CDOT Configuration ORD 10.12 Update ReadMe

Date: November 20, 2024
Workspace Configuration Version: CDOT.2022.R3-02
Software Versions:
- **OpenRoads Designer CE – 2022 Release 3 (10.12.02.4)**
- **ProjectWise Explorer CE (10.00.03.453)**

The CDOT Standards have been developed and tested using OpenRoads Designer Connect Edition 2022 Release 3 (ORD 10.12). These standards are under continuous development and are subject to change in future updates.

A summary of the major enhancements for this Workspace release is included below.

Installation:

Local Installation Path:

- ***C:\ProgramData\Bentley\OpenRoads Designer CE 10.12\Configuration***

Outstanding Issues:

- Bentley Service Tickets
  - SR 7001224258 - Extract Does not Prompt for Surface
    - Defect #1125400
  - 7001224259 - Direct Utility Conflicts not Detected
    - Defect #1125942 / #1125901
  - SR 7001291860 - Longitudinal Slope Wrong
    - Defect #1139138
  - SR 7001407189 - Element Template Settings Ignored
    - Defect #881012

Configurations

- *…\\Organization-Civil\CDOT_Standards.cfg*
  - Added MS_LEVEL_DO_NOT_OVERRIDE_DESIGN_LEVELS_IN_SHEET. This variable is adding the ability to see levels turn on and off in Cross Section Sheets.
  - Set the variable MS_IMPORT_USINGADOBEPDF = 0. This is for importing PDF files into ORD as vector elements.
- *…\\Organization-Civil\CDOT_Standards - ORD.cfg*
  - Updated configuration to include new cell library names
- Moved all Bridge Resources to be under the CDOT_Bridge Standards folder.
  …\\Organization-Civil\CDOT_Standards - OBM.cfg
  - Updated configuration to include new cell library names
  - Updated paths to Bridge resources.

Levels

- *…\\Organization-Civil\CDOT_ Standards\Dgnlib\Feature Definitions\CDOT_Bridge-levels _ElemTemp_Feat_TextFav_Annot.dgnlib*
  - Added the following levels:
    - BRDG_Outline-Concrete-Other
      - Color = 2, LS = 0, WT = 2
  - Changed the following levels:
    - Set the WT to 12 for BRDG_Quantities-Excavation
- *…\\Organization-Civil\CDOT_Standards\Dgnlib\Feature Definitions \CDOT_Roadway-Levels _ElemTemp_Feat_TextFav_Annot.dgnlib*
  - Added the following levels:
    - MOD_TempPoints-Topsoil
  - Changed the ByLevel properties of the following levels
    - TER_Proposed-Flow Arrows - color = 148
    - TER_Proposed-Points - High - color = 43
    - TER_Proposed-Points - Low - color = 140
    - TER_Proposed-Triangle Vertices - color = 82
    - TER_Proposed-Triangles - color = 80, style = 2

Cells

- *Updated all Bridge cell libraries to be using the proper Working Units and Resolution.*
- *Added the \\Organization-Civil\CDOT_Bridge Standards\OpenBridge Modeler\Cell\Modeling_3D – Bridge.cel for 3D Bridge modeling.*
- *…\\Organization-Civil\CDOT_Bridge Standards\OpenBridge Modeler\Cell\Bridge.cel*
  - Updated missing linework for the following cells:
    - drainage_mhstep-side
    - brdginlet_32875-side
    - brdginlet_r32875-grate-side
    - brdginlet_r32875-top
    - brdginlet_r3580-grate-side
    - brdginlet_r3922-top
    - drainage_m-604-25-box-front
    - drainage_m-604-25-box-side
    - fence-anchor_section
    - fence_36inch
    - Lighting_XCEL
    - Jbox-Top
  - Rescaled the following cells per comments from the Bridge Group:
    - ARROW_Break
    - ARROW_Slope
    - ARROW_Slope – Exist
    - ARROW_Swale Flow
    - DRAFT_Breakline
    - BRDG_Phase 1
    - BRDG_Phase 2
    - BRDG_Phase 3
    - BRDG_Phase 4
    - BRDG_Phase 5

- Renamed cells to have a more consistent naming convention. This is a WIP.
- Changed the level of the BRDG_Phase X cells to be on corresponding Phase level.
- Removed "Preliminary Stage Only" from SHEET_Revision Table cell.
- Fixed exploded text in the DETAIL_Nose Angle cell.
- Moved origin point of DRAIN_Manhole Rung cell to top end of rung.
- Added the following cells provided by Bridge Group:
  - DRAFT_Finish Mark
  - DRAFT_Weld
  - girders_cbt37_5 with WWR
  - girders_cbt63 with WWR
  - girders_u12steel
  - girders_u18steel
  - girders_u24steel
  - girders_u30steel
  - girders_u33steel
- Moved all the Guardrail cells to the Roadway Design.cel or XS Guardrail Details.cel files

- *…\\Organization-Civil\CDOT_Bridge Standards\OpenBridge Modeler\Cell\Bridge Piping.cel*
  - Scaled all cells up by 12.
  - Moved the origin point of VICT_6 HDPE Adaptor to middle side.
  - Moved the origin point of Fire - PIV and Fire-Hydrant to the bottom.
  - Changed the Level for the ABS_4_Elbow90 18Sweep to be set to Default
  - Updated elements in the following cells to use ByLevel symbology:
    - PVC_2-"X"
    - PVC_4
- *…\\Organization-Civil\CDOT_Bridge Standards\OpenBridge Modeler\Cell\Bridge Repair.cel*
  - Updated elements in the following cells to use ByLevel symbology:
    - bridgerail_type_10_plan
    - bridgerail_type_10_with_curb
    - bridgerail_type_10_with_reinforcing bridgerail_type_10r-* (all)
    - bridgerail_type_7_* (all) bridgerail_thrie-end
    - GRAIL_Type 7-Footing
  - Updated missing linework for the following cells:
    - bridgerail_type_10_with_curb
    - bridgerail_type_10_with_reinforcing
- *…\\Organization-Civil\CDOT_Standards\Cell\General.cel*
  - Renamed Title Block cells. New names are:
    - SHEET_Title Block - General
    - SHEET_Title Block - Title
  - Moved the origin of the following cells so they can be placed about the bottom left corner of the sheet borders.
    - SHEET_CDOT Logo Template SHEET_Revision Data Fields
    - SHEET_Revision Text
    - SHEET_Title Block - General SHEET_Title Block - Title
- *…\\Organization-Civil\CDOT_Standards\Cell\Patterns.cel*
  - *Rescaled all cells per comments from Bridge Group.*
- *…\\Organization-Civil\CDOT_Standards\Cell\Roadway Design.cel*
  - *Added GRAIL_Type 3-CBCIM cell.*
- *…\\Organization-Civil\CDOT_Standards\Cell\Modeling_3D - Landscaping.*
  - *Added 3D Tree cells from the Bridge Group.*
- *Rescaled all 3D Landscaping to be true to real world size.*
- *…\\Organization-Civil\CDOT_Standards\Cell\Modeling_3D - Lighting.cel*

    - *Rescaled all 3D Lighting to be true to real world size.*
- *…\\Organization-Civil\CDOT_Standards\Cell\Modeling_3D - Roadway Design.cel*
    - Added the following cells:
        - GRAIL_3D-Guardrail (MGS)-Type 3 Thrie Beam Only
        - GRAIL_3D-Guardrail (MGS)-Type 3 Thrie Beam Terminal
        - GRAIL_3D-Guardrail (MGS)-Type 3 Thrie Beam w- Holes
        - GRAIL_3D-Guardrail (MGS)-Type 3 W-Beam Only
        - GRAIL_3D-Guardrail (MGS)-Type 3 W-Beam Terminal w- Holes
        - GRAIL_3D-Guardrail Transition - Type 3G Asymmetric
        - GRAIL_3D-Guardrail Transition - Type 3G Symmetric
        - GRAIL_3D-Guardrail Transition - Type 9 to 3
        - GRAIL_3D-Thrie Beam Transition – Asymmetric
        - GRAIL_3D-Thrie Beam Transition - Symmetric
- *…\\Organization-Civil\CDOT_Standards\Cell\Modeling_3D - Traffic.cel*
    - Added the following cells:
        - TRAF_3D-Construction Barrel
        - TRAF_3D-Traffic Cone
- *…\\Organization-Civil\CDOT_Standards\Cell\Cell Selector*
    - Added/Updated the cell selector files:
        - Blank-New.csf
        - Arrows.csf
        - Cranes.csf
        - Drainage.csf
        - General.csf
        - Guardrail.csf
        - Patterns.csf
        - Pulpits.csf
        - Roadway Design.csf
        - Traffic - General.csf
- *…\\Organization-Civil\CDOT_Standards\Cell\Cell Selector\Bridge*
    - Updated the following cell selector files:
        - Bolts.csf
        - Bridge - Misc.csf
        - Bridge Plans Production.csf
        - Bridge.csf
        - BridgeRail.csf
        - Expansion.csf
        - Fence.csf
        - Girders.csf
        - Piping.csf
        - Pulpits.csf
        - Rebar.csf
        - Sections.csf

Dimension Styles

- *…\\Organization-Civil\CDOT_Standards\Dgnlib\Feature Definitions\CDOT_SS4-TextStyles_DimStyles.dgnlib*
    - Set the option for “Uniform Cell Scale” to be on by default.
    - Updated the names of the cells used for terminators.

Text Favorites

- *…\\Organization-Civil\CDOT_Standards\Dgnlib\Feature Definitions\CDOT_Roadway-Levels_ElemTemp_Feat_TextFav_Annot.dgnlib*
    - Removed the extra EL from the Right of Way\Points\Northing-Easting-Elev Text Favorite.

Element Templates

- *…\\Organization-Civil\CDOT_Standards\Dgnlib\Feature Defintions\CDOT_Roadway-Levels_ElemTemp_Feat_TextFav_Annot.dgnlib*
    - Updated the following Element Templates to point to the correct levels:
        - Terrains > Terrain Models > Temporary > Temporary Construction Corrected
            - HighPoints and Breakline Level settings
    - Made the following changes to the Proposed Terrain Element Templates
        - Terrains > Terrain Models > Proposed > Design Analysis Contours ▪ MinorContours
            - DisplayText = No
        - Terrains > Terrain Models > Proposed > *
            - MinorContours
                - Color = 4
                - LineStyle = 0
                - Weight = 0
            - Depression
                - Color = 4
                - LineStyle = 0
                - Weight = 0
            - MajorContours
                - Color = 3
                - LineStyle = 0
                - Weight = 3
            - Depression
                - Color = 3
                - LineStyle = 0
                - Weight = 3
            - Triangles
                - Color = 80
                - LineStyle = 2
                - Weight = 1
            - TrianglesVertices
                - Color = 82
                - LineStyle = 0
                - Weight = 1
            - Point Type = Cell
                - Symbol = SYM_Plus
                - CellScale = 67
                - DisplayText = Off
                - TextStyle = 05_ENG-80
            - FlowArrows
                - Color = 148
                - LineStyle = 0
                - Weight = 0
                - ArrowType = Element
                - CellScale = 2.0

- LowPoints
    - Color = 140
    - LineStyle = 0
    - Weight = 10
    - Point Type = Cell
        - Symbol = SYM_Diamond - Open
        - CellScale = 100
    - TextPrefix = [Empty]
- HighPoints
    - Color = 43
    - LineStyle = 0
    - Weight = 10
    - Point Type = Cell
        - Symbol = SYM_Triangle - Open
        - CellScale = 100
    - TextPrefix = [Empty]
- Breakline
    - Color = 72
    - LineStyle = 0
    - Weight = 1
- Boundary
    - Color = 3
    - LineStyle = 0
    - Weight = 3
- ImportedContours
    - Color = 80
    - LineStyle = 2
    - Weight = 2
- Island
    - Color = 46
    - LineStyle = 0
    - Weight = 1
- Hole
    - Color = 99
    - LineStyle = 0
    - Weight = 1
- Void
    - Color = 117
    - LineStyle = 0
    - Weight = 1
- Spot
    - Color = 130
    - LineStyle = 0

Feature Definitions

- *…\\Organization-Civil\CDOT_Standards\Dgnlib\Feature Defintions\CDOT_Roadway-Levels_ElemTemp_Feat_TextFav_Annot.dgnlib*
  - Added Feature Definition Linear > Modeling > Corridor Elements > Template Points > Misc > TempPoint-Topsoil
  - Updated the volume option for the Temporary Construction Terrain to None.
  - Change the label precision of the Design Analysis Contours Feature Definition to 1 decimal place.

Sheet Borders

- *…\\Organization-Civil\CDOT_Bridge Standards\OpenBridge Modeler\Sheet Borders\Sheets - Bridge.cel*
  - Added the Revision Table with Tags.

Sheet Seeds

- *…\\Organization-Civil\CDOT_Bridge Standards\OpenBridge Modeler\Dgnlib\Sheet Seeds*
  - Updated Bridge Sheet Seeds to include new Revision Table with Tags.

Printing

- *…\\Organization-Civil\CDOT_Standards\Printing\Pen Tables*
  - Updated ALL Pentables to have the DRAFT_Miscellaneous 30/70 print darker. o
  - Updated the following Pentables to ensure the TOPO levels print in grey:
    - CDOT_Rail - PenTable.tbl
    - CDOT_Utilities (All Color) – PenTable.tbl
    - CDOT_Utilities (Existing Color) - PenTable.tbl
- *\\Organization-Civil\CDOT_Standards\Dgnlib\Printing\CDOT_PrintStyles.dgnlib*
  - Added the Print Style CDOT PDF – Bridge

Template Library

- *…\\Organization-Civil\CDOT_Standards\Template Library\CDOT_TemplateLibrary.itl*
  - Updated Templates to have the same point and component names across all templates.

GUI

- *\\Organization-Civil\CDOT_Standards\Dgnlib\GUI\CDOT_CustomRibbon.dgnlib*
- Updated key-ins to reflect changes to cell name changes and origin changes.
  - Added link to the CDOT Training Website
    - Help > CDOT Info and Help > Helpful Links > CDOT OpenRoads Training
  - Added a link to the S Standards Website
    - Help > CDOT Info & Help > Helpful Links > S Standard Plan Drawings
  - Fixed links to Roadway Design Guide
    - Help > CDOT Info and Help > CDOT Roadway Design Guide
  - Added button to open Roadway 2D and 3D cell library.
    - CDOT > Roadway Design Drafting > Roadway >…
  - Added Polygon tools to the Bridge Workflow
    - Bridge > Favorites > Placement > Polygon Tools
  - Added Grouped Hole tools to the Bridge Workflow
    - Bridge > Favorites > Groups >…
  - Added an icon for View Attributes on the Bridge Workflow
    - Bridge > Home > Primary > View Attributes
  - Added Terrain tools to the Bridge Workflow
    - Bridge > Home > Terrain Modeling

Drainage and Utility configuration updates

Levels

- *…\Organization-Civil\CDOT_Standards\Dgnlib\Feature Definitions\CDOT_DU-Levels_ElemTemp_Feat_TextFav_Annot.dgnlib*
    - Added Levels for FEMA floodplain mapping.

Name	Color	Line Style	Line Weight
HYDR-FEMA_Base Flood-Corrected Effective	25	Zigzag	0
HYDR-FEMA_Base Flood-Effective	0	Zigzag	0
HYDR-FEMA_Base Flood-Existing	19	Zigzag	0
HYDR-FEMA_Base Flood-Proposed	3	Zigzag	0
HYDR-FEMA_Boundaries-Community	0	(Phantom)	5
HYDR-FEMA_Boundaries-Property	9	(Phantom)	0
HYDR-FEMA_Cross Section	0	0	0
HYDR-FEMA_Features-Bridge	0	0	0
HYDR-FEMA_Features-Channel	7	0	0
HYDR-FEMA_Features-Culvert	0	0	0
HYDR-FEMA_Features-Footbridge	0	0	0
HYDR-FEMA_Floodplain-100Yr-Corrected Effective	59	0	0
HYDR-FEMA_Floodplain-100Yr-Effective	7	0	0
HYDR-FEMA_Floodplain-100Yr-Existing	2	0	0
HYDR-FEMA_Floodplain-100Yr-Proposed	128	0	3
HYDR-FEMA_Floodplain-500Yr-Corrected Effective	59	2	0
HYDR-FEMA_Floodplain-500Yr-Effective	7	2	0
HYDR-FEMA_Floodplain-500Yr-Existing	2	2	0
HYDR-FEMA_Floodplain-500Yr-Proposed	128	2	3
HYDR-FEMA_Regulatory Floodway-Corrected Effective	59	(Hidden)	0
HYDR-FEMA_Regulatory Floodway-Effective	7	(Hidden)	0
HYDR-FEMA_Regulatory Floodway-Existing	2	(Hidden)	0
HYDR-FEMA_Regulatory Floodway-Proposed	128	(Hidden)	3

Element Templates

- *…\Organization-Civil\CDOT_Standards\Dgnlib\Feature Definitions\CDOT_DU-Levels_ElemTemp_Feat_TextFav_Annot.dgnlib*
    - Updated - Line Style set to MISC_Dash-150-100-Existing · CULV Ex - Pro
        - ELEC Ex - Pro
        - GAS Ex - Pro
        - OIL Ex - Pro
        - SAN Ex - Pro
        - STM Ex - Pro
        - TEL Ex - Pro
        - TRAF Ex - Pro
        - TV Ex - Pro
        - WTR Ex - Pro
    - Created Null Points for Existing Nodes · Element Templates
        - ELEC Null Ex - [Pln, Btm]
        - GAS Null Ex - [Pln, Btm]
        - OIL Null Ex - [Pln, Btm]
        - SAN Null Ex - [Pln, Btm]
        - TEL Null Ex - [Pln, Btm]
        - TRAF Null Ex - [Pln, Btm]
        - TV Null Ex - [Pln, Btm]
        - WTR Null Ex - [Pln, Btm]
        - STM Null Ex - [Pln, Btm]
    - Created Traffic Caisson Element Templates - *Subsurface > Utilities > Proposed TRAF - Nodes (New Folder)*
        - TRAF STR - Pro
        - TRAF CAIS [18, 36, 42, 48, 54] – Pln
        - TRAF CAIS [18, 36, 42, 48, 54] - Top
        - TRAF CAIS [18, 36, 42, 48, 54] – Btm
        - TRAF Null - Btm
        - TRAF Null - Pln
- *…\Organization-Civil\CDOT_Standards\Dgnlib\Feature Definitions\CDOT_DU Supplemental-ElemTemp_Feat_Annot.dgnlib*
    - Updated - Line Style set to MISC_Dash-150-100-Existing · CULV Ex - Pro
        - ELEC Ex – Pro
        - GAS Ex – Pro
        - OIL Ex - Pro
        - SAN Ex – Pro
        - STM Ex - Pro
        - TEL Ex - Pro
        - TRAF Ex - Pro
        - TV Ex - Pro
        - WTR Ex - Pro

- *…\Organization-Civil\CDOT_Standards\Dgnlib\Feature Definitions\CDOT_Survey-Levels_ElemTemp_Feat_TextFav_Annot.dgnlib*
    - Updated Terrains > Survey > *
        - MinorContours
            - Color = 84
            - LineStyle = 2
            - Weight = 0
            - Depression
                - Color = 84
                - LineStyle = 2
                - Weight = 0
        - MajorContours
            - Color = 52
            - LineStyle = 3
            - Weight = 3
            - Depression
                - Color = 52
                - LineStyle = 3
                - Weight = 3
        - Triangles
            - Color = 120
            - LineStyle = 0
            - Weight = 0
        - TrianglesVertices
            - Color = 120
            - LineStyle = 0
            - Weight = 0
            - Point Type = Cell
                - Symbol = SYM_Plus
                - CellScale = 67
                - DisplayText = Off
            - TextStyle = 05_ENG-80
        - FlowArrows
            - Color = 7
            - LineStyle = 0
            - Weight = 0
            - ArrowType = Element
            - CellScale = 1.5
        - LowPoints
            - Color = 4
            - LineStyle = 0
            - Weight = 10
            - Point Type = Cell
                - Symbol = SYM_Diamond – Open
                - CellScale = 100
            - TextPrefix = [Empty]
        - HighPoints
            - Color = 10
            - LineStyle = 0

        - Weight = 10
        - Point Type = Cell
            - Symbol = SYM_Triangle - Open
            - CellScale = 100
        - TextPrefix = [Empty]
    - Breakline
        - Color = 9
        - LineStyle = 0
        - Weight = 0
    - Boundary
        - Color = 117
        - LineStyle = 3
        - Weight = 3
    - ImportedContours
        - Color = 80
        - LineStyle = 2
        - Weight = 0
    - Island
        - Color = 46
        - LineStyle = 0
        - Weight = 1
    - Hole
        - Color = 99
        - LineStyle = 0
        - Weight = 1
    - Void
        - Color = 70
        - LineStyle = 3
        - Weight = 1
    - Spot
        - Color = 130
        - LineStyle = 0
        - Weight = 0
- *…\Organization-Civil\CDOT_Standards\Dgnlib\Feature Definitions\CDOT_Roadway-Levels_ElemTemp_Feat_TextFav_Annot.dgnlib*
    - Updated flow arrow settings on Element Templates for proposed terrain models
        - FlowArrows
            - Color = 148
            - LineStyle = 0
            - Weight = 0
            - ArrowType = Element
            - CellScale = 2.0

Feature Symbology

- *…\Organization-Civil\CDOT_Standards\Dgnlib\Feature Definitions\CDOT_DU-Levels_ElemTemp_Feat_TextFav_Annot.dgnlib*
  - STM STR Ex - Pro > Anno Group = DU - Pro - STM DiaInv - Ex
  - CULV STR Ex - Pro > Anno Group = DU - Pro - CULV DiaInv - Ex
  - Added "null" or dummy nodes for existing content
    - ELEC Null Node - Ex
    - GAS Null Node – Ex
    - OIL Null Node - Ex
    - SAN Null Node – Ex
    - TEL Null Node - Ex
    - TRAF Null Node – Ex
    - TV Null Node - Ex
    - WTR Null Node – Ex
    - STM Null Node - Ex
  - Added caissons for traffic
    - Point > TRAF (New Folder)
      - TRAF CAIS [18, 36, 42, 48, 54] – Pnt
      - TRAF Design Node - Pnt
    - Solid > TRAF (New Folder)
      - TRAF CAIS [18, 36, 42, 48, 54] – Sol
      - TRAF Design Node - Sol

Feature Definitions

- *…\Organization-Civil\CDOT_Standards\Dgnlib\Feature Definitions\CDOT_DU-Levels_ElemTemp_Feat_TextFav_Annot.dgnlib*
  - Updated:
    - Set Inner Profile Element Template to CULV Ex - Pro and STM Ex - Pro for all existing CULV and STM conduits
  - Deleted Outer Profile Element Template from all existing SAN conduits Renamed
    - TRAF Generic Node to TRAF Generic Node - Ex
  - Added "null" or dummy nodes for existing content
    - ELEC Null Node – Ex
    - GAS Null Node – Ex
    - OIL Null Node - Ex
    - SAN Null Node – Ex
    - TEL Null Node - Ex
    - TRAF Null Node – Ex
    - TV Null Node - Ex
    - WTR Null Node – Ex
    - STM Null Node - Ex
  - Added caissons for traffic in CommNode > TRAF (New Folder)
    - TRAF Caisson - [18", 36", 42", 48", 54"]
    - TRAF Design Node

Text Favorites

- *…\Organization-Civil\CDOT_Standards\Dgnlib\Feature Definitions\CDOT_DU-Levels_ElemTemp_Feat_TextFav_Annot.dgnlib*
  - Updated
    - DU - Cnd - Diameter to use Utility.Description field
  - Added
    - DU
      - DU - Pro - Cnd - StartInv using Utillity Link.Start Invert
      - DU - Pro - Cnd - StopInv Using Utillity Link.Stop Invert
    - Traffic
      - TRAF - Caisson - Desc-Dimensions-NE

Annotation Groups / Definitions

- *…\Organization-Civil\CDOT_Standards\Dgnlib\Feature Definitions\CDOT_DU-Levels_ElemTemp_Feat_TextFav_Annot.dgnlib*
  - Updated
    - XS-DU Label - Prop CULV Annotation Definition to use Text Favorite DU - Cnd -Size Material (Desc)
  - Added
    - XS-DU Label - Prop STM - CSP Arch to use Text Favorite DU - Cnd - Size Material (Desc)

Label Definition

- *…\Organization-Civil\CDOT_Standards\Dgnlib\Feature Definitions\CDOT_DU-Levels_ElemTemp_Feat_TextFav_Annot.dgnlib*
  - Added Traffic > Caisson Type-Dia-Depth-NE

Cells

- *…\Organization-Civil\CDOT_Standards\Cell\Drainage-Utils - Utilities.cel*
  - Scaled lines to 0.01' *(Provides better visibility in plan view for user interaction)*
    - SU_CMN Null - Pln
    - SU_CMN Cylinder - Pln
  - Created new cells for traffic caissons
    - SU_TRAF_CAIS [18, 24, 36, 42, 48, 54] – Btm
    - SU_TRAF_CAIS [18, 24, 36, 42, 48, 54] – Pln
    - SU_TRAF_CAIS [18, 24, 36, 42, 48, 54] - Top
- *…\Organization-Civil\CDOT_Standards\Cell\Drainage-Utils - Hydraulics.cel*
  - Updated insertion location to outside edge of structure
    - SU_STM INLT Vane - Pln
    - SU_STM INLT Vane DBL - Pln

Storm Project Content

Scenarios

- Revised Scenario Configuration
    - Project Frequency XX Yr. - Design
        - Project Frequency XX Yr. - Analysis
        - 2 Yr. Storm - Analysis
            - 2 Yr. Storm - Design
        - 5 Yr. Storm - Analysis
            - 5 Yr. Storm - Design
        - 10 Yr. Storm - Analysis
            - 10 Yr. Storm - Design
        - 25 Yr. Storm - Analysis
            - 25 Yr. Storm - Design
        - 50 Yr. Storm - Analysis
            - 50 Yr. Storm - Design
        - 100 Yr. Storm - Analysis
            - 100 Yr. Storm – Design

Alternatives

- Created Hydrology Alternatives
    - Project Base Hydrology
        - 2 Yr. Hydrology
        - 5 Yr. Hydrology
        - 10 Yr. Hydrology
        - 25 Yr. Hydrology
        - 50 Yr. Hydrology
        - 100 Yr. Hydrology

Catalog

- Updated Conduit Catalog design options; set Available For Design to false
    - Class & Labels Inactive
        - CDOT_Box Culvert
        - CDOT_CIP - Circular
        - CDOT_CONC - Trapezoidal CDOT_CONC - V Channel
        - CDOT_DIP - Circular
        - CDOT_GRSS - Trapezoidal
        - CDOT_GRSS - V Channel
        - CDOT_RCP - VertElliptical
        - CDOT_USER - Irregular Seed
        - CDOT_VCP - Circular
    - Class Inactive & Label Diameters < 18"
        - CDOT_CSP - Arch (17"x13" Arch)
        - CDOT_Corr Plastic - Circular
        - CDOT_HDPE - Circular
        - CDOT_PP - Circular
        - CDOT_PVC - Circular
        - CDOT_RCP - HorizElliptical
        - Label Diameters < 18" (Class Active)
        - CDOT_CMN - Circular
        - CDOT_CSP - Circular
        - CDOT_RCP - Circular

Storm Data

- Updated Storm Data
  - Removed Denver NOAA Site ID 05-2223
  - Added Durations to _ProjectStormData (Hours)
    - 168
    - 240
    - 480
    - 720
    - 1080
    - 1440

FlexTables

- Created Utilities FlexTable - CDOT STM Node - Generic Data

Tooltips

- Corrected Tooltip CDOT Physical - Conduit
  - Corrected Slope to use Construction Slope
  - Added Length to use Construction Length

Traffic Strip Map configuration updates

Levels

- *…\\Organization-Civil\CDOT_Standards\Dgnlib\FeatureDefinitions\CDOT_Traffic-Levels_ElemTemp_Feat_TextFav_Annot.dgnlib*
  - Modified Weight on the following levels:

	Old Weight	New
Weight TRAF_Strip Map-Arrows	3	2
TRAF_Strip Map-Ball Bank	2	1
TRAF_Strip Map-General	2	1
TRAF_Strip Map-NP - Zones	3	2
TRAF_Strip Map-NP - Zones – Existing	2	1
TRAF_Strip Map-Signs - Existing	1	0
TRAF_Strip Map-Signs - Install	3	2
TRAF_Strip Map-Signs - Missing	3	2
TRAF_Strip Map-Signs - Other	1	0
TRAF_Strip Map-Signs - Remove	3	2
TRAF_Strip Map-Signs - Retain	1	0
TRAF_Strip Map-Signs - Special	1	0

Cells

- Removed the following cells from the *Traffic - Stripmap.cel*:
  - Rec-NP-Zone
  - Rec-NP-Zone-Existing

Plotting

- *…\\Organization-Civil\CDOT_Standards\Printing\Pen Tables*.tbl* o Updated *CDOT_Traffic - PenTable.tbl* as follows:
    - Removed the levels TRAF_Strip Map-NP - Zones – Existing, TRAF_Strip Map-Signs – Existing, TRAF_Strip Map-Signs – Remove from the Proposed-Grey section.

Macros

- *…\\Organization-Civil\CDOT_Standards\Macros* o Replaced MakeStripmap.mvba with a new version.

Survey and Right of Way configuration updates

Annotation Groups

- *…\Organization-Civil\CDOT_Standards\Dgnlib\Feature Definitions\CDOT_ROW-Levels_ElemTemp_Feat_TextFav_Annot.dgnlib*
    - Update the LT and RT Curve Label Annotation Definitions to read the correct Text Favorites. This update fixes labeling ROW Arcs using the element annotation tool.

Civil Labeler

- *…\Organization-Civil\CDOT_Standards\Dgnlib\Feature Definitions\CDOT_ROW-Levels_ElemTemp_Feat_TextFav_Annot.dgnlib*
    - Created Civil Label Definitions for LT and RT Curve Labels. This fixes the issue with the Curve Data LT and Curve Data RT civil Labels for Right of Way.

Feature Definitions

- *…\\Organization-Civil\CDOT_Standards\Dgnlib\Feature Defintions\CDOT_Survey-Levels_ElemTemp_Feat_TextFav_Annot.dgnlib*
    - Added a feature definition for ruled boundaries.
    - Added the 277 and 283 field code features back into the DGNLIB.

Macros

- *…\\Organization-Civil\CDOT_Standards\Macros*
    - Updated the ROTCELL.mvba – This fix allows users to rotate survey cells to a specific degree from true north.