

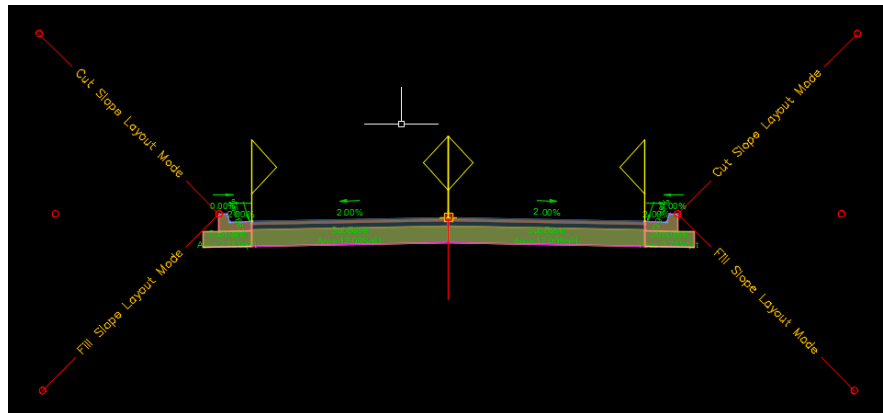
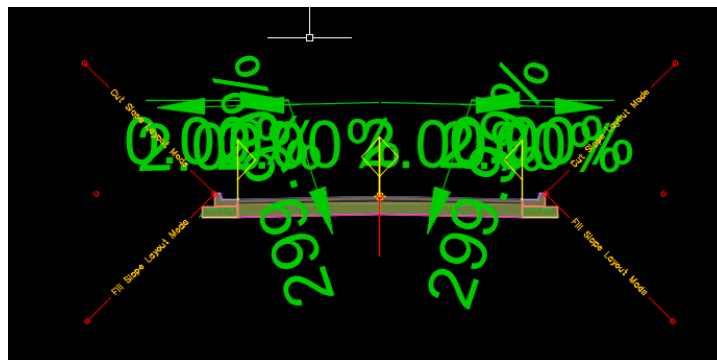
PIM & CAD STANDARDS VERSION 1.2 UPDATES

2/15/2023 Updates (PIM & CAD v1.2 Updates)

The following updates were made to the PTC PIM & CAD Standards:

Civil 3D Template/Support Files











- Added independent layering for Profiles, Profile Labeling, Profile Views, & Profile View Labels
- Added independent layering for Alignments and Alignment Labels
- Moved Alignment curve labels to inside curve
- Question: I think we should add an additional Code Set and new labels for Assemblies. The current one uses scale values that work on the plans but are too big and unreadable on Assemblies. Agree?
 - Added Assembly Code Set
 - Changed command setting to use whenever adding an Assembly.



- Survey Point Codes to match PennDOT table has been updated in the Standards 15.8.1
- Updated Baseline Linetype and documentation to reflect long line at 2.0 instead of 1.8
- Renamed Roll Plot Template and sheets to “PTC Full Project Length PDF C3D”
- Created a new PMP file for long plot configuration



- Added additional Roll sheet at 50 scale
- Added additional cut sheets:
 - 34x48
 - 34x60
 - 34x72
 - 34x96
 - 34x108
 - 34x120
- Remove (no plot) grid lines from cut sheets
- Added additional Alignment major label styles for existing and proposed labels with an extended offset to accommodate 4' linework.
- Added a tool pallette named PTC Barrier and Guiderail Transitions containing multiview blocks to add to a corridor model.

Block	Preview
MV-PTC SINGLE FACED BARRIER TRANSITION LEFT	
MV-PTC SINGLE FACED BARRIER TRANSITION RIGHT	
MV-PTC ABUTMENT TRANSITION TYPE I	
MV-PTC ABUTMENT TRANSITION TYPE II	
MV-PTC ABUTMENT TRANSITION TYPE III	
MV-PTC SINGLE FACE BARRIER TO THRIE BEAM	
MV-PTC PIER TRANSITION PIECE	
MV-PTC MONOPIPE CAISSON TRANSITION PIECE	
MV-PTC 41in BARRIER TRANSITION PIECE LEFT	
MV-PTC 41in BARRIER TRANSITION PIECE RIGHT	

Bentley ORD Support Files

Alignments

- Created Station Label Annotation Group that places station label on LEFT side (top) of alignment.
- Created Station Label Annotation Group with the Station value a larger distance away from alignment and larger major and minor tick size.
- Created a 'NoDisplay' Alignment Feature Definition.
- Verified length of 'Baseline' linestyle dashes to be proper (2.0) length.

Plan Sheets

- Created new PTC Plan Sheet sizes
 - 34x48
 - 34x60
 - 34x72
 - 34x96
 - 34x108
 - 34x120

Workspace Definition

- ORD units set to 4 decimal places

Revit Template Files

- Updated view templates to allow for changing of view scales while setting $\frac{1}{4}''=1'-0''$ as suggested minimum

1. "VIEW TEMPLATES"

1. Within the PTC Revit Template, all new views created from existing view types will be automatically assigned a corresponding view template. The assigned view template can be located (and modified) within the *Properties* window. This assigned template will govern the visibility and graphics of the view until it is removed.
1. The PTC Revit template will include a view template for each view type in use. **Note that the minimum acceptable view scale standard size is $\frac{1}{4}''$. However, it can be updated to a larger size when necessary.** Additional view templates may be required while working through a project and can be added as needed if they do not conflict or overlap with an existing view template.

- **MEP Template:** includes MEP specific standards.

The models are starting points and the consultant project teams are expected to add content as necessary per project. The MEP template contains Revit link placeholders from other disciplines. These placeholders are represented in the view templates but are placed only "as a suggestion" as

to the way the visibility graphics for these links should be set. The user has broad discretion as to how the visibility settings for the links are set.

- Moved **sheet type** parameter to *TEXT* section in Properties so it is grouped with **Sheet Function**.
- Renamed and loaded annotation families received USA CAD
- Updated wall CMU for each template per <https://ncma.org/resource/typical-sizes-and-shapes-of-concrete-masonry-units/>

Solid Block Size	NOMINAL DIMENSIONS	ACTUAL DIMENSIONS
	D X H X L (INCHES)	D X H X L (INCHES)
4" CMU Full Block	4" x 8" x 16"	3 5/8" x 7 5/8" x 15 5/8"
4" CMU Half-Block	4" x 8" x 8"	3 5/8" x 7 5/8" x 7 5/8"
6" CMU Full Block	6" x 8" x 16"	5 5/8" x 7 5/8" x 15 5/8"
6" CMU Half-Block	6" x 8" x 8"	5 5/8" x 7 5/8" x 7 5/8"
8" CMU Full Block	8" x 8" x 16"	7 5/8" x 7 5/8" x 15 5/8"
8" CMU Half-Block	8" x 8" x 8"	7 5/8" x 7 5/8" x 7 5/8"

- Matchline exists with linetype –PT CENTER. Created view reference tag
- Updated titleblocks for **BOLD** sheet names, checked parameters and fixed revision schedules
- Updated default viewport type to PTC_VIEW TITLE_W/SCALE
- Updated symbols sheet per markups
- Set PTC_STANDARD dimension style to use text style with 3/32" text height across all dimension types

PTC Project Execution Plan Template v1.2

- Updated formatting to update spacing.
- Updated text and added table to Section 5.5.
- Update title sheet
- Removed standards checklist.
- Updated table formatting and added table numbers/names
- Update section 1 language
- Removed project milestones Estimated Start Date
- Added hybrid table to section 3
- Removed Date column from deliverables
- Add ORD examples to 3D coordination
- Update executive statement
- Update table section 4.1
- Create new section 4.1.1
- Added tables in section 4.2



- Added tables in section 4.3
- Update tables in section 5.1
- Moved section shared model element ownership, project coordinate, levels/grids, and phasing items to Appendix A
- Added Project coordinate tables
- Added table to section 7
- Updated language in section 8
- Added appendix A

Project Information Modeling & CAD Standards v1.2

- Added note for full project length PDF sheet sizes to Section 7.1.3 PDF Plan Sets.
- Revised verbiage for full project length PDF selection for Section 7.7 Full Project Length PDFs.
- Revised Section 3.6.2.6 wording with Advertisement.
- Added section 5.8.3.9 - Guiderail
- Added section 5.8.3.10 - Barrier Transitions and End Pieces
- Section 10.1 Collaboration Strategy – revised CDE and Document Management language
- Updated section 10.2 Project Organization for updated folder structure and added abbreviations for subfolders
- Added appendix section 15.7.1.6 Civil 3D Barrier & Guiderail Transitions