



**US Army Corps
of Engineers®**
Engineer Research and
Development Center

Master Guide Documentation

US ARMY CORPS OF ENGINEERS CIVIL ENGINEERING TEMPLATE FOR CIVIL 3D

Templates based on the 2016 Autodesk Civil 3D® Software

Manual : USACE Civil 3D 2016 Template v3.0
Configuration – PART 1

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Advanced Modeling for the United States Corps of Engineers (USACE) not only includes Building Information Modeling (BIM) but Civil Information Modeling (CIM). Taking advantage of current software advances to provide capabilities for using computer models on projects allows more integrated engineering, analysis, design and documentation and improves the quality and delivery of Civil engineering projects.

To assist the designers with the setup and implementation of this complex software, standard templates are needed that have been prepared to allow users to focus on the design, planning and implementation of the project instead of project configuration. Proper symbology must be set up for different CIM processes: Hydrology, Navigation, Port, Coastal, Harbor and River control and protection. Customization as needed for special situations is a simple and quick process.

The USACE Civil 3D Template will provide preset layer settings (layer color, line styles, colors, line weights) and style settings applied to objects such as surfaces (topography, slope analysis, surface points, TIN, watershed analysis...). Profiles are built from an alignment and a surface. Assemblies such as Levees, roads, dredged areas are assigned to the profile and integrated to the site to connect back into the site surface at the edges.

Civil modeling involves design “objects” such as alignments, surfaces, profiles, assemblies, sections, piping systems and their various annotation settings. A Levee object can be created along an alignment based on a designed profile that is linked to an existing or proposed site. Changes to the Levee system can be made by adjusting the profile or elevation or levee section. Related views are automatically updated similar to the process of adding a door to a BIM floor plan and having the door added automatically in the appropriate elevation, section and door schedule. Profile views and sections are created from this set of information with correct symbology applied. Annotation labels extract information from the object that they are assigned to without having user interpretation. Placing a ground elevation point can return the point location (Northing, Easting, vertical elevation) as well as any other information associated with the point (Head Wall, Gravel, Gas Meter, ID number, user attributes...). Correct symbols based upon the AEC CAD Standards are set as part of the annotation label configuration.

The USACE Civil 3D will provide support for designers using Autodesk® Civil 3D® software to create Advanced Modeling infrastructure projects for the U.S. Corps of Engineers. Since the diversity of USACE Civil projects are so great, this project will be to provide a most common needed collection of object style settings based on several different model object types.

This “Civil 3D 2016 Configuration” manual will provide a written description of the complete configuration settings and styles that have been created for the USACE Civil 3D Template. This manual is a reference guide and not an instruction manual for the use of Autodesk Civil 3D software or a tutorial for understanding how the civil objects should be created and used. The user should be familiar with the software and the process of modeling civil projects.

3.1 Introduction

This document (Part 1) is an overview of settings and styles that the USACE AutoCAD Civil 3D 2016 template contains. The appendix document (Part 2) contains detailed samples and screen captures.

Because of the extensive flexibility of the software, setup for specific processes (create topo with 1 foot minor/5 foot major contours or an elevation or slope analysis) can use up project design and production time. The ability to use software for both modeling and analysis and documentation in the design process has become a required process for civil projects. The USACE Civil 3D template contains preconfigured settings (called styles) to simplify the process for display. Settings for point styles for Hydrology, Coastal, Navigation, Geotechnical, Communications and Utilities have been set up with symbols and data labels. Survey information brought into the template may be quickly assigned to the correct symbols.

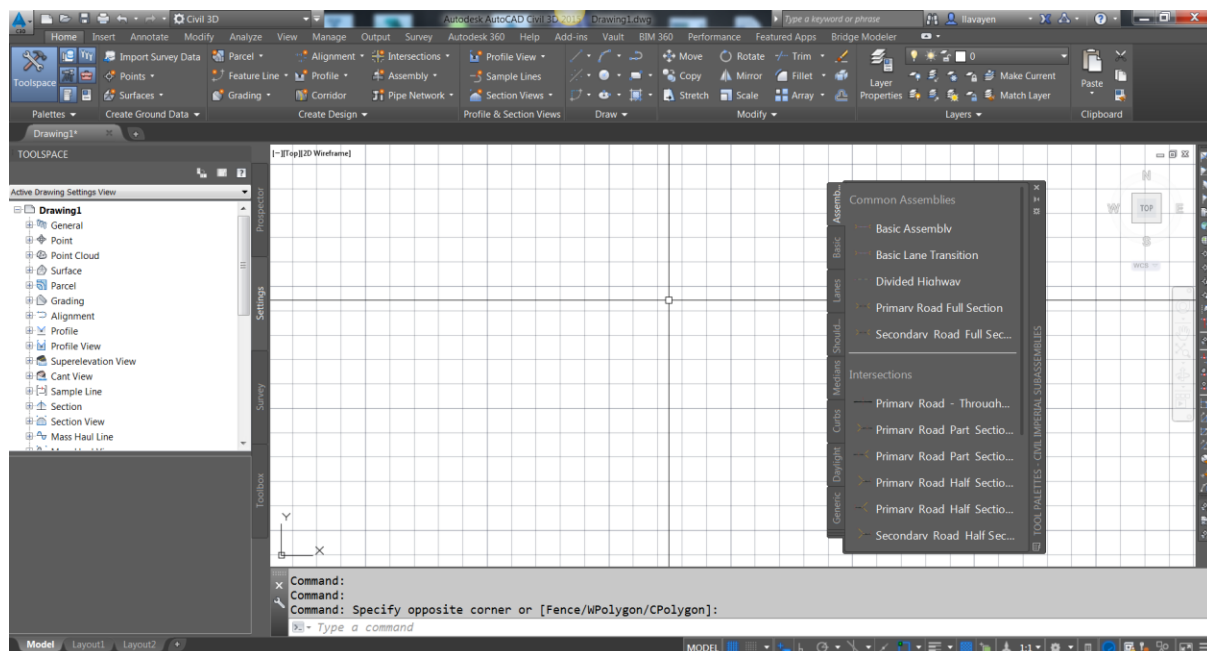
Table styles have been created for consistency in line weights and font sizes for all project tables.

Questions may be submitted to [“USACE Civil 3D Template Team”](#).

3.2 Overview

Toolspace is the Primary Civil 3D property window. This window is used for handling Civil 3D objects and settings of all Civil 3D styles for Civil 3D objects and labels. The Toolspace has four important tabs:

- **Prospector.** Use this tab for handling properties and styles for Civil 3D objects and labels.
- **Settings.** Use this tab for general settings of Civil 3D styles.
- **Toolbox.** Use this tab for generating typical reports for various Civil 3D objects.
- **Survey.** Use this tab to manage survey data.



3.3 Prospector

Any Civil 3D object contains its own style. This style controls the Civil 3D object appearance (object and label) in the drawing. The Prospector tab in the Toolspace is the Primary window for handling property, styles and commands for all Civil 3D objects.

From the Prospector tab in the Toolspace, it is possible to create, copy, or edit styles for Civil 3D objects. In addition to this, labels are generated as dynamic data mostly annotative.

Note that any new styles will not automatically be saved in the template. This has to be done manually with Drag and Drop. Any styles to be added must go through proper USACE CAD administration before being added to the existing template.

3.4 Settings

Civil 3D objects are generated with their own styles when created in the drawing with a Civil 3D command. Styles are standard in the USACE template, which is recommended to use for every new drawing in Civil 3D so new objects are created with the same appearance. Select the current USACE Civil 3D template when creating a new drawing.

Style setting happens from the Settings tab in the Toolspace. Here it is possible to create, copy, or edit Civil 3D styles.

Font settings for Text for Labels and Tables and for Point Styles (markers) are Arial non-annotative to allow Civil 3D to scale the text based on the view scale that is set. A change in View scale will automatically change the object to the correct proportional size. The "Arial" style with the 'Arial' font is intended to simplify user settings and avoid problems with alternate "Standard" font settings that may be accidentally set.

Civil 3D objects are assigned with standard Civil 3D layers while other objects are placed on their appropriate AutoCAD layer.

3.5 Toolbox

Civil 3D provides a report manager under the Toolbox for generating various reports for a host of Civil 3D objects such as Parcel and Alignments. The two buttons on the top left allow for the customization of report settings and adding new content.

3.6 Survey

The Survey tab of Toolspace controls the use of survey data, equipment, linework code sets, and the figure prefix database. The button in the top left controls the path to various data.

4 Autodesk Civil 3D Text Styles

The table below lists used text styles.

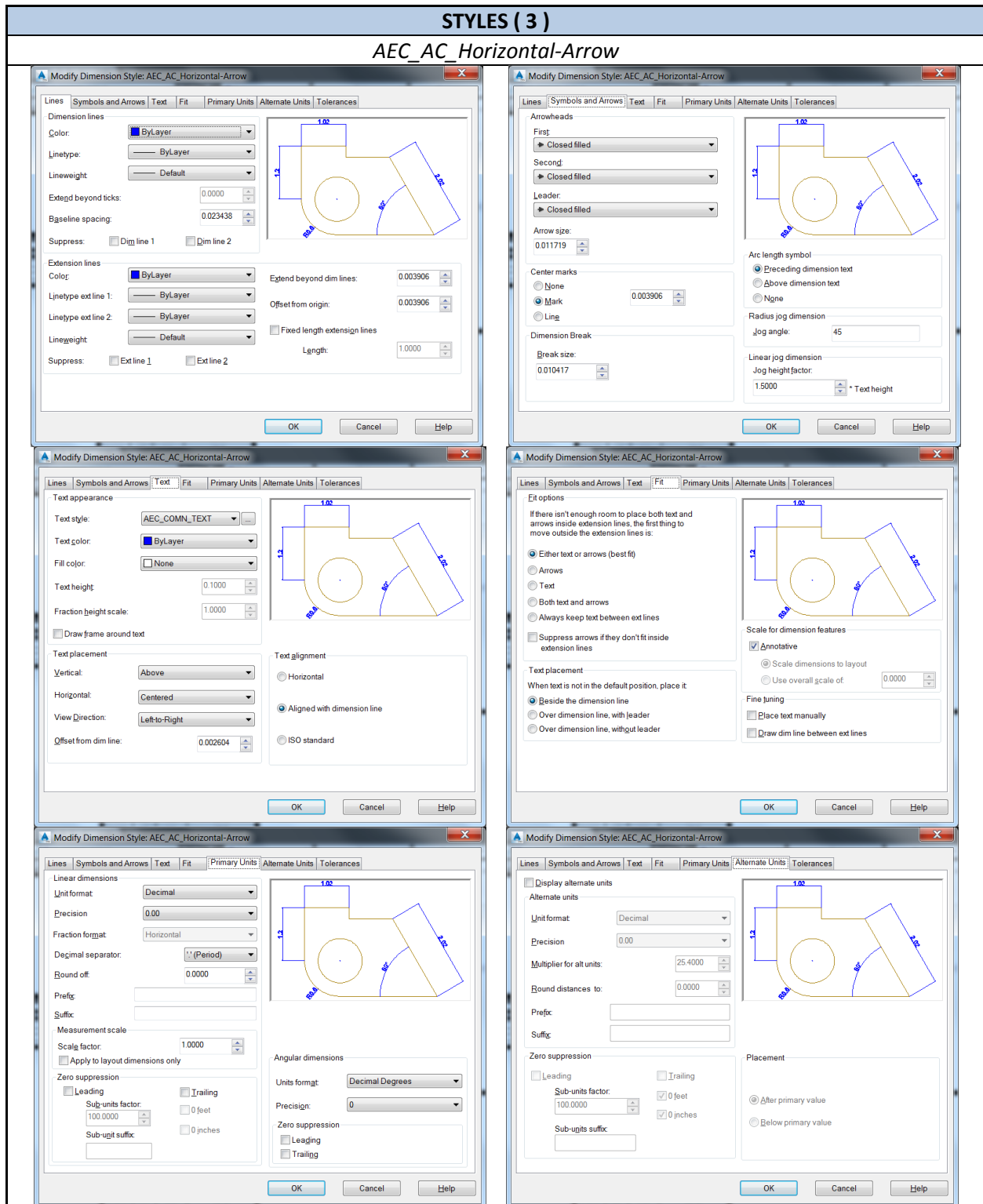
Text Styles	Font	Annotative	Text Height
Arial	Arial	No	0
Arial-I	Arial	No	0
Standard	Arial	No	0
Legend	Arial	No	0
A100 USACE	Arial	Yes	0.1
A125 USACE	Arial	Yes	0.13
A130 USACE	Arial	Yes	0.13
A150 USACE	Arial	Yes	0.15
A250 USACE	Arial	Yes	0.25
AEC_COMN_TEXT	Arial	Yes	0.1
AEC_COMN_TITLE	Arial	Yes	0.2
Annotative	Arial	Yes	0
xDWG-LINETYPE	Arial	No	0.09
xStyle-Arial	Arial	No	0

The Arial font is the standard font set for Label Styles. Arial is the text Style Name and the actual Font style to clarify that the Arial style for the standards is to be the Arial font.

The General setting for text styles for Dimensions, Labels and Tables is set to “Arial” for consistency and simplicity. “Arial-I” is used for Italic fonts in areas.

STYLES (3)

AEC_AC_Horizontal-Arrow

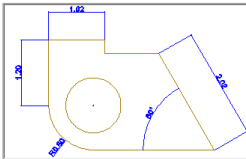


AEC_AC_Horizontal-Slash

Modify Dimension Style: AEC_AC_Horizontal-Slash

Lines | Symbols and Arrows | Text | Fit | Primary Units | Alternate Units | Tolerances

Dimension lines

Color: 

Linetype:

Lineweight:

Extend beyond ticks:

Baseline spacing:

Suppress: ☐ Dim line 1 ☐ Dim line 2

Extension lines

Color:

Linetype ext line 1:

Linetype ext line 2:

Lineweight:

Suppress: ☐ Ext line 1 ☐ Ext line 2

Extend beyond dim lines:

Offset from origin:

☐ Fixed length extension lines

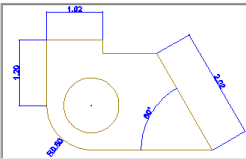
Length:

OK Cancel Help

Modify Dimension Style: AEC_AC_Horizontal-Slash

Lines | Symbols and Arrows | Text | Fit | Primary Units | Alternate Units | Tolerances

Arrowheads

First: 

Second:

Leader:

Arrow size:

Center marks

☐ None ☐ Mark ☐ Line

Dimension Break

Break size:

Arc length symbol

☒ Preceding dimension text ☐ Above dimension text ☐ None

Radius jog dimension

Jog angle:

Linear jog dimension

Jog height factor: * Text height

OK Cancel Help

Modify Dimension Style: AEC_AC_Horizontal-Slash

Lines | Symbols and Arrows | Text | Fit | Primary Units | Alternate Units | Tolerances

Text appearance

Text style:

Text color:

Fill color:

Text height:

Fraction height scale:

☐ Draw frame around text

Text placement

Vertical:

Horizontal:

View Direction:

Offset from dim line:

Text alignment

☐ Horizontal ☒ Aligned with dimension line ☐ ISO standard

OK Cancel Help

Modify Dimension Style: AEC_AC_Horizontal-Slash

Lines | Symbols and Arrows | Text | Fit | Primary Units | Alternate Units | Tolerances

Fit options

If there isn't enough room to place both text and arrows inside extension lines, the first thing to move outside the extension lines is:

☒ Either text or arrows (best fit) ☐ Arrows ☐ Text ☐ Both text and arrows ☐ Always keep text between ext lines

☐ Suppress arrows if they don't fit inside extension lines

Scale for dimension features

☒ Annotative ☐ Scale dimensions to layout ☐ Use overall scale of:

Text placement

When text is not in the default position, place it:

☒ Beside the dimension line ☐ Over dimension line, with leader ☐ Over dimension line, without leader

Fine tuning

☐ Place text manually ☐ Draw dim line between ext lines

OK Cancel Help

Modify Dimension Style: AEC_AC_Horizontal-Slash

Lines | Symbols and Arrows | Text | Fit | Primary Units | Alternate Units | Tolerances

Linear dimensions

Unit format:

Precision:

Fraction format:

Decimal separator:

Bound off:

Prefix:

Suffix:

Measurement scale

Scale factor:

☐ Apply to layout dimensions only

Zero suppression

☐ Leading ☐ Trailing ☒ Sub-units factor: ☐ 0 feet ☒ 0 inches

Angular dimensions

Units format:

Precision:

Zero suppression

☐ Leading ☐ Trailing

OK Cancel Help

Modify Dimension Style: AEC_AC_Horizontal-Slash

Lines | Symbols and Arrows | Text | Fit | Primary Units | Alternate Units | Tolerances

Display alternate units

Unit format:

Precision:

Multiplier for alt units:

Bound distances to:

Prefix:

Suffix:

Zero suppression

☐ Leading ☐ Trailing ☒ Sub-units factor: ☒ 0 feet ☒ 0 inches

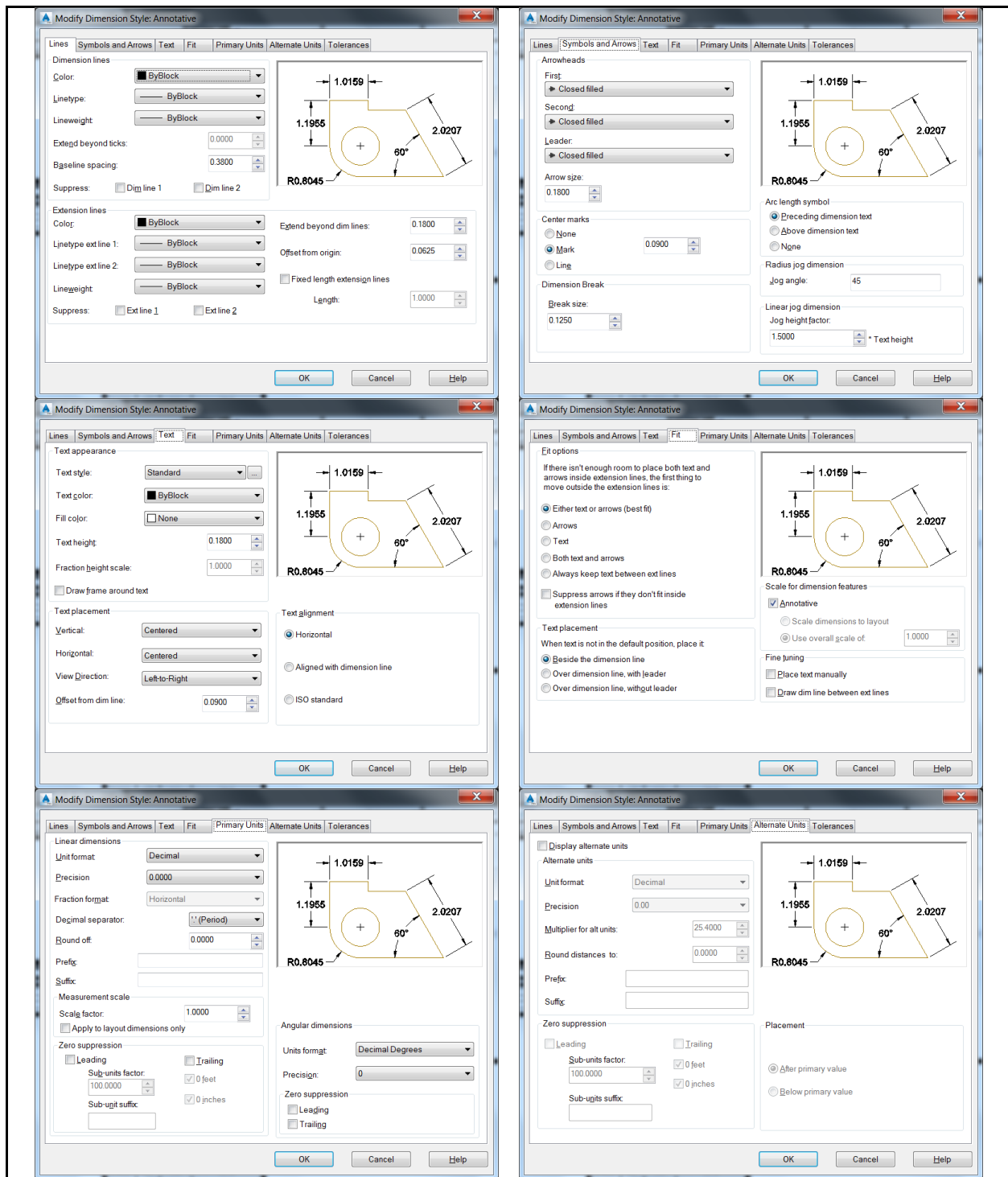
Sub-units suffix:

Placement

☒ After primary value ☐ Below primary value

OK Cancel Help

Annotative



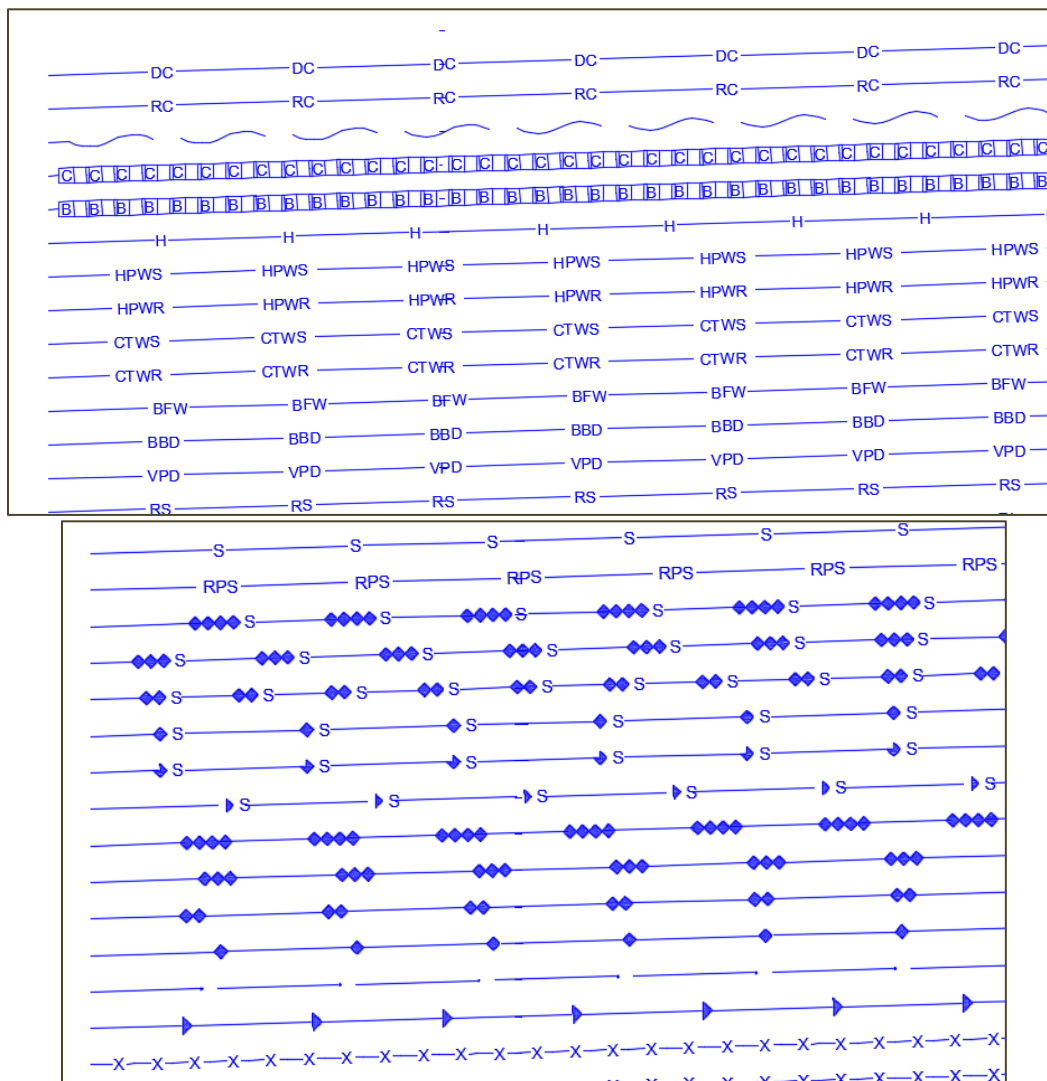
There is a line type file that is included called “**AEC_C3D_Linetypes.lin**”. This contains the linetype settings for lines that will scale based on the Viewport scale. The text and symbols in the linetype will adjust to the correct printed size in different viewports at different scales.

The Line types have been set for a text size of 0.1” height to be consistent based on the scaling

NOTE: To ensure all line types load without error –

Create a Text Style called "Arial" and set the font to "Arial" True Type non annotative scale.

*Make sure that the location for the files “**AEC_C3D_Linetypes.lin**”, “**AEC_LT_Shapes**”, “**LTPESHX.SHX**” are added to the “Support File Search Path” for AutoCAD Civil 3D.*



Note: For the Linetype “**BATTING**”, this uses an older method of creating lines. The current preferred method in inserting the parametric object “**Batt_Insul**” that allows the width and length to be set easily.

The table below lists a sampling of used layers and selected settings.

Name	On	Freeze	Lock	Color	Linetype		Description
0	TRUE	FALSE	FALSE	white	Continuous	ByDefault	0
A-AREA-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Room numbers, tenant identifications, area calculations
A-AREA-LINE	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Architectural area calculation boundary lines
A-AREA-OCCP	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Occupant or employee names
A-AREA-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Area cross hatching
A-BARR-AIR~	TRUE	FALSE	FALSE	0,0,255	Continuous	13	Air barrier
A-CLNG-ACCS	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Access panels
A-CLNG-CTLJ	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Ceiling control joints
A-CLNG-GRID	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Ceiling grid
A-CLNG-LITE	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Specialty ceiling lights not shown on the Electrical Lighting Plan
A-CLNG-OPNG	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Openings, ceiling/roof penetrations (see also A-FLOR-OVHD in Floor Plan model file)
A-CLNG-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Ceiling patterns
A-CLNG-SFFT	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Soffits
A-CLNG-SUSP	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Suspended elements, ceiling mounted specialties (e.g., clocks, fans, etc.)
A-CLNG-TEES	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Main tees
A-COLS-ENCL	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Column enclosures/fire protection
A-DETL-GRPH	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Graphics, gridlines, non-text items
A-DOOR-FULL	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Full height (to ceiling) door: swing and leaf
A-DOOR-IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Door number and symbol, hardware group, etc.
A-DOOR-PRHT	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Partial height door: swing and leaf
A-DOOR-SYMB	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Miscellaneous door symbols (e.g., overhead, bifold, pocket, etc.)
A-ELEV-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Component identification numbers
A-ELEV-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Outlines
A-ELEV-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Textures and hatch patterns
A-EQPM-ACCS	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Equipment access
A-EQPM-FIXD	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Fixed equipment
A-EQPM-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Equipment identification numbers

A-EQPM-MOVE	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Moveable equipment
A-EQPM-OVHD	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Overhead, ceiling mounted, or suspended equipment
A-FLOR-CSWK	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Casework (manufactured cabinets)
A-FLOR-EVTR	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Elevator cars and equipment
A-FLOR-FIXT	TRUE	FALSE	FALSE	223,127,255	Continuous	13	Plumbing fixtures
A-FLOR-FTPT	TRUE	FALSE	FALSE	0,255,255	Continuous	70	Floor/building footprint
A-FLOR-HRAL	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Stair and balcony handrails, guard rails
A-FLOR-IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Room name, space identification text
A-FLOR-LEVL	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Level changes, shafts, ramps, pits, breaks in construction, and depressions
A-FLOR-NUMB	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Room/space identification number and symbol
A-FLOR-OVHD	TRUE	FALSE	FALSE	128,128,128	MS2 Medium Dash	0	Overhead items (overhangs, etc.)
A-FLOR-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Paving, tile, carpet patterns
A-FLOR-PERI	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Room perimeter shape (interior walls)
A-FLOR-RAIS	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Access (raised) flooring
A-FLOR-SIGN	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Signage
A-FLOR-SPCL	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Architectural specialties (e.g., toilet room accessories, display cases)
A-FLOR-STRS	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Stair risers/treads, escalators, ladders
A-FLOR-TPTN	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Toilet partitions
A-FLOR-WDWK	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Architectural woodwork (field built cabinets and counters)
A-GLAZ-FULL	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Full height glazed walls and partitions (see A-WALL-CURT for curtain walls)
A-GLAZ-IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Window number and symbol
A-GLAZ-PRHT	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Windows and partial height glazed partitions
A-GLAZ-SILL	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Window sills
A-ROOF-CRKT	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Crickets flow arrows flow info
A-ROOF-DRNS	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Roof drains
A-ROOF-EXPJ	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Expansion joints
A-ROOF-GUTR	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Roof internal gutters
A-ROOF-HRAL	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Stair handrails, nosing, guard rails
A-ROOF-LEVL	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Level changes
A-ROOF-OTLN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Roof perimeter/edge, roof geometry

A-ROOF-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Roof surface patterns, hatching
A-ROOF-PRPT	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Parapet walls and wall caps
A-ROOF-SKLT	TRUE	FALSE	FALSE	128,128,128	MS2 Medium Dash	0	Skylights
A-ROOF-SPCL	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Roof specialties, accessories, access hatches, dormers
A-ROOF-STRS	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Stair risers/treads, ladders
A-ROOF-WALK	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Roof walkways
A-SECT-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Component identification numbers
A-SECT-MBND	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Material beyond section cut
A-SECT-MCUT	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Material cut by section
A-SECT-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Textures and hatch patterns
A-WALL-CAVI	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Cavity wall lines
A-WALL-CNTR	TRUE	FALSE	FALSE	0,0,255	Center Line	13	Wall centerlines
A-WALL-CURT	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Curtain wall mullions and glass
A-WALL-FIRE	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Fire wall designators (patterning)
A-WALL-FULL- EXTR	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Exterior full height walls
A-WALL-FULL- INTR	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Interior full height walls
A-WALL-HEAD	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Door and window headers
A-WALL-IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Wall identification/type text or tags
A-WALL-JAMB	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Door and window jambs
A-WALL-MESH	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Mesh or wire wall
A-WALL-MOVE	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Moveable walls/partitions
A-WALL-OPNG- LVRS	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Louvers
A-WALL-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Wall insulation, hatching, and fill
A-WALL-PRHT	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Partial height walls (do not appear on Reflected Ceiling Plan)
A-WALL-SPCL	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Wall-hung/attached specialties (e.g., fixtures, grab bars (incl. handicap), telephone booths)
B-BLDG-FTPT	TRUE	FALSE	FALSE	255,255,255	Continuous	40	Building footprints
B-BLDG-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Building and other structure annotation
B-BORE-CONE	TRUE	FALSE	FALSE	0,41,165	Continuous	30	Cone penetrometer test location
B-BORE-HOLE	TRUE	FALSE	FALSE	0,41,165	Continuous	30	Geophysical boring locations
B-BORE-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Geophysical location identification
B-BORE-LINE	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Geophysical transect lines

B-BORE-PUSH	TRUE	FALSE	FALSE	0,41,165	Continuous	30	Direct push test location
B-BORE-STRK	TRUE	FALSE	FALSE	0,41,165	Continuous	30	Geophysical strike line
B-CONS-DATA	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Consolidation curve data
B-CONS-DATA-TEXT	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Consolidation curve data text
B-CONS-FRAM	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Consolidation curve frame
B-CONS-GRID	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Consolidation curve grid
B-CONS-GRID-TEXT	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Consolidation curve grid text
B-DETL-GRPH	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Graphics, gridlines, non-text items
B-EXCV-EXST	TRUE	FALSE	FALSE	255,0,0	MS2 Medium Dash	13	Existing excavation
B-EXCV-FUTR	TRUE	FALSE	FALSE	0,0,255	MS1 Dot	30	Future excavation
B-EXCV-PROP	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Proposed excavation
B-GROU-ALGN	TRUE	FALSE	FALSE	255,255,0	MS4 Dot Dash	13	Grout hole alignments
B-GROU-HOLE	TRUE	FALSE	FALSE	128,128,128	Continuous	30	Borehold made specifically for grouting
B-GROU-PRIM	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Primary grout holes
B-GROU-QUAT	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Quaternary grout holes
B-GROU-SECD	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Secondary grout holes
B-GROU-TERT	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Tertiary grout holes
B-H2OC-ATTB-DATA	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Water content Atterberg limits
B-H2OC-ATTB-TEXT	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Water content Atterberg limits text
B-H2OC-GRID-MAJR	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Water content major grid
B-H2OC-GRID-MINR	TRUE	FALSE	FALSE	128,128,128	MS1 Dot	0	Water content minor grid
B-H2OC-GRID-TEXT	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Water content grid text
B-H2OC-MOIS-DATA	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Water content moisture content points and lines
B-H2OC-MOIS-TEXT	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Water content moisture content text
B-INST-EXTN	TRUE	FALSE	FALSE	191,0,255	Continuous	30	Extensometers
B-INST-EXTN-IDEN	TRUE	FALSE	FALSE	191,0,255	Continuous	30	Extensometer identification
B-INST-GAGE	TRUE	FALSE	FALSE	191,0,255	Continuous	30	Pressure gages
B-INST-GAGE-IDEN	TRUE	FALSE	FALSE	191,0,255	Continuous	30	Pressure gage identification
B-INST-INCL	TRUE	FALSE	FALSE	191,0,255	Continuous	30	Inclinometers
B-INST-INCL-IDEN	TRUE	FALSE	FALSE	191,0,255	Continuous	30	Inclinometer identification
B-INST-SETL	TRUE	FALSE	FALSE	191,0,255	Continuous	30	Settlement monuments

B-INST-SETL-IDEN	TRUE	FALSE	FALSE	191,0,255	Continuous	30	Settlement monument identification
B-JNTS-CNTJ-LONG	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Construction joints - longitudinal
B-JNTS-CNTJ-TRAV	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Construction joints - transverse
B-JNTS-CTRJ-LONG	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Contraction joints - longitudinal
B-JNTS-CTRJ-TRAV	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Contraction joints - transverse
B-JNTS-EDGE	TRUE	FALSE	FALSE	0,255,255	Continuous	211	Thickened edges
B-JNTS-EXPJ	TRUE	FALSE	FALSE	165,0,0	Continuous	30	Expansion joints
B-LOGS-FDTA	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Field data
B-LOGS-FORM	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Bore log form
B-LOGS-FRAM	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Frame for boring log and associated test data
B-LOGS-FRAM-TEXT	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Text associated with boring log frame
B-LOGS-LDTA	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Laboratory data
B-LOGS-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Soil/rock patterns
B-MONP-SEEP	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Seepage monitoring point
B-MONP-WEIR	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Weirs
B-NORM-DATA	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Normal stress data
B-NORM-DATA-TEXT	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Normal stress data text
B-NORM-GRID-MAJR	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Normal stress major grid
B-NORM-GRID-MINR	TRUE	FALSE	FALSE	128,128,128	MS1 Dot	0	Normal stress minor grid
B-NORM-GRID-TEXT	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Normal stress grid text
B-PLAS-DATA	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Plasticity chart data
B-PLAS-DATA-TEXT	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Plasticity chart data text
B-PLAS-FRAM	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Plasticity chart frame
B-PLAS-GRID	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Plasticity chart grid
B-PLAS-GRID-TEXT	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Plasticity chart grid text
B-PVMT-MISM	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Mismatched pavement joint
B-PVMT-OTLN-AGSC	TRUE	FALSE	FALSE	191,0,255	Continuous	30	Outline - aggregate surface course and gravel
B-PVMT-OTLN-HMAC	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Outline - hot mix, asphaltic concrete
B-PVMT-OTLN-PCCP	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Outline - Portland cement, concrete pavement
B-PVMT-PATT-AGSC	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Pattern - aggregate surface course and gravel
B-PVMT-PATT-HMAC	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Pattern - hot mix, asphaltic concrete

B-PVMT-PATT-PCCP	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Pattern - Portland cement, concrete pavement
B-PVMT-REIN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Reinforced pavement
B-SAMP-AUGR	TRUE	FALSE	FALSE	76,38,38	Continuous	30	Auger sample location
B-SAMP-CORE	TRUE	FALSE	FALSE	76,38,38	Continuous	30	Core sample location
B-SAMP-DRVE	TRUE	FALSE	FALSE	76,38,38	Continuous	30	Drive sample (shelby split spoon) location
B-SAMP-GRAB	TRUE	FALSE	FALSE	76,38,38	Continuous	30	Grab sample location
B-SAMP-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Sample location identification
B-SAMP-PERC	TRUE	FALSE	FALSE	103,165,82	Continuous	40	Percolation test hole
B-SAMP-PITS	TRUE	FALSE	FALSE	103,165,82	Continuous	40	Test pit sample location
B-SAMP-VERT	TRUE	FALSE	FALSE	0,165,124	Continuous	30	Vertical core hole location
B-SAMP-WASH	TRUE	FALSE	FALSE	0,165,124	Continuous	30	Wash bored hole location
B-SECT-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Component identification numbers
B-SECT-MBND	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Material beyond section cut
B-SECT-MCUT	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Material cut by section
B-SECT-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Textures and hatch patterns
B-SECT-SLOG	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Stick log graphics
B-SECT-STRA	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Stratigraphy
B-SSNS-DATA	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Shear strength vs. normal stress data
B-SSNS-DATA-TEXT	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Shear strength vs. normal stress data text
B-SSNS-FRAM	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Shear strength vs. normal stress frame
B-SSNS-GRID	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Shear strength vs. normal stress grid
B-SSNS-GRID-TEXT	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Shear strength vs. normal stress grid text
B-SSTR-1TST-DATA	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Shear strength 1 Point Q test data
B-SSTR-1TST-TEXT	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Shear strength 1 Point Q test text
B-SSTR-GRID-MAJR	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Shear strength major grid
B-SSTR-GRID-MINR	TRUE	FALSE	FALSE	128,128,128	MS1 Dot	0	Shear strength minor grid
B-SSTR-GRID-TEXT	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Shear strength grid text
B-SSTR-QTST-DATA	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Shear strength Q test data
B-SSTR-QTST-TEXT	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Shear strength Q test text
B-SSTR-RTST-DATA	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Shear strength R test data
B-SSTR-RTST-TEXT	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Shear strength R test text

B-SSTR-STST-DATA	TRUE	FALSE	FALSE	0,0,255	Continuous	13	Shear strength S test data
B-SSTR-STST-TEXT	TRUE	FALSE	FALSE	0,0,255	Continuous	13	Shear strength S test text
B-SSTR-UTST-DATA	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Shear strength UCT test data
B-SSTR-UTST-TEXT	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Shear strength UCT test text
B-SSTR-VTST-DATA	TRUE	FALSE	FALSE	255,255,255	Continuous	13	Shear strength Vane shear test data
B-SSTR-VTST-TEXT	TRUE	FALSE	FALSE	255,255,255	Continuous	13	Shear strength Vane shear test text
B-TABT-DATA	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Tabular test data
B-TABT-DATA-TEXT	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Tabular test data text
B-TABT-FRAM	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Tabular test data frame
B-TABT-GRID	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Tabular test data grid
B-TABT-GRID-TEXT	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Tabular test data grid text
B-WELL-ASR~	TRUE	FALSE	FALSE	41,165,0	Continuous	30	ASR wells
B-WELL-HORZ	TRUE	FALSE	FALSE	41,165,0	Continuous	30	Horizontal drain
B-WELL-MONT	TRUE	FALSE	FALSE	41,165,0	Continuous	30	Monitoring wells
B-WELL-PIZO	TRUE	FALSE	FALSE	41,165,0	Continuous	30	Piezometers
B-WELL-VERT	TRUE	FALSE	FALSE	41,165,0	Continuous	30	Vertical drain
B-WETD-DATA	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Wet density data
B-WETD-DATA-TEXT	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Wet density data text
B-WETD-GRID-MAJR	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Wet density major grid
B-WETD-GRID-MINR	TRUE	FALSE	FALSE	128,128,128	MS1 Dot	0	Wet density minor grid
B-WETD-GRID-TEXT	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Wet density grid text
C-ALGN-DATA	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Alignment coordinates and curve data
C-ALGN-LINE	TRUE	FALSE	FALSE	255,255,0	MS4 Dot Dash	30	Alignments
C-ALGN-MAJR	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Alignment major stationing and tick marks
C-ALGN-MARK	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Alignment tick marks
C-ALGN-MINR	TRUE	FALSE	FALSE	255,0,255	Continuous	0	Alignment minor stationing and tick marks
C-ALGN-STAT	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Alignment stationing and tick marks, alignment PI stations
C-ALGN-SYMB	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Alignment symbols (PIs)
C-ALGN-TEXT	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Alignment text, annotation with associated leaders
C-APRN-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	13	Apron centerlines
C-APRN-CNTR-	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Apron centerline annotation

IDEN							
C-APRN-GRND	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Grounding points
C-APRN-HOLD	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Holding position markings
C-APRN-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Airfield apron - annotation
C-APRN-MOOR	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Mooring points
C-APRN-MRKG	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Apron markings
C-APRN-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Airfield apron - outlines
C-APRN-SECU	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Security zone markings
C-APRN-SHLD	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Shoulders with annotation
C-APRN-SHLD-MRKG	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Shoulder stripes
C-BECH-BANK-TOP~	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Beach top of bank
C-BECH-BKLN	TRUE	FALSE	FALSE	0,0,255	MS2 Medium Dash	30	Beach breakline
C-BECH-BLIN	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Beach baseline and control line
C-BECH-BLIN-IDEN	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Beach baseline and control line annotation
C-BECH-BNCH	TRUE	FALSE	FALSE	165,41,0	MS6 Dash Dot Dot	30	Beach bench
C-BECH-CNTR	TRUE	FALSE	FALSE	0,0,255	Center Line	13	Beach centerline
C-BECH-CNTR-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Beach centerline annotation
C-BECH-ELIN	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Beach erosion control line
C-BECH-ELIN-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Beach erosion control line annotation
C-BECH-LIMIT	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Beach limit lines
C-BECH-OHWM	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Ordinary high water marks
C-BECH-OTLN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Beach outline
C-BECH-SLOP-IDEN	TRUE	FALSE	FALSE	255,255,255	Continuous	13	Beach slope indicator with annotation
C-BECH-SLOP-TOP~	TRUE	FALSE	FALSE	165,41,0	MS2 Medium Dash	30	Beach top of slope
C-BECH-SYMB	TRUE	FALSE	FALSE	255,0,255	Continuous	0	Beach symbols
C-BECH-TOE~	TRUE	FALSE	FALSE	0,0,255	MS3 Long Dash	40	Beach toe
C-BECH-TOE~IDEN	TRUE	FALSE	FALSE	255,255,255	Continuous	13	Beach toe annotation
C-BLDG-DECK	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Outdoor decks (attached, no roof overhead)
C-BLDG-DOCK	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Loading docks
C-BLDG-FTPT	TRUE	FALSE	FALSE	255,255,255	Continuous	70	Building footprints
C-BLDG-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Building and other structure

							annotation
C-BLDG-OVHD	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Building overhangs
C-BLDG-PRCH	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Porches (attached, roof overhead)
C-BORW-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Borrow/spoil area annotation
C-BORW-LINE	TRUE	FALSE	FALSE	255,255,0	MS2 Medium Dash	30	Borrow/spoil area
C-BRDG-CHRD- LOW~	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Low chord
C-BRDG-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	13	Bridge centerlines
C-BRDG-CTLJ	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Control joints
C-BRDG-DECK	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Bridge deck
C-BRDG-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Bridge annotation
C-BRDG-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Bridge outlines
C-BRDG-RLG~	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Bridge railing
C-CHAN-BANK- IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Channel/canal top of bank annotation
C-CHAN-BANK- TOP~	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Channel/canal top of bank
C-CHAN-BNCH	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Channel/canal bench design feature lines (breaklines form DTMs)
C-CHAN-BWTR	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Breakwaters
C-CHAN-CNTR	TRUE	FALSE	FALSE	0,0,255	Center Line	13	Channel centerline and survey report lines
C-CHAN-CNTR- IDEN	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Channel centerline and survey report lines - annotation
C-CHAN-DACL	TRUE	FALSE	FALSE	0,255,0	Continuous	30	De-authorized channel limits, anchorages, etc.
C-CHAN-DACL- IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	30	De-authorized channel limits, anchorages, etc. - annotation
C-CHAN-DOCK	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Docks, decks, floats, piers, and mooring facilities
C-CHAN-LIMIT	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Channel limits, anchorages, turning basins, disposal areas, etc.
C-CHAN-LIMIT- IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Channel limits, anchorages, turning basins, disposal areas, etc. - annotation
C-CHAN-NAID	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Navigation aids and text
C-CHAN-SLOP- LINE	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Channel cut/fill slope (Indicates cut and fill lines)
C-CHAN-SPOL	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Spoil limits
C-CHAN-SYMB	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Channel/canal symbols
C-CHAN-TEXT	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Channel/canal text, annotation with associated leaders
C-CHAN-TOE~	TRUE	FALSE	FALSE	0,0,255	MS3 Long Dash	40	Channel/canal toe

C-CHAN-TOE~IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Channel/canal toe annotation
C-CHAN-TURN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Turning points
C-CHAN-WIDE	TRUE	FALSE	FALSE	0,255,255	MS3 Long Dash	40	Channel/canal widener
C-DETL-GRPH	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Graphics, gridlines, non-text items
C-DRED-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Dredging annotation
C-DRED-LIMT	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Dredge limit lines
C-DRED-OHWM	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Ordinary high water marks
C-DTCH-BOTM	TRUE	FALSE	FALSE	0,0,255	Ditch	13	Bottom of ditch or wash
C-DTCH-CNTR	TRUE	FALSE	FALSE	0,0,255	Center Line	13	Centerline of ditch or wash
C-DTCH-EWAT	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Edge of water
C-DTCH-IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Ditches and washes annotation
C-DTCH-TOP~	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Top of ditch or wash
C-ECCO-BURR	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Burrow
C-ECCO-DENS	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Den
C-ECCO-GATR	TRUE	FALSE	FALSE	255,0,255	MS2 Medium Dash	30	Gator hole
C-ECCO-HUMK	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Hummocks
C-ECCO-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Habitat annotation
C-ECCO-NEST	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Nest, nesting tree
C-ECCO-PRCH	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Perch/nesting hole
C-ELEV-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Component identification numbers
C-ELEV-OTLN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Outlines
C-ELEV-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Textures and hatch patterns
C-ELEV-SIGN	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Signage
C-EROS-CIPR	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Culvert inlet protection
C-EROS-CNTE	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Construction entrance
C-EROS-DDIV	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Drainage divides
C-EROS-DVDK	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Diversion dike
C-EROS-IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Erosion and sediment control annotation
C-EROS-INPR	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Inlet protection
C-EROS-SILT	TRUE	FALSE	FALSE	255,255,0	Silt Fence	30	Silt fence
C-EROS-SILT-CHCK	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Silt check
C-EROS-SILT-TRAP	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Silt trap

C-EROS-SSLT	TRUE	FALSE	FALSE	255,255,0	Super Silt Fence	30	Super silt fence
C-FIRE-HYDT	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Hydrants and connections
C-FIRE-PIPE	TRUE	FALSE	FALSE	255,0,0	Fire Protection Water Supply	30	Piping
C-FLHA-025Y	TRUE	FALSE	FALSE	255,0,255	MS6 Dash Dot Dot	30	25 year mark
C-FLHA-050Y	TRUE	FALSE	FALSE	255,255,0	MS3 Long Dash	30	50 year mark
C-FLHA-100Y	TRUE	FALSE	FALSE	255,0,255	Continuous	30	100 year mark
C-FLHA-200Y	TRUE	FALSE	FALSE	255,255,0	MS2 Medium Dash	30	200 year mark
C-FLHA-500Y	TRUE	FALSE	FALSE	255,0,255	Center Line	30	500 year mark
C-FLHA-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Flood hazard area annotation
C-FLOD-BASE	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Floodwall base of wall
C-FLOD-BASE-IDEN	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Floodwall base of wall annotation
C-FLOD-CNTR	TRUE	FALSE	FALSE	255,63,0	Center Line	13	Floodwall centerline
C-FLOD-CNTR-IDEN	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Floodwall centerline annotation
C-FLOD-DRNS	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Floodwall toe drain
C-FLOD-DRNS-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Floodwall toe drain annotation
C-FLOD-PILE	TRUE	FALSE	FALSE	255,255,0	Continuous	40	Floodwall sheet piling
C-FLOD-PILE-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Floodwall sheet piling annotation
C-FLOD-TOE~	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Floodwall toe outline
C-FLOD-TOP~	TRUE	FALSE	FALSE	255,255,0	Continuous	40	Floodwall top of wall
C-FLOD-TOP~IDEN	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Floodwall top of wall annotation
C-FUEL-BERM	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Berms for retaining fuel in case of major tank/line rupture
C-FUEL-DEFL-PIPE	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Defueling piping
C-FUEL-DEVC	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Air eliminators, filter strainers, hydrant fill points, line vents, markers, oil/water separators, reducers, regulators, and valves
C-FUEL-FLOW	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Flow direction arrows
C-FUEL-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifier, and text
C-FUEL-JBOX	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Junction boxes, manholes, handholes, test boxes
C-FUEL-MAIN-PIPE	TRUE	FALSE	FALSE	255,255,0	Gas - Liquefied Petroleum	30	Main fuel piping

C-FUEL-METR	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Meters
C-FUEL-SERV-PIPE	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Service piping
C-FUEL-STNS-PUMP	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Booster pump stations
C-FUEL-TANK	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Fuel tanks
C-FUEL-TRCH	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Fuel line trench
C-FUEL-VALT	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Hydrant control/valve/vent pits/vaults
C-GRAD-ALOW	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Allowable over depth
C-GRAD-BNCH	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Bench cut
C-GRAD-DSGN	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Design grade (proposed)
C-GRAD-EXCV	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Excavation grade
C-GRAD-EXST	TRUE	FALSE	FALSE	255,0,255	MS3 Long Dash	30	Existing grade, ground line
C-GRAD-FNSH	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Finished grade
C-GRAD-FNSH-PRP1	TRUE	FALSE	FALSE	128,128,128	Continuous	30	Proposed Surface #1
C-GRAD-FNSH-PRP2	TRUE	FALSE	FALSE	128,128,128	Continuous	30	Proposed Surface #2
C-GRAD-FNSH-PRP3	TRUE	FALSE	FALSE	128,128,128	Continuous	30	Proposed Surface #3
C-GRAD-FNSH-PRP4	TRUE	FALSE	FALSE	128,128,128	Continuous	30	Proposed Surface #4
C-GRAD-GTXL	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Geotextile placement grade
C-GRAD-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Grade annotation for cross sections and profiles
C-GRAD-REQD	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Required depth
C-GRAD-SCLN	TRUE	FALSE	FALSE	0,0,255	Center Line	40	Stability control line
C-GRAD-WATR	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Water surface in section view
C-GRID-FRAM	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Frame
C-GRID-MAJR	TRUE	FALSE	FALSE	128,128,128	MS1 Dot	30	Major grid lines
C-GRID-MINR	TRUE	FALSE	FALSE	128,128,128	MS1 Dot	0	Minor grid lines
C-GRID-TEXT	TRUE	FALSE	FALSE	255,255,0	MS1 Dot	30	Border text, annotation
C-HELI-BLST	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Blast pad and stopway markings
C-HELI-CNTR	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Centerline markings
C-HELI-DISP	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Displaced threshold markings
C-HELI-DIST	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Fixed distance markings
C-HELI-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Heliport numbers and letters
C-HELI-SHLD	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Shoulder markings
C-HELI-SIDE	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Side stripes
C-HELI-TDZM	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Touchdown zone markers

C-HELI-THRS	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Threshold markers
C-INDW-DEVC	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Grit chambers, flumes, neutralizers, oil/water separators, ejectors, tanks, and valves
C-INDW-FLOW	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Flow direction arrows
C-INDW-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifier, and text
C-INDW-JBOX	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Junction boxes and manholes
C-INDW-LAGN	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Lagoons
C-INDW-MAIN-PIPE	TRUE	FALSE	FALSE	255,63,0	Industrial Waste	30	Main industrial waste water piping
C-INDW-METR	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Meters
C-INDW-PLNT	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Treatment plants
C-INDW-SERV-PIPE	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Industrial waste water service piping
C-INDW-SIGN	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Surface markers/signs
C-INDW-STNS-LIFT	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Lift stations
C-JNTS-CNSL	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Construction joints - longitudinal
C-JNTS-CNST	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Construction joints - transverse
C-JNTS-CNTL	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Contraction joints - longitudinal
C-JNTS-CNTT	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Contraction joints - transverse
C-JNTS-EDGE	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Thickened edges
C-JNTS-EXPJ	TRUE	FALSE	FALSE	165,0,0	Continuous	30	Expansion joints
C-JNTS-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Joint annotation
C-LEVE-BANK-IDEN	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Levee top of bank annotation
C-LEVE-BERM	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Levee berm outline
C-LEVE-BNCH	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Levee bench design feature lines (breaklines form DTMs)
C-LEVE-BNCH-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Levee bench annotation
C-LEVE-BRRW	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Borrow limits
C-LEVE-CNTR	TRUE	FALSE	FALSE	255,63,0	Center Line	13	Levee centerline
C-LEVE-CNTR-IDEN	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Levee centerline annotation
C-LEVE-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Levee annotation
C-LEVE-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Levee outline
C-LEVE-SLOP	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Levee slope indicator with annotation
C-LEVE-STAN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Levee stationing
C-LEVE-TOE~	TRUE	FALSE	FALSE	255,63,0	MS2 Medium Dash	30	Levee toe

C-LEVE-TOE~ IDEN	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Levee toe annotation
C-LEVE-TOPB	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Levee top of bank
C-MILR-BATP	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Battle positions
C-MILR-CAMS	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Range cameras
C-MILR-FOXH	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Fox holes and pits
C-MILR-MATS	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Moving army targets
C-MILR-MITS	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Moving infantry targets
C-MILR-MITS- IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Moving infantry targets annotation
C-MILR-PUTS	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Pop up targets
C-MILR-PUTS- IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Pop up targets annotation
C-MILR-SATS	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Stationary army targets
C-MILR-SATS- IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Stationary army targets annotation
C-MILR-SITS	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Stationary infantry targets
C-MILR-SITS- IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Stationary infantry targets annotation
C-NGAS-EQPM	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Equipment (pumps, motors, etc.)
C-NGAS-FLOW	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Flow direction arrows
C-NGAS-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifier, and text
C-NGAS-INST	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Instrumentation (valves, etc.)
C-NGAS-METR	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Meters
C-NGAS-MHOL	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Manholes
C-NGAS-PIPE	TRUE	FALSE	FALSE	255,255,0	Gas - Low Pressure	30	Natural gas piping
C-NGAS-SIGN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Surface markers/signs
C-NGAS-STNS- PUMP	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Compressor stations
C-NGAS-STNS- REDC	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Reducing stations
C-NGAS-TANK	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Tanks
C-NGAS-VALT	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Valve/vent pits/vaults
C-OBST-AIRS	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Airspace obstructions
C-OBST-AIRS- IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Obstruction annotation
C-OVRN-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	13	Centerlines
C-OVRN-CNTR- IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Centerline annotation
C-OVRN-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Airfield overrun area - annotation
C-OVRN-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Airfield overrun area - outlines

C-OVRN-SHLD-MRKG	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Shoulder markings
C-PADS-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	13	Centerlines
C-PADS-CNTR-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Centerline annotation
C-PADS-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Pads - annotation
C-PADS-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Pad - outlines
C-PADS-SHLD	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Shoulders with annotation
C-PRKG-CARS	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Graphic illustration of cars
C-PRKG-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	13	Parking lot centerlines
C-PRKG-CNTR-IDEN	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Parking lot centerline annotation
C-PRKG-CURB	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Curbs and gutters
C-PRKG-DRAIN	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Drainage slope indications
C-PRKG-FIXT	TRUE	FALSE	FALSE	127,255,127	Continuous	30	Parking lot fixtures (e.g., wheel stops, parking meters)
C-PRKG-FLNE	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Fire lanes
C-PRKG-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Parking lot annotation
C-PRKG-MRKG	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Pavement markings
C-PRKG-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Parking lot outlines
C-PRKG-SIGN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Signs
C-PROP-CONS	TRUE	FALSE	FALSE	255,255,255	Construction Contract Limit	70	Construction limits/controls, staging area
C-PROP-ESMT	TRUE	FALSE	FALSE	255,255,255	Construction Easement	70	Easements
C-PROP-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Property annotation
C-PROP-LINE	TRUE	FALSE	FALSE	255,255,0	Property Line	40	Property lines
C-PROP-RWAY	TRUE	FALSE	FALSE	255,255,255	Right Of Way	70	Right of ways
C-PROP-RWAY-ACQU	TRUE	FALSE	FALSE	255,255,255	Continuous	70	Right of way to be acquired in perpetuity
C-PROP-SBCK	TRUE	FALSE	FALSE	255,255,255	MS3 Long Dash	13	Setback lines
C-PROP-SECT	TRUE	FALSE	FALSE	255,0,255	Center Line	40	Section lines
C-PROP-SECT-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Section lines annotation
C-PROP-TSHP	TRUE	FALSE	FALSE	255,0,255	MS4 Dot Dash	40	Township/range lines
C-PROP-TSHP-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Township/range lines annotation
C-PVMT-ASPH	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Pavement pattern - asphalt
C-PVMT-CONC	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Pavement pattern - concrete
C-PVMT-GRVL	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Pavement pattern - gravel

C-PVMT-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Road, parking lot, railroad, airfield pavement annotation
C-PVMT-MRKG	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Pavement markings
C-PVMT-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Joint patterns, text and dimensions
C-RAIL-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	13	Railroad track centerlines
C-RAIL-CNTR-IDEN	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Railroad track centerline annotation
C-RAIL-EQPM	TRUE	FALSE	FALSE	127,255,127	Continuous	30	Railroad equipment (e.g., gates, signals)
C-RAIL-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Railroad - annotation
C-RAIL-TRAK	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Railroad tracks
C-RIVR-BOTM	TRUE	FALSE	FALSE	0,0,255	Continuous	30	River bottom
C-RIVR-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	13	Centerline of river
C-RIVR-EDGE	TRUE	FALSE	FALSE	0,0,255	Continuous	40	River edge
C-RIVR-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
C-RIVR-TOPB	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Top of river bank
C-ROAD-ASPH	TRUE	FALSE	FALSE	128,128,128	Continuous	13	Road outlines - asphalt surface
C-ROAD-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	13	Road centerlines
C-ROAD-CNTR-IDEN	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Road centerline annotation
C-ROAD-CONC	TRUE	FALSE	FALSE	255,255,255	Continuous	13	Road outlines - concrete surface
C-ROAD-CURB	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Curbs and gutters
C-ROAD-GRAL	TRUE	FALSE	FALSE	255,0,255	Guardrail	30	Guard rails
C-ROAD-GRVL	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Road outlines - gravel surface
C-ROAD-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Road, street, highway annotation
C-ROAD-MRKG	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Pavement markings
C-ROAD-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Joint patterns, text and dimensions
C-ROAD-SHLD	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Roadway shoulder
C-ROAD-SIGN	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Signs
C-ROAD-UPVD	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Road outlines - unpaved surface
C-RRAP-GABN	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Gabions
C-RRAP-MATS	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Articulated concrete mats
C-RRAP-RVMT	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Revetments
C-RRAP-WEIR	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Weirs
C-RUNW-BLST	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Blast pad and stopway markings
C-RUNW-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	13	Centerlines
C-RUNW-CNTR-MRKG	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Centerline markings

C-RUNW-DISP	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Displaced threshold markings
C-RUNW-DIST	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Fixed distance markings
C-RUNW-EDGE	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Airfield runway edges
C-RUNW-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Airfield runway annotation
C-RUNW-SHLD	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Shoulder markings
C-RUNW-SIDE	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Side stripes
C-RUNW-TDZM	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Touchdown zone markers
C-RUNW-THRS	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Threshold markers
C-SECT-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Component identification numbers
C-SECT-MBND	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Material beyond section cut
C-SECT-MCUT	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Cuts through road surfaces, buildings, structures, fence lines, etc.
C-SECT-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Textures and hatch patterns
C-SITE-BLIN	TRUE	FALSE	FALSE	0,255,0	MS2 Medium Dash	30	Site breakline
C-SITE-FENC	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Fences and handrails
C-SITE-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Site feature annotation
C-SITE-STRC	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Structures (bridges, sheds, foundation pads, footings, etc.)
C-SITE-STRS	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Stairs and ramps
C-SITE-WALK	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Walks, trails and bicycle paths
C-SSWR-DEVC	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Grease traps, grit chambers, flumes, neutralizers, oil/water separators, ejectors, and valves
C-SSWR-FILT	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Filtration beds
C-SSWR-FLOW	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Flow direction arrows
C-SSWR-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifier, and text
C-SSWR-JBOX	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Junction boxes and manholes
C-SSWR-LAGN	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Lagoons
C-SSWR-LEAC	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Leach field
C-SSWR-MAIN-PIPE	TRUE	FALSE	FALSE	0,255,0	Sanitary Waste	30	Sanitary sewer piping
C-SSWR-NITF	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Nitrification drain fields
C-SSWR-PLNT	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Treatment plants
C-SSWR-SERV-PIPE	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Sanitary sewer service piping
C-SSWR-SIGN	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Surface markers/signs
C-SSWR-STNS-PUMP	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Booster pump stations

C-SSWR-TANK	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Septic tanks
C-STRM-AFFF	TRUE	FALSE	FALSE	0,255,0	Continuous	30	AFFF lagoon/detention pond
C-STRM-CHUT	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Chutes and concrete erosion control structures
C-STRM-CULV	TRUE	FALSE	FALSE	0,255,0	Culvert	30	Culverts
C-STRM-DEVC	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Downspouts, flumes, oil/water separators, and flap gates
C-STRM-FLOW	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Flow direction arrows
C-STRM-FMON	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Flow monitoring station
C-STRM-HWAL	TRUE	FALSE	FALSE	0,255,0	Continuous	40	Headwalls and endwalls
C-STRM-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifier, and text
C-STRM-INLT	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Inlets (curb, surface, and catch basins)
C-STRM-MAIN-PIPE	TRUE	FALSE	FALSE	0,255,0	Drain - Storm	30	Storm sewer piping
C-STRM-MHOL	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Manholes
C-STRM-POND	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Retention ponds, lagoons, watersheds, and basins
C-STRM-ROOF	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Roof drain line
C-STRM-SERV-PIPE	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Storm sewer service piping
C-STRM-SIGN	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Surface markers/signs
C-STRM-STNS-PUMP	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Pump stations
C-STRM-SUBS-CHIM	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Subsurface chimney drain
C-STRM-SUBS-COLL	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Subsurface drain collector
C-STRM-SUBS-DRAN	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Subsurface drainage layer
C-STRM-SUBS-FILT	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Subsurface drain filter
C-STRM-SUBS-GEOX	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Subsurface drain geotextile material and filter fabric
C-STRM-SUBS-INCP	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Subsurface interceptor drain
C-STRM-SUBS-PIPE	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Subsurface drain piping
C-STRM-SUBS-SEPR	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Subsurface drain separation layer
C-SURV-DATA	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Survey data (benchmarks and horizontal control points or monuments)
C-SURV-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Survey, baseline, and control line annotation
C-SURV-LINE	TRUE	FALSE	FALSE	0,255,255	MS2 Medium Dash	30	Survey, baseline, and control lines
C-TAXI-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	13	Centerlines

C-TAXI-CNTR- IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Centerline annotation
C-TAXI-CNTR- MRKG	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Centerline markings
C-TAXI-EDGE	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Edge markings
C-TAXI-HOLD	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Holding lines
C-TAXI-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Taxiway - annotation
C-TAXI-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Taxiway - outlines
C-TAXI-SHLD	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Shoulders with annotation
C-TOPO-BKLN	TRUE	FALSE	FALSE	255,255,255	MS4 Dot Dash	40	Breaklines
C-TOPO-BKLN- COMM	TRUE	FALSE	FALSE	255,255,255	Communica tion	40	Subsurface utilities communications breakline
C-TOPO-BKLN- DOMW	TRUE	FALSE	FALSE	255,255,255	Water Line	40	Subsurface utilities water breakline
C-TOPO-BKLN- ELEC	TRUE	FALSE	FALSE	255,255,255	Electrical Primary	40	Subsurface utilities electric breakline
C-TOPO-BKLN- FUEL	TRUE	FALSE	FALSE	255,255,255	Gas - Liquefied Petroleum	40	Subsurface utilities liquid fuel breakline
C-TOPO-BKLN- NGAS	TRUE	FALSE	FALSE	255,255,255	Gas - Low Pressure	40	Subsurface utilities natural gas breakline
C-TOPO-BKLN- SSWR	TRUE	FALSE	FALSE	255,255,255	Sanitary Waste	40	Subsurface utilities sanitary sewer breakline
C-TOPO-BKLN- STRM	TRUE	FALSE	FALSE	255,255,255	Drain - Storm	40	Subsurface utilities storm sewer breakline
C-TOPO-BNDY- EXTR	TRUE	FALSE	FALSE	0,255,0	Continuous	0	Surface exterior boundary
C-TOPO-BNDY- INTR	TRUE	FALSE	FALSE	255,0,0	MS2 Medium Dash	0	Surface interior boundary
C-TOPO-BORE	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Boring locations and text
C-TOPO-COOR	TRUE	FALSE	FALSE	0,165,124	Continuous	30	Coordinate grid text annotation
C-TOPO-COOR- LALO	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Latitude and longitude grid ticks
C-TOPO-COOR- STAT	TRUE	FALSE	FALSE	0,255,0	Continuous	13	State Plane coordinate ticks
C-TOPO-COOR- UTM~	TRUE	FALSE	FALSE	0,255,0	Continuous	13	UTM coordinate ticks
C-TOPO-DTMO	TRUE	FALSE	FALSE	255,0,255	Continuous	30	DTM obscure area boundary
C-TOPO-DTMP	TRUE	FALSE	FALSE	255,0,255	Continuous	30	DTM points
C-TOPO-DTMT	TRUE	FALSE	FALSE	165,41,0	Continuous	30	DTM triangles
C-TOPO-MAJR	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Major contours
C-TOPO-MAJR- IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Major contours - annotation
C-TOPO-MINR	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Minor contours
C-TOPO-MINR- IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Minor contours - annotation
C-TOPO-SHAP	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Inroads generated shapes/lines

C-TOPO-SHOR	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Shorelines, land features, and references
C-TOPO-SLOP-FILL	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Cut/fill slopes
C-TOPO-SLOP-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Cut/fill slope, top/toe slope annotation
C-TOPO-SLOP-TOPT	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Top/toe slopes
C-TOPO-SOUN	TRUE	FALSE	FALSE	255,255,255	Continuous	0	Soundings and overbanks
C-TOPO-SPOT	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Spot elevations
C-TOPO-SURF-PERI	TRUE	FALSE	FALSE	0,255,0	Continuous	0	Surface perimeter
C-TOPO-SURF-PONT	TRUE	FALSE	FALSE	255,255,255	Continuous	13	Surface feature points
C-TOPO-SURF-VOID	TRUE	FALSE	FALSE	255,0,0	Continuous	0	Surface void region
C-TOPO-WATR	TRUE	FALSE	FALSE	255,255,255	MS3 Long Dash	40	Water level reference (LWRP, after-grading LWRP, SWL, etc.)
C-TRAF-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Airfield traffic area annotation
C-TRAF-TYPA	TRUE	FALSE	FALSE	0,255,255	MS4 Dot Dash	40	Type A traffic area
C-TRAF-TYPB	TRUE	FALSE	FALSE	0,255,255	MS6 Dash Dot Dot	40	Type B traffic area
C-TRAF-TYPC	TRUE	FALSE	FALSE	0,255,255	MS1 Dot	40	Type C traffic area
C-WATR-DEVC	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Connectors, faucets, reducers, regulators, vents, intake points, taps, backflow preventers, and valves
C-WATR-HYDT	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Flushing hydrants
C-WATR-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifier, and text
C-WATR-MAIN-PIPE	TRUE	FALSE	FALSE	0,255,255	Water Line	30	Main domestic water piping
C-WATR-METR	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Meters
C-WATR-NPW~-PIPE	TRUE	FALSE	FALSE	0,255,255	Non-Potable Water	30	Non-potable water piping
C-WATR-SERV-PIPE	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Domestic water service piping
C-WATR-SIGN	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Surface markers/signs
C-WATR-STNS-PUMP	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Booster pump stations
C-WATR-STNS-REDC	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Pressure reducing stations
C-WATR-TANK	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Water storage tanks
C-WATR-VALT	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Valve/vent pits/vaults
C-WATR-WELL	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Water well houses
C-WETL-BOGS	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Bogs
C-WETL-FENS	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Fens

C-WETL-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Wetland annotation
C-WETL-MRSH	TRUE	FALSE	FALSE	0,41,165	Continuous	30	Fresh water marshes
C-WETL-MRSH-SALT	TRUE	FALSE	FALSE	0,41,165	Continuous	30	Tidal saltwater marshes
C-WETL-MRSH-TIDL	TRUE	FALSE	FALSE	0,41,165	Continuous	30	Tidal freshwater marsh
C-WETL-PCSN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Pocosins
C-WETL-PHOL	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Vernal pools, playas, prairie potholes, wet meadows, and wet prairies
C-WETL-RPRN	TRUE	FALSE	FALSE	0,41,165	Continuous	30	Riparian forested wetlands
C-WETL-SLGH	TRUE	FALSE	FALSE	0,41,165	Continuous	30	Sloughs
C-WETL-SWMP	TRUE	FALSE	FALSE	0,41,165	Continuous	30	Swamps
Defpoints	TRUE	FALSE	FALSE	white	Continuous	ByDefault	Defpoints
E-AFLD-CIRC-CTRL	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Control and monitoring circuits
E-AFLD-CIRC-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Circuit identifier tags, symbol modifier, and text
E-AFLD-CIRC-MULT	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Multiple circuits
E-AFLD-CIRC-SERS	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Series circuits
E-AFLD-DBNK	TRUE	FALSE	FALSE	145,82,165	Duct Bank	40	Ductbanks
E-AFLD-DEVC	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Capacitors, voltage regulators, motors, buses, generators, meters, grounds, and markers
E-AFLD-JBOX	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Junction boxes, pull boxes, manholes, handholes, pedestals, splices
E-AFLD-LITE-APPR	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Approach lights
E-AFLD-LITE-DIST	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Distance and arresting gear markers
E-AFLD-LITE-LANE	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Hoverlane, taxilane, and helipad lights
E-AFLD-LITE-OBST	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Obstruction lights
E-AFLD-LITE-RUNW	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Runway lights
E-AFLD-LITE-SIGN	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Taxiway guidance signs
E-AFLD-LITE-TAXI	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Taxiway lights
E-AFLD-LITE-THRS	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Threshold lights
E-AFLD-VALT	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Airfield lighting vaults
E-ALRM-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Alarm system equipment
E-ALRM-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-BCNS-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text

E-BCNS-MISC	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Miscellaneous nav aids - windcones and beacons
E-BCNS-STRB	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Strobe beacons
E-BELL-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Bell system equipment
E-BELL-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-CABL-COAX	TRUE	FALSE	FALSE	255,63,0	MS2 Medium Dash	40	Coax cable
E-CABL-FIBR	TRUE	FALSE	FALSE	255,63,0	Fiberoptics	40	Fiber optics cable
E-CABL-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-CABL-MULT	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Multi-conductor cable
E-CABL-TRAY	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Cable trays and wireways
E-CATH-ANOD	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Sacrificial anode system
E-CATH-CURR	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Impress current system
E-CATH-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifier, and text
E-CATH-TEST	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Test stations
E-CATV-EQPM	TRUE	FALSE	FALSE	255,63,0	Cable TV	40	Cable TV system equipment
E-CATV-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-CCTV-EQPM	TRUE	FALSE	FALSE	255,63,0	Closed Circuit TV	40	Closed-circuit television system equipment
E-CCTV-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-CLOK-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Clock system equipment
E-CLOK-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-COMM-ANTN	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Antennae
E-COMM-CIRC	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Circuits
E-COMM-CNMB	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Communication circuit numbers (e.g., panel/circuit number, wire/conduit size)
E-COMM-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Other communications distribution equipment
E-COMM-JBOX	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Communication junction boxes, pull boxes, handholes, pedestals, and splices
E-COMM-MHOL	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Manholes
E-COMM-OVHD	TRUE	FALSE	FALSE	255,63,0	Communica tion	40	Overhead communications/telephone lines
E-COMM-OVHD-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifier and text
E-COMM-POLE	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Poles
E-COMM-POLE-GUYS	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Guying equipment

E-COMM-POLE-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-COMM-UGND	TRUE	FALSE	FALSE	255,63,0	Communication	40	Underground communications/telephone lines
E-COMM-UGND-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifier and text
E-DBNK-MULT	TRUE	FALSE	FALSE	105,0,0	Duct Bank	40	Ductbank
E-DBNK-MULT-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifier and text
E-DETL-GRPH	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Graphics, gridlines, non-text items
E-DIAG-GRPH	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Graphics, gridlines, non-text items
E-DIAG-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-DICT-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Central dictation system equipment
E-DICT-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-DISC-INFO	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Clearances and working space information (NEC code, etc.)
E-EMCS-EQPM	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Energy monitoring control system equipment
E-EMCS-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-FLOR-IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Room name, space identification text (copied from Architectural - Floor Plan model file)
E-FLOR-NUMB	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Room/space identification number and symbol (copied from Architectural - Floor Plan model file)
E-GRND-CIRC	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Circuits
E-GRND-DIAG	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Ground system diagram
E-GRND-EQUI	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Equipotential ground system
E-GRND-REFR	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Reference ground system
E-INTC-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Intercom system equipment
E-INTC-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-LITE-CIRC	TRUE	FALSE	FALSE	255,0,0	Continuous	40	Lighting circuits (including crosslines and homeruns)
E-LITE-CLNG	TRUE	FALSE	FALSE	255,0,0	Continuous	40	Ceiling mounted (surface/pendant) fixtures
E-LITE-CNMB	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Lighting circuit numbers (e.g., panel/circuit number, wire/conduit size)
E-LITE-EMER	TRUE	FALSE	FALSE	255,0,0	Continuous	40	Emergency fixtures (outline of light (if ceiling mounted) should go on E-LITE-CLNG)
E-LITE-EXIT	TRUE	FALSE	FALSE	255,0,0	Continuous	40	Exit fixtures (outline of light (if ceiling mounted) should go on E-LITE-CLNG)
E-LITE-EXTR	TRUE	FALSE	FALSE	255,0,0	Continuous	40	Exterior lights

E-LITE-FLOR	TRUE	FALSE	FALSE	255,0,0	Continuous	40	Floor mounted fixtures (e.g., stage)
E-LITE-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Light fixture identifier tags
E-LITE-JBOX	TRUE	FALSE	FALSE	255,0,0	Continuous	40	Junction boxes
E-LITE-PANL	TRUE	FALSE	FALSE	255,0,0	Continuous	40	Main distribution panels, switchboards, lighting panels
E-LITE-ROOF	TRUE	FALSE	FALSE	255,0,0	Continuous	40	Roof lighting
E-LITE-SPCL	TRUE	FALSE	FALSE	255,0,0	Continuous	40	Special fixtures
E-LITE-SWCH	TRUE	FALSE	FALSE	255,0,0	Continuous	40	Lighting contactors, photoelectric controls, low-voltage lighting controls, etc.
E-LITE-WALL	TRUE	FALSE	FALSE	255,0,0	Continuous	40	Wall mounted fixtures
E-LTNG-COND	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Lightning protection conductors
E-LTNG-TERM	TRUE	FALSE	FALSE	105,0,0	Continuous	30	Lightning protection terminals
E-NURS-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Nurse call/paging system equipment
E-NURS-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-POWR-BUSW	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Busways
E-POWR-CIRC	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Power circuits (including crosslines and homeruns)
E-POWR-CLNG	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Ceiling outlets (receptacles and switches)
E-POWR-CNDT	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Conduit
E-POWR-CNMB	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Power circuit numbers (e.g., panel/circuit number, wire/conduit size)
E-POWR-DEVC	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Capacitors, voltage regulators, motors, buses, grounds, and markers
E-POWR-DSCO	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Disconnect switches
E-POWR-FEED	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Feeders
E-POWR-GENR	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Generators and auxiliary equipment
E-POWR-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-POWR-JBOX	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Junction boxes, pull boxes, manholes, handholes, pedestals, splices
E-POWR-METR	TRUE	FALSE	FALSE	105,0,0	Continuous	40	E-POWR-METR
E-POWR-MOTR	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Motors and utilization equipment
E-POWR-PANL	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Panelboards, MCC, backing boards, patch panel racks
E-POWR-POLE	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Power poles
E-POWR-POLE-GUYS	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Guying equipment
E-POWR-SBST	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Substation equipment

E-POWR-SWBD	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Switchboards
E-POWR-SWCH	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Fuse cutouts, motor starters, contactors, pole mounted switches, circuit breakers, reclosers, cubicle switches
E-POWR-URAC	TRUE	FALSE	FALSE	105,0,0	MS3 Long Dash	40	Underfloor raceways
E-POWR-WALL	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Wall/floor outlets (receptacles and switches)
E-POWR-XFMR-PADM	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Pad mounted transformers
E-POWR-XFMR-POLM	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Pole mounted transformers
E-PRIM-OVHD	TRUE	FALSE	FALSE	105,0,0	Electrical Primary	40	Overhead electrical utility lines
E-PRIM-OVHD-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-PRIM-UGND	TRUE	FALSE	FALSE	105,0,0	Electrical Primary	40	Underground electrical utility lines
E-PRIM-UGND-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-SECD-OVHD	TRUE	FALSE	FALSE	105,0,0	Electrical Secondary	40	Overhead electrical utility lines
E-SECD-OVHD-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-SECD-UGND	TRUE	FALSE	FALSE	105,0,0	Electrical Secondary	40	Underground electrical utility lines
E-SECD-UGND-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-SERT-ACCS	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Access control system
E-SERT-CLNG	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Ceiling mounted sensors
E-SERT-FLOR	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Floor mounted sensors
E-SERT-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-SERT-UNDR	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Buried sensors
E-SERT-WALL	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Wall mounted sensors
E-SOUN-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Sound system equipment
E-SOUN-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
E-SPCL-SYST	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Special systems (UMCS, EMCS, etc.)
E-SPCL-SYST-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Special systems (UMCS, EMCS, etc.) identifier tags, symbol modifier, and text
E-SPCL-TRAF	TRUE	FALSE	FALSE	105,0,0	Continuous	40	Traffic signal system
E-SPCL-TRAF-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Traffic signal identifier tags, symbol modifier, and text
F-AFFF-EQPM	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Equipment
F-AFFF-PIPE	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Piping
F-CO2S-EQPM	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Equipment

F-CO2S-PIPE	TRUE	FALSE	FALSE	255,0,0	Continuous	30	CO2 piping or CO2 discharge nozzle piping
F-CTRL-PANL	TRUE	FALSE	FALSE	165,103,82	Continuous	40	Control panels
F-DETL-GRPH	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Graphics, gridlines, non-text items
F-FLOR-IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Room name, space identification text (copied from Architectural - Floor Plan model file)
F-FLOR-NUMB	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Room/space identification number and symbol (copied from Architectural - Floor Plan model file)
F-HALN-EQPM	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Equipment
F-HALN-PIPE	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Piping
F-IGAS-EQPM	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Equipment
F-IGAS-PIPE	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Piping
F-LITE-EMER	TRUE	FALSE	FALSE	165,103,82	Continuous	40	Emergency fixtures
F-LITE-EXIT	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Exit fixtures
F-LSFT-EGRE	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Egress requirements designator
F-LSFT-OCCP	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Occupant load for egress capacity
F-LSFT-TRVL	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Maximum travel distances
F-PROT-ALRM-INDC	TRUE	FALSE	FALSE	103,165,82	Continuous	40	Indicating appliances
F-PROT-ALRM-MANL	TRUE	FALSE	FALSE	165,103,82	Continuous	40	Manual fire alarm pull stations
F-PROT-EXTI	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Fire extinguishers
F-PROT-EXTI-CABN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Fire extinguisher cabinets
F-PROT-HOSE	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Fire hoses
F-PROT-HOSE-CABN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Fire hose cabinets
F-PROT-RATE-DOOR	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Door fire ratings
F-PROT-RATE-WALL	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Wall fire ratings
F-PROT-SMOK	TRUE	FALSE	FALSE	165,103,82	Continuous	40	Smoke detectors and heat sensors
F-SMOK-DMPR	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Dampers
F-SPKL-CLHD	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Sprinkler - ceiling heads
F-SPKL-OTHD	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Sprinkler - other heads
F-SPKL-PIPE	TRUE	FALSE	FALSE	255,0,0	Fire Protection - Supply	40	Sprinkler piping
F-SPKL-STAN	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Standpipe system
F-WATR-HYDT	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Hydrants and connections
F-WATR-PIPE	TRUE	FALSE	FALSE	255,0,0	Fire Protection	40	Piping

					Water Supply		
F-WATR-PUMP	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Fire pumps
G-ANNO-DIMS	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Witness/extension lines dimension terminators dimension text
G-ANNO-KEYN	TRUE	FALSE	FALSE	white	Continuous	30	Reference keynotes with associated leaders
G-ANNO-LEGN	TRUE	FALSE	FALSE	white	Continuous	30	Legends and symbol keys
G-ANNO-MASK	TRUE	FALSE	FALSE	82,165,124	Continuous	0	Text/shape mask for use with photo backgrounds
G-ANNO-MATC	TRUE	FALSE	FALSE	255,0,255	Center Line	70	Match lines
G-ANNO-NOTE	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Sheet-specific notes and general remarks
G-ANNO-NPLT	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Non-plotting graphic information
G-ANNO-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Patterning, shading, and hatching
G-ANNO-RDME	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Read-me information
G-ANNO-REDL	TRUE	FALSE	FALSE	255,0,0	Continuous	0	Redlines
G-ANNO-REFR	TRUE	FALSE	FALSE	white	Continuous	30	Reference files and raster attachments
G-ANNO-REVC	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Revision clouds
G-ANNO-REVS	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Revision indicators and text
G-ANNO-SCHD	TRUE	FALSE	FALSE	white	Continuous	30	Schedules
G-ANNO-SYMB	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Miscellaneous symbols
G-ANNO-TEXT	TRUE	FALSE	FALSE	white	Continuous	30	Sheet-specific text and callouts with associated leaders
G-ANNO-TTLB	TRUE	FALSE	FALSE	white	Continuous	30	Border and titleblock linework
G-ANNO-TTLB-GRID	TRUE	FALSE	FALSE	0,0,255	MS7 Long Dash Short Dash	0	Grid lines inside border
G-ANNO-TTLB-GRID (Construction)	TRUE	FALSE	FALSE	0,0,255	MS7 Long Dash Short Dash	18	Grid lines inside border
G-COOR-LALO	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Latitude/longitude coordinate grid ticks
G-COOR-LALO-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Latitude/longitude coordinate text
G-COOR-STAT	TRUE	FALSE	FALSE	255,255,0	MS3 Long Dash	13	State plane coordinate grid ticks
G-COOR-STAT-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	State plane coordinate text
G-DEMO-PHS1	TRUE	FALSE	FALSE	232,232,0	Demolition Line	40	Items to be demolished
G-GRID-COOR	TRUE	FALSE	FALSE	white	Continuous	13	X-Y coordinate grid lines
G-GRID-COOR-IDEN	TRUE	FALSE	FALSE	white	Continuous	13	X-Y coordinate grid lines annotation
G-GRID-EXTR	TRUE	FALSE	FALSE	0,0,255	Center Line	0	Column grid outside building
G-GRID-IDEN	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Column grid tags

G-PLAN-OTLN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Floor outline/perimeter/building footprint
G-SITE-OTLN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Site plan - key map
H-ABAT-BARR	TRUE	FALSE	FALSE	255,255,0	Continuous	40	Tape barrier
H-ABAT-BARR-STRC	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Critical structural barriers
H-ABAT-POLY	TRUE	FALSE	FALSE	0,255,0	MS2 Medium Dash	40	Polyethylene sheeting
H-BLDG-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Annotation
H-BLDG-OTLN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Command posts, information centers
H-DECN-EQPM	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Decontamination equipment
H-DECN-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Annotation
H-DETL-GRPH	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Graphics, gridlines, non-text items
H-DISP-HAZW	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Hazardous waste
H-DISP-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Annotation
H-DISP-MUNT	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Munitions
H-DISP-TANK	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Spill containment tanks
H-FIXT-EYEW	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Emergency eyewashes
H-FIXT-SHWR	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Emergency showers
H-MNST-AIRQ	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Air quality
H-MNST-GWTR	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Ground water
H-MNST-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Annotation
H-MNST-LAND	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Landfill gas
H-MNST-SOIL	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Soil gas
H-MNST-SWTR	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Surface water
H-POLL-CONC	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Polluted area of concern
H-POLL-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Annotation
H-POLL-ORIG	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Point of pollution origin
H-POLL-POTN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Potential spill, emission, or release source
H-SAMP-AIRS	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Air samples
H-SAMP-BIOL	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Biological samples
H-SAMP-BLDG	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Building material samples (e.g., asbestos, lead, PCBs, etc.)
H-SAMP-GWTR	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Ground water samples
H-SAMP-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Annotation
H-SAMP-MAGN	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Magnetometer location points

H-SAMP-SEDI	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Sediment samples
H-SAMP-SOIL	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Soil samples
H-SAMP-SOLI	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Solid material samples
H-SAMP-SWTR	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Surface water samples
H-SAMP-WAST	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Waste samples
H-SECT-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Component identification numbers
H-SECT-MBND	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Material beyond section cut
H-SECT-MCUT	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Material cut by section
H-SECT-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Textures and hatch patterns
H-STOR-HAZM	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Hazardous materials
H-STOR-HAZW	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Hazardous waste
H-STOR-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Annotation
H-WELL-INJN	TRUE	FALSE	FALSE	0,0,255	Continuous	13	Injection well
H-WELL-XTRA	TRUE	FALSE	FALSE	0,0,255	Continuous	13	Extraction well
I-CRPT-ROLL-ACNT	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Carpet (roll goods) - accent color
I-CRPT-ROLL-FILD	TRUE	FALSE	FALSE	191,255,0	Continuous	30	Carpet (roll goods) - field color
I-CRPT-TILE-ACN1	TRUE	FALSE	FALSE	28,0,38	Continuous	30	Carpet tile - accent color
I-CRPT-TILE-ACN2	TRUE	FALSE	FALSE	76,0,38	Continuous	30	Carpet tile - accent color
I-CRPT-TILE-FILD	TRUE	FALSE	FALSE	95,0,127	Continuous	30	Carpet tile - field color
I-DETL-GRPH	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Graphics, gridlines, non-text items
I-ELEV-IDEN	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Component identification numbers
I-ELEV-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Outlines
I-ELEV-PATT	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Textures and hatch patterns
I-EQPM-ACCS	TRUE	FALSE	FALSE	128,128,128	MS2 Medium Dash	0	Equipment access
I-EQPM-CHLD	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Child development (play toys, teaching rugs, play forms)
I-EQPM-COPY	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Copiers, fax machines, office equipment
I-EQPM-FIXD	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Fixed equipment
I-EQPM-IDEN	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Equipment identification numbers
I-EQPM-MEDI	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Medical (exam beds, dental chairs, etc.)
I-EQPM-MOVE	TRUE	FALSE	FALSE	0,0,255	MS2 Medium Dash	0	Moveable equipment
I-EQPM-OVHD	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Overhead, ceiling mounted, and suspended equipment

I-EQPM-STOR	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Storage equipment
I-FLOR-SIGN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Signage
I-FLRG-CONC	TRUE	FALSE	FALSE	128,128,128	Continuous	30	Concrete flooring
I-FLRG-MATS	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Entrance mat components and frames
I-FLRG-STON	TRUE	FALSE	FALSE	82,124,165	Continuous	30	Stone flooring
I-FLRG-TRAN	TRUE	FALSE	FALSE	0,0,255	Continuous	30	All floor thresholds and transition moldings
I-FLRG-WOOD	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Wood parquet tile or planks
I-FURN-ACCS	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Accessories (vestibule mats, partitions, draperies, clocks, trash cans, lecturns, lamps, etc.)
I-FURN-ADPC	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Automated Data Processing Components
I-FURN-ARTW	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Artwork
I-FURN-FLOR	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Flooring (carpet, rugs, etc.)
I-FURN-FREE	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Free-standing furnishings (desks, beds, tables, dressers, credenzas, casegoods)
I-FURN-GRID	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Planning grid/modular outline
I-FURN-IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Furniture code identification
I-FURN-PLNT	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Plants
I-FURN-SEAT	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Seating (chairs, sofas, etc.)
I-FURN-STOR	TRUE	FALSE	FALSE	255,255,0	Continuous	30	File cabinets, high density storage, shelving, storage cabinets
I-MONO-SRFL-ACNT	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Seamless resinous flooring - accent color
I-MONO-SRFL-FILD	TRUE	FALSE	FALSE	192,192,192	Continuous	30	Seamless resinous flooring - field color
I-MONO-TERR-ACN1	TRUE	FALSE	FALSE	0,95,127	Continuous	30	Terrazzo - accent color
I-MONO-TERR-ACN2	TRUE	FALSE	FALSE	66,76,38	Continuous	30	Terrazzo - accent color
I-MONO-TERR-FILD	TRUE	FALSE	FALSE	88,19,28	Continuous	30	Terrazzo - field color
I-SHTP-ACNT	TRUE	FALSE	FALSE	127,0,255	Continuous	30	Sheet product (vinyl/rubber/linoleum) - accent color
I-SHTP-FILD	TRUE	FALSE	FALSE	255,127,159	Continuous	30	Sheet product (vinyl/rubber/linoleum) - field color
I-SYST-FURN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Furniture
I-SYST-IDEN	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Code identification components
I-SYST-IDPL	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Code identification panels
I-SYST-LITE	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Lighting components
I-SYST-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Patterns

I-SYST-PNLS	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Panels
I-SYST-POWR	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Power, communication components
I-SYST-STOR	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Storage components
I-SYST-WALL	TRUE	FALSE	FALSE	255,255,0	Continuous	30	System furniture partition walls
I-SYST-WKSF	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Work surface components
I-TILE-CERM-ACNT	TRUE	FALSE	FALSE	82,124,165	Continuous	30	Ceramic mosaic tile - accent color
I-TILE-CERM-FILD	TRUE	FALSE	FALSE	0,127,95	Continuous	30	Ceramic mosaic tile - field color
I-TILE-LINO-ACNT	TRUE	FALSE	FALSE	76,0,38	Continuous	30	Linoleum tile - accent color
I-TILE-LINO-FILD	TRUE	FALSE	FALSE	191,255,0	Continuous	30	Linoleum tile - field color
I-TILE-PORC-ACN1	TRUE	FALSE	FALSE	19,38,0	Continuous	30	Porcelain tile - accent color
I-TILE-PORC-ACN2	TRUE	FALSE	FALSE	192,192,192	Continuous	30	Porcelain tile - accent color
I-TILE-PORC-FILD	TRUE	FALSE	FALSE	0,38,28	Continuous	30	Porcelain tile - field color
I-TILE-QUAR-ACNT	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Quarry tile - accent color
I-TILE-QUAR-FILD	TRUE	FALSE	FALSE	255,127,0	Continuous	30	Quarry tile - field color
I-TILE-RUBB-ACNT	TRUE	FALSE	FALSE	88,19,88	Continuous	30	Rubber tile - accent color
I-TILE-RUBB-FILD	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Rubber tile - field color
I-TILE-TERR-ACN1	TRUE	FALSE	FALSE	0,95,127	Continuous	30	Terrazzo tile - accent color
I-TILE-TERR-ACN2	TRUE	FALSE	FALSE	66,76,38	Continuous	30	Terrazzo tile - accent color
I-TILE-TERR-ACN3	TRUE	FALSE	FALSE	255,127,223	Continuous	30	Terrazzo tile - accent color
I-TILE-TERR-FILD	TRUE	FALSE	FALSE	88,19,28	Continuous	30	Terrazzo tile - field color
I-TILE-VNYL-ACN1	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Vinyl or Vinyl composition tile - accent color
I-TILE-VNYL-ACN2	TRUE	FALSE	FALSE	63,127,95	Continuous	30	Vinyl or Vinyl composition tile - accent color
I-TILE-VNYL-FILD	TRUE	FALSE	FALSE	23,38,19	Continuous	30	Vinyl or Vinyl composition tile - field color
L-DETL-GRPH	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Graphics, gridlines, non-text items
L-IRRG-COVR	TRUE	FALSE	FALSE	124,0,165	Continuous	0	Irrigation coverage, spray distribution patterns
L-IRRG-EQPM	TRUE	FALSE	FALSE	124,0,165	Continuous	30	Equipment (e.g., controllers, valves, RPBPs, etc.)
L-IRRG-HEAD	TRUE	FALSE	FALSE	124,0,165	Continuous	13	Irrigation heads, bubblers, and drip irrigation emitters
L-IRRG-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Annotation
L-IRRG-PIPE	TRUE	FALSE	FALSE	124,0,165	Lawn Sprinkler	30	Piping
L-IRRG-SPKL	TRUE	FALSE	FALSE	124,0,165	Continuous	30	Sprinklers

L-PLNT-BEDS	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Planting beds (perennial and annual beds)
L-PLNT-BUSH	TRUE	FALSE	FALSE	103,165,82	Continuous	40	Bushes and shrubs (e.g., evergreen, deciduous, etc.)
L-PLNT-BUSH-LINE	TRUE	FALSE	FALSE	103,165,82	Continuous	40	Bush and shrub line
L-PLNT-CTNR	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Containers or planters
L-PLNT-GCVR	TRUE	FALSE	FALSE	41,165,0	Continuous	30	Groundcover and vines
L-PLNT-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Annotation
L-PLNT-MLCH	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Mulches - organic and inorganic
L-PLNT-PLNT	TRUE	FALSE	FALSE	103,165,82	Continuous	40	Planting plants (e.g., ornamental annuals and perennials)
L-PLNT-SHAD	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Shadow areas
L-PLNT-SPRG	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Sprigs
L-PLNT-TREE	TRUE	FALSE	FALSE	103,165,82	Continuous	40	Trees (e.g., evergreen, deciduous, etc.)
L-PLNT-TREE-LINE	TRUE	FALSE	FALSE	103,165,82	Tree Line	40	Tree line
L-PLNT-TURF	TRUE	FALSE	FALSE	165,103,82	Continuous	40	Lawn areas (turfing limits)
L-SITE-BRDG	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Bridges (pedestrian)
L-SITE-DECK	TRUE	FALSE	FALSE	165,0,82	Continuous	30	Decks
L-SITE-FENC	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Fencing
L-SITE-FURN	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Furnishings
L-SITE-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Annotation
L-SITE-PLAY	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Play structures
L-SITE-POOL	TRUE	FALSE	FALSE	0,41,165	Continuous	30	Pools and spas
L-SITE-ROCK	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Boulders and cobble
L-SITE-RTWL	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Retaining walls
L-SITE-SPRT	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Sports fields
L-SITE-SWLK	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Sidewalks and steps
Layer1	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifier, and text
M-ACID-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Acid, alkaline, and oil waste equipment
M-ACID-PIPE	TRUE	FALSE	FALSE	255,63,0	Waste - Acid	40	Acid, alkaline, and oil waste piping
M-ACID-VENT	TRUE	FALSE	FALSE	255,63,0	MS2 Medium Dash	40	Acid, alkaline, and oil waste vent piping
M-AFRZ-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Anti-freeze equipment
M-AFRZ-SPLY-PIPE	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Anti-freeze supply piping
M-AFRZ-WAST-PIPE	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Anti-freeze waste piping

M-BRIN-EQPM	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Brine system equipment
M-BRIN-RETN-PIPE	TRUE	FALSE	FALSE	0,255,0	Brine - Return	40	Brine system return piping
M-BRIN-SPLY-PIPE	TRUE	FALSE	FALSE	0,255,0	Brine - Supply	40	Brine system supply piping
M-CHEM-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Chemical treatment system equipment
M-CHEM-RETN-PIPE	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Chemical treatment system return piping
M-CHEM-SPLY-PIPE	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Chemical treatment system supply piping
M-CMPA-EQPM	TRUE	FALSE	FALSE	0,0,255	Continuous	70	Equipment
M-CMPA-PIPE	TRUE	FALSE	FALSE	0,0,255	Air - Compressed	40	Piping
M-CNDW-EQPM	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Condenser water system equipment
M-CNDW-RETN-PIPE	TRUE	FALSE	FALSE	0,255,0	Condenser Water - Supply	40	Condenser water system return piping
M-CNDW-SPLY-PIPE	TRUE	FALSE	FALSE	0,255,0	Condenser Water - Supply	40	Condenser water system supply piping
M-CONT-THER	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Thermostats
M-CONT-WIRE	TRUE	FALSE	FALSE	255,0,0	MS2 Medium Dash	13	Low voltage wiring
M-CVAL-BASE	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Culvert valve machinery base
M-CVAL-BEAM	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Culvert valve beams
M-CVAL-CYLD	TRUE	FALSE	FALSE	63,255,0	Continuous	30	Culvert valve machinery cylinder (outline not for details)
M-CVAL-SEAL	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Culvert valve seals
M-CVAL-SKIN	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Culvert valve skin plate
M-CVAL-STIF	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Stiffener plates, angles, etc.
M-CVAL-TRUN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Culvert valve trunnion beam
M-CWTR-CNDS	TRUE	FALSE	FALSE	255,127,191	Condensate - Drain	40	Condensate piping
M-CWTR-EQPM	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Chilled water equipment
M-CWTR-RETN-PIPE	TRUE	FALSE	FALSE	0,0,255	Chilled Water - Return	40	Chilled water return piping
M-CWTR-SPLY-PIPE	TRUE	FALSE	FALSE	0,0,255	Chilled Water - Supply	40	Chilled water supply piping
M-DETL-GRPH	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Graphics, gridlines, non-text items
M-DIAG-GRPH	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Graphics, gridlines, non-text items
M-DUAL-EQPM	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Dual temperature system equipment

M-DUAL-RETN-PIPE	TRUE	FALSE	FALSE	255,0,255	Dual Temperature - Return	40	Dual temperature system return piping
M-DUAL-SPLY-PIPE	TRUE	FALSE	FALSE	255,0,255	Dual Temperature - Supply	40	Dual temperature system supply piping
M-DUST-DUCT	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Dust and fume ductwork
M-DUST-DUCT-CNTR	TRUE	FALSE	FALSE	0,0,255	Center Line	13	Dust and fume ductwork centerlines
M-DUST-EQPM	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Dust and fume equipment
M-DUST-GRIL	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Dust and fume grilles
M-ELEV-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Component identification numbers
M-ELEV-OTLN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Outlines
M-ELEV-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Textures and hatch patterns
M-EXHS-DUCT	TRUE	FALSE	FALSE	103,165,82	Continuous	40	Exhaust ductwork
M-EXHS-DUCT-CNTR	TRUE	FALSE	FALSE	0,0,255	Center Line	13	Exhaust ductwork centerlines
M-EXHS-EQPM	TRUE	FALSE	FALSE	103,165,82	Continuous	30	Exhaust equipment
M-EXHS-GRIL	TRUE	FALSE	FALSE	103,165,82	Continuous	30	Grilles
M-FLOR-IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Room name, space identification text (copied from Architectural - Floor Plan model file)
M-FLOR-NUMB	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Room/space identification number and symbol (copied from Architectural - Floor Plan model file)
M-FLOR-PENE	TRUE	FALSE	FALSE	0,255,0	MS2 Medium Dash	13	Floor penetrations
M-FUEL-DIES-RETN	TRUE	FALSE	FALSE	255,255,0	Continuous	40	Diesel fuel return piping
M-FUEL-DIES-SPLY	TRUE	FALSE	FALSE	255,255,0	Continuous	40	Diesel fuel supply piping
M-FUEL-DIES-VENT	TRUE	FALSE	FALSE	255,255,0	Continuous	40	Diesel fuel vent piping
M-FUEL-EQPM	TRUE	FALSE	FALSE	255,255,0	Continuous	70	Equipment
M-FUEL-GGEP-LQPG	TRUE	FALSE	FALSE	255,255,0	Gas - Liquefied Petroleum	40	Liquid petroleum gas
M-FUEL-OGEP-RETN	TRUE	FALSE	FALSE	255,255,0	Fuel Oil Return	40	Return oil piping
M-FUEL-OGEP-SPLY	TRUE	FALSE	FALSE	255,255,0	Fuel Oil Supply	40	Supply oil piping
M-FUEL-OGEP-VENT	TRUE	FALSE	FALSE	255,255,0	Fuel Oil Tank Vent	40	Oil piping vent
M-GLYC-EQPM	TRUE	FALSE	FALSE	165,165,0	Continuous	30	Glycol system equipment
M-GLYC-RETN-PIPE	TRUE	FALSE	FALSE	165,165,0	Glycol - Return	40	Glycol system return piping
M-GLYC-SPLY-PIPE	TRUE	FALSE	FALSE	165,165,0	Glycol - Supply	40	Glycol system supply piping

M-GTHP-EQPM	TRUE	FALSE	FALSE	0,76,76	Continuous	30	Geothermal heat pump system equipment
M-GTHP-RETN-PIPE	TRUE	FALSE	FALSE	0,76,76	Continuous	40	Geothermal heat pump system return piping
M-GTHP-SPLY-PIPE	TRUE	FALSE	FALSE	0,76,76	Continuous	40	Geothermal heat pump system supply piping
M-HCSF-CYLD	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Hydraulic cylinders
M-HCSF-CYLD-PSTN	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Hydraulic cylinder pistons
M-HCSF-CYLD-WEAR	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Wear rings
M-HCSF-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Hydraulic system equipment
M-HCSF-FTTG	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Hose and pipe fittings
M-HCSF-HOSE	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Hydraulic hoses
M-HCSF-MOTR	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Hydraulic motors and actuators
M-HCSF-OTLN	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Outlines of machinery, etc. in the vicinity of the hydraulic components
M-HCSF-PUMP	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Hydraulic pumps and pump motors
M-HCSF-RETN-PIPE	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Hydraulic system return piping
M-HCSF-ROOM	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Floor, walls, etc. that hydraulic system attaches to
M-HCSF-SCHM-MISC	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Miscellaneous schematic figures (i.e., common location lines)
M-HCSF-SPLY-PIPE	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Hydraulic system supply piping
M-HCSF-SUPT	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Pipe supports, hangers, etc.
M-HCSF-VALV	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Hydraulic valves
M-HCSF-VALV-CONT	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Hydraulic directional control valves
M-HCSF-VALV-FLOW	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Flow control valves, check valves, etc.
M-HCSF-VALV-PRES	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Pressure control valves: relief valves, counterbalance valves, etc.
M-HCSF-VALV-SOFF	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Hydraulic shutoff type valves (ball, gate, etc.)
M-HCSW-DEVC	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Stilling wells, rigid anchors, anchor guides, rectifiers, reducers, markers, meters, regulators, tanks, and valves
M-HCSW-EQPM-ACCS	TRUE	FALSE	FALSE	0,0,255	Continuous	13	Equipment access doors
M-HCSW-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Device identifiers
M-HCSW-PUMP	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Pump station equipment
M-HCSW-PUMP-PIPE	TRUE	FALSE	FALSE	0,0,255	Continuous	40	Pump piping (includes fittings and valves)
M-HTCW-CWTR-MAIN	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Main chilled water piping
M-HTCW-	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Chilled water plant

CWTR-PLNT							
M-HTCW-CWTR-SERV	TRUE	FALSE	FALSE	0,0,255	Continuous	13	Chilled water service piping
M-HTCW-DEVC	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Rigid anchors, anchor guides, rectifiers, reducers, markers, meters, pumps, regulators, tanks, and valves
M-HTCW-HWTR-MAIN	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Main high temperature piping
M-HTCW-HWTR-PLNT	TRUE	FALSE	FALSE	255,0,0	Continuous	30	High temperature water plant
M-HTCW-HWTR-SERV	TRUE	FALSE	FALSE	255,0,0	Continuous	13	High temperature service piping
M-HTCW-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
M-HTCW-JBOX	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Junction boxes, manholes, handholes, test boxes
M-HTCW-LWTR-MAIN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Main low temperature piping
M-HTCW-LWTR-SERV	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Low temperature service piping
M-HTCW-METR	TRUE	FALSE	FALSE	255,0,255	Continuous	30	M-HTCW-METR
M-HTCW-RETN-PIPE	TRUE	FALSE	FALSE	255,0,255	Continuous	0	Return for all HTCW lines
M-HTCW-STEM-MAIN	TRUE	FALSE	FALSE	255,127,191	Continuous	30	Main steam piping
M-HTCW-STEM-SERV	TRUE	FALSE	FALSE	255,127,191	Continuous	13	Steam service piping
M-HTCW-STNS-PUMP	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Pump stations
M-HTCW-VALT	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Valve pits/vaults, steam pits
M-HVAC-ACCS	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Equipment access doors
M-HVAC-CDFF	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Ceiling diffusers, registers, and grilles
M-HVAC-DMPR	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Fire, smoke, volume dampers
M-HVAC-EQPM	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Equipment (non-powered)
M-HVAC-EQPM-EFAN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Equipment with electric fans or motors
M-HVAC-EQPM-EPIP	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Equipment with piping and electricity
M-HVAC-EQPM-FLOR	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Equipment - floor mounted
M-HVAC-EQPM-SUSP	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Equipment - suspended
M-HVAC-FDFF	TRUE	FALSE	FALSE	0,41,165	Continuous	30	Floor diffusers, registers, and grilles
M-HVAC-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Duct sizes and pressure classes
M-HVAC-RDFF	TRUE	FALSE	FALSE	165,103,82	Continuous	30	Return air diffusers
M-HVAC-RETN	TRUE	FALSE	FALSE	165,103,82	Continuous	40	Return ductwork
M-HVAC-RETN-CNTR	TRUE	FALSE	FALSE	0,0,255	Center Line	13	Return ductwork centerlines

M-HVAC-ROOF	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Roof mounted HVAC equipment
M-HVAC-SPLY	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Supply ductwork
M-HVAC-SPLY-CNTR	TRUE	FALSE	FALSE	0,0,255	Center Line	13	Supply ductwork centerlines
M-HVAC-SPLY-HDUC	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Supply ductwork - high pressure
M-HVAC-SPLY-LDUC	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Supply ductwork - low pressure
M-HVAC-TAGS	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Diffuser/register/grille tags and air flow arrows
M-HVAC-WDFF	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Wall diffusers, registers, and grilles
M-HWTR-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Hot water heating system equipment
M-HWTR-RETN-PIPE	TRUE	FALSE	FALSE	255,63,0	Hot Water - Low Temperature - Return	40	Hot water heating system return piping
M-HWTR-SPLY-PIPE	TRUE	FALSE	FALSE	255,63,0	Hot Water - Low Temperature - Supply	40	Hot water heating system supply piping
M-INSL-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Insulating oil equipment
M-INSL-RETN-PIPE	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Insulating oil return piping
M-INSL-SPLY-PIPE	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Insulating oil supply piping
M-LUBE-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Lubrication oil equipment
M-LUBE-RETN-PIPE	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Lubrication oil return piping
M-LUBE-SPLY-PIPE	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Lubrication oil supply piping
M-MACH-AXLE	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Shafts and axles
M-MACH-BASE	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Machinery bases
M-MACH-BEAR	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Bearings and couplings
M-MACH-BELT	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Wire rope, chains, and belts
M-MACH-BSHG	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Bushings, wear plates, shims, and spacers
M-MACH-CLEV	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Clevises
M-MACH-COMP	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Miscellaneous machinery parts and components
M-MACH-COVR	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Machinery covers, cover plates, and guarding
M-MACH-FSTN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Fasteners, nuts, and bolts
M-MACH-GEAR	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Gears
M-MACH-KEYS	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Keys and keeper plates
M-MACH-LROT	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Large rotating machinery (turbine and pump outlines)
M-MACH-MOTR	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Machinery motors

M-MACH-PINS	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Pins
M-MACH-PULL	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Pulleys, drums, and sheaves
M-MACH-RAIL	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Rails (e.g., crane rails, rail hoots, splice plates, etc.)
M-MACH-ROLL	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Rollers and wheels
M-MACH-ROLL-TRAK	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Roller tracks
M-MACH-SEAL	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Seals
M-MACH-SHOE	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Sliding shoes, skids, etc.
M-MACH-SPRG	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Springs
M-MACH-SUPT	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Support brackets
M-MAIR-DUCT	TRUE	FALSE	FALSE	255,255,255	Continuous	40	Mixed air ductwork
M-MAIR-DUCT-CNTR	TRUE	FALSE	FALSE	0,0,255	Center Line	13	Mixed air ductwork centerlines
M-MAIR-EQPM	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Mixed air equipment
M-MATL-CRAN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Cranes
M-MATL-CRAN-BOOM	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Crane boom
M-MATL-HOIS	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Hoists
M-MATL-HOOK	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Hooks, eyes, and other end attachments
M-MATL-LIFT	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Miscellaneous lifting equipment
M-MATL-WIRE	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Wire rope, chains, and other hoisting medium
M-MITR-BASE	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Miter gate machinery base
M-MITR-CLEV	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Clevises
M-MITR-CRNG	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Cardanic ring
M-MITR-CYLD	TRUE	FALSE	FALSE	63,255,0	Continuous	30	Miter gate machinery cylinder (outline not for details)
M-MITR-TRUN	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Miter gate machinery trunnion
M-MKUP-DUCT	TRUE	FALSE	FALSE	255,255,0	Continuous	40	Makeup air ductwork
M-MKUP-DUCT-CNTR	TRUE	FALSE	FALSE	0,0,255	Center Line	13	Makeup air ductwork centerlines
M-MKUP-EQPM	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Makeup air equipment
M-MKUP-GRIL	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Makeup air grilles
M-NGAS-EQPM	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Natural gas equipment
M-NGAS-PIPE	TRUE	FALSE	FALSE	255,255,0	Gas - Low Pressure	30	Natural gas piping
M-PROC-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Process equipment
M-PROC-RETN-PIPE	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Process return piping
M-PROC-SPLY-PIPE	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Process supply piping

M-RAIR-DUCT	TRUE	FALSE	FALSE	255,0,0	Continuous	40	Relief air ductwork
M-RAIR-DUCT-CNTR	TRUE	FALSE	FALSE	0,0,255	Center Line	13	Relief air ductwork centerlines
M-RAIR-EQPM	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Relief air equipment
M-RAIR-GRIL	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Relief air grilles
M-RCOV-EQPM	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Energy recovery system equipment
M-RCOV-RETN-PIPE	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Energy recovery system return piping
M-RCOV-SPLY-PIPE	TRUE	FALSE	FALSE	145,82,165	Continuous	40	Energy recovery system supply piping
M-REFG-DISC	TRUE	FALSE	FALSE	255,63,0	Refrigerant - Discharge	40	Refrigeration system discharge
M-REFG-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Refrigeration system equipment
M-REFG-RETN-PIPE	TRUE	FALSE	FALSE	255,63,0	Refrigerant - Suction	40	Refrigeration system return piping
M-REFG-SPLY-PIPE	TRUE	FALSE	FALSE	255,63,0	Refrigerant - Liquid	40	Refrigeration system supply piping
M-ROOF-PENE	TRUE	FALSE	FALSE	255,0,0	MS2 Medium Dash	13	Roof penetrations
M-RWTR-EQPM	TRUE	FALSE	FALSE	79,127,63	Continuous	30	Raw water equipment
M-RWTR-RETN-PIPE	TRUE	FALSE	FALSE	79,127,63	Continuous	40	Raw water return piping
M-RWTR-SPLY-PIPE	TRUE	FALSE	FALSE	79,127,63	Continuous	40	Raw water supply piping
M-SECT-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Component identification numbers
M-SECT-MBND	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Material beyond section cut
M-SECT-MCUT	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Material cut by section
M-SECT-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Textures and hatch patterns
M-STEM-BLBD	TRUE	FALSE	FALSE	255,127,191	Boiler Blow Down	40	Boiler blow down piping
M-STEM-CNDS	TRUE	FALSE	FALSE	255,127,191	Condensate - Drain	40	Condensate piping
M-STEM-EQPM	TRUE	FALSE	FALSE	255,127,191	Continuous	30	Steam system equipment
M-STEM-HPIP	TRUE	FALSE	FALSE	255,127,191	Steam - High Pressure	40	High pressure steam piping
M-STEM-LPIP	TRUE	FALSE	FALSE	255,127,191	Steam - Low Pressure	40	Low pressure steam piping
M-STEM-MPIP	TRUE	FALSE	FALSE	255,127,191	Steam - Medium Pressure	40	Medium pressure steam piping
M-TAIR-DUCT	TRUE	FALSE	FALSE	191,0,255	Continuous	40	Transfer air ductwork
M-TAIR-DUCT-CNTR	TRUE	FALSE	FALSE	0,0,255	Center Line	0	Transfer air ductwork centerlines
M-TAIR-EQPM	TRUE	FALSE	FALSE	191,0,255	Continuous	30	Transfer air equipment

M-WALL-PENE	TRUE	FALSE	FALSE	255,255,0	MS2 Medium Dash	13	Wall penetrations
P-DETL-GRPH	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Graphics, gridlines, non-text items
P-DIAG-GRPH	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Graphics, gridlines, non-text items
P-DOMW-CPIP	TRUE	FALSE	FALSE	0,255,255	Domestic Water - Cold	40	Cold water piping
P-DOMW-EQPM	TRUE	FALSE	FALSE	0,255,255	Continuous	70	Hot and cold water equipment
P-DOMW-EQPM-ACCS	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Equipment access doors
P-DOMW-FPIP	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Domestic filtered water piping
P-DOMW-HPIP	TRUE	FALSE	FALSE	0,255,255	Domestic Water - Hot - Supply	40	Hot water piping
P-DOMW-RISR	TRUE	FALSE	FALSE	0,255,255	MS2 Medium Dash	13	Hot and cold water risers
P-FLOR-IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Room name, space identification text (copied from Architectural - Floor Plan model file)
P-FLOR-NUMB	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Room/space identification number and symbol (copied from Architectural - Floor Plan model file)
P-FLOR-PENE	TRUE	FALSE	FALSE	0,255,0	MS2 Medium Dash	13	Floor penetrations
P-GRAY-EQPM	TRUE	FALSE	FALSE	124,0,165	Continuous	70	Equipment
P-GRAY-PIPE	TRUE	FALSE	FALSE	124,0,165	Gray Water	40	Graywater piping
P-LGAS-DH2O	TRUE	FALSE	FALSE	255,63,0	Water - Distilled	40	Distilled water piping
P-LGAS-DIS~	TRUE	FALSE	FALSE	255,63,0	Water - Deionized	40	Deionized water piping
P-LGAS-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	70	Equipment
P-LGAS-H2~~	TRUE	FALSE	FALSE	255,63,0	Hydrogen	40	Hydrogen piping
P-LGAS-HE~~	TRUE	FALSE	FALSE	255,63,0	Helium	40	Helium piping
P-LGAS-NITG	TRUE	FALSE	FALSE	255,63,0	Nitrogen	40	Nitrogen piping
P-LGAS-OXYG	TRUE	FALSE	FALSE	255,63,0	Oxygen	40	Pure O2 piping
P-MDGS-CAIR	TRUE	FALSE	FALSE	0,0,255	Air - Compressed	40	Compressed air
P-MDGS-EQPM	TRUE	FALSE	FALSE	255,255,0	Continuous	70	Equipment
P-MDGS-NITG	TRUE	FALSE	FALSE	255,255,0	Nitrogen	40	Nitrogen piping
P-MDGS-NOXG	TRUE	FALSE	FALSE	255,255,0	Nitrous Oxide	40	Nitrous oxide piping
P-MDGS-OXYG	TRUE	FALSE	FALSE	255,255,0	Oxygen	40	Pure O2 piping

P-MDGS-SAIR	TRUE	FALSE	FALSE	255,255,0	Continuous	40	Scavenge air
P-MDGS-VACU	TRUE	FALSE	FALSE	0,0,255	Vacuum - Air	40	Medical vacuum piping
P-ROOF-PENE	TRUE	FALSE	FALSE	255,0,0	MS2 Medium Dash	13	Roof penetrations
P-SSWR-CNDS	TRUE	FALSE	FALSE	255,127,191	Continuous	40	Condensate piping
P-SSWR-DRNS	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Floor drains, sinks, and cleanouts
P-SSWR-EQPM	TRUE	FALSE	FALSE	0,255,0	Continuous	70	Equipment (e.g., sand/oil/water separators)
P-SSWR-PIPE	TRUE	FALSE	FALSE	0,255,0	Sanitary Waste	40	Piping
P-SSWR-RISR	TRUE	FALSE	FALSE	0,255,0	MS2 Medium Dash	40	Sanitary risers
P-SSWR-VENT	TRUE	FALSE	FALSE	0,255,0	Vent	40	Vent piping
P-STRM-DRNS	TRUE	FALSE	FALSE	0,255,0	Continuous	40	Roof drains
P-STRM-PIPE	TRUE	FALSE	FALSE	0,255,0	Drain - Storm	40	Storm drain piping
P-STRM-RISR	TRUE	FALSE	FALSE	0,255,0	MS2 Medium Dash	40	Storm drain risers
P-WALL-PENE	TRUE	FALSE	FALSE	255,255,0	MS2 Medium Dash	13	Wall penetrations
S-ACCS-ADIT	TRUE	FALSE	FALSE	255,159,127	Continuous	30	Adits in galleries and passages
S-ACCS-CHAM	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Chambers
S-ACCS-EVTR	TRUE	FALSE	FALSE	0,165,165	Continuous	30	Elevators
S-ACCS-GLRY	TRUE	FALSE	FALSE	255,127,0	Continuous	30	Galleries, cross overs, trenches, etc.
S-ACCS-HTCH	TRUE	FALSE	FALSE	165,82,0	Continuous	13	Hatches
S-ACCS-LADD	TRUE	FALSE	FALSE	0,41,165	Continuous	30	Ladders and ladder safety devices
S-ACCS-MHOL	TRUE	FALSE	FALSE	103,165,82	Continuous	30	Manholes
S-ACCS-MISC	TRUE	FALSE	FALSE	103,165,82	Continuous	30	Miscellaneous access
S-ACCS-STRS	TRUE	FALSE	FALSE	82,165,165	Continuous	30	Stairs
S-ACCS-STRS-FRMG	TRUE	FALSE	FALSE	63,127,127	Continuous	30	Stair framing
S-ACCS-TUNL	TRUE	FALSE	FALSE	165,124,0	Continuous	30	Tunnels
S-ARMR-CRNR	TRUE	FALSE	FALSE	82,145,165	Continuous	13	Corner protection, corner cap casting
S-ARMR-LINR	TRUE	FALSE	FALSE	0,165,124	Continuous	13	Protective liner (used for walls, culverts, etc.)
S-ARMR-MISC	TRUE	FALSE	FALSE	82,145,165	Continuous	13	Miscellaneous armor
S-ARMR-WALL	TRUE	FALSE	FALSE	82,145,165	Continuous	13	Wall armor
S-BEAM-CNTR	TRUE	FALSE	FALSE	127,0,127	Center Line	13	Beam centerlines
S-BEAM-IDEN	TRUE	FALSE	FALSE	255,255,255	Continuous	13	Beam Annotations, identification

S-BEAM-PRIM	TRUE	FALSE	FALSE	255,127,255	Continuous	40	Continuous beam or primary beam of two-way beam system
S-BEAM-RBAR	TRUE	FALSE	FALSE	0,0,255	Continuous	70	Beam rebar
S-BEAM-SECD	TRUE	FALSE	FALSE	165,0,165	Continuous	30	Girders or secondary beams of two-way beam system
S-BRCG-DIA~	TRUE	FALSE	FALSE	127,159,255	Continuous	30	Diagonal bracing
S-BRCG-HORZ	TRUE	FALSE	FALSE	127,159,255	Continuous	30	Horizontal bracing
S-BRCG-VERT	TRUE	FALSE	FALSE	0,95,127	Continuous	30	Vertical bracing
S-BRDG-ABUT	TRUE	FALSE	FALSE	103,165,82	Continuous	40	Abutments
S-BRDG-ABUT-RBAR	TRUE	FALSE	FALSE	0,0,255	Continuous	70	Abutment rebar
S-BRDG-BEAR	TRUE	FALSE	FALSE	0,82,165	Continuous	30	Bridge bearing
S-BRDG-BEAR-CNTR	TRUE	FALSE	FALSE	127,0,127	Center Line	13	Bridge bearing centerlines
S-BRDG-BENT	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Bent cap
S-BRDG-BENT-CNTR	TRUE	FALSE	FALSE	127,0,127	Center Line	13	Centerline of bents
S-BRDG-BENT-RBAR	TRUE	FALSE	FALSE	0,0,255	Continuous	70	Bent cap rebar
S-BRDG-CURB	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Curbs/sidewalks on structure
S-BRDG-DIAP	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Diaphragms
S-BRDG-DIAP-RBAR	TRUE	FALSE	FALSE	0,0,255	Continuous	70	Diaphragm rebar
S-BRDG-DRNS	TRUE	FALSE	FALSE	165,41,0	Continuous	13	Drains
S-BRDG-FENC	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Fencing rails, fabric, supports, and gates
S-BRDG-FEND	TRUE	FALSE	FALSE	95,127,63	Continuous	30	Fenders
S-BRDG-GIRD	TRUE	FALSE	FALSE	127,255,0	Continuous	30	Girders
S-BRDG-GIRD-CNTR	TRUE	FALSE	FALSE	127,0,127	Center Line	13	Girder centerline
S-BRDG-HEAD	TRUE	FALSE	FALSE	0,165,82	Continuous	30	Headers
S-BRDG-PIER	TRUE	FALSE	FALSE	103,165,82	Continuous	40	Piers
S-BRDG-STRG	TRUE	FALSE	FALSE	165,0,165	Continuous	30	Stringers
S-COLS-CNTR	TRUE	FALSE	FALSE	255,191,0	Center Line	13	Column centerlines/working lines
S-COLS-IDEN	TRUE	FALSE	FALSE	255,255,255	Continuous	13	Column Annotations, identification
S-COLS-POST	TRUE	FALSE	FALSE	47,76,38	Continuous	30	Short columns
S-COLS-PRIM	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Primary columns
S-COLS-RBAR	TRUE	FALSE	FALSE	0,0,255	Continuous	70	Column rebar
S-COLS-SECD	TRUE	FALSE	FALSE	31,127,0	Continuous	30	Secondary columns
S-DECK-BRDG	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Bridge deck
S-DECK-BRDG-RBAR	TRUE	FALSE	FALSE	0,0,255	Continuous	70	Bridge deck rebar

S-DECK-FLOR	TRUE	FALSE	FALSE	127,255,159	Continuous	13	Floor deck
S-DECK-FLOR- OPNG	TRUE	FALSE	FALSE	255,0,0	MS2 Medium Dash	13	Floor deck openings
S-DECK-RBAR	TRUE	FALSE	FALSE	0,0,255	Continuous	70	Bridge deck rebar
S-DECK-ROOF	TRUE	FALSE	FALSE	124,165,0	Continuous	13	Roof deck
S-DECK-ROOF- OPNG	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Roof deck openings
S-DETL-GRPH	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Graphics, gridlines, non-text items
S-EROS-BARR	TRUE	FALSE	FALSE	165,82,124	Continuous	13	Vapor/capillary water barriers
S-EROS-GABN	TRUE	FALSE	FALSE	255,127,159	Continuous	13	Gabions
S-EROS-PVMT	TRUE	FALSE	FALSE	255,127,159	Continuous	13	Slope paving
S-EROS-RRAP	TRUE	FALSE	FALSE	165,0,82	Continuous	13	Riprap, stone protection, jetties, breakwaters
S-FABR-EMBD	TRUE	FALSE	FALSE	103,82,165	Continuous	30	Embedded metals (framing around openings)
S-FABR-HOIS	TRUE	FALSE	FALSE	0,124,165	Continuous	13	Hoist structures
S-FABR-HOOK	TRUE	FALSE	FALSE	0,124,165	Continuous	13	Line hooks, lifting hooks, check posts etc.
S-FABR-MOOR	TRUE	FALSE	FALSE	0,124,165	Continuous	30	Mooring bits, chocks, rings
S-FABR-PL~~	TRUE	FALSE	FALSE	0,124,165	Continuous	30	Plates
S-FABR-TRSH	TRUE	FALSE	FALSE	0,124,165	Continuous	30	Trash racks, intake screens
S-FNDN-ANCH	TRUE	FALSE	FALSE	165,124,0	Continuous	30	Anchor piles, blocks, strands, deadmen, soil/rock anchors
S-FNDN-BLRD	TRUE	FALSE	FALSE	165,124,0	Continuous	30	Bollards, bollard foundations
S-FNDN-CNTR	TRUE	FALSE	FALSE	127,95,0	Center Line	13	Foundation centerlines
S-FNDN-DRNS	TRUE	FALSE	FALSE	165,145,82	Continuous	13	Foundation drainage features and objects
S-FNDN-FTNG	TRUE	FALSE	FALSE	165,124,0	Continuous	30	Footings
S-FNDN-FTNG- RBAR	TRUE	FALSE	FALSE	0,0,255	Continuous	70	Footing rebar
S-FNDN-GRBM	TRUE	FALSE	FALSE	165,165,0	Continuous	40	Grade beams
S-FNDN-PCAP	TRUE	FALSE	FALSE	165,165,0	Continuous	30	Pile caps
S-FNDN-PEDS	TRUE	FALSE	FALSE	255,223,127	Continuous	30	Foundation pedestals/pads
S-FNDN-PIER	TRUE	FALSE	FALSE	82,165,0	Continuous	40	Piers, drilled shafts, caissons
S-FNDN-PILE	TRUE	FALSE	FALSE	255,191,0	Continuous	30	Piles
S-FNDN-PL~~	TRUE	FALSE	FALSE	165,82,82	Continuous	13	Column base plates
S-FNDN-RIBS	TRUE	FALSE	FALSE	165,165,0	Continuous	30	Ribbed mat foundation
S-FNDN-TRMT	TRUE	FALSE	FALSE	255,255,127	Continuous	30	Foundation treatment (grouting)
S-FNDN-TUNL	TRUE	FALSE	FALSE	165,124,0	Continuous	30	Service tunnel/duct banks
S-FSTN-ABLT	TRUE	FALSE	FALSE	255,127,0	Continuous	13	Anchor bolts

S-FSTN-MISC	TRUE	FALSE	FALSE	165,82,82	Continuous	13	Fasteners and connections (non-specific)
S-FSTN-PL~~	TRUE	FALSE	FALSE	165,82,82	Continuous	13	Connection plates (shear plates, gusset plates, etc.
S-GATE-ANCH	TRUE	FALSE	FALSE	255,127,0	Continuous	13	Gate anchorages
S-GATE-ANCH-DEAD	TRUE	FALSE	FALSE	255,127,0	Continuous	13	Dead man anchorage
S-GATE-ARMS	TRUE	FALSE	FALSE	127,159,255	Continuous	30	Arm
S-GATE-AXIS	TRUE	FALSE	FALSE	127,0,127	Center Line	13	Gate axis and centerlines
S-GATE-BLKH	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Bulkhead
S-GATE-BLKH-NDLB	TRUE	FALSE	FALSE	165,0,165	Continuous	30	Bulkhead needles beam
S-GATE-BLKH-NDLS	TRUE	FALSE	FALSE	165,82,82	Continuous	30	Bulkhead needles
S-GATE-CONN	TRUE	FALSE	FALSE	255,127,0	Continuous	30	Gate connects, links
S-GATE-DIA~	TRUE	FALSE	FALSE	165,82,82	Continuous	30	Diagonals, gussets, sleeve nut
S-GATE-DIA~-CHAN	TRUE	FALSE	FALSE	165,82,82	Continuous	30	Diagonal channels
S-GATE-DIA~-GUST	TRUE	FALSE	FALSE	165,82,82	Continuous	30	Diagonal gusset plate
S-GATE-DIA~-SUPT	TRUE	FALSE	FALSE	165,82,82	Continuous	30	Diagonal gusset plate support
S-GATE-DIAP	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Diaphragms
S-GATE-FEND	TRUE	FALSE	FALSE	95,127,63	Continuous	30	Gate fenders
S-GATE-FLNG	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Flange
S-GATE-FLNG-DNST	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Downstream flange
S-GATE-FLNG-GIRD	TRUE	FALSE	FALSE	255,127,0	Continuous	30	Girder flange
S-GATE-FLNG-UPST	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Upstream flange
S-GATE-GIRD-WEB~	TRUE	FALSE	FALSE	0,41,165	Continuous	30	Girder web plates
S-GATE-GUDG	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Gudgeon
S-GATE-GUDG-HOOD	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Gudgeon hood
S-GATE-GUDG-HUB~	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Gudgeon hub
S-GATE-GUDG-PIN~	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Gudgeon pin
S-GATE-GUDG-STIF	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Gudgeon (hood) stiffener
S-GATE-GUDG-SUPT	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Gudgeon (pin) support
S-GATE-HORZ	TRUE	FALSE	FALSE	255,127,255	Continuous	30	Horizontal rolled shapes
S-GATE-ICST	TRUE	FALSE	FALSE	0,165,165	Continuous	30	Intercostals
S-GATE-JACK	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Gate jack
S-GATE-JACK-HORZ	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Gate jack - horizontal

S-GATE-JACK- VERT	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Gate jack - vertical
S-GATE-LIFT	TRUE	FALSE	FALSE	0,124,165	Continuous	30	Lifting mechanism
S-GATE-LTCH	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Latching device
S-GATE-LTCH- BOTM	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Latching device - bottom
S-GATE-LTCH- TOP~	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Latching device - top
S-GATE-LUBE	TRUE	FALSE	FALSE	0,0,255	Continuous	13	Lubrication system
S-GATE-MISC	TRUE	FALSE	FALSE	0,0,255	Continuous	13	Gates incidental to structure
S-GATE-MITR- ASSY	TRUE	FALSE	FALSE	0,82,165	Continuous	30	Miter guide assembly
S-GATE-PIN~	TRUE	FALSE	FALSE	255,127,0	Continuous	13	Gate pins
S-GATE-PNTL	TRUE	FALSE	FALSE	255,127,0	Continuous	30	Pintle ball, bushing & base
S-GATE-PNTL- CAST	TRUE	FALSE	FALSE	124,165,0	Continuous	30	Pintle casting
S-GATE-QOIN	TRUE	FALSE	FALSE	0,82,165	Continuous	30	Quoin
S-GATE-QOIN- FLNG	TRUE	FALSE	FALSE	0,82,165	Continuous	30	Quoin flange
S-GATE-QOIN- MITR	TRUE	FALSE	FALSE	0,82,165	Continuous	30	Quion, miter
S-GATE-QOIN- STIF	TRUE	FALSE	FALSE	0,82,165	Continuous	30	Quoin stiffener
S-GATE-QOIN- TRST	TRUE	FALSE	FALSE	0,82,165	Continuous	30	Quoin thrust plate
S-GATE-QOIN- WALL	TRUE	FALSE	FALSE	0,82,165	Continuous	30	Quoin, wall
S-GATE-QOIN- WEB~	TRUE	FALSE	FALSE	0,82,165	Continuous	30	Quoin web
S-GATE-RAIL	TRUE	FALSE	FALSE	0,82,165	Continuous	30	Rails and guides
S-GATE-SEAL	TRUE	FALSE	FALSE	165,0,82	Continuous	30	Gate seal
S-GATE-SEAL- HORZ	TRUE	FALSE	FALSE	165,0,82	Continuous	30	Gate seal - horizontal
S-GATE-SEAL- VERT	TRUE	FALSE	FALSE	165,0,82	Continuous	30	Gate seal - vertical
S-GATE-SHOE	TRUE	FALSE	FALSE	0,124,165	Continuous	30	Gate shoe
S-GATE-SKIN	TRUE	FALSE	FALSE	0,124,165	Continuous	13	Skin plates
S-GATE-STIF	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Stiffener
S-GATE-STIF- LONG	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Stiffener - longitudinal
S-GATE-STIF- TRAN	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Stiffener - transverse
S-GATE-STOP	TRUE	FALSE	FALSE	165,124,0	Continuous	30	Stoplogs
S-GATE-THBL	TRUE	FALSE	FALSE	255,127,159	Continuous	13	Thimble
S-GATE-TRST	TRUE	FALSE	FALSE	0,165,124	Continuous	13	Thrust plate
S-GATE-TRUN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Trunion

S-GATE-VALV	TRUE	FALSE	FALSE	124,0,165	Continuous	30	Valves (general shape)
S-GATE-VERT	TRUE	FALSE	FALSE	0,95,127	Continuous	30	Rolled vertical shapes
S-GATE-WALK	TRUE	FALSE	FALSE	0,165,165	Continuous	30	Walkway
S-GATE-WALK-FRMG	TRUE	FALSE	FALSE	0,165,165	Continuous	30	Walkway - framing
S-GATE-WALK-GRTG	TRUE	FALSE	FALSE	0,165,165	Continuous	30	Walkway - grating
S-GATE-WALK-SUPT	TRUE	FALSE	FALSE	0,165,165	Continuous	30	Walkway - support
S-GATE-WEB~	TRUE	FALSE	FALSE	0,41,165	Continuous	30	Web
S-GRID-HORZ	TRUE	FALSE	FALSE	255,0,255	MS7 Long Dash Short Dash	0	Grid lines (horizontal)
S-GRID-HORZ-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Column I.D. tags (horizontal)
S-GRID-VERT	TRUE	FALSE	FALSE	255,0,255	MS7 Long Dash Short Dash	0	Grid lines (vertical)
S-GRID-VERT-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Column I.D. tags (vertical)
S-GRLN-SURF-E	TRUE	FALSE	FALSE	255,191,127	MS3 Long Dash	13	Existing ground
S-GRLN-SURF-N	TRUE	FALSE	FALSE	165,82,0	Continuous	30	Finished grade
S-HYDR-AXIS	TRUE	FALSE	FALSE	124,0,165	MS4 Dot Dash	0	Axis of structure
S-HYDR-BAFL	TRUE	FALSE	FALSE	0,165,124	Continuous	30	Baffle blocks, splash pads
S-HYDR-BASN	TRUE	FALSE	FALSE	0,165,124	Continuous	30	Stilling and settling basins
S-HYDR-CHAN	TRUE	FALSE	FALSE	0,165,124	Continuous	30	Channel (Does not include earthen structures)
S-HYDR-COFF	TRUE	FALSE	FALSE	165,124,0	Continuous	30	Cofferdam
S-HYDR-COND	TRUE	FALSE	FALSE	0,165,124	Continuous	30	Diversionary/bypass conduits and culverts
S-HYDR-DAM~	TRUE	FALSE	FALSE	0,165,124	Continuous	30	Dam
S-HYDR-FISH	TRUE	FALSE	FALSE	0,165,124	Continuous	30	Fish ladder or passage
S-HYDR-FLUM	TRUE	FALSE	FALSE	0,165,124	Continuous	30	Flume
S-HYDR-INTK	TRUE	FALSE	FALSE	0,165,124	Continuous	30	Intake, outlet
S-HYDR-NOVR	TRUE	FALSE	FALSE	0,165,124	Continuous	30	Non-overflow structures
S-HYDR-PENS	TRUE	FALSE	FALSE	0,165,124	Continuous	30	Penstock outline and features
S-HYDR-STRC-POWR	TRUE	FALSE	FALSE	0,127,95	Continuous	30	Powerhouse
S-HYDR-SWAY	TRUE	FALSE	FALSE	0,165,124	Continuous	30	Spillway
S-HYDR-WEIR	TRUE	FALSE	FALSE	0,165,124	Continuous	30	Weirs and sluiceways
S-JNTS-CNTJ	TRUE	FALSE	FALSE	0,165,124	Continuous	13	Construction/lift joints
S-JNTS-CTLJ	TRUE	FALSE	FALSE	0,165,124	Continuous	13	Control/contraction joints (saw cut)

S-JNTS-EXPJ	TRUE	FALSE	FALSE	0,127,95	Continuous	13	Expansion joints, joint materials (e.g., felt)
S-JNTS-STUC	TRUE	FALSE	FALSE	127,255,191	Continuous	13	Stucco joints
S-JNTS-WTRS	TRUE	FALSE	FALSE	255,127,223	Continuous	13	Waterstops
S-JOIS-BRGX	TRUE	FALSE	FALSE	41,165,0	Continuous	30	Bridging
S-JOIS-GIRD	TRUE	FALSE	FALSE	0,165,124	Continuous	40	Joist girders
S-JOIS-PERI	TRUE	FALSE	FALSE	0,124,165	Continuous	30	Perimeter channel or rim joist
S-JOIS-PRIM	TRUE	FALSE	FALSE	0,165,165	Continuous	30	Primary joists
S-JOIS-SECD	TRUE	FALSE	FALSE	0,127,127	Continuous	30	Secondary joists
S-JOIS-TRIM	TRUE	FALSE	FALSE	0,127,127	Continuous	30	Partial length or trimmer floor joist
S-OTLN-BLDG	TRUE	FALSE	FALSE	0,0,255	MS6 Dash Dot Dot	13	Building outline
S-OTLN-FLOR	TRUE	FALSE	FALSE	0,0,255	MS6 Dash Dot Dot	13	Floor outline
S-OTLN-OPNG	TRUE	FALSE	FALSE	0,0,255	MS6 Dash Dot Dot	13	Openings
S-OTLN-ROOF	TRUE	FALSE	FALSE	0,0,255	MS6 Dash Dot Dot	13	Roof
S-OTLN-STRC	TRUE	FALSE	FALSE	0,0,255	MS6 Dash Dot Dot	13	Misc. structures
S-PADS-EQPM	TRUE	FALSE	FALSE	255,159,127	Continuous	30	Equipment pads
S-PIPE-CULV	TRUE	FALSE	FALSE	191,0,255	Continuous	30	Precast/manufactured culverts
S-PLAT-FRMG	TRUE	FALSE	FALSE	165,0,165	Continuous	30	Platform frame/stringers
S-PLAT-GRTG	TRUE	FALSE	FALSE	127,255,223	Continuous	13	Platform grating (add a second minor group to indicate platform # or elev)
S-PLAT-WALK	TRUE	FALSE	FALSE	165,124,82	Continuous	30	Platform walkway
S-REIN-RBAR	TRUE	FALSE	FALSE	0,0,255	Continuous	70	Steel reinforcing, welded wire fabric
S-REIN-TEND-HORZ	TRUE	FALSE	FALSE	159,127,255	Continuous	40	Horizontal Tendons
S-REIN-TEND-VERT	TRUE	FALSE	FALSE	159,127,255	Continuous	40	Vertical Tendons
S-SAFE-FENC	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Fencing rails, fabric, supports, and gates
S-SAFE-GRAL	TRUE	FALSE	FALSE	124,165,0	Continuous	30	Guardrails
S-SAFE-HRAL	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Handrails, railings
S-SAFE-PRPT	TRUE	FALSE	FALSE	0,255,0	Continuous	40	Parapet/jersey barrier
S-SAFE-PRPT-RBAR	TRUE	FALSE	FALSE	0,0,255	Continuous	70	Parapet/jersey barrier rebar
S-SAFE-WATR	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Waterway safety barriers
S-SECT-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Component identification numbers
S-SECT-MBND	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Material beyond section cut
S-SECT-MCUT	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Material cut by section

S-SECT-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Textures and hatch patterns
S-SIGN-BUOY	TRUE	FALSE	FALSE	165,0,41	Continuous	30	Sign buoys
S-SIGN-EXTN	TRUE	FALSE	FALSE	165,0,165	Continuous	30	Extrusions
S-SIGN-FRMG	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Framing and connections
S-SIGN-GAGE	TRUE	FALSE	FALSE	165,0,82	Continuous	30	Staff gages
S-SIGN-PANL	TRUE	FALSE	FALSE	165,0,82	Continuous	30	Sign panels
S-SIGN-SPRT	TRUE	FALSE	FALSE	0,0,255	Continuous	30	Supports
S-SIGN-TEXT	TRUE	FALSE	FALSE	165,0,124	Continuous	30	Signage text
S-SLAB-APPR	TRUE	FALSE	FALSE	255,223,127	Continuous	30	Approach slab
S-SLAB-APPR-RBAR	TRUE	FALSE	FALSE	0,0,255	Continuous	70	Approach slab rebar
S-SLAB-EDGE	TRUE	FALSE	FALSE	255,223,127	Continuous	30	Edge of slab
S-SLAB-OPNG	TRUE	FALSE	FALSE	255,0,0	MS2 Medium Dash	13	Openings (and depressions)
S-SLAB-RBAR	TRUE	FALSE	FALSE	0,0,255	Continuous	70	Slab rebar
S-SLAB-SECD	TRUE	FALSE	FALSE	255,223,127	Continuous	30	Second pour, slab cap
S-SLAB-SILL	TRUE	FALSE	FALSE	255,223,127	Continuous	30	Sill
S-STIF-LONG	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Stiffeners - longitudinal
S-STIF-TRAV	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Stiffeners - transverse
S-TRUS-BRGX	TRUE	FALSE	FALSE	41,165,0	Continuous	30	Truss bridging
S-TRUS-PRIM	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Primary trusses
S-TRUS-SECD	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Secondary trusses
S-WALL-ABUT	TRUE	FALSE	FALSE	103,165,82	Continuous	30	Abutments
S-WALL-CELL	TRUE	FALSE	FALSE	165,165,82	Continuous	30	Cell
S-WALL-COFF	TRUE	FALSE	FALSE	255,127,0	Continuous	30	Cutoff wall
S-WALL-CURT	TRUE	FALSE	FALSE	82,165,0	Continuous	30	Curtain/breast wall
S-WALL-FULL	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Wall going to the top of the structure
S-WALL-GARD	TRUE	FALSE	FALSE	82,165,0	Continuous	30	Guard/guide walls
S-WALL-LOAD	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Load bearing walls
S-WALL-MONO	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Wall monoliths
S-WALL-MSE~	TRUE	FALSE	FALSE	82,165,0	Continuous	30	Mechanically stabilized earth (MSE) wall
S-WALL-NONL	TRUE	FALSE	FALSE	82,165,0	Continuous	30	Non-load bearing walls
S-WALL-PCST	TRUE	FALSE	FALSE	0,76,57	Continuous	30	Pre-cast concrete walls
S-WALL-PRHT	TRUE	FALSE	FALSE	82,165,0	Continuous	30	Wall that does not reach to the top of the structure
S-WALL-RBAR	TRUE	FALSE	FALSE	0,0,255	Continuous	70	Wall rebar

S-WALL-RTWL	TRUE	FALSE	FALSE	82,165,0	Continuous	30	Retaining wall (flood walls, wingwalls, etc.)
S-WALL-SHEA	TRUE	FALSE	FALSE	127,255,159	Continuous	30	Shear walls
S-WALL-STUD	TRUE	FALSE	FALSE	165,124,0	Continuous	30	Stud walls
S-WATR-SURF	TRUE	FALSE	FALSE	127,159,255	Continuous	13	Water surface
S-WWAY-DLPH	TRUE	FALSE	FALSE	0,165,124	Continuous	30	Dolphins (associated with but not part of bridges, locks and guidewalls)
S-WWAY-FEND	TRUE	FALSE	FALSE	95,127,63	Continuous	30	Fenders
S-WWAY-MOOR	TRUE	FALSE	FALSE	0,124,165	Continuous	30	Mooring cells
T-CABL-COAX	TRUE	FALSE	FALSE	255,63,0	MS2 Medium Dash	40	Coax
T-CABL-FIBR	TRUE	FALSE	FALSE	255,63,0	Fiberoptics	40	Fiber optics cable
T-CABL-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Cable identifiers
T-CABL-MULT	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Multi-conductor cable
T-CABL-TRAY	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Cable trays and wireways
T-COMB-JACK	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Combination telephone and data/LAN jacks
T-COMM-CIRC	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Circuits
T-COMM-CNMB	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Circuit numbers
T-COMM-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Equipment
T-COMM-JBOX	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Junction boxes
T-DATA-JACK	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Data/LAN jacks
T-DETL-GRPH	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Graphics, gridlines, non-text items
T-DIAG-GRPH	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Graphics, gridlines, non-text items
T-DIAG-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Identifier tags, symbol modifiers, and text
T-DISC-INFO	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Information and notes for other disciplines
T-EQPM-COMB	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Distribution equipment for both copper and fiber optics
T-EQPM-COPP	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Distribution equipment for copper
T-EQPM-FIBR	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Distribution equipment for fiber optic
T-EQPM-OTHR	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Other telecommunications equipment
T-EQPM-RELA	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Relays, resistors, capacitors, and inducers
T-FLOR-IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Room name, space identification text (copied from Architectural - Floor Plan model file)
T-FLOR-NUMB	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Room/space identification number and symbol (copied from Architectural - Floor Plan model

							file)
T-PHON-JACK	TRUE	FALSE	FALSE	255,63,0	Continuous	40	Telephone jacks
V-AERI-BNDY	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Arial photography boundaries
V-AERI-BNDY-NEAT	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Neat model boundary
V-AERI-FLYS	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Fly station
V-AERI-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Arial annotation
V-AERI-INDX	TRUE	FALSE	FALSE	255,255,255	Continuous	70	Arial photo index
V-AERI-PATH	TRUE	FALSE	FALSE	165,41,0	MS6 Dash Dot Dot	30	Arial flight lines/paths
V-AERI-PHOT	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Photo center (exposure station)
V-AERI-PNPT	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Panel points
V-AFLD-CIRC-CTRL	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Control and monitoring circuits
V-AFLD-CIRC-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Circuit identifier tags, symbol modifier, and text
V-AFLD-CIRC-MULT	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Multiple circuits
V-AFLD-CIRC-SERS	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Series circuits
V-AFLD-DBNK	TRUE	FALSE	FALSE	145,82,165	Duct Bank	13	Ductbanks
V-AFLD-DEVC	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Capacitors, voltage regulators, motors, buses, generators, meters, grounds, and markers
V-AFLD-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Airfield annotation
V-AFLD-JBOX	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Junction boxes, pull boxes, manholes, handholes, pedestals, splices
V-AFLD-LITE-APPR	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Approach lights
V-AFLD-LITE-DIST	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Distance and arresting gear markers
V-AFLD-LITE-LANE	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Hoverlane, taxilane, and helipad lights
V-AFLD-LITE-OBST	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Obstruction lights
V-AFLD-LITE-RUNW	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Runway lights
V-AFLD-LITE-SIGN	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Taxiway guidance signs
V-AFLD-LITE-TAXI	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Taxiway lights
V-AFLD-LITE-THRS	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Threshold lights
V-AFLD-VALT	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Airfield lighting vaults
V-ALGN-DATA	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Alignment coordinates and curve data
V-ALGN-LINE	TRUE	FALSE	FALSE	255,255,0	MS4 Dot Dash	13	Alignments

V-ALGN-MAJR	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Alignment major stationing and tick marks
V-ALGN-MARK	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Alignment tick marks
V-ALGN-MINR	TRUE	FALSE	FALSE	255,0,255	Continuous	0	Alignment minor stationing and tick marks
V-ALGN-STAT	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Alignment stationing
V-ALGN-SYMB	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Alignment symbols (PIs)
V-ALGN-TEXT	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Alignment text, annotation with associated leaders
V-APRN-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	13	Apron centerlines
V-APRN-CNTR- IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Apron centerline annotation
V-APRN-GRND	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Grounding points
V-APRN-HOLD	TRUE	FALSE	FALSE	255,0,0	Continuous	0	Holding position markings
V-APRN-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Airfield apron - annotation
V-APRN-MOOR	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Mooring points
V-APRN-MRKG	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Apron markings
V-APRN-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Airfield apron - outlines
V-APRN-SECU	TRUE	FALSE	FALSE	255,0,0	Continuous	0	Security zone markings
V-APRN-SHLD	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Shoulders with annotation
V-APRN-SHLD- MRKG	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Shoulder stripes
V-BCNS-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifiers, and text
V-BCNS-MISC	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Miscellaneous nav aids - windcones and beacons
V-BCNS-STRB	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Strobe beacons
V-BECH-BANK- TOP~	TRUE	FALSE	FALSE	255,0,255	Continuous	0	Beach top of bank
V-BECH-BKLN	TRUE	FALSE	FALSE	0,0,255	MS2 Medium Dash	13	Beach breakline
V-BECH-BNCH	TRUE	FALSE	FALSE	165,41,0	MS6 Dash Dot Dot	13	Beach bench
V-BECH-CNTR	TRUE	FALSE	FALSE	0,0,255	Center Line	0	Beach centerline
V-BECH-LIMT	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Beach limit lines
V-BECH- OHWM	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Ordinary high water marks
V-BECH-OTLN	TRUE	FALSE	FALSE	255,255,0	Continuous	0	Beach outline
V-BECH-SLOP- IDEN	TRUE	FALSE	FALSE	255,255,255	Continuous	0	Beach slope indicator with annotation
V-BECH-SLOP- TOP~	TRUE	FALSE	FALSE	165,41,0	MS2 Medium Dash	13	Beach top of slope
V-BECH-SYMB	TRUE	FALSE	FALSE	255,0,255	Continuous	0	Beach symbols
V-BECH-TOE~	TRUE	FALSE	FALSE	0,0,255	MS3 Long	30	Beach toe

					Dash		
V-BECH-TOE~IDEN	TRUE	FALSE	FALSE	255,255,255	Continuous	0	Beach toe annotation
V-BLDG-DECK	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Outdoor decks (attached, no roof overhead)
V-BLDG-DOCK	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Loading docks
V-BLDG-FTPT	TRUE	FALSE	FALSE	255,255,255	Continuous	40	Building footprints
V-BLDG-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Building and other structure annotation
V-BLDG-OVHD	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Building overhangs
V-BLDG-PRCH	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Porches (attached, roof overhead)
V-BORE-GENL-LOCN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	General boring X,Y location marker
V-BORE-GENL-NAME	TRUE	FALSE	FALSE	255,0,255	Continuous	30	General boring name
V-BORE-GENL-NOTE	TRUE	FALSE	FALSE	255,0,255	Continuous	30	General boring notes
V-BORE-GPRO-LOCN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	GeoProbe X,Y location marker
V-BORE-GPRO-NAME	TRUE	FALSE	FALSE	255,0,255	Continuous	30	GeoProbe boring name
V-BORE-GPRO-NOTE	TRUE	FALSE	FALSE	255,0,255	Continuous	30	GeoProbe boring notes
V-BORE-UNDS-LOCN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Undisturbed boring X,Y location marker
V-BORE-UNDS-NAME	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Undisturbed boring name
V-BORE-UNDS-NOTE	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Undisturbed boring notes
V-BORE-VCOR-LOCN	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Vibra-Core X,Y location marker
V-BORE-VCOR-NAME	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Vibra-Core name
V-BORE-VCOR-NOTE	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Vibra-Core notes
V-BORW-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Borrow/spoil area annotation
V-BORW-LINE	TRUE	FALSE	FALSE	255,255,0	MS2 Medium Dash	13	Borrow/spoil area
V-BRDG-CHRD-LOW~	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Low chord
V-BRDG-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	0	Bridge centerlines
V-BRDG-CTLJ	TRUE	FALSE	FALSE	0,255,255	Continuous	0	Control joints
V-BRDG-DECK	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Bridge deck
V-BRDG-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Bridge annotation
V-BRDG-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Bridge outlines
V-BRDG-RLG~	TRUE	FALSE	FALSE	0,255,255	Continuous	0	Bridge railing
V-CATH-ANOD	TRUE	FALSE	FALSE	105,0,0	Continuous	30	Sacrificial anode system

V-CATH-CURR	TRUE	FALSE	FALSE	105,0,0	Continuous	30	Impress current system
V-CATH-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifier, and text
V-CATH-TEST	TRUE	FALSE	FALSE	105,0,0	Continuous	30	Test stations
V-CHAN-BANK-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Channel/canal top of bank annotation
V-CHAN-BANK-TOP~	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Channel/canal top of bank
V-CHAN-BNCH	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Channel/canal bench design feature lines (breaklines form DTMs)
V-CHAN-BWTR	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Breakwaters
V-CHAN-CNTR	TRUE	FALSE	FALSE	0,0,255	Center Line	0	Channel centerline and survey report lines
V-CHAN-CNTR-IDEN	TRUE	FALSE	FALSE	0,0,255	Continuous	13	Channel centerline and survey report lines - annotation
V-CHAN-DACL	TRUE	FALSE	FALSE	0,255,0	Continuous	13	De-authorized channel limits, anchorages, etc.
V-CHAN-DACL-IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	13	De-authorized channel limits, anchorages, etc. - annotation
V-CHAN-DOCK	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Docks, decks, floats, piers, and mooring facilities
V-CHAN-LIMIT	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Channel limits, anchorages, turning basins, disposal areas, etc.
V-CHAN-LIMIT-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Channel limits, anchorages, turning basins, disposal areas, etc. - annotation
V-CHAN-NAID	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Navigation aids and text
V-CHAN-SLOP-LINE	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Channel cut/fill slope (Indicates cut and fill lines)
V-CHAN-SPOL	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Spoil limits
V-CHAN-SYMB	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Channel/canal symbols
V-CHAN-TEXT	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Channel/canal text, annotation with associated leaders
V-CHAN-TOE~	TRUE	FALSE	FALSE	0,0,255	MS3 Long Dash	30	Channel/canal toe
V-CHAN-TOE~-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Channel/canal toe annotation
V-CHAN-TURN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Turning points
V-CHAN-WIDE	TRUE	FALSE	FALSE	0,255,255	MS3 Long Dash	30	Channel/canal widener
V-COMM-ANTN	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Antennae
V-COMM-EQPM	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Other communications distribution equipment
V-COMM-JBOX	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Communication junction boxes, pull boxes, handholes, pedestals, and splices
V-COMM-MHOL	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Manholes
V-COMM-OVHD	TRUE	FALSE	FALSE	255,63,0	Communication	30	Overhead communications/telephone lines

V-COMM-OVHD-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifier and text
V-COMM-POLE	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Poles
V-COMM-POLE-GUYS	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Guying equipment
V-COMM-POLE-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifiers, and text
V-COMM-UGND	TRUE	FALSE	FALSE	255,63,0	Communication	30	Underground communications/telephone lines
V-COMM-UGND-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifier and text
V-CTRL-BMRK	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Benchmarks
V-CTRL-GRID	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Grid
V-CTRL-HORZ	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Horizontal control points
V-CTRL-HVPT	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Horizontal/vertical control points
V-CTRL-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Control point annotation
V-CTRL-TRAV	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Transverse points
V-CTRL-VERT	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Vertical control points
V-DBNK-MULT	TRUE	FALSE	FALSE	105,0,0	Duct Bank	30	Ductbank
V-DBNK-MULT-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifier and text
V-DTCH-BOTM	TRUE	FALSE	FALSE	0,0,255	Ditch	0	Bottom of ditch or wash
V-DTCH-CNTR	TRUE	FALSE	FALSE	0,0,255	Center Line	0	Centerline of ditch or wash
V-DTCH-EWAT	TRUE	FALSE	FALSE	0,255,255	Continuous	0	Edge of water
V-DTCH-IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Ditches and washes annotation
V-DTCH-TOP~	TRUE	FALSE	FALSE	0,255,0	Continuous	0	Top of ditch or wash
V-ECCO-BURR	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Burrow
V-ECCO-DENS	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Den
V-ECCO-GATR	TRUE	FALSE	FALSE	255,0,255	MS2 Medium Dash	13	Gator hole
V-ECCO-HUMK	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Hummocks
V-ECCO-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Habitat annotation
V-ECCO-NEST	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Nest, nesting tree
V-ECCO-PRCH	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Perch/nesting hole
V-FIRE-HYDT	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Hydrants
V-FIRE-PIPE	TRUE	FALSE	FALSE	255,0,0	Fire Protection Water Supply	13	Piping
V-FLHA-025Y	TRUE	FALSE	FALSE	255,0,255	MS6 Dash Dot Dot	13	25 year mark
V-FLHA-050Y	TRUE	FALSE	FALSE	255,255,0	MS3 Long Dash	13	50 year mark

V-FLHA-100Y	TRUE	FALSE	FALSE	255,0,255	Continuous	13	100 year mark
V-FLHA-200Y	TRUE	FALSE	FALSE	255,255,0	MS2 Medium Dash	13	200 year mark
V-FLHA-500Y	TRUE	FALSE	FALSE	255,0,255	MS7 Long Dash Short Dash	13	500 year mark
V-FLHA-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Flood hazard area annotation
V-FLOD-BASE	TRUE	FALSE	FALSE	255,63,0	Continuous	30	Floodwall base of wall
V-FLOD-BASE- IDEN	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Floodwall base of wall annotation
V-FLOD-CNTR	TRUE	FALSE	FALSE	255,63,0	Center Line	0	Floodwall centerline
V-FLOD-CNTR- IDEN	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Floodwall centerline annotation
V-FLOD-DRNS	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Floodwall toe drain
V-FLOD-DRNS- IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Floodwall toe drain annotation
V-FLOD-PILE	TRUE	FALSE	FALSE	165,41,0	Continuous	30	Floodwall sheet piling
V-FLOD-PILE- IDEN	TRUE	FALSE	FALSE	165,41,0	Continuous	13	Floodwall sheet piling annotation
V-FLOD-TOE~	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Floodwall toe outline
V-FLOD-TOP~	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Floodwall top of wall
V-FLOD-TOP~- IDEN	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Floodwall top of wall annotation
V-FUEL-BERM	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Berms for retaining fuel in case of major tank/line rupture
V-FUEL-DEFL- PIPE	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Defueling piping
V-FUEL-DEVC	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Air eliminators, filter strainers, hydrant fill points, line vents, markers, oil/water separators, reducers, regulators, and valves
V-FUEL-FLOW	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Flow direction arrows
V-FUEL-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifier, and text
V-FUEL-JBOX	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Junction boxes, manholes, handholes, test boxes
V-FUEL-MAIN- PIPE	TRUE	FALSE	FALSE	255,255,0	Gas - Liquefied Petroleum	13	Main fuel piping
V-FUEL-METR	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Meters
V-FUEL-SERV- PIPE	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Service piping
V-FUEL-STNS- PUMP	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Booster pump stations
V-FUEL-TANK	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Fuel tanks
V-FUEL-TRCH	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Fuel line trench
V-FUEL-VALT	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Vent/valve/hydrant pits/vaults

V-GRAD-AFTR	TRUE	FALSE	FALSE	255,255,0	Continuous	30	After dredge depth
V-GRAD-EXST	TRUE	FALSE	FALSE	255,0,255	MS3 Long Dash	30	Existing grade, ground line
V-GRAD-EXST-BASE	TRUE	FALSE	FALSE	165,41,0	MS2 Medium Dash	0	Base survey
V-GRAD-EXST-SYR1	TRUE	FALSE	FALSE	255,0,255	MS4 Dot Dash	0	Survey year one or area one
V-GRAD-EXST-SYR2	TRUE	FALSE	FALSE	255,255,0	MS1 Dot	0	Survey year two or area two
V-GRAD-EXST-SYR3	TRUE	FALSE	FALSE	0,255,0	MS6 Dash Dot Dot	0	Survey year three or area three
V-GRAD-EXST-SYR4	TRUE	FALSE	FALSE	82,165,124	MS3 Long Dash	0	Survey year four or area four
V-GRAD-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Grade annotation
V-GRAD-PRED	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Pre-dredge
V-GRAD-SCLN	TRUE	FALSE	FALSE	0,0,255	MS7 Long Dash Short Dash	30	Stability control line
V-GRID-FRAM	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Frame
V-GRID-MAJR	TRUE	FALSE	FALSE	128,128,128	MS1 Dot	13	Major grid lines
V-GRID-MINR	TRUE	FALSE	FALSE	128,128,128	MS1 Dot	0	Minor grid lines
V-GRID-TEXT	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Border text, annotation
V-GTHP-EQPM	TRUE	FALSE	FALSE	145,82,165	Continuous	13	Geothermal heat pump system equipment
V-GTHP-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Geothermal heat pump annotation
V-GTHP-RETN-PIPE	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Geothermal heat pump system return piping
V-GTHP-SUPP-PIPE	TRUE	FALSE	FALSE	145,82,165	Continuous	30	Geothermal heat pump system supply piping
V-HTCW-CWTR-MAIN	TRUE	FALSE	FALSE	0,0,255	Continuous	13	Main chilled water piping
V-HTCW-CWTR-PLNT	TRUE	FALSE	FALSE	0,0,255	Continuous	13	Chilled water plant
V-HTCW-CWTR-SERV	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Chilled water service piping
V-HTCW-DEVC	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Rigid anchors, anchor guides, rectifiers, reducers, markers, pumps, regulators, tanks, and valves
V-HTCW-HWTR-MAIN	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Main high temperature piping
V-HTCW-HWTR-PLNT	TRUE	FALSE	FALSE	255,0,0	Continuous	13	High temperature water plant
V-HTCW-HWTR-SERV	TRUE	FALSE	FALSE	255,0,0	Continuous	0	High temperature service piping
V-HTCW-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifier, and text
V-HTCW-JBOX	TRUE	FALSE	FALSE	255,0,255	Continuous	0	Junction boxes, manholes, handholes, test boxes
V-HTCW-LWTR-MAIN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Main low temperature piping

V-HTCW-LWTR-SERV	TRUE	FALSE	FALSE	255,255,0	Continuous	0	Low temperature service piping
V-HTCW-METR	TRUE	FALSE	FALSE	255,0,255	Continuous	13	V-HTCW-METR
V-HTCW-RETN-PIPE	TRUE	FALSE	FALSE	255,0,255	Continuous	0	Return for all HTCW lines
V-HTCW-STEM-MAIN	TRUE	FALSE	FALSE	255,127,191	Continuous	13	Main steam piping
V-HTCW-STEM-SERV	TRUE	FALSE	FALSE	255,127,191	Continuous	0	Steam service piping
V-HTCW-STNS-PUMP	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Pump stations
V-HTCW-VALT	TRUE	FALSE	FALSE	255,0,255	Continuous	0	Valve pits/vaults, steam pits
V-HYDS-BKLN	TRUE	FALSE	FALSE	255,255,255	MS4 Dot Dash	30	Breaklines
V-HYDS-BKLN-COMM	TRUE	FALSE	FALSE	255,255,255	Communication	30	Subsurface utilities communications breakline
V-HYDS-BKLN-DOMW	TRUE	FALSE	FALSE	255,255,255	Water Line	30	Subsurface utilities water breakline
V-HYDS-BKLN-ELEC	TRUE	FALSE	FALSE	255,255,255	Electrical Primary	30	Subsurface utilities electric breakline
V-HYDS-BKLN-FUEL	TRUE	FALSE	FALSE	255,255,255	Gas - Liquefied Petroleum	30	Subsurface utilities liquid fuel breakline
V-HYDS-BKLN-NGAS	TRUE	FALSE	FALSE	255,255,255	Gas - Low Pressure	30	Subsurface utilities natural gas breakline
V-HYDS-BKLN-SSWR	TRUE	FALSE	FALSE	255,255,255	Sanitary Waste	30	Subsurface utilities sanitary sewer breakline
V-HYDS-BKLN-STRM	TRUE	FALSE	FALSE	255,255,255	Drain - Storm	30	Subsurface utilities storm sewer breakline
V-HYDS-BNDY-EXTR	TRUE	FALSE	FALSE	0,255,0	Continuous	0	Surface exterior boundary
V-HYDS-BNDY-INTR	TRUE	FALSE	FALSE	255,0,0	MS2 Medium Dash	0	Surface interior boundary
V-HYDS-BORE	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Boring locations and text
V-HYDS-COOR	TRUE	FALSE	FALSE	0,165,124	Continuous	13	Coordinate grid text annotation
V-HYDS-COOR-LALO	TRUE	FALSE	FALSE	0,255,0	Continuous	0	Latitude and longitude grid ticks
V-HYDS-COOR-STAT	TRUE	FALSE	FALSE	0,255,0	Continuous	0	State Plane coordinate ticks
V-HYDS-COOR-UTM~	TRUE	FALSE	FALSE	0,255,0	Continuous	0	UTM coordinate ticks
V-HYDS-DTMO	TRUE	FALSE	FALSE	255,0,255	Continuous	30	DTM obscure area boundary
V-HYDS-DTMP	TRUE	FALSE	FALSE	255,0,255	Continuous	30	DTM points
V-HYDS-DTMT	TRUE	FALSE	FALSE	165,41,0	Continuous	30	DTM triangles
V-HYDS-MAJR	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Major contours
V-HYDS-MAJR-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Major contours - annotation
V-HYDS-MINR	TRUE	FALSE	FALSE	0,255,0	Continuous	0	Minor contours
V-HYDS-MINR-IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	0	Minor contours - annotation

V-HYDS-PERI	TRUE	FALSE	FALSE	0,255,0	Continuous	0	Surface perimeter
V-HYDS-SHAP	TRUE	FALSE	FALSE	255,0,0	Continuous	0	Inroads generated shapes/lines
V-HYDS-SHOR	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Shorelines, land features, and references
V-HYDS-SLOP-FILL	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Cut/fill slopes
V-HYDS-SLOP-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Cut/fill slope, top/toe slope annotation
V-HYDS-SLOP-TOPT	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Top/toe slopes
V-HYDS-SOUN	TRUE	FALSE	FALSE	255,255,255	Continuous	0	Soundings and overbanks
V-HYDS-SPOT	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Spot elevations
V-HYDS-VOID	TRUE	FALSE	FALSE	255,0,0	Continuous	0	Surface void region
V-HYDS-WATR	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Water level reference (e.g., LWRP, after-grading LWRP, SWP, etc.)
V-INDW-DEVC	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Grit chambers, flumes, neutralizers, oil/water separators, ejectors, tanks, and valves
V-INDW-FLOW	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Flow direction arrows
V-INDW-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifier, and text
V-INDW-JBOX	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Junction boxes and manholes
V-INDW-LAGN	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Lagoons
V-INDW-MAIN-PIPE	TRUE	FALSE	FALSE	255,63,0	Industrial Waste	13	Main industrial waste water piping
V-INDW-METR	TRUE	FALSE	FALSE	255,63,0	Continuous	0	V-INDW-METR
V-INDW-PLNT	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Treatment plants
V-INDW-SERV-PIPE	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Industrial waste water service piping
V-INDW-SIGN	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Surface markers/signs
V-INDW-STNS-LIFT	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Lift stations
V-IRRG-EQPM	TRUE	FALSE	FALSE	124,0,165	Continuous	13	Irrigation equipment (e.g., controllers, valves, etc.)
V-IRRG-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Irrigation annotation
V-IRRG-PIPE	TRUE	FALSE	FALSE	124,0,165	Continuous	13	Irrigation piping
V-IRRG-WELL	TRUE	FALSE	FALSE	124,0,165	Continuous	0	Irrigation wells
V-JNTS-CNSL	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Construction joints - longitudinal
V-JNTS-CNST	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Construction joints - transverse
V-JNTS-CNTL	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Contraction joints - longitudinal
V-JNTS-CNTT	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Contraction joints - transverse
V-JNTS-EDGE	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Thickened edges
V-JNTS-EXPJ	TRUE	FALSE	FALSE	165,0,0	Continuous	13	Expansion joints
V-JNTS-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Joint annotation

V-LEVE-BANK-IDEN	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Levee top of bank annotation
V-LEVE-BERM	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Existing berms
V-LEVE-BNCH	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Levee bench design feature lines (breaklines form DTMs)
V-LEVE-BNCH-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	0	Levee bench annotation
V-LEVE-BRRW	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Borrow limits
V-LEVE-CNTR	TRUE	FALSE	FALSE	255,63,0	Center Line	0	Levee centerline
V-LEVE-CNTR-IDEN	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Levee centerline annotation
V-LEVE-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Levee annotation
V-LEVE-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Levee outline
V-LEVE-SLOP	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Levee slope indicator with annotation
V-LEVE-STAN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Levee stationing
V-LEVE-TOE~	TRUE	FALSE	FALSE	255,63,0	MS2 Medium Dash	13	Levee toe
V-LEVE-TOE~-IDEN	TRUE	FALSE	FALSE	255,63,0	Continuous	0	Levee toe annotation
V-LEVE-TOPB	TRUE	FALSE	FALSE	255,63,0	Continuous	13	Levee top of bank
V-LITE-EXTR	TRUE	FALSE	FALSE	255,0,0	Continuous	30	Exterior lights
V-LITE-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Light identifier tags, symbol modifiers, and text
V-MILR-BATP	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Battle positions
V-MILR-CAMS	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Range cameras
V-MILR-FOXH	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Fox holes and pits
V-MILR-MATS	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Moving army targets
V-MILR-MITS	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Moving infantry targets
V-MILR-MITS-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Moving infantry targets annotation
V-MILR-PUTS	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Pop up targets
V-MILR-PUTS-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Pop up targets annotation
V-MILR-SATS	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Stationary army targets
V-MILR-SATS-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Stationary army targets annotation
V-MILR-SITS	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Stationary infantry targets
V-MILR-SITS-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Stationary infantry targets annotation
V-NGAS-EQPM	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Equipment (pumps, motors, etc.)
V-NGAS-FLOW	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Flow direction arrows
V-NGAS-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifier, and text

V-NGAS-INST	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Instrumentation (valves, etc.)
V-NGAS-METR	TRUE	FALSE	FALSE	255,255,0	Continuous	0	Meters
V-NGAS-MHOL	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Manholes
V-NGAS-PIPE	TRUE	FALSE	FALSE	255,255,0	Gas - Low Pressure	13	Natural gas piping
V-NGAS-SIGN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Surface markers/signs
V-NGAS-STNS-PUMP	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Compressor stations
V-NGAS-STNS-REDC	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Reducing stations
V-NGAS-TANK	TRUE	FALSE	FALSE	255,255,0	Continuous	0	Tanks
V-NGAS-VALT	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Valve/vent pits/vaults
V-OBST-AIRS	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Airspace obstructions
V-OBST-AIRS-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Airspace obstruction annotation
V-OBST-UWTR	TRUE	FALSE	FALSE	255,0,0	MS2 Medium Dash	13	Underwater obstructions (e.g., sunken ship, barge, etc.)
V-OBST-UWTR-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Underwater obstruction annotation
V-OVRN-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	0	Centerlines
V-OVRN-CNTR-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Centerline annotation
V-OVRN-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Airfield overrun area - annotation
V-OVRN-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Airfield overrun area - outlines
V-OVRN-SHLD-MRKG	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Shoulder markings
V-PADS-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	0	Centerlines
V-PADS-CNTR-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Centerline annotation
V-PADS-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Pads - annotation
V-PADS-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Pad - outlines
V-PADS-SHLD	TRUE	FALSE	FALSE	255,255,0	Continuous	0	Shoulders with annotation
V-POWR-DEVC	TRUE	FALSE	FALSE	105,0,0	Continuous	30	Capacitors, voltage regulators, motors, buses, grounds, and markers
V-POWR-GENR	TRUE	FALSE	FALSE	105,0,0	Continuous	0	Generators
V-POWR-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Power annotation
V-POWR-JBOX	TRUE	FALSE	FALSE	105,0,0	Continuous	30	Junction boxes, pull boxes, manholes, handholes, pedestals, splices
V-POWR-METR	TRUE	FALSE	FALSE	105,0,0	Continuous	0	Meters
V-POWR-POLE	TRUE	FALSE	FALSE	105,0,0	Continuous	30	Power poles
V-POWR-POLE-GUYS	TRUE	FALSE	FALSE	105,0,0	Continuous	30	Guying equipment

V-POWR-SBST	TRUE	FALSE	FALSE	105,0,0	Continuous	30	Substation equipment
V-POWR-SWCH	TRUE	FALSE	FALSE	105,0,0	Continuous	30	Fuse cutouts, pole mounted switches, circuit breakers, gang operated disconnects, reclosers, cubicle
V-POWR-XFMR-PADM	TRUE	FALSE	FALSE	105,0,0	Continuous	30	Pad mounted transformers
V-POWR-XFMR-POLM	TRUE	FALSE	FALSE	105,0,0	Continuous	30	Pole mounted transformers
V-PRIM-OVHD	TRUE	FALSE	FALSE	105,0,0	Electrical Primary	30	Overhead electrical utility lines
V-PRIM-OVHD-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifiers, and text
V-PRIM-UGND	TRUE	FALSE	FALSE	105,0,0	Electrical Primary	30	Underground electrical utility lines
V-PRIM-UGND-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifiers, and text
V-PRKG-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	0	Parking lot centerlines
V-PRKG-CNTR-IDEN	TRUE	FALSE	FALSE	255,0,0	Continuous	0	Parking lot centerline annotation
V-PRKG-CURB	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Curbs and gutters
V-PRKG-DRAIN	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Drainage slope indications
V-PRKG-FIXT	TRUE	FALSE	FALSE	127,255,127	Continuous	13	Parking lot fixtures (e.g., wheel stops, parking meters)
V-PRKG-FLNE	TRUE	FALSE	FALSE	255,0,0	Continuous	0	Fire lanes
V-PRKG-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Parking lot annotation
V-PRKG-MRKG	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Pavement markings
V-PRKG-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	30	Parking lot outlines
V-PRKG-SIGN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Signs
V-PROP-BRNG	TRUE	FALSE	FALSE	255,0,255	Continuous	30	Bearings and distance labels
V-PROP-ESMT	TRUE	FALSE	FALSE	255,255,255	Construction Easement	40	Easements
V-PROP-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Property annotation
V-PROP-LINE	TRUE	FALSE	FALSE	255,255,0	Property Line	30	Property lines (Existing recorded plats)
V-PROP-QTRS	TRUE	FALSE	FALSE	255,0,255	MS1 Dot	30	Quarter lines
V-PROP-RWAY	TRUE	FALSE	FALSE	255,255,255	MS6 Dash Dot Dot	40	Right of ways
V-PROP-SBCK	TRUE	FALSE	FALSE	255,255,255	MS3 Long Dash	0	Setback lines
V-PROP-SECT	TRUE	FALSE	FALSE	255,0,255	MS7 Long Dash Short Dash	30	Section lines
V-PROP-SECT-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Section lines annotation
V-PROP-SUBD	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Subdivision (interior) lines
V-PROP-SXTS	TRUE	FALSE	FALSE	255,0,255	Phantom Line	30	Sixteenth lines (40 lines)

V-PROP-TSHP	TRUE	FALSE	FALSE	255,0,255	MS4 Dot Dash	30	Township/range lines
V-PROP-TSHP-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Township/range lines annotation
V-PVMT-ASPH	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Pavement pattern - asphalt
V-PVMT-CONC	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Pavement pattern - concrete
V-PVMT-GRVL	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Pavement pattern - gravel
V-PVMT-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Road, parking lot, railroad, airfield pavement annotation
V-PVMT-MRKG	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Pavement markings
V-PVMT-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Joint patterns, text and dimensions
V-RAIL-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	0	Railroad track centerlines
V-RAIL-CNTR-IDEN	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Railroad track centerline annotation
V-RAIL-EQPM	TRUE	FALSE	FALSE	127,255,127	Continuous	13	Railroad equipment (e.g., gates, signals)
V-RAIL-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Railroad - annotation
V-RAIL-TRAK	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Railroad tracks
V-RIVR-BOTM	TRUE	FALSE	FALSE	0,0,255	Continuous	13	River bottom
V-RIVR-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	0	Centerline of river
V-RIVR-EDGE	TRUE	FALSE	FALSE	0,0,255	Continuous	30	River edge
V-RIVR-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifiers, and text
V-RIVR-TOPB	TRUE	FALSE	FALSE	0,0,255	Continuous	13	Top of river bank
V-ROAD-ASPH	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Road outlines - asphalt surface
V-ROAD-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	0	Road centerlines
V-ROAD-CNTR-IDEN	TRUE	FALSE	FALSE	255,0,0	Continuous	0	Road centerline annotation
V-ROAD-CONC	TRUE	FALSE	FALSE	255,255,255	Continuous	0	Road outlines - concrete surface
V-ROAD-CURB	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Curbs and gutters
V-ROAD-GRAL	TRUE	FALSE	FALSE	255,0,255	Guardrail	13	Guard rails
V-ROAD-GRVL	TRUE	FALSE	FALSE	255,63,0	Continuous	0	Road outlines - gravel surface
V-ROAD-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Road, street, highway annotation
V-ROAD-MRKG	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Pavement markings
V-ROAD-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Road outlines
V-ROAD-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Joint patterns, text and dimensions
V-ROAD-SHLD	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Roadway shoulders
V-ROAD-SIGN	TRUE	FALSE	FALSE	255,0,0	Continuous	0	Signs
V-ROAD-UPVD	TRUE	FALSE	FALSE	0,255,0	Continuous	0	Road outlines - unpaved surface
V-RRAP-BLKT	TRUE	FALSE	FALSE	255,0,0	Continuous	0	Natural/synthetic mats, blankets, textiles, and grids used for slope

							stabilization
V-RRAP-GABN	TRUE	FALSE	FALSE	255,0,0	Continuous	0	Gabions
V-RRAP-MATS	TRUE	FALSE	FALSE	0,255,0	Continuous	0	Articulated concrete mats
V-RRAP-RVMT	TRUE	FALSE	FALSE	255,0,0	Continuous	0	Revetments
V-RRAP-TRET	TRUE	FALSE	FALSE	0,255,0	Continuous	0	Soil cement, fiber reinforced soil, and chemical erosion control treatments
V-RRAP-VEGE	TRUE	FALSE	FALSE	255,0,0	MS6 Dash Dot Dot	0	Erosion control aquatic vegetation and planted riparian buffers
V-RRAP-WEIR	TRUE	FALSE	FALSE	0,255,0	Continuous	0	Weirs
V-RUNW-BLST	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Blast pad and stopway markings
V-RUNW-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	0	Centerlines
V-RUNW-CNTR-MRKG	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Centerline markings
V-RUNW-DISP	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Displaced threshold markings
V-RUNW-DIST	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Fixed distance markings
V-RUNW-EDGE	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Airfield runway edges
V-RUNW-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Airfield runway annotation
V-RUNW-SHLD	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Shoulder markings
V-RUNW-SIDE	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Side stripes
V-RUNW-TDZM	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Touchdown zone markers
V-RUNW-THRS	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Threshold markers
V-SECD-OVHD	TRUE	FALSE	FALSE	105,0,0	Electrical Secondary	30	Overhead electrical utility lines
V-SECD-OVHD-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifiers, and text
V-SECD-UGND	TRUE	FALSE	FALSE	105,0,0	Electrical Secondary	30	Underground electrical utility lines
V-SECD-UGND-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifiers, and text
V-SECT-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Component identification numbers
V-SECT-MBND	TRUE	FALSE	FALSE	0,0,255	Continuous	0	Material beyond section cut
V-SECT-MCUT	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Material cut by section
V-SECT-PATT	TRUE	FALSE	FALSE	128,128,128	Continuous	0	Textures and hatch patterns
V-SITE-EWAT	TRUE	FALSE	FALSE	0,41,165	Continuous	30	Edge of water
V-SITE-FENC	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Fences and handrails
V-SITE-FLDS	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Stump fields
V-SITE-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Existing site feature/structure annotation
V-SITE-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	40	Existing site features (play structures, bike racks, benches, recreational equipment)

V-SITE-ROCK	TRUE	FALSE	FALSE	255,0,0	Continuous	13	Rock and rock outcroppings, boulders and cobble
V-SITE-SOIL	TRUE	FALSE	FALSE	255,0,0	Continuous	13	V-SITE-SOIL
V-SITE-STRC	TRUE	FALSE	FALSE	165,41,0	Continuous	13	Structures (bridges, sheds, foundation pads, footings, etc.)
V-SITE-STRS	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Stairs and ramps
V-SITE-VEGE	TRUE	FALSE	FALSE	41,165,0	Tree Line	30	Existing treelines and vegetation
V-SITE-VEGE-IDEN	TRUE	FALSE	FALSE	41,165,0	Continuous	30	Existing treelines and vegetation - identification
V-SITE-WALK	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Walks, trails, and bicycle paths
V-SITE-WATR	TRUE	FALSE	FALSE	0,41,165	Continuous	30	Water features
V-SPCL-SYST	TRUE	FALSE	FALSE	105,0,0	Continuous	30	Special systems (UMCS, EMCS, etc.)
V-SPCL-SYST-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Special systems (UMCS, EMCS, etc.) identifier tags, symbol modifier, and text
V-SPCL-TRAF	TRUE	FALSE	FALSE	105,0,0	Continuous	30	Traffic signal system
V-SPCL-TRAF-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Traffic signal identifier tags, symbol modifier, and text
V-SSWR-DEVC	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Grease traps, grit chambers, flumes, neutralizers, oil/water separators, ejectors, and valves
V-SSWR-FILT	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Filtration beds
V-SSWR-FLOW	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Flow direction arrows
V-SSWR-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifier, and text
V-SSWR-JBOX	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Junction boxes and manholes
V-SSWR-LAGN	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Lagoons
V-SSWR-LEAC	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Leach field
V-SSWR-MAIN-PIPE	TRUE	FALSE	FALSE	0,255,0	Sanitary Waste	13	Sanitary sewer piping
V-SSWR-NITF	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Nitrification drain fields
V-SSWR-PLNT	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Treatment plants
V-SSWR-SERV-PIPE	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Sanitary sewer service piping
V-SSWR-SIGN	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Surface markers/signs
V-SSWR-STNS-PUMP	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Booster pump stations
V-SSWR-TANK	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Septic tanks
V-STRM-AFFF	TRUE	FALSE	FALSE	0,255,0	Continuous	13	AFFF lagoon/detention pond
V-STRM-CHUT	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Chutes and concrete erosion control structures
V-STRM-CULV	TRUE	FALSE	FALSE	0,255,0	Culvert	13	Culverts
V-STRM-DEVC	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Downspouts, flumes, oil/water separators, and flap gates
V-STRM-FLOW	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Flow direction arrows

V-STRM-FMON	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Flow monitoring station
V-STRM-HWAL	TRUE	FALSE	FALSE	0,255,0	Continuous	30	Headwalls and endwalls
V-STRM-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifier, and text
V-STRM-INLT	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Inlets (curb, surface, and catch basins)
V-STRM-MAIN-PIPE	TRUE	FALSE	FALSE	0,255,0	Drain - Storm	13	Storm sewer piping
V-STRM-MHOL	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Manholes
V-STRM-POND	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Lagoons, ponds, watersheds, and basins
V-STRM-ROOF	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Roof drain line
V-STRM-SERV-PIPE	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Storm sewer service piping
V-STRM-SIGN	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Surface markers/signs
V-STRM-STNS-PUMP	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Pump stations
V-STRM-SUBS-PIPE	TRUE	FALSE	FALSE	0,255,0	Continuous	13	Subsurface drain piping
V-SURV-DATA	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Survey data (benchmarks and horizontal control points or monuments)
V-SURV-IDEN	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Survey, baseline, and control line annotation
V-SURV-LINE	TRUE	FALSE	FALSE	0,255,255	MS2 Medium Dash	13	Survey, baseline, and control line
V-SURV-SYMB	TRUE	FALSE	FALSE	255,255,0	Continuous	30	Survey line symbol (PIs)
V-TAXI-CNTR	TRUE	FALSE	FALSE	255,0,0	Center Line	0	Centerlines
V-TAXI-CNTR-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Centerline annotation
V-TAXI-CNTR-MRKG	TRUE	FALSE	FALSE	255,0,0	Continuous	0	Centerline markings
V-TAXI-EDGE	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Edge markings
V-TAXI-HOLD	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Holding lines
V-TAXI-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Taxiway - annotation
V-TAXI-OTLN	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Taxiway - outlines
V-TAXI-SHLD	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Shoulders with annotation
V-TOPO-BKLN	TRUE	FALSE	FALSE	255,255,255	MS4 Dot Dash	30	Breaklines
V-TOPO-BKLN-COMM	TRUE	FALSE	FALSE	255,255,255	Communication	30	Subsurface utilities communications breakline
V-TOPO-BKLN-DOMW	TRUE	FALSE	FALSE	255,255,255	Water Line	30	Subsurface utilities water breakline
V-TOPO-BKLN-ELEC	TRUE	FALSE	FALSE	255,255,255	Electrical Primary	30	Subsurface utilities electric breakline
V-TOPO-BKLN-FUEL	TRUE	FALSE	FALSE	255,255,255	Gas - Liquefied Petroleum	30	Subsurface utilities liquid fuel breakline

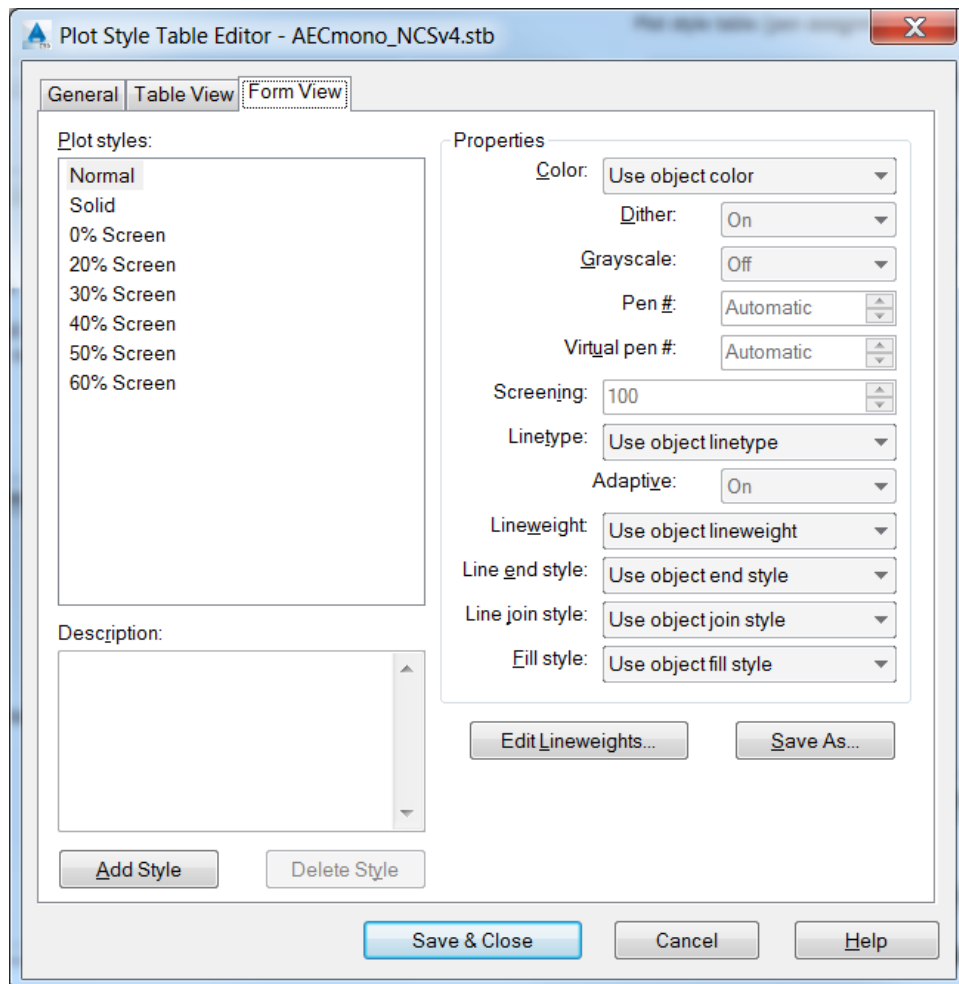
V-TOPO-BKLN-NGAS	TRUE	FALSE	FALSE	255,255,255	Gas - Low Pressure	30	Subsurface utilities natural gas breakline
V-TOPO-BKLN-SSWR	TRUE	FALSE	FALSE	255,255,255	Sanitary Waste	30	Subsurface utilities sanitary sewer breakline
V-TOPO-BKLN-STRM	TRUE	FALSE	FALSE	255,255,255	Drain - Storm	30	Subsurface utilities storm sewer breakline
V-TOPO-BNDY-EXTR	TRUE	FALSE	FALSE	0,255,0	Continuous	0	Surface exterior boundary
V-TOPO-BNDY-INTR	TRUE	FALSE	FALSE	255,0,0	MS2 Medium Dash	0	Surface interior boundary
V-TOPO-BORE	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Boring locations and text
V-TOPO-COOR	TRUE	FALSE	FALSE	0,165,124	Continuous	13	Coordinate grid text annotation
V-TOPO-COOR-LALO	TRUE	FALSE	FALSE	0,255,0	Continuous	0	Latitude and longitude grid ticks
V-TOPO-COOR-STAT	TRUE	FALSE	FALSE	0,255,0	Continuous	0	State Plane coordinate ticks
V-TOPO-COOR-UTM~	TRUE	FALSE	FALSE	0,255,0	Continuous	0	UTM coordinate ticks
V-TOPO-DTMO	TRUE	FALSE	FALSE	255,0,255	Continuous	13	DTM obscure area boundary
V-TOPO-DTMP	TRUE	FALSE	FALSE	255,0,255	Continuous	13	DTM points
V-TOPO-DTMT	TRUE	FALSE	FALSE	165,41,0	Continuous	13	DTM triangles
V-TOPO-MAJR	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Major contours
V-TOPO-MAJR-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Major contours - annotation
V-TOPO-MINR	TRUE	FALSE	FALSE	0,255,0	Continuous	0	Minor contours
V-TOPO-MINR-IDEN	TRUE	FALSE	FALSE	0,255,0	Continuous	0	Minor contours - annotation
V-TOPO-PERI	TRUE	FALSE	FALSE	0,255,0	Continuous	0	Surface perimeter
V-TOPO-SHAP	TRUE	FALSE	FALSE	255,0,0	Continuous	0	Inroads generated shapes/lines
V-TOPO-SHOR	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Shorelines, land features, and references
V-TOPO-SLOP-FILL	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Cut/fill slopes
V-TOPO-SLOP-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Cut/fill slope, top/toe slope annotation
V-TOPO-SLOP-TOPT	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Top/toe slopes
V-TOPO-SOUN	TRUE	FALSE	FALSE	255,255,255	Continuous	0	Soundings and overbanks
V-TOPO-SPOT	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Spot elevations
V-TOPO-VOID	TRUE	FALSE	FALSE	255,0,0	Continuous	0	Surface void region
V-TOPO-WATR	TRUE	FALSE	FALSE	255,255,255	Continuous	30	Water level reference (e.g., LWRP, after-grading LWRP, SWP, etc.)
V-TRAF-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Airfield traffic area annotation
V-TRAF-TYPA	TRUE	FALSE	FALSE	0,255,255	MS4 Dot Dash	30	Type A traffic area
V-TRAF-TYPB	TRUE	FALSE	FALSE	0,255,255	MS6 Dash Dot Dot	30	Type B traffic area

V-TRAF-TYPC	TRUE	FALSE	FALSE	0,255,255	MS1 Dot	30	Type C traffic area
V-WATR-DEVC	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Connectors, faucets, reducers, regulators, vents, intake points, taps, backflow preventers, and valves
V-WATR-HYDT	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Flushing hydrants
V-WATR-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Identifier tags, symbol modifier, and text
V-WATR-MAIN-PIPE	TRUE	FALSE	FALSE	0,255,255	Water Line	13	Main domestic water piping
V-WATR-METR	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Meters
V-WATR-NPW~-PIPE	TRUE	FALSE	FALSE	0,255,255	Non-Potable Water	13	Non-potable water piping
V-WATR-SERV-PIPE	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Domestic water service piping
V-WATR-SIGN	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Surface markers/signs
V-WATR-STNS-PUMP	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Booster pump stations
V-WATR-STNS-REDC	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Pressure reducing stations
V-WATR-TANK	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Water storage tanks
V-WATR-VALT	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Valve/vent pits/vaults
V-WATR-WELL	TRUE	FALSE	FALSE	0,255,255	Continuous	13	Water well houses
V-WETL-BOGS	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Bogs
V-WETL-FENS	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Fens
V-WETL-IDEN	TRUE	FALSE	FALSE	255,255,0	Continuous	13	Wetland annotation
V-WETL-MRSH	TRUE	FALSE	FALSE	0,41,165	Continuous	13	Fresh water marshes
V-WETL-MRSH-SALT	TRUE	FALSE	FALSE	0,41,165	Continuous	13	Tidal saltwater marshes
V-WETL-MRSH-TIDL	TRUE	FALSE	FALSE	0,41,165	Continuous	13	Tidal freshwater marsh
V-WETL-PCSN	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Pocosins
V-WETL-PHOL	TRUE	FALSE	FALSE	255,0,255	Continuous	13	Vernal pools, playas, prairie potholes, wet meadows, and wet prairies
V-WETL-RPRN	TRUE	FALSE	FALSE	0,41,165	Continuous	13	Riparian forested wetlands
V-WETL-SLGH	TRUE	FALSE	FALSE	0,41,165	Continuous	13	Sloughs
V-WETL-SWMP	TRUE	FALSE	FALSE	0,41,165	Continuous	13	Swamps

8 Plotting Configuration

8.1 Style Based (.stb)

Set to USACE configured file **AECmono_NCSv4.stb**



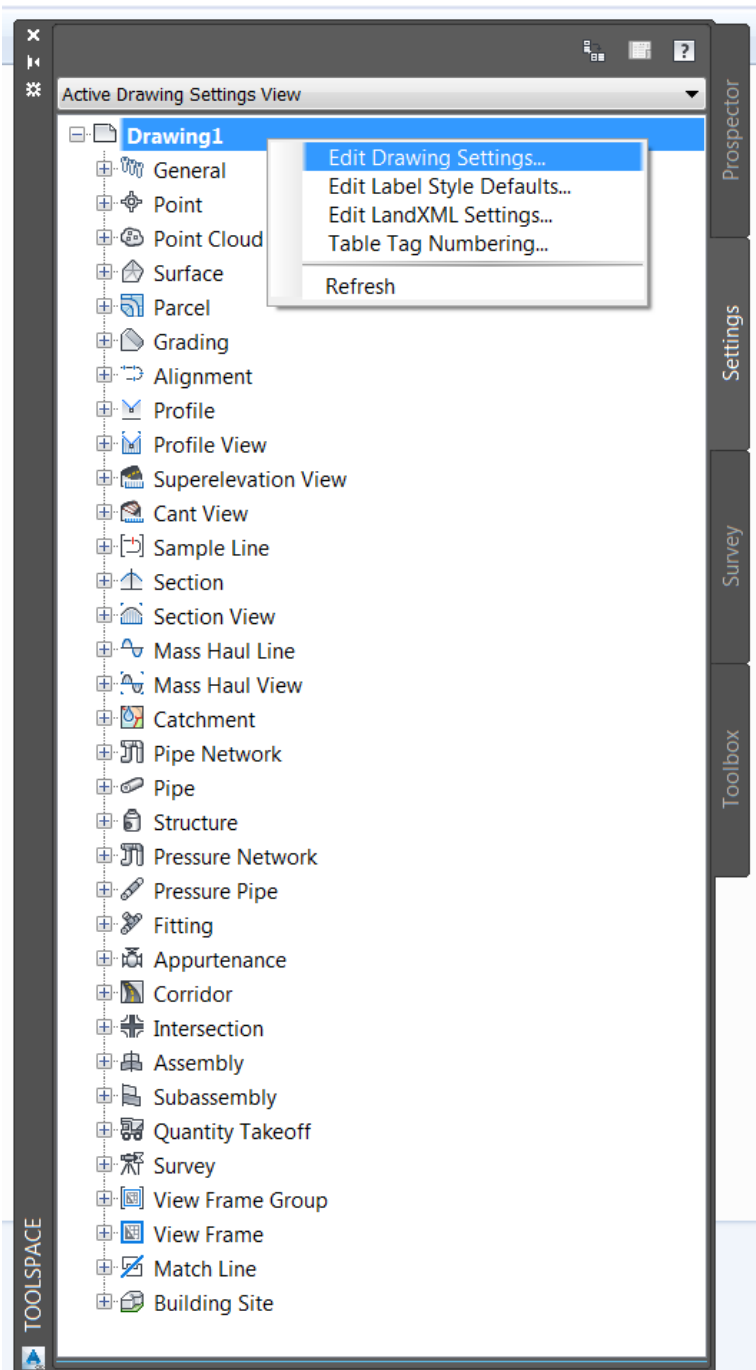
9.1 Style Naming Conventions

Styles will appear alphabetically in Toolspace Settings tab. Naming convention set with prefixes and spaced with use of underscore “_” between words.

Name	Description
<i>_No_Display</i>	<i>ALL Components Turned OFF in ALL Views and set to Layer 0. Will typically appear at top of list.</i>
<i>C_</i>	<i>Intended for f Proposed Objects, style drives nested layers. Layer use set to prefixed of “C-_____”</i>
<i>G_</i>	<i>Generic style, intended for analysis, editing or reviewing.</i>
<i>P_</i>	<i>Intended for f Existing Objects, style drives nested layers. Layer use set to prefixed of “E-_____”</i>
<i>Standard</i>	<i>Not created for USACE use. AutoCAD will at times create styles in categories with this name as default.</i>

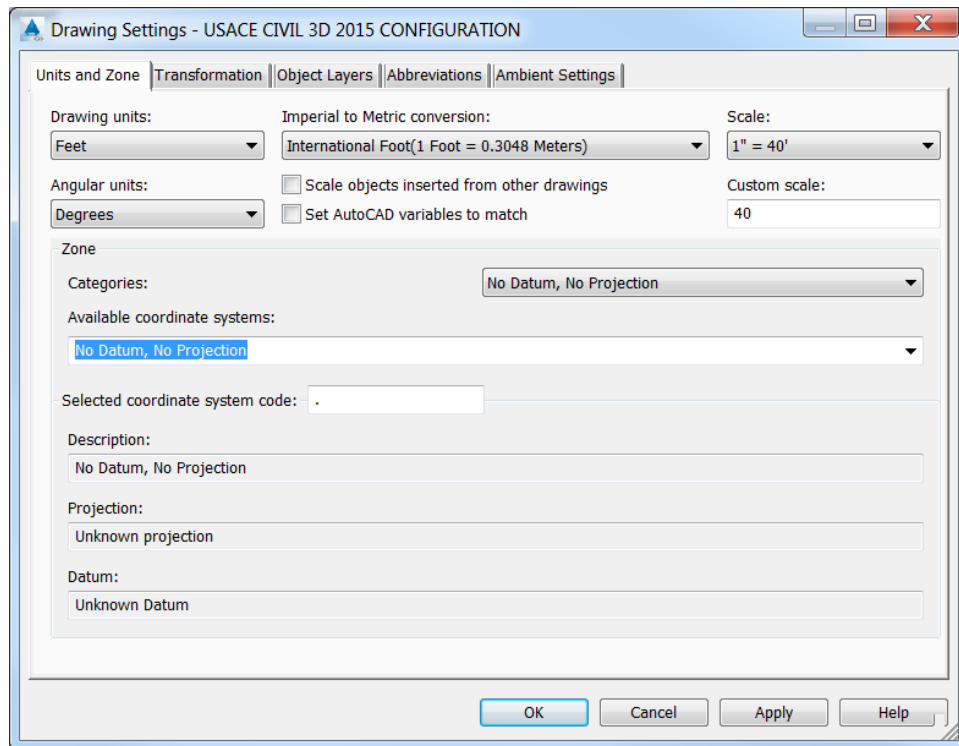
9.2 Edit Drawing Settings...

Civil 3D object layers are available from Edit Drawing Settings. Right click on the drawing name to make them accessible.



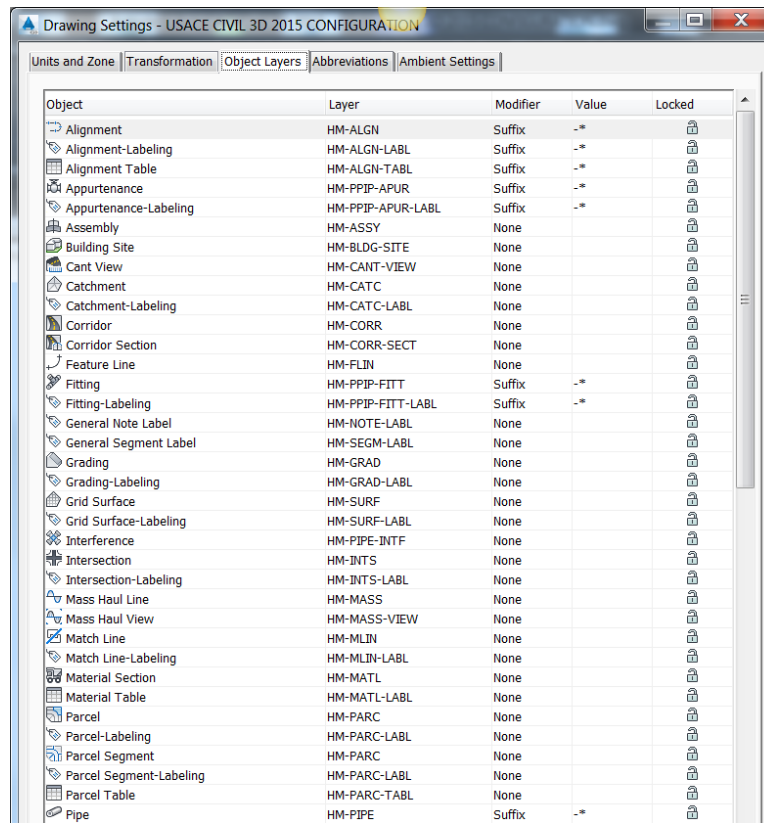
9.3 Units and Zone

Figure below shows the window and tab with Object Layers.



9.4 Object Layers...

Figure below shows the window and tab with Object Layers.



Pipe-Labeling	HM-PIPE-LABL	Suffix	-*	
Pipe and Structure Table	HM-PIPE-TABL	None		
Pipe Network Section	HM-PIPE-SECT	Suffix	-*	
Pipe or Structure Profile	HM-PIPE-PROF	Suffix	-*	
Point Table	HM-PNTS-TABL	None		
Pressure Network Section	HM-PPIP-SECT	Suffix	-*	
Pressure Part Profile	HM-PPIP-PROF	Suffix	-*	
Pressure Part Table	HM-PPIP-TABL	None		
Pressure Pipe	HM-PPIP-PIPE	Suffix	-*	
Pressure Pipe-Labeling	HM-PPIP-FITT-LABL	Suffix	-*	
Profile	HM-PROF	Suffix	-*	
Profile-Labeling	HM-PROF-LABL	None		
Profile View	HM-PROF-VIEW	None		
Profile View-Labeling	HM-PROF-VIEW-LABL	None		
Sample Line	HM-SLIN	None		
Sample Line-Labeling	HM-SLIN-LABL	None		
Section	HM-SECT	None		
Section-Labeling	HM-SECT-LABL	None		
Section View	HM-SECT-VIEW	None		
Section View-Labeling	HM-SECT-VIEW-LABL	None		
Section View Quantity Takeoff Table	HM-SECT-TABL	None		
Sheet	HM-SHET	None		
Structure	HM-PIPE-STRC	Suffix	-*	
Structure-Labeling	HM-PIPE-STRC-LABL	Suffix	-*	
Subassembly	HM-SASS	None		
Superelevation View	HM-SUPR-VIEW	None		
Surface Legend Table	HM-SURF-TABL	None		
Survey Figure	HM-VFIG	None		
Survey Figure-Labeling	HM-VFIG-LABL	None		
Survey Figure Segment Label	HM-VFIG-LABL	None		
Survey Network	HM-VNET	None		
Tin Surface	HM-SURF	Suffix	-*	
Tin Surface-Labeling	HM-SURF-LABL	Suffix	-*	
View Frame	HM-VIEW-FRAM	None		
View Frame-Labeling	HM-VIEW-FRAM-LABL	None		

Enter a single * (asterisk) in the value field to include the object name as the prefix or suffix value in a layer name.

☐ Immediate and independent layer on/off control of display components

OK Cancel Apply Help









Note the immediate and independent layer on/off control button in the bottom left. When this box is selected, the individual component layer exerts some control.

9.5 Ambient Settings...

These are general drawing settings and can be different on an individual Object or Command level settings. Figure below shows the window and tab with Ambient Settings.

The screenshot shows the 'Drawing Settings - USACE CIVIL 3D 2015 CONFIGURATION' window with the 'Ambient Settings' tab selected. The window contains a table with two columns: 'Property' and 'Value'. The properties are grouped into expandable categories, each indicated by a minus sign icon in the 'Property' column.

Property	Value
General	
Plotted Unit Display Type	decimal
Set AutoCAD Units	No
Save Command Changes to Settings	No
Show Event Viewer	Yes
Show Tooltips	Yes
Imperial to Metric conversion	Use International Foot
New Entity Tooltip State	On
Driving Direction	Right Side of the Road
Drawing Unit	foot
Drawing Scale	40,000
Scale Inserted Objects	No
Independent Layer On	No
Degree of Curvature	
Unit Chord Length	100.000
Unit Arc Length	100.000
Labeling	
Labeling Prompt Method	Command Line
Time	
Unit	hr
Precision	3
Rounding	round normal
Unitless	
Precision	3
Rounding	round normal
Sign	sign negative '-'
Distance	
Unit	foot
Precision	3
Rounding	round normal
Sign	sign negative '-'
Dimension	
Unit	inch
Precision	3
Rounding	round normal
Sign	sign negative '-'
Coordinate	
Unit	foot
Precision	4
Rounding	round normal
Sign	sign negative '-'
Grid Coordinate	
Unit	foot
Precision	4
Rounding	round normal
Sign	sign negative '-'
Elevation	
Unit	foot
Precision	3
Rounding	round normal
Sign	sign negative '-'

 Area	
Unit	square foot
Precision	2
Rounding	round normal
Sign	sign negative '-'
 Volume	
Unit	cubic yard
Precision	2
Rounding	round normal
Sign	sign negative '-'
 Speed	
Unit	mile/hr.
Precision	0
Rounding	round normal
Sign	sign negative '-'
 Angle	
Unit	degree
Precision	4
Rounding	round normal
Format	decimal
Sign	sign negative '-'
Drop Decimal for Whole Numbers	no
Drop Leading Zeros for Degrees	no
 Direction	
Unit	degree
Precision	6
Rounding	round normal
Format	DD° MM' SS.SS" (spaced)
Direction	short name
Capitalization	upper case
Sign	sign negative '-'
Measurement Type	Bearings
Bearing Quadrant	1 - NE
Drop Decimal for Whole Numbers	no
Drop Leading Zeros for Degrees	no
 Lat Long	
Unit	degree
Precision	6
Rounding	round normal
Format	DD° MM' SS.SS" (spaced)
Direction	prefix short name
Capitalization	upper case
Drop Decimal for Whole Numbers	no
Drop Leading Zeros for Degrees	no
 Slope	
Precision	2
Rounding	round normal
Format	run:rise
Sign	sign negative '-'
 Grade/Slope	
Precision	2
Rounding	round normal
Format	percent
Sign	sign negative '-'

Station	
Unit	foot
Format	station format
Precision	2
Rounding	round normal
Sign	sign negative '-'
Station Delimiter Character	plus sign '+'
Station Delimiter Position	1+00
Drop Decimal for Whole Numbers	no
Drop Leading Zeros Right of Station Character	yes
Minimum Display Width	0
Acceleration	
Unit	foot/sec.^2
Precision	3
Rounding	round normal
Sign	sign negative '-'
Pressure	
Unit	psi
Precision	2
Rounding	round normal
Sign	sign negative '-'
Transparent Commands	
Prompt for 3D Points	False
Prompt for Y before X	False
Prompt for Easting then Northing	False
Prompt for Longitude then Latitude	False

Rounding: Sets decimal rounding rule for distance.
 Parent Value: N/A
 Parent: Current

Object, Label and Table styles control the display of various Civil 3D entities. Configuration in this area is shared for multiple Civil 3D objects. Naming convention prefix should help indicate where style is used. If a “**Standard**” named style appears it is a Civil 3D configured style and NOT set up for use.

10.1 Multipurpose Styles

10.1.1 Marker Styles

List of created styles:

- _No_Display (USACE)*
- C_ALGN_Marker (USACE)*
- C_ALGN_Marker_Geom (USACE)*
- C_ALGN_Marker_PI (USACE)*
- C_GRID_Marker (USACE)*
- C_PROF_Marker_Geom (USACE)*
- C_PROF_Marker_PVI (USACE)*
- C_TOPO_Spot (USACE)*
- G_CORR_Marked_Point_NPLT (USACE)*
- G_CORR_Marker_Dot_NPLT (USACE)*
- V_TOPO_Spot (USACE)*

10.1.2 Feature Line Styles

List of created styles:

- G_GRAD_Feature_Line_By Layer (USACE)*
- G_NPLT_CORR_Feature_Line (USACE)*

10.1.3 Slope Pattern Styles

List of created styles:

- G_GRAD_Slope_Pattern (USACE)*

10.1.4 Projection Styles

List of created styles:

- C_GIRD_Projection (USACE)*

10.1.5 Code Set Styles

List of created styles:

- C_CORR_Proposed (USACE)*
- G_CORR_Simple (USACE)*
- V_CORR_Existing (USACE)*

10.1.6 Link Styles

List of created styles:

- _No_Display (USACE)*
- C_CORR_Proposed (USACE)*
- V_CORR_Existing (USACE)*

10.1.7 Shape Styles

Used for hatching areas such as in Profile Views, Section Views, Assemblies, Corridors and Sectional Volumes. Bounding areas turned off and only hatch pattern visible.

List of created styles:

- _No_Shade_No_Fill (USACE)*
- C_GRID_PATT_Checkerd (USACE)*
- C_GRID_PATT_Concrete (USACE)*
- C_GRID_PATT_Cut_RED (USACE)*
- C_GRID_PATT_Earth (USACE)*
- C_GRID_PATT_Fill_GREEN (USACE)*
- C_GRID_PATT_Gravel (USACE)*
- C_GRID_PATT_Honey (USACE)*
- C_GRID_PATT_Sand (USACE)*
- C_GRID_PATT_Solid (USACE)*

10.2 Label Styles

10.2.1 Note

List of created styles:

- G_ANNO_NOTE Coords (USACE)*
- G_ANNO_NOTE Empty (USACE)*

10.2.2 Line

List of created styles:

- C_PROP_Brng_over_Dist (USACE)*
 - C_Brng_Only (USACE)*
 - C_Dist_Only (USACE)*
- C_PROP_Line_TAG (USACE)*
- G_ANNO_Grade (USACE)*
- G_ANNO_Slope (USACE)*
- V_PROP_Brng_over_Dist (USACE)*
 - V_Dist_Only (USACE)*
 - V_Brng_Only (USACE)*

10.2.3 Curve

List of created styles:

- C_ANNO_Grade (USACE)*
- C_ANNO_Radi_PERP_Line (USACE)*
- C_ANNO_Slope (USACE)*
- C_PROP_Dist_over_Radi (USACE)*
 - C_Dist_ONLY (USACE)*
 - C_Radi_ONLY (USACE)*
- C_PROP_Tag (USACE)*
- V_PROP_Dist_over_Radi (USACE)*
 - V_Dist_ONLY (USACE)*
 - V_Radi_ONLY (USACE)*

10.2.4 Marker

List of created styles:

- C_ROAD_CORR_Elev_and_Offset [v] (USACE)*
- C_Elev_and_Offset [small] (USACE)*
- C_ROAD_CORR_Elev_Only [v] (USACE)*
- C_Elev_Only [small] (USACE)*

10.2.5 Link

List of created styles:

- C_ROAD_CORR_Grade (USACE)*
- C_Grade [small] (USACE)*
- C_ROAD_CORR_Slope (USACE)*
- C_Slope [small] (USACE)*

10.2.6 Shape

List of created styles:

- C_ROAD_CORR_Code Only (USACE)*
- C_Code_Only [small] (USACE)*
- C_ROAD_CORR_Code_and_Area (USACE)*
- C-Code and Area [small] (USACE)*

11 Points Configuration

11.1 Point User Defined Properties

None Created.

11.2 Point Marker Styles

List of created styles:

<i>__C_TOPO_Spot [x] (USACE)</i>	<i>BECH_Float - Light V_(USACE)</i>
<i>__G_Marker By Layer [x] (USACE)</i>	<i>BECH_Flood Gate V_(USACE)</i>
<i>__V_TOPO_Spot [x] (USACE)</i>	<i>BECH_Floodlight V_(USACE)</i>
<i>_No_Display (USACE)</i>	<i>BECH_Fog Signal V_(USACE)</i>
<i>_V-CHAN_NAV_AIDS (DEFAULT)</i>	<i>BECH_Jetty V_(USACE)</i>
<i>_V-HYDS_COORDINATE GRID (N-E DEFAULT)</i>	<i>BECH_Lanby Superbuoy Navaid V_(USACE)</i>
<i>_V-HYDS_GRID (HIDE)</i>	<i>BECH_Location - Boarding Place V_(USACE)</i>
<i>_V-HYDS_GRID (N-E DEFAULT)</i>	<i>BECH_Location - Boat Harbor Marina V_(USACE)</i>
<i>_V-PROJ_LIMITS (DEFAULT)</i>	<i>BECH_Location - Dolphin V_(USACE)</i>
<i>_V-SURV_CONTROL (DEFAULT)</i>	<i>BECH_Location - Lifeboat V_(USACE)</i>
<i>_Marker By Layer [x] V_(USACE)</i>	<i>BECH_Location - Lighthouse V_(USACE)</i>
<i>AFLD_Windcone V_(USACE)</i>	<i>BECH_Location - Pilot Office V_(USACE)</i>
<i>BCNS_Beacon - General V_(USACE)</i>	<i>BECH_Location - Production Platform Oil Derrick V_(USACE)</i>
<i>BCNS_Beacon - Lattice V_(USACE)</i>	<i>BECH_Location - Tide Gauge V_(USACE)</i>
<i>BCNS_Beacon - Refuge V_(USACE)</i>	<i>BECH_Marker - Green Day V_(USACE)</i>
<i>BCNS_Beacon - Tower V_(USACE)</i>	<i>BECH_Marker - Open River Mile V_(USACE)</i>
<i>BECH_Buoy - Barrel V_(USACE)</i>	<i>BECH_Marker - Red Day V_(USACE)</i>
<i>BECH_Buoy - Barrel1 V_(USACE)</i>	<i>BECH_Marker - Solid River Mile V_(USACE)</i>
<i>BECH_Buoy - Bell V_(USACE)</i>	<i>BECH_Numerous Moorings V_(USACE)</i>
<i>BECH_Buoy - Can V_(USACE)</i>	<i>BECH_Range Extension V_(USACE)</i>
<i>BECH_Buoy - Conical V_(USACE)</i>	<i>BECH_Range Star V_(USACE)</i>
<i>BECH_Buoy - Gong V_(USACE)</i>	<i>BECH_Station - Coast Radar V_(USACE)</i>
<i>BECH_Buoy - Ocean Data Acq Sys V_(USACE)</i>	<i>BECH_Station - Distress Signal V_(USACE)</i>
<i>BECH_Buoy - Pillar V_(USACE)</i>	<i>BECH_Station - Port Control Signal V_(USACE)</i>
<i>BECH_Buoy - Privately Maintained V_(USACE)</i>	<i>BECH_Station - Signal - General V_(USACE)</i>
<i>BECH_Buoy - Seaplane Anchorage V_(USACE)</i>	<i>BECH_Tidestaff V_(USACE)</i>
<i>BECH_Buoy - Spar Buoy Spindle V_(USACE)</i>	<i>BECH_Vessel - Light V_(USACE)</i>
<i>BECH_Buoy - Spherical V_(USACE)</i>	<i>BECH_Vessel - Unmanned Light V_(USACE)</i>
<i>BECH_Buoy - Super V_(USACE)</i>	<i>BECH_Withy - Port Hand V_(USACE)</i>
<i>BECH_Buoy - Whistle V_(USACE)</i>	<i>BECH_Withy - Port Hand Perch V_(USACE)</i>
<i>BECH_Buoy V_(USACE)</i>	<i>BECH_Withy - Starboard Hand V_(USACE)</i>
<i>BECH_Buoyant Beacon V_(USACE)</i>	<i>BECH_Withy - Starboard Hand Perch V_(USACE)</i>
<i>BECH_Coast Guard Rescue Station V_(USACE)</i>	<i>BECH_Wreck - Depth Unknown - Dangerous V_(USACE)</i>
<i>BECH_Coast Guard Rescue Station2 V_(USACE)</i>	<i>BECH_Wreck - Partly Exposed V_(USACE)</i>
<i>BECH_Coast Guard Rescue Station3 V_(USACE)</i>	<i>BECH_Wreck - Sunken - Not Dangerous V_(USACE)</i>
<i>BECH_Coast Guard Station V_(USACE)</i>	<i>BORE_Boring with Inclinator V_(USACE)</i>
<i>BECH_Coast Guard Station4 V_(USACE)</i>	
<i>BECH_Coast Guard Station5 V_(USACE)</i>	

BORE_Cairn V_(USACE)
 BORE_Cone Penetrometer Hole V_(USACE)
 BORE_Consolidated Drained V_(USACE)
 BORE_Consolidated Drained Dir Shear V_(USACE)
 BORE_Consolidated Undrained V_(USACE)
 BORE_Consolidated Undrained Triaxial Test V_(USACE)
 BORE_Consolidation V_(USACE)
 BORE_Consolidation Test V_(USACE)
 BORE_Core Drill Hole Drilled V_(USACE)
 BORE_Core Drill Hole Undrilled V_(USACE)
 BORE_Disturb Sample Boring With Piezometer V_(USACE)
 BORE_Drill Hole V_(USACE)
 BORE_Drive Sampled Spot And Cor V_(USACE)
 BORE_Drive Sampled Spot And Cor Hydraulic Press Tested V_(USACE)
 BORE_Drive Sampled Spot And Cor With Piezometer V_(USACE)
 BORE_Drive Sampled Spot Cor Hydraulic Press Test Piezometer V_(USACE)
 BORE_Drive Sampled Spot Hole V_(USACE)
 BORE_Fault Block Movement 1 V_(USACE)
 BORE_Fault Block Movement 2 V_(USACE)
 BORE_High Angle Fault 1 V_(USACE)
 BORE_High Angle Fault 2 V_(USACE)
 BORE_Horizontal Beds V_(USACE)
 BORE_Location - Magnetometer Detection V_(USACE)
 BORE_Location - Potential Release V_(USACE)
 BORE_Monitoring Probe - Landfill Gas V_(USACE)
 BORE_Monitoring Probe - Soil Gas V_(USACE)
 BORE_Monitoring Station - Groundwater Quality V_(USACE)
 BORE_Monitoring Station - Surface Water Quality V_(USACE)
 BORE_Nonsampled Area Of Hole V_(USACE)
 BORE_Piezometer V_(USACE)
 BORE_Piezometer Abandoned V_(USACE)
 BORE_Piezometer Or Observat Hole V_(USACE)
 BORE_Proposed Exploration V_(USACE)
 BORE_Refusal Slashes V_(USACE)
 BORE_Relief Well V_(USACE)
 BORE_Sample V_(USACE)
 BORE_Strike Dip V_(USACE)
 BORE_Strike Dip Of Inclined V_(USACE)
 BORE_Strike Of Vertical Joint V_(USACE)
 BORE_Strike W Vertical Dip V_(USACE)

BORE_Subsurface Investigation - Trench Exploration Completed V_(USACE)
 BORE_Subsurface Investigation - Trench Exploration Proposed V_(USACE)
 BORE_Subsurface Investigation - Tunnel Exploration Completed V_(USACE)
 BORE_Subsurface Investigation - Tunnel Exploration Proposed V_(USACE)
 BORE_Test Pit In Overburden V_(USACE)
 BORE_Unconsolidated Underground Triaxial Test V_(USACE)
 BORE_Unconsolidated Undrained V_(USACE)
 BORE_Undisturbed Denison Or Push V_(USACE)
 BORE_Undisturbed Sample Boring Piezometer V_(USACE)
 BORE_Uplift Cell V_(USACE)
 BORE_Vertical Core Hole V_(USACE)
 BORE_Vertical Core Hole Hydraulic Press Tested V_(USACE)
 BORE_Washbored V_(USACE)
 COMM_Guy V_(USACE)
 COMM_Manhole - Communications V_(USACE)
 COMM_Manhole - Telephone V_(USACE)
 COMM_Pedestal - Communications V_(USACE)
 COMM_Pole - Arial With Guying V_(USACE)
 COMM_Pole - Utility V_(USACE)
 DOMW_Backflow Preventer Double Check V_(USACE)
 DOMW_Backflow Preventer Rpz V_(USACE)
 DOMW_Hydrant - Fire V_(USACE)
 DOMW_Hydrant - Pan V_(USACE)
 DOMW_Hydrant - Wall V_(USACE)
 DOMW_Hydrant - One Hose Outlet V_(USACE)
 DOMW_Hydrant - Two Hose Outlet V_(USACE)
 DOMW_Hydrant - Wall Two Hose Outlet V_(USACE)
 DOMW_Monitoring Well V_(USACE)
 DOMW_Piping-Thrust Block V_(USACE)
 DOMW_Storage Tank-Water Utility V_(USACE)
 DOMW_Submerged Production Well V_(USACE)
 DOMW_Suspended Well Depth Known V_(USACE)
 DOMW_Suspended Well Depth Unknown V_(USACE)
 DOMW_Utility-Water Handhole V_(USACE)
 DOMW_Utility-Water Manhole V_(USACE)
 DOMW_Utility-Water Meter V_(USACE)
 DOMW_Utility-Water Meter Station V_(USACE)
 DOMW_Utility-Water Plant V_(USACE)
 DOMW_Utility-Water Station Pump V_(USACE)

<i>DOMW_ Utility-Water Tank V_(USACE)</i>	<i>POWR_Handhole - Electrical - Primary V_(USACE)</i>
<i>DOMW_ Utility-Water Valve Vault V_(USACE)</i>	<i>POWR_Manhole - Electrical V_(USACE)</i>
<i>DOMW_Valve - General V_(USACE)</i>	<i>POWR_Pole - Arial With Guying V_(USACE)</i>
<i>DOMW_Valve - Regulator V_(USACE)</i>	<i>POWR_Pole - Light - One Arm V_(USACE)</i>
<i>EROS_Dam - Rock - Sediment Trap V_(USACE)</i>	<i>POWR_Pole - Utility V_(USACE)</i>
<i>EROS_Sediment Control Temporary Diversion V_(USACE)</i>	<i>POWR_Tower - Transmission V_(USACE)</i>
<i>EROS_Sediment Trap - Stone Outlet V_(USACE)</i>	<i>POWR_Transformer - Constnt Current V_(USACE)</i>
<i>EROS_Silt Fence V_(USACE)</i>	<i>POWR_Transformer - Pad Mounted V_(USACE)</i>
<i>EROS_Silt Fence - Rock Overflow V_(USACE)</i>	<i>POWR_Transformer - Pole Mounted V_(USACE)</i>
<i>EROS_Straw Bale V_(USACE)</i>	<i>POWR_Transformer - Vault V_(USACE)</i>
<i>FUEL_Manhole - Utility Services V_(USACE)</i>	<i>POWR_Transformer - Wye Connection V_(USACE)</i>
<i>FUEL_Tank - Above Ground V_(USACE)</i>	<i>POWR_Weather Head - Arial Service V_(USACE)</i>
<i>FUEL_Tank - Below Ground V_(USACE)</i>	<i>PRKG_Ballast V_(USACE)</i>
<i>FUEL_Valve General V_(USACE)</i>	<i>PRKG_MRKG [x] V_(USACE)</i>
<i>FUEL_Valve Regulator V_(USACE)</i>	<i>PRKG_Tire Treddle V_(USACE)</i>
<i>FULE_Tank - Fuel Storage V_(USACE)</i>	<i>RAIL_Signal V_(USACE)</i>
<i>HTCW-Steam Pit V_(USACE)</i>	<i>RAIL_Switch V_(USACE)</i>
<i>INDW_Industrial Waste Water Manhole V_(USACE)</i>	<i>ROAD_CL [x] V_(USACE)</i>
<i>INDW_Industrial Waste Water Meter V_(USACE)</i>	<i>ROAD_MRKG - Parking Turn Arrow V_(USACE)</i>
<i>INDW_Valve - General V_(USACE)</i>	<i>ROAD_MRKG - Straight And Turn Arrow V_(USACE)</i>
<i>INDW_Valve - Regulator V_(USACE)</i>	<i>ROAD_MRKG - Straight Direction Arrow V_(USACE)</i>
<i>NGAS_Piping - Natural Gas - Receiver V_(USACE)</i>	<i>ROAD_MRKG [x] V_(USACE)</i>
<i>NGAS_Piping - Natural Gas - Shutoff V_(USACE)</i>	<i>ROAD_Sign V_(USACE)</i>
<i>NGAS_Tank - Above Ground V_(USACE)</i>	<i>SITE_Fence V_(USACE)</i>
<i>NGAS_Tank - Below Ground V_(USACE)</i>	<i>SITE_Mailbox V_(USACE)</i>
<i>NGAS_Utility - Gas Plant V_(USACE)</i>	<i>SITE_Manhole - Utility Services V_(USACE)</i>
<i>NGAS_Utility - Natural Gas - Manhole V_(USACE)</i>	<i>SITE_Pole - Arial With Guying V_(USACE)</i>
<i>NGAS_Utility - Natural Gas - Meter V_(USACE)</i>	<i>SITE_Pole - Utility V_(USACE)</i>
<i>NGAS_Utility - Natural Gas - Trap V_(USACE)</i>	<i>SITE_Post V_(USACE)</i>
<i>NGAS_Valve - Regulator V_(USACE)</i>	<i>SITE_Sign V_(USACE)</i>
<i>NGAS_Vavle General V_(USACE)</i>	<i>SITE_Site Remediation - Storage Container Agent V_(USACE)</i>
<i>OBST_Obstruction V_(USACE)</i>	<i>SITE_Tank - Above Ground V_(USACE)</i>
<i>OBST_Obstruction - Kelp Seaweed V_(USACE)</i>	<i>SITE_Tank - Below Ground V_(USACE)</i>
<i>OBST_Obstruction - Rock - Danger Low Water V_(USACE)</i>	<i>SITE_Tower V_(USACE)</i>
<i>OBST_Obstruction - Rock - Danger Underwater - Depth Unknown V_(USACE)</i>	<i>SITE_Utility - Unknown V_(USACE)</i>
<i>OBST_Obstruction - Submerged Pile W Position V_(USACE)</i>	<i>SITE_Utility Unkown V_(USACE)</i>
<i>OBST_Obstruction - Wholly Submerged Post Or Pile V_(USACE)</i>	<i>SITE_Valve - General V_(USACE)</i>
<i>PAVE_MRKG [x] V_(USACE)</i>	<i>SITE_Valve - Regulator V_(USACE)</i>
<i>POWR-Arial Rod V_(USACE)</i>	<i>SITE_VEGE_Coniferous Shrub V_(USACE)</i>
<i>POWR_Distribution Switch Or Switching Station V_(USACE)</i>	<i>SITE_VEGE_Coniferous Tree V_(USACE)</i>
<i>POWR_Electrical - Guy Wire V_(USACE)</i>	<i>SITE_VEGE_Deciduous Shrub V_(USACE)</i>
<i>POWR_Electrical - Handhole V_(USACE)</i>	<i>SITE_VEGE_Deciduous Tree V_(USACE)</i>
	<i>SITE_VEGE_Generic Tree V_(USACE)</i>
	<i>SITE_Water Level V_(USACE)</i>
	<i>SPCL_Traffic Arm V_(USACE)</i>
	<i>SPCL_Traffic Signal - Controller V_(USACE)</i>
	<i>SPCL_Traffic Signal - Mast Arm V_(USACE)</i>

<i>SPCL_Traffic Signal - Ph No_Thru V_(USACE)</i>	<i>SURV_Survey Pedestal V_(USACE)</i>
<i>SPCL_Traffic Signal - Ph No_Turn V_(USACE)</i>	<i>SURV_Symbol - Hexagon V_(USACE)</i>
<i>SSWR_Sign V_(USACE)</i>	<i>SURV_Symbol - Square V_(USACE)</i>
<i>SSWR_Utility-Septic Tank V_(USACE)</i>	<i>SURV_Symbol - Test Hole V_(USACE)</i>
<i>SSWR_Utility - Sanitary Cleanout V_(USACE)</i>	<i>SURV_Symbol - Triangle V_(USACE)</i>
<i>SSWR_Utility - Sanitary Manhole V_(USACE)</i>	<i>SURV_Triangulation Point V_(USACE)</i>
<i>SSWR_Utility - Sanitary Meter V_(USACE)</i>	<i>SURV_Unsatisfactory Limit V_(USACE)</i>
<i>SSWR_Utility - Sanitary Pressure Vessel V_(USACE)</i>	<i>TOPO_Anticline V_(USACE)</i>
<i>SSWR_Utility - Sanitary Sewer Lift Station V_(USACE)</i>	<i>TOPO_Syncline V_(USACE)</i>
<i>SSWR_Utility - Sanitary Valve Vault V_(USACE)</i>	<i>WATR_Backflow Preventer Double Check V_(USACE)</i>
<i>SSWR_Valve - General V_(USACE)</i>	<i>WATR_Backflow Preventer Rpz V_(USACE)</i>
<i>STRM_Culvert End Symbol V_(USACE)</i>	<i>WATR_Hydrant - Fire V_(USACE)</i>
<i>STRM_Drainage - Catch Basin V_(USACE)</i>	<i>WATR_Hydrant - Pan V_(USACE)</i>
<i>STRM_Drainage - Catch Basin - Round V_(USACE)</i>	<i>WATR_Hydrant - Wall V_(USACE)</i>
<i>STRM_Drainage - Open Tile Drain V_(USACE)</i>	<i>WATR_Hydrant - One Hose Outlet V_(USACE)</i>
<i>STRM_Drainage - Spray Pond V_(USACE)</i>	<i>WATR_Hydrant - Two Hose Outlet V_(USACE)</i>
<i>STRM_Foundation Drain V_(USACE)</i>	<i>WATR_Hydrant - Wall Two Hose Outlet V_(USACE)</i>
<i>STRM_Headwall V_(USACE)</i>	<i>WATR_Monitoring Well V_(USACE)</i>
<i>STRM_Inlet V_(USACE)</i>	<i>WATR_Piping-Thrust Block V_(USACE)</i>
<i>STRM_Main Pipe [x] V_(USACE)</i>	<i>WATR_Sign V_(USACE)</i>
<i>STRM_Roof [x] V_(USACE)</i>	<i>WATR_Storage Tank-Water Utility V_(USACE)</i>
<i>STRM_Serv Pipe [x] V_(USACE)</i>	<i>WATR_Submerged Production Well V_(USACE)</i>
<i>STRM_Sign V_(USACE)</i>	<i>WATR_Suspended Well Depth Known V_(USACE)</i>
<i>STRM_Utility - Storm Drainage Device V_(USACE)</i>	<i>WATR_Suspended Well Depth Unknown V_(USACE)</i>
<i>STRM_Utility - Storm Drainage Manhole V_(USACE)</i>	<i>WATR_Tank - Above Ground V_(USACE)</i>
<i>STRM_Weir V_(USACE)</i>	<i>WATR_Tank - Below Ground V_(USACE)</i>
<i>SURV_Bench Mark [CTRL] V_(USACE)</i>	<i>WATR_Utility-Water Handhole V_(USACE)</i>
<i>SURV_Bench Mark Alternate V_(USACE)</i>	<i>WATR_Utility-Water Manhole V_(USACE)</i>
<i>SURV_Boundary_Mark [CTRL] V_(USACE)</i>	<i>WATR_Utility-Water Meter V_(USACE)</i>
<i>SURV_Corner Not Found V_(USACE)</i>	<i>WATR_Utility-Water Meter Station V_(USACE)</i>
<i>SURV_Fixed Point V_(USACE)</i>	<i>WATR_Utility-Water Plant V_(USACE)</i>
<i>SURV_Iron Pin and Cap V_(USACE)</i>	<i>WATR_Utility-Water Station Pump V_(USACE)</i>
<i>SURV_Observation Spot V_(USACE)</i>	<i>WATR_Utility-Water Tank V_(USACE)</i>
<i>SURV_Photo Control Point V_(USACE)</i>	<i>WATR_Utility-Water Valve Vault V_(USACE)</i>
<i>SURV_Pole Stake V_(USACE)</i>	<i>WATR_Valve - Regulator V_(USACE)</i>
<i>SURV_Section Corner T Open V_(USACE)</i>	<i>WATR_Valve General V_(USACE)</i>
<i>SURV_Stake Perch V_(USACE)</i>	<i>WATR_Water Softener V_(USACE)</i>
<i>SURV_Surface Displacement Monument V_(USACE)</i>	<i>WETL_Swamp V_(USACE)</i>

11.3 Point Label Styles

List of created styles:

- _No_Display (USACE)*
- _V-HYDS GRID (DEFAULT) N-E TICK_ONLY*
- _V-HYDS GRID_EDGE (BOTTOM)_EASTING ONLY*
- _V-HYDS GRID_EDGE (LEFT)_NORTHING ONLY*

_V-HYDS GRID_EDGE (RIGHT)_NORTHING ONLY
 _V-HYDS GRID_EDGE (TOP)_EASTING ONLY
 _V-HYDS GRID_WITH_N&E (NE)
 _V-HYDS GRID_WITH_N&E (NW)
 _V-HYDS GRID_WITH_N&E (SE)
 _V-HYDS GRID_WITH_N&E (SW)
 _V-NAV AIDS-LABEL (NAME ONLY)
 _V-PROJECT LIMITS (POINT# WITH CIRCLE) - DEFAULT
 _V-SURVEY_CONTROL-LABEL (DEFAULT)
 C_Elev_Only (USACE)
 C_Num_Elev_Desc (USACE)
 V_Desc_and Att_1-10 (USACE)
 V_Desc_N_E_Elev (USACE)
 V_Desc_Only (USACE)
 V_Elev_Only (USACE)
 V_Name_Only (USACE)
 V_Num_Elev_Desc (USACE)

11.4 Point Point File Format

List of created styles:

_USACE NAME_N_E_Z_D (comma delimited)
 _USACE NUMB_N_E_Z_D (comma delimited)
 Autodesk Up-loadable File
 ENZ (comma delimited)
 ENZ (space delimited)
 External Project Point Database
 NEZ (comma delimited)
 NEZ (space delimited)
 PENZ (comma delimited)
 PENZ (space delimited)
 PENZD (comma delimited)
 PENZD (space delimited)
 PNE (comma delimited)
 PNE (space delimited)
 PNEZ (comma delimited)
 PNEZ (space delimited)
 PNEZD (comma delimited)
 PNEZD (space delimited)

11.5 Description Keys

Description keys are a list of descriptions and parameters that control how pons look and behave once they are imported or created in drawings. Enables the automation and processing of points. This configuration is saved into template. Special characters will act as wildcards to process more data at once. Below the asterisk (*) used below is used at end of code as wild card.

List of created point codes, **National Alpha Codes (USACE)**:

AC*	CLG*	ER	MBX*	SOC*
AP	CLL*	ERF*	MH	SP
APR*	CLR*	ERP*	MON	SPT*
ASP*	CLRD	ESH*	MSH*	SPV*
ATO*	CLW*	ESL*	MTR*	SRR*
ATP	CND*	ESP*	MTX*	STMH
BAL*	CNL*	ESR*	NG	STP*
BBP*	COH*	EW	NGP*	SW*
BBT*	CON*	FC	OH	SWK*
BCR*	COR*	FEP*	PIC*	TB
BF	CPG*	FH*	PIM*	TBK*
BFB*	CR	FIP*	PIN*	TBL*
BL	CRA*	FL	PIP*	TBP*
BLD*	CRB*	FLB*	PIR*	TBR*
BLK*	CRD*	FLC*	PIS*	TBS*
BM*	CRK*	FLD*	PL	TC*
BNT*	CRN*	FLW*	PLC*	TCB*
BOD*	CRT*	FP	PLG*	TCR*
BOS*	CRW*	FS	POR*	TCS*
BOT*	CSP*	FSC*	PPE*	TCW*
BRC*	CTD*	FST*	PPL*	TEC*
BRDG*	CTH*	FTG*	PRK*	TED*
BRF*	CUB*	GAC*	PS	TEL*
BRK*	CUL*	GAP*	PSC*	TEP*
BRW*	DKE*	GAT*	PST*	TIP*
BS*	DRI*	GGE*	PVC	TNK*
BW	DRN*	GL	PWC*	TOB*
CA	DRV*	GM	PWL*	TOC*
CAP*	EA*	GR	RAL*	TOD*
CAR*	EAR*	GRN*	RCK*	TOE*
CB	EC	GRV*	RCP*	TOL*
CBC*	ECB*	GTB*	RD	TOP*
CBK*	ECC*	GUY*	RDM*	TOR*
CBL*	ECR*	GVL*	RMP*	TOW*
CBT*	ECW*	HBK*	ROW*	TP
CCL*	EDR*	HED*	RP	TPB*
CCP*	EFB*	HL	RR	TPC*
CCR*	EGL*	HSE*	RRP	TPL*
CDR*	ELI*	HUB*	SCO*	TPR*
CFP*	EMG*	HWL*	SGN*	TPT*
CG	EOA*	HYD*	SGP*	TPW*
CH	EOB*	INV*	SHD*	TR*
CHW*	EOC*	IP*	SHL*	TRA*
CLB*	EOM*	IR*	SHM	TRK*
CLC*	EOR*	IRL*	SLP*	TRL*
CLD*	EP	LPL*	SND*	TRN*
CLDT	EPL*	LW*	SNG*	TRW*

<i>TSP*</i>	<i>UTL*</i>	<i>WES*</i>	<i>WM</i>	<i>WW</i>
<i>TWB*</i>	<i>VAL*</i>	<i>WF</i>	<i>WMA*</i>	<i>XBR*</i>
<i>TWR*</i>	<i>WBK*</i>	<i>WFL*</i>	<i>WRW*</i>	
<i>TWW*</i>	<i>WBT*</i>	<i>WL</i>	<i>WS</i>	
<i>UBX*</i>	<i>WDP*</i>	<i>WLK*</i>	<i>WSB*</i>	
<i>UGT*</i>	<i>WE</i>	<i>WLN*</i>	<i>WV</i>	

11.6 Point Tables

List of created styles:

G_SCHD_Navigation_Aids (USACE)
G_SCHD_Num_Lat_Long (USACE)
G_SCHD_Num_North_East_Elev_Desc_Atts_1-10 (USACE)
G_SCHD_Obstruction_Data (USACE)
G_SCHD_Primary_SPI_PVI (USACE)
G_SCHD_Project_Limits_By_PT_Name (USACE)
G_SCHD_Project_Limits_By_PT_Num (USACE)
G_SCHD_Secondary_SPI_PVI (USACE)
G_SCHD_Sediment_Sample (USACE)
G_SCHD_Survey_Control_Data (USACE)
G_SCHD_Water_Quality (USACE)

12 Point Cloud Configuration

12.1 Point Cloud Styles

List of created styles:

- _No_Display (USACE)*
- V_SITE_Elevation_Ranges (USACE)*
- V_SITE_LIDAR_Point_Classification (USACE)*
- V_SITE_True_Color (USACE)*

13 Surfaces Configuration

13.1 Surface Styles

List of created styles:

- _No_Display (USACE)*
- C_TOPO_Contours_1ft_5ft (USACE)*
- C_TOPO_Contours_2ft_10ft (USACE)*
- G_Analysis_Elevation (USACE)*
- G_Analysis_Slopes (USACE)*
- G_Analysis_Watershed (USACE)*
- G_Review_TIN_Blue (USACE)*
- G_Review_TIN_Red (USACE)*
- G_Review_TIN_Yellow (USACE)*
- G_TOPO_Border_Only (USACE)*
- G_TOPO_Surface_Edits (USACE)*
- V_HYDS_Contours_1ft_2ft (USACE)*
- V_HYDS_Contours_2ft_10ft (USACE)*
- V_HYDS_Contours_2ft_10ft_with_MLLW (USACE)*
- V_TOPO_Contours_1ft_5ft (USACE)*
- V_TOPO_Contours_2ft_10ft (USACE)*

13.2 Surface Label Styles

13.2.1 Contour

List of created styles:

- C_TOPO_Major (USACE)*
- C_TOPO_Minor (USACE)*
- C_TOPO_User (USACE)*
- V_HYDS_Major (USACE)*
- V_HYDS_Minor (USACE)*
- V_HYDS_MLLW (USACE)*
- V_TOPO_Major (USACE)*
- V_TOPO_Minor (USACE)*
- V_TOPO_User (USACE)*

13.2.2 Slope

List of created styles:

- C_TOPO_Grade (USACE)*
- C_TOPO_Slope (USACE)*
- V_TOPO_Grade (USACE)*
- V_TOPO_Slope (USACE)*

13.2.3 Spot Elevation

List of created styles:

- C_TOPO_Spot_Elev (USACE)*
- V_TOPO_Spot_Elev (USACE)*

13.2.4 Watershed

List of created styles:

C_WATR_Watershed (USACE)

G_TOPO_No Label (USACE)

V_WATR_Watershed (USACE)

13.3 Surface Tables

13.3.1 Direction

List of created styles:

G_SCHD_Direction_Table (USACE)

13.3.2 Elevation

List of created styles:

G_SCHD_Elevation_Table (USACE)

13.3.3 Slope

List of created styles:

G_SCHD_Slope_Table (USACE)

13.3.4 Slope Arrow

List of created styles:

G_SCHD_Slope_Arrow_Table (USACE)

13.3.5 Contour

List of created styles:

G_SCHD_Contour_Table (USACE)

13.3.6 Watershed

List of created styles:

G_SCHD_Watershead_Table (USACE)

13.3.7 User-Defined Contour

List of created styles:

G_SCHD_User_Defined_Contour_Table (USACE)

14 Parcels Configuration

14.1 Parcel User-Defined Properties Classifications

None Crated.

14.2 Parcel Styles

List of created styles:

_No_Display (USACE)
G_PROP_NO_Fill_By_Layer (USACE)

14.3 Parcel Label Styles

14.3.1 Area

List of created styles:

_No_Label (USACE)
C_PROP_Name_Only (USACE)
C_PROP_Number_and_Area (USACE)
C_PROP_Number_Only (USACE)
V_PROP_Name_Only (USACE)
V_PROP_Number_and_Area (USACE)
V_PROP_Number_Only (USACE)

14.3.2 Line

Configuration is shared and styles can be found in the **General Section 7**, available style indicates this.

_Use_General_Set_Up (USACE)

14.3.3 Curve

Configuration is shared and styles can be found in the **General Section 7**, available style indicates this.

_Use_General_Set_Up (USACE)

14.4 Parcel Table Styles

14.4.1 Line

List of created styles:

G_SCHD_Line_Table (USACE)

14.4.2 Curve

List of created styles:

G_SCHD_Line_Table (USACE)

14.4.3 Segment

List of created styles:

G_SCHD_Segments_Table (USACE)

14.4.4 Area

List of created styles:

G_SCHD_Area_Table (USACE)

15 Grading Configuration

15.1 Grading Styles

Objects are not configured to plot as they are meant for modeling grading conditions to then create a “Final” surface. Colors have been hardcoded to reduce the number of layers.

List of created styles:

C_NPLT_Cut (USACE)

C_NPLT_Fill (USACE)

C_NPLT_General (USACE)

15.2 Grading Criteria Set

Grading objects are 3D projections that need a criteria that describes how it is to be created from a feature line. The configured set fro USACE: ***C_Criteria Set (USACE)***

Slope to Absolute Elev

Slope to Distance

Slope to Relative Elev

Slope to Surface

16 Alignment Configuration

16.1 Alignment Styles

List of created styles:

- _No_Display (USACE)*
- C_ALGN_CL (USACE)*
- G_ALGN_CL_By_Layer (USACE)*
- V_ALGN_CL (USACE)*

16.2 ALIGNMENT Design Checks

None Created.

16.3 Alignment Label Styles

16.3.1 Label Sets

Saved Collections of pre-configured labels, locations and interval saved in Label Set. Styles are picked out from the “**Station**” collection below (13.3.2).

List of created sets:

- _Empty Label Set (USACE)*
- C_ALGN_PARA_LT_Majr100_Minr50_Geom_Pnts (USACE)*
- C_ALGN_PARL_LT_Majr100_Only (USACE)*
- C_ALGN_PERP_CNTR_LT_Majr100_Minr50 (USACE)*
- C_ALGN_PERP_OFST_LT_Majr100_Minr50 (USACE)*
- C_ALGN_PERP_OFST_RT_Majr100_Minr50 (USACE)*
- V_ALGN_PARL_LT_Majr100_Minr50 (USACE)*
- V_ALGN_PERP_CNTR_LT_Majr100_Minr50 (USACE)*
- V_ALGN_PERP_LT_Majr100_Minr50 (USACE)*

16.3.2 Station

This configuration is for annotation ON the Alignment (line, curve or spiral).

16.3.2.1 Major Station:

List of created styles:

- C_ALGN_PARL_LT_Majr_Stat_Tick (USACE)*
- C_ALGN_PARL_RT_Majr_Stat_Tick (USACE)*
- C_ALGN_PERP_CNTR_LT_Majr_Stat_Plus (USACE)*
- C_ALGN_PERP_CNTR_RT_Majr_Stat_Plus (USACE)*
- C_ALGN_PERP_OFST_LT_Majr_Stat_Tick (USACE)*
- C_ALGN_PERP_OFST_RT_Majr_Stat_Tick (USACE)*
- V_ALGN_PARL_LT_Majr_Stat_Tick (USACE)*
- V_ALGN_PARL_RT_Majr_Stat_Tick (USACE)*
- V_ALGN_PERP_CNTR_LT_Majr_Stat_Plus (USACE)*
- V_ALGN_PERP_OFST_LT_Majr_Stat_Tick (USACE)*
- V_ALGN_PERP_OFST_RT_Majr_Stat_Tick (USACE)*

16.3.2.2 Minor Station:

List of created styles:

C_ALGN_PERP_CNTR_Minr_Tick_Only (USACE)

V_ALGN_PERP_CNTR_Minr_Tick_Only (USACE)

16.3.2.3 Geometry Point:

List of created styles:

C_ALGN_Horiz_RT_Coords_Line (USACE)

C_ALGN_PERP_LT_Coords_Line (USACE)

C_ALGN_PERP_LT_Geom_Pnts_Stat_Line (USACE)

C_ALGN_PERP_LT_Geom_Pnts_Stat_No_Line (USACE)

C_ALGN_PERP_RT_Geom_Pnts_Stat_Line (USACE)

16.3.2.4 Profile Geometry Point:

List of created styles:

C_ALGN_PERP_LT_Prof_Geom_Pnts_Stat_Line (USACE)

16.3.2.5 Station Equation:

List of created styles:

C_ALGN_PERP_RT_Stat_Eqtn_Line (USACE)

16.3.2.6 Design Speed:

List of created styles:

C_ALGN_PERP_RT_Dsgn_Speed_Stat_Line (USACE)

16.3.2.7 Superlevation Critical Points:

List of created styles:

C_ALGN_PERP_LT_Super_Stat_Line (USACE)

16.3.2.8 Cant Critical Points:

List of created styles:

C_ALGN_PERP_LT_Cant_Pnts_Stat (USACE)

16.3.3 Station Offset

List of created styles:

C_ALGN_Coords_ONLY (USACE)

C_ALGN_Data_No_Border (USACE)

C_ALGN_Data_with_Border (USACE)

C_ALGN_Intersection_ALGN1_ALGN2 (USACE)

C_ALGN_Stat_Only (USACE)

C_ALGN_Stat_over_Ofst_LT (USACE)

C_ALGN_Stat_over_Ofst_RT (USACE)

C_ALNG_Offset_ONLY (USACE)

16.3.4 Line

List of created styles:

- C_ALGN_Brng_Only (USACE)*
- C_ALGN_Brng_over_Dist (USACE)*
- C_ALGN_Dist_Only (USACE)*
- C_ALGN_Name (USACE)*
- C_ALGN_TAG_Line (USACE)*
- V_ALGN_Brng_and_Dist (USACE)*
- V_ALGN_Brng_over_Dist (USACE)*
- V_ALGN_Dist_Only (USACE)*
- V_ALGN_Name (USACE)*
- V_ALNG_Brng_Only (USACE)*

16.3.5 Curve

List of created styles:

- C_ALGN_Curve_Data (USACE)*
- C_ALGN_Dist_Only (USACE)*
- C_ALGN_Dist_over_Radi (USACE)*
- C_ALGN_Name (USACE)*
- C_ALGN_Radi_Only (USACE)*
- C_ALGN_Radi_with_Line (USACE)*
- C_ALGN_TAG_Curve (USACE)*
- V_ALGN_Curve_Data (USACE)*
- V_ALGN_Dist_Only (USACE)*
- V_ALGN_Dist_over_Radius (USACE)*
- V_ALGN_Name (USACE)*
- V_ALGN_Radi_Only (USACE)*
- V_ALGN_Radi_with_Line (USACE)*

16.3.6 Spiral

None Created.

16.3.7 Tangent Intersection

List of created styles:

- C_ALGN_Stat_Coords (USACE)*

16.3.8 Point of Intersection

List of created styles:

- C_ALGN_Horiz_PI_Curve_Data_Complex (USACE)*
- C_ALGN_Horiz_PI_Curve_Data_Simple (USACE)*
- C_ALGN_PERP_PI_Stat_Only (USACE)*
- C_ALGN_PI_Marker_Only (USACE)*
- C_ALGN_Stat_Coords (USACE)*
- V_ALGN_PI_Marker_Only (USACE)*

16.4 Alignment Table Styles

16.4.1 Line

List of created styles:

G_SCHD_Line_Table (USACE)

16.4.2 Curve

List of created styles:

G_SCHD_Line_Table (USACE)

16.4.3 Spiral

List of created styles:

G_SCHD_Spiral_Table (USACE)

16.4.4 Segment

List of created styles:

G_SCHD_Segmnet_Table (USACE)

17 Profile Configuration

17.1 Profile Styles

List of created styles:

C_PROF_Grade (USACE)
G_PROF_By_Layer (USACE)
V_PROF_Grade (USACE)

17.2 Profile Design Checks

None Created.

17.3 Profile Label Styles

17.3.1 Label Sets

List of created styles:

_Empty_Label_Label_Set (USACE)
C_GRAD_Exist_Ground_Note (USACE)
C_GRAD_Prop_Grade_Note (USACE)
C_GRAD_Roadway_Label_Set (USACE)
G_ANNO_NPLT_Horiz_Geom (USACE)

17.3.2 Station

17.3.2.1 Major Station

List of created styles:

G_ANNO_NPLT_Majr_Stat_ABOVE [v] (USACE)

17.3.2.2 Major Station

List of created styles:

G_ANNO_NPLT_Minr_Stat_ABOVE [v] (USACE)

17.3.2.3 Major Station

List of created styles:

G_ANNO_NPLT_Horz_Geom_Pnts_BELOW [v] (USACE)

17.3.3 Grade Breaks

List of created styles:

C_ALGN_STAT [v] (USACE)

17.3.4 Line

List of created styles:

C_GRAD_Exist_Ground_Anno (USACE)
C_GRAD_Percent (USACE)

C_GRAD_Prop_Grade_Anno (USACE)
C_GRAD_Slope (USACE)

17.3.5 Curve

List of created styles:

C_ALGN_STAT_HI_Point [v] (USACE)
C_ALGN_STAT_LOW_Point [v] (USACE)
C_ALNG_STAT_PVI_ELEV [v] (USACE)
G_ANNO_DIMS_Curve_Crest (USACE)
G_ANNO_DIMS_Curve_Sag (USACE)

18.1 Profile View Styles

List of created styles:

C_GRID [L-R] Majr_Minr_H100|2__V10|2_FULL_x1 (USACE) [NEW]
C_GRID [L-R] Majr_Minr_H100|20__V10|5_FULL_x10 (USACE)
C_GRID [L-R] Majr_Minr_H100|25__V5|2-5_FULL_x10 (USACE) [default]
C_GRID [L-R] Majr_Minr_H100|25__V5|2-5_LEFT_x10 (USACE) [default]
C_GRID [L-R] Majr_Minr_H100|25__V5|2-5_MID_x10 (USACE) [default]
C_GRID [L-R] Majr_Minr_H100|25__V5|2-5_RIGHT_x10 (USACE) [default]
C_GRID [L-R] Majr_Only_H10__V2_FULL_x5 (USACE)
C_GRID [L-R] Majr_Only_H20__V10_FULL_x2 (USACE)
C_GRID [L-R] Majr_Only_H25__V10_FULL_x2 (USACE)
C_GRID [L-R] Majr_Only_H100__V10_FULL_x10 (USACE)
C_GRID [R-L] Majr_Minr_H100|2H__V10|2_FULL_x1 (USACE) [NEW]

18.2 Label Styles

18.2.1 Station Elevation

List of created styles:

C_GRID_Elev_and_Stat [v] (USACE)
C_GRID_Exist_Ground_Anno (USACE)
C_GRID_Prop_Grade_Anno (USACE)

18.2.2 Depth

List of created styles:

C_GRID_Depth (USACE)
C_GRID_Distance (USACE)
C_GRID_Grade (USACE)
C_GRID_Slope (USACE)

18.2.3 Projection

List of created styles:

C_GRID_Projection [v] (USACE)

18.3 Band Styles

18.3.1 Band Sets

List of created styles:

_Empty_Band_Set (USACE)
C_BAND_STA_Ex|Pr_and FG_Majr_Minr_BELOW (USACE) [NEW]
C_BAND_STA_Ex|Pr_and FG_Majr_Only_BELOW (USACE) [NEW]
C_BAND_STA_Ex|Pr_Majr_Minr_BELOW (USACE)
C_BAND_STA_Ex|Pr_Majr_Only_BELOW (USACE)

C_BAND_STA_Majr_Only_BELOW (USACE)

18.3.2 Profile Data

List of created styles:

C_GRID_STA_Ex_Only_Majr_Minr (USACE)

C_GRID_STA_Ex_Only_Majr_ONLY (USACE)

C_GRID_STA_Ex|Pr_Majr_Minr (USACE)

C_GRID_STA_Ex|Pr_Majr_ONLY (USACE)

C_GRID_STA_FG_Offset_Majr_Minr (USACE) [new]

C_GRID_STA_FG_Offset_Majr_ONLY (USACE) [new]

C_GRID_STA_Only_Majr_Only (USACE)

18.3.3 Vertical Geometry

None Created.

18.3.4 Horizontal Geometry

None Created.

18.3.5 Superelevation Data

None Created.

18.3.6 Sectional Data

None Created.

18.3.7 Sectional Data

None Created.

18.3.8 Pipe Network

None Created.

19 Superelevation View Configuration

19.1 Superelevation View Styles

None Created.

20.1 Cant View Styles

None Created.

21 Samaple Line Configuration

21.1 Sample Line Styles

List of created styles:

C_SECT_Line (USACE)

21.2 Label Styles

List of created styles:

C_SECT_Station (USACE)

22.1 Section Styles

List of created styles:

- C_SECT_Design (USACE)*
- C_SECT_Excavation (USACE)*
- C_SECT_Water_Surface (USACE)*
- G_SECT_By_Layer (USACE)*
- V_SECT_Dredge_After (USACE)*
- V_SECT_Dredge_Pred (USACE)*
- V_SECT_Existing (USACE)*

22.2 Label Styles

22.2.1 Label Sets

List of created styles:

- _Empty_Label_Set (USACE)*

22.2.2 Major Offset

None Created.

22.2.3 Minor Offsets

None Created.

22.2.4 Grade Break

None Created.

22.2.5 Segment

None Created.

22.2.6 Corridor Points

None Created.

23 Section View Configuration

23.1 Section View Styles

List of created styles:

- C_SECT_Design (USACE)*
- C_SECT_Excavation (USACE)*
- C_SECT_Water_Surface (USACE)*
- G_SECT_By_Layer (USACE)*
- V_SECT_Dredge_After (USACE)*
- V_SECT_Dredge_Pred (USACE)*
- V_SECT_Existing (USACE)*

23.2 Group Plot Styles

List of created styles:

- C_GRID_Plot_Style (USACE)*

23.3 Sheet Styles

List of created styles:

- G_Sheet_Style (USACE)*

23.4 Label Styles

23.4.1 Offset Elevation

List of created styles:

- C_SECT_Elev_Only [v] (USACE)*
- C_SECT_Stat_over_Elev [v] (USACE)*

23.4.2 Grade

List of created styles:

- C_SECT_Depth (USACE)*
- C_SECT_Dist (USACE)*
- C_SECT_Grade (USACE)*
- C_SECT_Slope (USACE)*

23.4.3 Projection

List of created styles:

- C_SECT_Projection_above [v] (USACE)*

23.5 Band Styles

23.5.1 Band Sets

List of created styles:

_No_Bands (USACE)

C_BAND_Ex|Pr_CL (USACE)

23.5.2 Section Data

List of created styles:

C_GRID_Ex|Pr_CL (USACE)

23.5.3 Section Segment

None Created.

23.6 **Table Styles**

23.6.1 Total Volume

List of created styles:

G_SCHD_SECT_Total (USACE)

23.6.2 Material

List of created styles:

G_SCHD_SECT_Material (USACE)

24.1 Mass Haul Line Styles

None Created.

25 Mass Haul View Configuration

25.1 Mass Haul View Styles

None Created.

26 Catchment Configuration

26.1 Catchment Styles

List of created styles:

C_TOPO_Catchment (USACE)

26.2 Label Styles

26.2.1 Area

List of created styles:

C_TOPO_CATC_Area (USACE)

26.2.2 Flow Segment

List of created styles:

C_TOPO_CATC_Segment_Data (USACE)

27 Pipe Networks (gravity) Configuration

27.1 Parts List

Each of the parts list is a compilation of available structures and pipes that are available to be used for designing proposed sanitary sewer and storm sewer along with representing existing utilities as well. Each structure and pipe is given an object style, rules for design, render material for graphic representation, and an optional pay item. The four available parts lists:

C_SSWR_List (USACE)
C_STRM_List (USACE)
V_SSWR_List (USACE)
V_STRM_List (USACE)

27.2 Interference Styles

List of styles created:

G_NPLT_Interference (USACE)

28 Pipes (gravity) Configuration

28.1 Pipe Styles

List of styles created:

<i>C_SSWR_MAIN_CL (USACE)</i>	<i>V_SSWR_MAIN_CL (USACE)</i>
<i>C_SSWR_MAIN_double (USACE)</i>	<i>V_SSWR_MAIN_crossing (USACE)</i>
<i>C_SSWR_SERV_CL (USACE)</i>	<i>V_SSWR_MAIN_double (USACE)</i>
<i>C_STRM_CULV_double (USACE)</i>	<i>V_STRM_CULV (USACE)</i>
<i>C_STRM_MAIN_CL (USACE)</i>	<i>V_STRM_CULV_crossing (USACE)</i>
<i>C_STRM_MAIN_crossing (USACE)</i>	<i>V_STRM_MAIN_CL (USACE)</i>
<i>C_STRM_SERV_CL (USACE)</i>	<i>V_STRM_MAIN_crossing (USACE)</i>

28.2 Pipe Rule Set

Rules define constraints on pipes and are assigned to the parts list. Rules are only applied during creation and when manually applied. Civil 3D will not automatically change designs after initial layout.

List of rule sets created:

_No Rules (USACE)
C_SSWR_Rules (USACE)
C_STRM_Rules (USACE)

28.3 Pipe Label Styles

28.3.1 Plan Profile

List of styles created:

C_SSWR_PLAN (USACE)
C_SSWR_PROF (USACE)
C_STRM_PLAN (USACE)
C_STRM_PROF (USACE)
V_SSWR_PLAN (USACE)
V_SSWR_PROF (USACE)
V_STRM_PLAN (USACE)
V_STRM_PROF (USACE)

28.3.2 Crossing Section

C_SSWR_Crossing (USACE)
C_STRM_Crossing (USACE)

28.4 Pipe Tables

List of styles created:

G_SCHD_Drainage_Pipe_Table_1 (USACE)
G_SCHD_Pipe_Data_Table_2 (USACE)

29.1 Structure Styles

List of styles created:

<i>_NPLT_Null (USACE)</i>	<i>V_SSWR_FTTG (USACE)</i>
<i>C_SSWR_FTTG (USACE)</i>	<i>V_SSWR_JB_MH (USACE)</i>
<i>C_SSWR_JB_MH (USACE)</i>	<i>V_STRM_HW (USACE)</i>
<i>C_STRM_FTTG (USACE)</i>	<i>V_STRM_INLT (USACE)</i>
<i>C_STRM_HW (USACE)</i>	<i>V_STRM_MH (USACE)</i>
<i>C_STRM_INLT (USACE)</i>	
<i>C_STRM_MH (USACE)</i>	

29.2 Structure Rule Set

Rules define constraints on structures and are assigned to the parts list. Rules are only applied during creation and when manually applied. Civil 3D will not automatically change designs after initial layout.

List of rule sets created:

_No Rules (USACE)
C-SSWR (USACE)
C-STRM (USACE)

29.3 Structure Label Styles

List of styles created:

<i>C_SSWR_PLAN_Coords_Rt (USACE)</i>	<i>C_STRM_PLAN_Coords_Rt (USACE)</i>
<i>Left Drag</i>	<i>Left Drag</i>
<i>C_SSWR_PLAN_Key_Note_DESC (USACE)</i>	<i>C_STRM_PLAN_Key_Note (USACE)</i>
<i>C_SSWR_PLAN_Name_No_Arrow (USACE)</i>	<i>C_STRM_PLAN_Name_No_Arrow (USACE)</i>
<i>C_SSWR_PLAN_Name_Rt (USACE)</i>	<i>C_STRM_PROF_Data_Btm_Rt (USACE)</i>
<i>Left Drag</i>	<i>Left Side</i>
<i>C_SSWR_PROF_Data_Btm_Rt (USACE)</i>	<i>C_STRM_PROF_Data_Top [v] (USACE)</i>
<i>Left Side</i>	<i>C_STRM_PROF_Data_Top_Rt (USACE)</i>
<i>C_SSWR_PROF_Data_Top [v] (USACE)</i>	<i>Left Side</i>
<i>C_SSWR_PROF_Data_Top_Rt (USACE)</i>	<i>C_STRM_PROF_Key_Note (USACE)</i>
<i>Left Side</i>	<i>V_SSWR_PLAN_Desc (USACE)</i>
<i>C_SSWR_PROF_Key_Note (USACE)</i>	<i>V_STRM_PLAN_Desc (USACE)</i>

29.4 Structure Tables

List of styles created:

G_SCHD_Drainage_Strcutre_Table_1 (USACE)
G_SCHD_Strcutre_Data_Table_2 (USACE)

30.1 Parts List

Each of the parts list is a compilation of available pipes, fittings and appurtenances that are available to be used for designing proposed watermain design. Each element is given an object style, rules for design, render material for graphic representation, and an optional pay item. The two available parts lists:

C_DOMW_List (USACE)

C_WATR_List (USACE)

31 Pressure Pipe Configuration

31.1 Pipe Styles

List of styles created:

C_DOMW_MAIN_double (USACE)

C_WATR_MAIN_CL (USACE)

31.2 Label Styles

List of styles created:

C_WATR_Pipe_Anno (USACE)

C_DOMW_Pipe_Anno (USACE)

31.3 Table Styles

None Created.

32 Fittings Configuration

32.1 Fitting Styles

List of styles created:

C_DOWNM_FTTG_Outline (USACE)
C_WATR_DEVC_CL (USACE)

32.2 Label Styles

List of styles created:

C_DOMW_FTTG_Desc_Anno (USACE)
C_WATR_FTTG_Desc_Anno (USACE)

32.3 Table Styles

None Created.

33 Appurtenance Configuration

33.1 Pipe Styles

List of styles created:

C_DOMW_DEVC_Outline (USACE)
C_WATR_DEVC_CL (USACE)

33.2 Label Styles

List of styles created:

C_DOMW_APPT_Anno (USACE)
C_WATR_APPT_Anno (USACE)

33.3 Table Styles

None Created.

34 Corridors Configuration

34.1 Corridor Styles

List of styles created:

G_NPLT_Corridor (USACE)

35 Intersection Configuration

35.1 Intersection Styles

List of styles created:

C_NPLT_Intersect (USACE)

35.2 Label Styles

35.2.1 Intersection Location Labels

List of styles created:

G_NPLT_ANNO_Algn1_Algn2 (USACE)

36.1 Assembly Styles

List of styles created:

G_NPLT_Assembly (USACE)

37 Subassembly Configuration

Only command settings available in this section.

38 Quantity Takeoff Criteria

38.1 Quantity Takeoff Criteria

List of styles created:

C_QTY_Earthwork (USACE)

G_QTY_Corridor (USACE)

38.2 Table Styles

38.2.1 Total Volume

List of created styles:

G_SCHD_QTY_Total (USACE)

38.2.2 Material

List of created styles:

G_SCHD_QTY_Corridor (USACE)

39.1 Networks

39.1.1 Network Styles

List of created styles:

V_SURV_Network (USACE)

39.2 Figures

39.2.1 Figure Styles

List of created styles:

G_SURV_Line_By_Layer (USACE)

39.2.2 Label Styles

39.2.2.1 Figure

List of created styles:

V_SURV_Figure_Name (USACE)

39.2.2.2 Line

List of created styles:

V_SURV_Length_Only (USACE)

39.2.2.3 Curve

List of created styles:

V_SURV_Radius_Only (USACE)

39.3 Figure Prefix Database

External file accessed from the Prospectors Survey tab and external to Drawing Template. File controls how the Automated linework created when Survey Databases are processed.

List of created styles:

<i>ROADASPH</i>	<i>TAXIEOP</i>	<i>BOG</i>	<i>DRVWAY</i>	<i>COMLNUG</i>
<i>ROADCONC</i>	<i>ROADUNPAV</i>	<i>BASELINE</i>	<i>EDGEDRIVEWAY</i>	<i>CLBRDG</i>
<i>CLRD</i>	<i>RIPRAP</i>	<i>STLN</i>	<i>PAD</i>	<i>CLDRIDGE</i>
<i>RUNWAYSHLDR</i>	<i>TL</i>	<i>SSLINE</i>	<i>WE</i>	<i>CLFLDWALL</i>
<i>ROADGRVL</i>	<i>RUNWAYEOP</i>	<i>TOPSTROM</i>	<i>WTREDG</i>	<i>RUNWAYWOP</i>
<i>FENC</i>	<i>CDHD</i>	<i>DRAIN</i>	<i>EDGEROAD</i>	<i>BLDG</i>
<i>BRK</i>	<i>CDHU</i>	<i>HDWALL</i>	<i>ROADEDGE</i>	<i>RRAPTOE</i>
<i>ROADSHLDR</i>	<i>ESW</i>	<i>TOPCULVERT</i>	<i>CLROAD</i>	<i>TOERRAP</i>
<i>CULVERT</i>	<i>EWALK</i>	<i>SSLN</i>	<i>ROADCL</i>	<i>GRAIL</i>
<i>CLDT</i>	<i>SW</i>	<i>TRAIL</i>	<i>CLRUNWY</i>	<i>BC</i>
<i>ELUG</i>	<i>UKNLN</i>	<i>DRIVEWAY</i>	<i>CLTAXI</i>	<i>CURBTB</i>
<i>TAXISHLDR</i>	<i>SWMP</i>	<i>STEPS</i>	<i>BRIDECL</i>	<i>LBC</i>

TBCURB	CATGUARD	UGFIBER	CL_SB	TOE BERM
CURBBFE	CLFENCE	GASL	CL_W	TOP BERM
FC	FENCECL	EDGELAWN	CR_DK	TOP_BERM
CURBFL	CABIN	LAWNEDGE	DOCK	TOP_PL
BUILDING	CENTLINE	LEACHLINE	UG_COMM	TOP_RR
WALL	CLINE	MAILBOXUS	E_DR	TYPE_A
WALLTOPEDGE	CLARR	USMAILBOX	E_PAD	TYPE_L
ASPHREV	CLLEVEE	SAND	E_PL	TYPE_LL
ASPHREVEDGE	LEVEECL	SWALETOE	EDG_REV	TYPE_S
BB	CLBERM	TOESWALE	EDG_WAT	TYPE_X
BANKTOE	CLRAILROAD	SWALETOP	ERD	TYPE_XG
BOTBANK	CLRR	TOPSWALE	EXT_C_B	WET
TOEBANK	RAILROADCL	THALWEG	F_LINE	WT
BANKTOP	CLSTWALL	BERMCRWN	F_WALK	BANK_TOE
TB	RAMP	CRWNBERM	FL_CURB	BANK_TOP
TOPBANK	STWALLCL	SLGH	FL_D	TOE_FAIL
BBERM	DTHTOP	ROCK	FLOOD_GT	
BERMTOE	ELOH	BREAKTOE	FOC	
TOEBERM	LNDSCPOUT	TOEBREAK	HC_RAMP	
BERMTOP	DTHBOT	ENDABUT	LBT	
TBERM	PKBC	CURBSTOP	LOCK_MAJ	
TOPBERM	PPKCURBFL	CURTIANDRN	LOCK_MIN	
BOREPITTOE	PKFC	DRYWELL	LOW TBK	
TOEBORPIT	WTRLN	COMLNOH	LTB	
BORPITTOP	CLDITHCH	PKLOTEDG	OH_COMM	
TOPBORPIT	DITCHCL	NATGASL	PIER	
BOTDUNE	CLCREEK	CR_W	R_RET	
BOTCUT	CLCRK	ABUT	RBT	
CUTTOE	CREEKCL	B_WALK	Sample(1)	
TOECUT	GATE	BENT	RTB	
DUNETOE	CMP	BLD_MAJ	SHD_L	
TOEDUNE	CONCDTTOE	BLD_MIN	SHD_RD	
BOTFILL	TOECONCDT	BOC	SHD_RR	
FILLTOE	CONCDTTOP	Breakline	SHD_SB	
TOEFILL	TOPCONCDT	CL_DK	SPRING	
BOTLEVEE	CONCEDGE	C_PAD	ST	
LEVEETOE	EDGECONC	CATTLE_XING	STAIR	
TOELEVEE	CONCRETE	CL_L	TOE FAIL	
BOTWALL	CONCREV	GRD	TOE_BERM	
WALLBOT	CONCREVMAT	HW_B	TOEFAIL	
BREAKTOP	DIKECRWN	HW_T	TOE_DK	
TOPBREAK	DIKETOP	JERSEY	TOE_L	
BRDG	TOPDIKE	OH_PWR	TOE_RD	
BRIDGECOR	DRAINFIELD	UG_GAS	TOE_SB	
CORBRIDGE	DRAINPIT	UG_PWR	TOE_W	
BURSH	CONCJOINT	W_MAIN	TOP FAIL	
BWFENCE	EXPANJOINT	WELL	TOP_FAIL	
FENCEBW	FIBERUG	CL_RR	TOPFAIL	

39.4 Linework Code Sets

External file accessed from the Prospectors Survey tab and external to Drawing Template. File controls how the Automated linework created when Survey Databases are processed.

Property	Value
Information	
Name	USACE - NATIONAL
Description	Line Code Sets
Coding Methods	
Feature/Code delimiter	<Space>
Field code escape	/
Start in comment mode	<input type="checkbox"/> No
Automatic begin on figure prefix match	<input type="checkbox"/> No
Special Codes	
Begin	+
Continue	C
End	-
Close	CLO
Horizontal offset	H
Vertical offset	V
Stop offsets	SO
Line Segment Codes	
Recall point	JPT
Connect point	JNC
Rectangle	CLSRECT
Right turn	RT
Extend	X
Curve Segment Codes	
Begin curve	PC
End curve	PT
Circle	CIR
Point on curve	OC

OK Cancel Help

Only commands settings available in this section.

41.1 View Frame Styles

List of created styles:

G_ANNO_NPLT_FRAM (USACE)

41.2 Label Styles**41.2.1** View Frame

List of created styles:

G_ANNO_NPLT_FRAM (USACE)

42.1 Match Line Styles

List of created styles:

G_ANNO_MTCH_Line (USACE)

42.2 Label Styles**42.2.1 Match Line Left**

List of created styles:

G_ANNO_MTCH_Previous Sheet (USACE)

42.2.2 Match Line Right

List of created styles:

G_ANNO_MTCH_Next Sheet (USACE)

End of Document