structure. To ensure that these custom catalogs are used by Civil 3D, perform the following steps:

Gravity Pipe Network Catalog

8. While still in Civil 3D, on the Home tab of the Ribbon, locate the Create Design panel, click ▼ to expand the panel and choose Set Pipe Network Catalog.
9. In the dialog that appears, make sure the Catalog Folder is set to "U:\USACE Civil 3D 2020 Standards\Pipes Catalog". If it is not, hit the Browse button and navigate to this folder.
10. If not already set, use the drop-downs to set the Pipe Catalog to US Imperial Pipe Catalog and the Structure Catalog to US Imperial Structure Catalog
11. Hit OK to save the settings and close the dialog box..

Pressure Pipe Network Catalog

1. While still on the Home tab of the Ribbon, go back to the Create Design panel, click ▼ to expand the panel again and choose *Set Pressure Network Catalog*
2. In the dialog that appears, make sure the Catalog Folder is set to "U:\USACE Civil 3D 2020 Standards\Pressure Pipes Catalog". If it is not, hit the *Browse* button and navigate to this folder.
3. TBD - If not already set, use the drop-down to set the Catalog Database File to "Imperial_AWWA_USACE.sqlite".
4. Hit OK to save the settings and close the dialog box.

Load the Custom Survey User Settings (Surveyors Only)

To ensure that all Survey databases use the correct units, custom Figure Prefix Database, and custom Linework Code Set, two Survey Database Settings files have been created (one Imperial and one Metric) that can be used every time a new Survey Database is created. These files are stored under the Standards folder structure, along with other important Survey customizations such as the Figure Prefix Database and the Linework Code Set. Additional files for the Survey User Settings that point to these paths have been created for imperial and metric. Follow the instructions below to load the appropriate settings files:

1. In the Survey tab of the Toolspace, click on the Survey Users Settings  button.
2. In the Survey User Settings dialog, click on the Import Settings  button
3. Browse to “U:\USACE Civil 3D 2020 Standards\Survey” and choose “USACE Imperial Survey User Settings.usr_set” or “USACE Metric Survey User Settings.usr_set”
4. Hit *OK* to close the Survey User Settings dialog.

Note: Each user will need to go through the process of pointing Civil 3D's Survey “Working Folder” to the current project folder.

Add Custom Desktop Shortcut (Optional)

To prevent the users from having to switch from the default Profile to the custom USACE Profile every time they launch the program, a custom desktop icon has been created that will automatically do this step for them. To ensure that this icon is available to the users on workstations, follow these steps:

1. Open Windows Explorer and navigate to “U:\USACE Civil 3D 2020 Standards\Support Files”. From this folder copy the “USACE - Civil 3D 2020” icon.
 - Note: This shortcut will need to be edited if the default Civil 3D installation path is not used.
2. Double-click on the new icon to launch Civil 3D and make sure the correct Profile has been loaded.

Workstation Standards Setup : Local Installation

Local Installation Option (C:\ProgramData)

The as-delivered USACE Civil 3D Standards folder is intended to be installed on a Network Shared Drive (U: Drive). This document outlines the steps involved in changing the delivered files to be installed on the users Local C: Drive instead. Installing the USACE Civil 3D Standard Folder on the Local C: drive may be preferential while users are teleworking or otherwise working remotely. Please note that Civil 3D 2020 must be installed prior to the completion of these steps.

1 Unzip the Files

1. Download the “USACE Civil 3D 2020 Standards.zip” file.
2. Extract the entire folder to “C:\Program Data”.

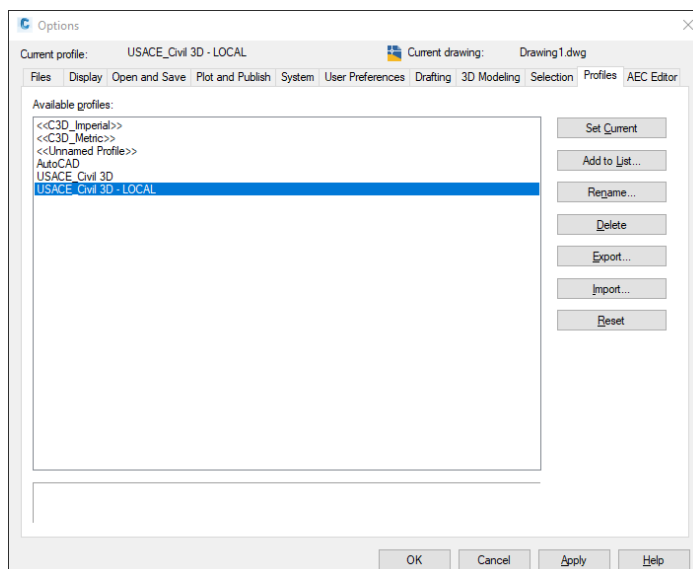
2 Copy the USCAE Local Civil 3D Shortcut

1. Open the “C:\ProgramData\USACE Civil 3D 2020 Standards\Support Files” folder and copy the Civil 3D 2020 USACE Local shortcut to your desktop.



3 Start Civil 3D with the USACE Local Profile

1. Start Civil 3D 2020 from the Civil 3D 2020 USACE Local shortcut. This will start Civil 3D 2020 with the USACE_Civil 3D – LOCAL Profile set as the current Profile. You can verify this from the Profiles tab on the Options dialog (key in OP in the Command Line to open the Options dialog).



4 Check/Set the Pipe Network Catalog Path

The USACE Pipe Network and Pressure Network Catalogs have been customized to include many of the required sizes and shapes for Storm, Sanitary, and Water modeling in Civil 3D. If you will be working with Pipe Networks, you will need to ensure that the USACE custom catalogs are used.

Gravity Pipe Network Catalog

1. Start Civil 3D 2020 from the Civil 3D 2020 USACE Local shortcut. From the Home tab on the ribbon, locate the Create Design panel and click ▼ to expand the panel and choose *Set Pipe Network Catalog*.
2. In the dialog that appears, make sure the Catalog folder is set to "C:\ProgramData\USACE Civil 3D 2020 Standards\Pipes Catalog". If it is not set, hit the *Browse* button and navigate to the folder.
3. If not already set, use the drop-downs to set the Pipe Catalog to US Imperial Pipe Catalog and the Structure Catalog to US Imperial Structure Catalog.
4. Hit OK to save the settings and close the dialog box.

Pressure Pipe Network Catalog

1. While still on the Home tab of the Ribbon, go back to the Create Design panel, click ▼ to expand the panel again and choose *Set Pressure Network Catalog*.
2. In the dialog that appears, make sure the Catalog Folder is set to "C:\ProgramData\USACE Civil 3D 2020 Standards\Pressure Pipes Catalog\". If it is not, hit the *Browse* button and navigate to this folder.
3. If not already set, use the drop-down to set the Catalog Database File to "Imperial_AWWA_USACE.sqlite".
4. Hit OK to save the settings and close the dialog box.

5 Load the Custom Survey User Settings (Surveyors Only)

To ensure that all Survey databases use the correct units, custom Figure Prefix Database, and custom Linework Code Set, two Survey Database Settings files have been created (one Imperial and one Metric) that can be used every time a new Survey Database is created. These files are stored under the Standards folder structure, along with other important Survey customizations such as the Figure Prefix Database and the Linework Code Set. Additional files for the Survey User Settings that point to these paths have been created for imperial and metric. Follow the instructions below to load the appropriate settings files:

1. In the Survey tab of the Toolspace, click on the *Survey Users Settings* button.



2. In the Survey User Settings dialog, click on the *Import Settings* button.



3. Browse to "C:\ProgramData\USACE Civil 3D 2020 Standards\Survey" and choose "USACE-LOCAL Imperial Survey User Settings.usr_set" or "USACE-LOCAL-Metric Survey User Settings.usr_set".
4. Hit OK to close the Survey User Settings dialog.