

# Civil Container Files

CADD Technicians at ODOT have been using container files for attaching several references for quite some time. Container files are a handy file that holds many references so that they may all be attached to another file with one reference attachment to the container. Live nesting with a depth of one allows the references attached to the container to be seen in the other file. **Civil container files** are used in a similar fashion, but the **civil** container file has an extra model (3D) that is managed by the civil CADD products, OpenRoads or OpenSite Designer. Civil container files are the method of delivering civil design data and civil annotations to CADD Technicians and other disciplines so the civil data and annotations may be used in other designs and in the plans production process. Updated for Hydraulic name changes in March 2026, to use “published” and “container” files. Drainage and Utilities database has been made accessible via referencing for design and annotation.

## Create the Civil Container File (Designer)

1. Create a new DGN document from a 2D DGN seed file for the appropriate OpenX software. New bas\_CF\_##.dgn documents are created in the 6\_Civil Data folder in ProjectWise.
2. Edit the DGN file with OpenRoads Designer or OpenSite Designer.
3. In the Default model, attach a reference to a terrain.
4. Select the terrain and use Set As Active Terrain Model.
5. Verify that the Default-3D model has been created and has a reference attachment to the terrain.
6. In the Default-3D model, the reference to the terrain may be detached if not creating a terrain container file. Detaching the terrain from the Default-3D model will normally also remove the reference attachment from the Default model. **When creating a GEOM\_bas\_CF, ANNO\_bas\_CF, DU\_bas\_CF, or a CORR\_bas\_CF container file, it is good practice to detach the terrain from the Default-3D model. This will reduce redundant references and allow greater level display control.**
7. From the Default model, make direct reference attachments to published DGN documents (pub) of the same type (no nesting). **It is good practice when creating a GEOM\_bas\_CF to only attach GEOM\_pub or FEAT documents. Similarly, when creating a CORR\_bas\_CF, only attach CORR\_pub documents; when creating a DU\_bas\_CF, only attach DU\_pub documents; and when creating an ANNO\_bas\_CF, only attach ANNO\_pub documents.**

## Display Civil Data for Plans Production (CADD Technician)

1. Create a new DGN document from a 2D DGN seed file for the appropriate MicroStation or OpenX software. The new DGN document is created in the 2\_Plan\_Sheets folder in ProjectWise.
2. Edit the DGN file with MicroStation or OpenX.
3. In the Default model, **interactively** attach a reference(s) to a container file(s) in the 6\_Civil\_Data folder. Select the **Default** model and use **Live Nesting, Depth of 1**.
4. In the Default model, use the Place Named Boundary tool to create drawings (sheets).

## Reference Civil Data for Design Modeling Work (Designer - Corridor)

1. Create a new CORR\_pub document from a 2D DGN seed file for the appropriate OpenX software. “Pub” or “published” DGN documents are created in the discipline folders in ProjectWise.
2. Edit the DGN with OpenRoads Designer or OpenSite Designer.
3. In the Default model, **interactively** attach a reference to a terrain container file in the 6\_Civil\_Data folder. Select the **Default** model and use **Live Nesting, Depth of 1**.
4. Select the terrain and use Set As Active Terrain Model.
5. Verify that the Default-3D model has been created and has a reference attachment to the terrain. The new corridor file is now ready for civil design work to be performed.
6. In the Default model, **interactively** attach references to other container files, like GEOM\_bas\_CF, selecting the **Default** model and using **Live Nesting, Depth of 1**.
7. In the Default model, perform design work.