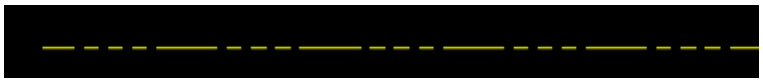
NRCS AutoCAD and Civil 3D 2022 Updates

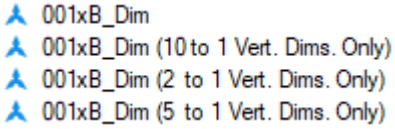
1. C3D Template Files have been renamed as follows:
    a. **NRCSC3D2022(11x17)R1.dwt**
    b. **NRCSC3D2022(22x34)R1.dwt**
2. Updated **NRCSC3DTitleBlocks.dwt** by adding 11x17 and 22x34 layouts for section sheet production at 1" = 20' scale
3. AutoCAD Standardized Components
    a. Linetype (nrcs.lin)
        i. Created OH (Overhead) linetype with OH for text



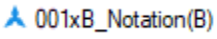
        ii. Created Easement linetype



    b. Layers
        i. Added V.Poin.Stak, for proposed staking points (1, Continuous, Proposed Staking Points)
        ii. Renamed W.Plan.Util layer to W.Plan.Util.Ugnd, and updated layer description (this layer already references an underground linetype)
        iii. Added W.Plan.Util.Ovhd and assigned OH linetype
        iv. Added C.Prop.Easmt
        v. Added C.Prop.Setback
    c. Dimension Styles
        i. Removed the following dimension styles from C3D 22x34 (D) DWT



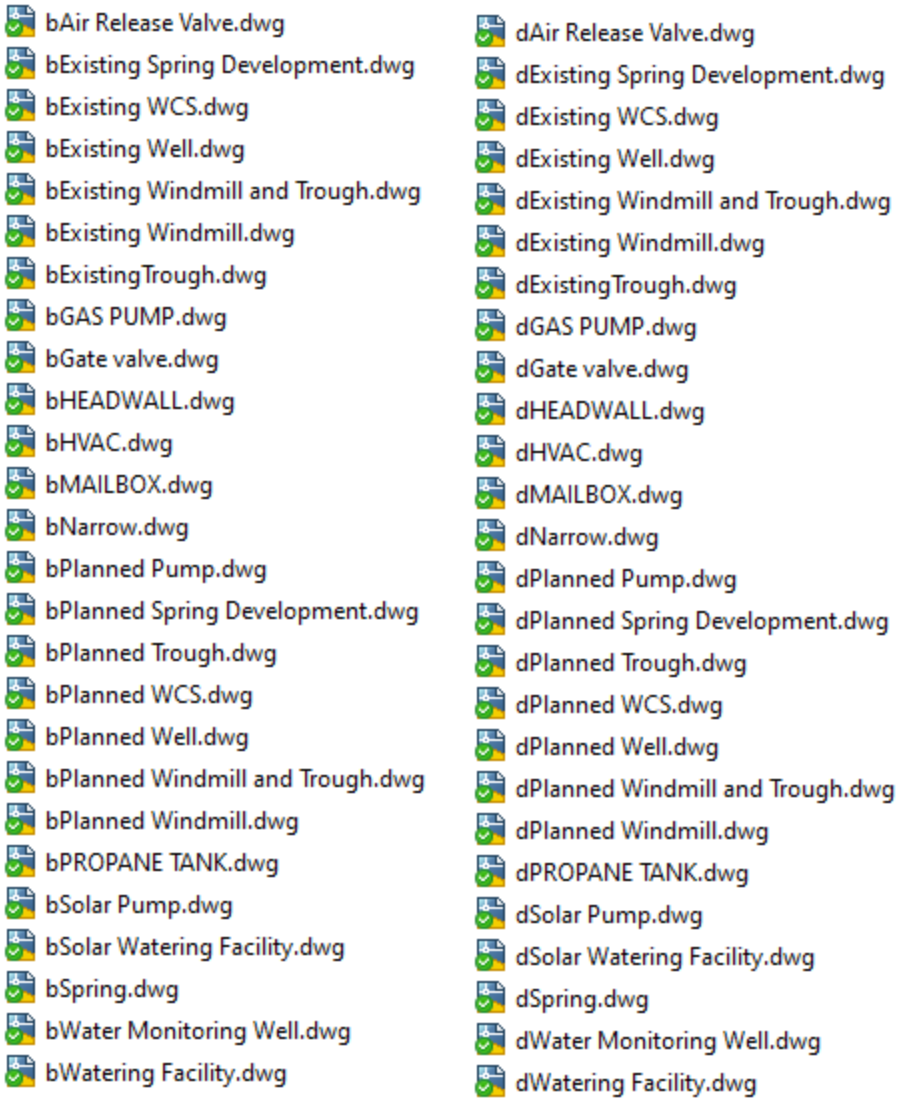
    d. Text Styles
        i. Removed the following text style from C3D 22x34 (D) DWT



        ii. Added the following text styles to both C3D DWT's
            1. **NRCSC3D2022(11x17)R1.dwt:** 001xB_Notation(A), romans.shx, .063, 22 degrees
            2. **NRCSC3D2022(22x34)R1.dwt:** 001xD_Notation(A), romans.shx, .125, 22 degrees

e. Blocks

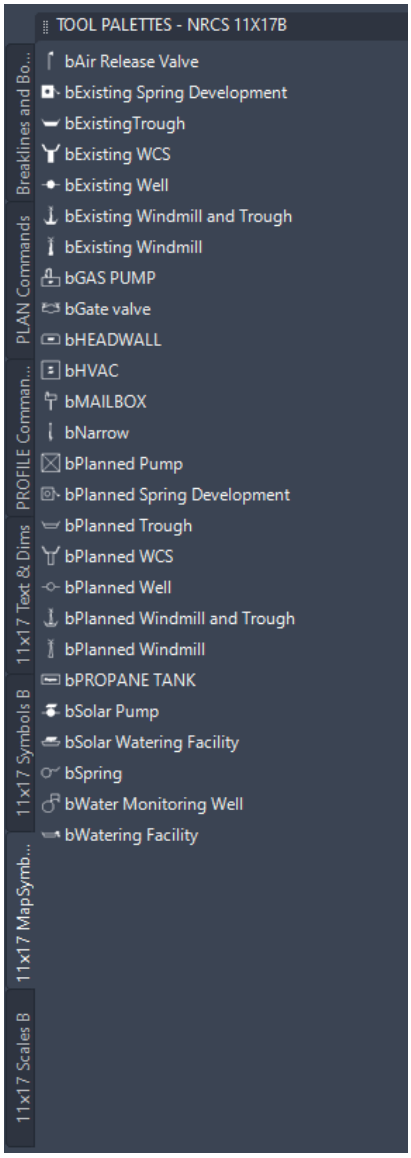
i. The following GIS (Mapping) blocks have been added to the 11x17 and 22x34 tool palettes

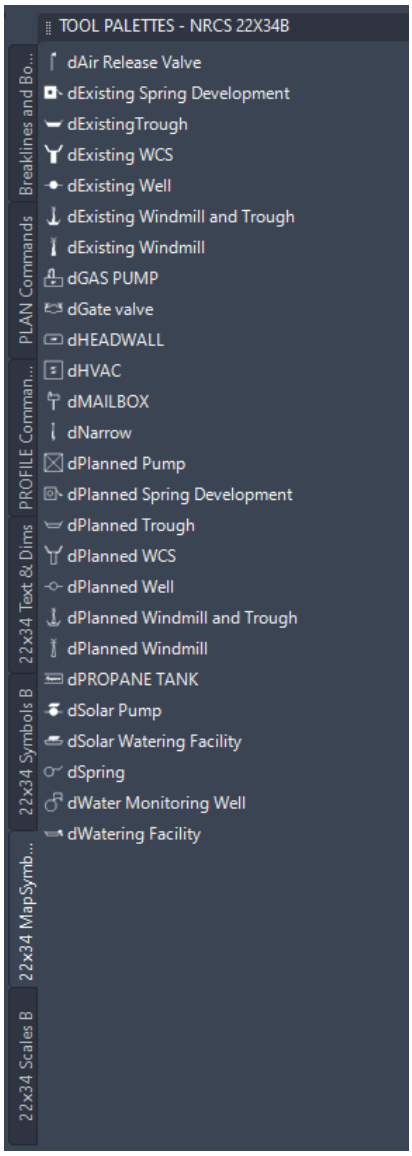


ii. Added PivotIrrigation Dynamic Block for a pivot irrigation system

f. Tool Palette Updates

i. Created “11x17 MapSymbols B” and “22x34 MapSymbols B” palettes in “NRCS 11x17B” and “NRCS 22x34B” palette groups; added all above new GIS map symbol blocks to the appropriate palette “b” and “d” palettes.





ii. Placed “PivotIrrigation Dynamic” block in both “11x17 Symbols B” and “22x34 Symbols B” palettes

iii. Created new “Property Line – Easement”, “Property Line – Easement Setback”, “Utility Line – Overhead” polyline tools in the PLAN Commands palette. Edited existing “Utility Line” to “Utility Line – Underground”.

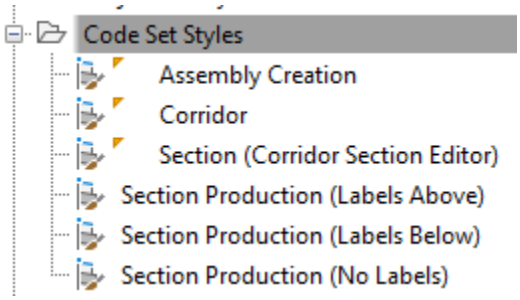
4. Civil 3D Standardized Components

a. Dragged State Arrowhead Sizes

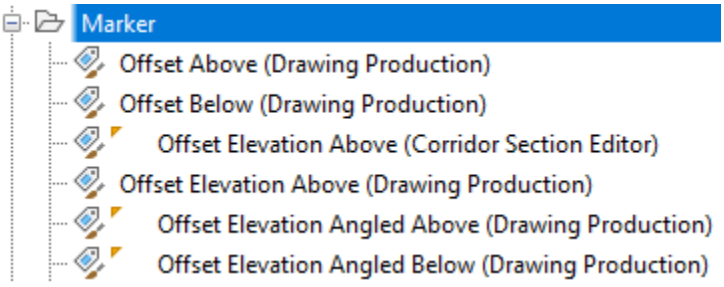
i. All C3D label styles in **NRCSC3D2022(11x17)R1.dwt** have been updated to have a height of 0.117 (formerly 0.078)

ii. All C3D label styles in **NRCSC3D2022(11x17)R1.dwt** have been updated so dragged state leaders are splined, and not straight
iii. All C3D label styles in **NRCSC3D2022(22x34)R1.dwt** have been updated to have a height of 0.234 (formerly 0.156)
iv. All C3D label styles in **NRCSC3D2022(22x34)R1.dwt** have been updated so dragged state leaders are splined, and not straight
v. The 4 items above were done to match NRCS text, multileader and dimension styles

b. General → Multipurpose Styles → Code Set Styles
   i. Deleted Corridor Production CSS and updated Corridor CSS to include point codes from NRCS custom waterway subassemblies
   ii. Deleted Waterway (Corridor Design) and Waterway (Sections with Labels) CSS's, as they duplicate the functionality of the Corridor and Section (With Labels) CSS
   iii. Updated Section (Corridor Section Editor) CSS to include point codes from NRCS custom waterway assemblies
   iv. Deleted Section (Drawing Production) as it is duplicated with Section (With Labels) CSS
   v. Resulting set of CSS's is as follows:



c. General → Multipurpose Styles → Label Styles → Marker
   i. Modified Offset (Drawing Production) so the negative value is not shown on a left side offset label. These labels use a L and R as a suffix to indicate the side
   ii. Removed Offset and Elevation as this is a duplicate for Offset and Elevation (Drawing Production). CSS referencing the old label style were updated accordingly.
   iii. Resulting set of maker label styles is as follows:



d. General → Multipurpose Styles → Label Styles → Line

i. Grade and Elev Start End and Slope and Elev Start End have been updated so the grade is displayed on the middle of the segment

e. Point → Description Key Sets
   i. Updated Z* code (in Z_Staking Description Key Set), to reference the new V.Poin.Stak layer
   ii. Deleted EDGE* in Edge DKS, as it conflicts with ED*, in the same DKS

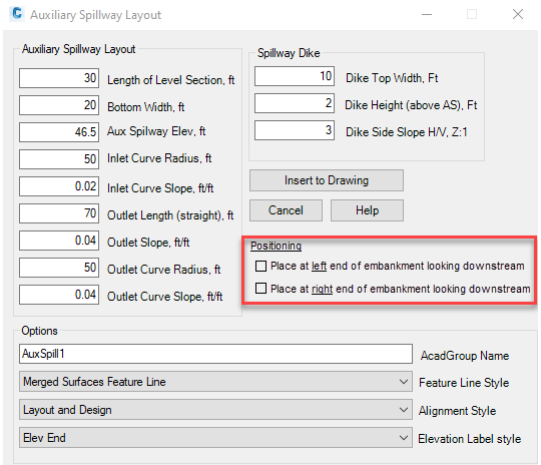
f. Point Groups
   i. Updated EX – Ground (Plain) point group to include GRD and GS point descriptions
   ii. Updated PR – Staking point group to remove *With names matching: z**. Points with description Z* are included in the PR – Staking point group

g. Surfaces
   i. Added Watershed Analysis surface style
   ii. Added Watershed label styles (watershed details and off)
   iii. Added Watershed table style

h. Profile View Styles
   i. For both **(11x17)** and **(22x34)** DWT's, the default profile view style was set to A 40Hx10V to align with DWT current annotation scale of 1"=40'

i. Corridor
   i. Modified ViewEditCorridorSections command settings to assign the Section (Corridor Section Editor) as the default Code Set Style when this command is issued.

5. Custom Applications
   a. AUXSP – Auxiliary Spillway has been updated to provide better instruction on the orientation of the auxiliary spillway. The mirror option has been removed, and labels are now placed in the drawing to indicate the upstream and downstream sides



   b. CALCA – Calculate area command now supports C3D feature lines
   c. TOTLEN – Total length now supports a variety of entity types including lines, polylines, splines, circles and arcs