



FDOTSS4 Readme File

Version

Product: FDOT CADD Software
Version: FDOTSS4, version 01.07.00
Date: July 2, 2018

Acronyms

CADD - Computer Aided Drafting and Design
FDOT - Florida Department of Transportation

Software Version Notification

FDOTSS4 version 01.07.00 Summer 2018

FDOTSS4 Maintenance Release (MR) 7

This Maintenance Release includes fixes of issues reported since the release of FDOTSS4 MR6.

- FDOT_ASCIIEarthworkQuantitiesSubsoil.XSL – Updated to fix formatting
- Design Apps.XML – Deleted menu item GEOPAK VBAs > COGO > Identify COGO Element
- FDOT_ElementTempaltes.DGNLIB – Re-added Subsoil_px element template that had been removed
- TTF_v8structures.CEL – Revised standard note on Key Sheet
- LabelShapesWithID.MVBA – Added circles and ellipses
- LabelShapesWithArea.MVBA – Added circles and ellipses
- FDOTSS4.ITAL – Changing some of the Bottom-pm to SubGrade_pm for the creation of a SubGrade surface for 3D deliverables.

- Summary_of_Curb_and_Traffic_Separators.XLSX - Changed the number of decimal places from 0 to 1 for the deduction length column. Based on the BOE and confirmed with Melissa Hollis in Estimates, the LF quantities should be measured to one additional significant figure, so in this case, one decimal place.
- FDOT_DesignGeometricsCriteria.DGNLIB - added Shared Use Path vertical and horizontal Design Standards
- Multiple CAICE FDOT_SS4 files - Removed PE and replaced with ESMTP (perpetual easement proposed).
- Survey_levels.DGNLIB - Added levels 1794-1797 for survey processing automation levels. They are for Control, Setups, Observations and the Traverse.
- Removed Construction menu from FDOT Menu.
- Removed help link for "Request CADD Support," and "FDOT State of Florida County maps" links
- Updated help links for "Request CADD Support," "Label Shapes With Area," "Design Apps" and "Drainage."
- Updated Cell Webpages
- Updated CADD Manual Website link
- Updated control files to be in sync with Masterstandards.XLSX
- Updated the "file Type" for Non-Bridge related file names to match the "File Groups."
- Removed "Help" folder as all help files are stored on the website.
- Imbedded MR7 Survey_Display/ROW_Display XML feature tables (Control and RW Monuments).
- Updated Filters for Control Survey, RW Maps and CTL sheets.
- Removed CAT as a control monument.
- Add Control Monuments and RW Monuments.
- Add Control Monuments, RW Monuments, Changed PE to ESMTP, Moved ITS features to zone.
- Revised CTLDAT Cell legend: Solid monument = Set, Open monument = Found.
- Added option for Regulatory Sign R07-01. Ok with Ed Cashman.
- Added new templates to Sheets pull-down per request from Survey/John Hazlip: Control_Sheet_Detail_Table.xlsx & Control_Sheet_Table.xlsx
- Added new templates to Sheets pull-down per request from Survey/John Hazlip: Control_Sheet_Detail_Table.xlsx & Control_Sheet_Table.xlsx
- Correct Template designation from fdotmaster.dwt to planrd.dwt
- Per Michael Robertson and approved by Charles Boyd, remove the 'X' (representing the Pier No.) from all Bascule Piers base file names. Pier No. can be entered as additional Modifier to the filename and Sheet No. Sequence No. will be separated by a dash '- '.
- Additional Structure levels for Substructure Concrete and Superstructure Concrete
- LEVEL NAME DESCRIPTION

- SubStrConc3 Substructure Concrete Misc
- SubStrConc3_h Substructure Concrete Misc Hidden
- SubStrConc4 Substructure Concrete Misc
- SubStrConc4_h Substructure Concrete Misc Hidden
- SupstrConc3 Superstructure Concrete Misc
- SupstrConc3_h Superstructure Concrete Misc Hidden
- SupstrConc4 Superstructure Concrete Misc
- SupstrConc4_h Superstructure Concrete Misc Hidden
- Additional Structure levels for Substructure Concrete and Superstructure Concrete
- LEVEL NAME DESCRIPTION
- SubStrConc3 Substructure Concrete Misc
- SubStrConc3_h Substructure Concrete Misc Hidden
- SubStrConc4 Substructure Concrete Misc
- SubStrConc4_h Substructure Concrete Misc Hidden
- SupstrConc3 Superstructure Concrete Misc
- SupstrConc3_h Superstructure Concrete Misc Hidden
- SupstrConc4 Superstructure Concrete Misc
- SupstrConc4_h Superstructure Concrete Misc Hidden
- Workspace Doctor and ClearCrash - add clear excel
- Created and linked feature definitions for SubGrade_pm and SubGrade_px to the Element Template SubGrade_pm and Subgrade_px for the creation of an alternative surface called SubGrade
- Added the Element templates for SubGrade_pm and SubGrade_px
- Rule_Filename Tab - File Group column - removed the unnecessary verbiage "Design" and "Geotechnical" to shorten number of character for the field.
- Item 0711 15101 Thermoplastic, Standard - Open Graded Asphalt Surfaces, White, Solid 6" - error in adhoc for paint 0710 11101 painted PM, Std, White, Solid, 8" - corrected to 6"
-
- 5/31/18 - Corrected Filename settings for a separate Geotech grouping used by the Create File application
- Corrected Filename settings for Structures group selection sets used by the Create File application
- Create new Control Monument Feature Codes and Survey Levels and assign to rweng10 and survrd rules:
- Move Levels: MonConcOpen, MonConcSolid, MonConRW, MonPermRW, MonRodOpen, MonRodSolid from ROW level library to Common level library

- Move Levels: MonConcOpen, MonConcSolid, MonConRW, MonPermRW, MonRodOpen, MonRodSolid from ROW level library to Common level library
- Opened and saved all .xlsx files with Excel 2016 to eliminate LDM/Excel "save as" background dialog error
- Remove the ustation.box or PowerGEOPAK.BOX file from the roaming profile on file open. LoadVBA.MVBA
- Fixed Pat-Asphalt cell not found error. Program doesn't actually use a cell call "Pat-Asphalt", just triggers the shape to be solid filled.
- Added new FDOT Standard Landscape non-critical filenames to the Landscape Sheet
- Added new FDOT Standard Roadway non-critical filenames to the Roadway Sheet
- Changed CADD Customer Support Guide to CADD Manual and redirected the link accordingly. Will update help file to reflect changes to menu entry and provide landing location for the CADD Manual help link.

FDOTSS4 Maintenance Release (MR) 6

FDOTSS4 (MR6) contains updates necessitated by changes to Design Standards, Plans Preparation Manual (PPM), and the Basis of Estimates (BOE) as well as bug fixes to address reported issues.

The FDOTSS4 MR6 Release is intended for use with PowerGEOPAK (Select Series 4) 08.11.09.878, or MicroStation V8i (Select Series 4) installations on version(s) 08.11.09.832 and GEOPAK (Select Series 4) version 08.11.09.878.

The following is a list of fixes and additions since Maintenance Release 5, December 2017.

- Add LOC (Limits of Construction), BLF (Baseline Field), Revise BL to Baseline Survey. fdot_ss4.smd
- Add LOC (Limits of Construction), BLF (Baseline Field), Revise BL to Baseline Survey. fdot_ss4rw.smd
- ROW_Display.xml
- Survey_Display.xml
- Updated Digital Delivery Borders for Typical Section Package. TypicalSection.cel
- Added features for Geometry Chains (Right of Way Elements). FDOT_SS4.ftm
- Correction to LOC feature description. ROW_Display.xml
- Added text files back for C3D. MasterStandards.xlsx
- Added Survey_Display Feature > 2D Geometry Chains templates for right of way elements. FDOT_ElementTemplates.dgnlib

- Connected 2D Geometry Chain templates to Right of Way elements and baseline elements for Horizontal Geometry functionality. FDOT_SurveyFeatures_RD.dgnlib
- Updated ROW (Existing Right of Way) feature color from red to cyan. FDOT_SS4.ftm
- Add BL, BLF, LOC to SURVRD Standards Level Filter. fdot_v8_levels.dgnlib
- Updated Topography and Utilities theme. themes.xml
- DrainagePatternLines.mvba
- Let the user know when the FDOTSS4.ucf is Read Only. LoadVBA.mvba
- Deleted unnecessary line break between paragraphs. Disclaimer.rtf
- remover unneeded reference. DrainTab.mvba
- Change Color to Silver. cadpilot.ui.xml
- updated the element template for Existing Curb for plan from (CGFace_ep to CGBack_ep). FDOT_CivilFeatures_RD.dgnlib
- Added past deleted rules to the Rule_Description tab to support the automation process. SPDTRD Special Details
- Appended Cell Name to Description to display in the Cell Webpage Mutcd.htm
- Under the Rule_Filename Tab: Update "Action" column to match roadway.ctl control file for the
 - - EMO file: ALGNEM
 - - Roadway files: GDTMRD, ALGNRD, & DSGNRD
 - - Survey file: GDTMRD.
 - "Action" information is used by the File Create application to specifically set the new files. MasterStandards.xlsx
- corrected exit App. LevelFilterOnOff.mvba
- Remove RW level #1806 BaselineSideStreet and add to Common Level Library #180 BaselineSideStreet
- Correct Common Level #612 GISParentTrackParcel to GISParentTractParcel
- Correct Common Level #613 GISParentTrackParcelRaw to GISParentTractParcelRaw fdot_common_levels.csv
- Added pay items for single slope median barriers 521-1-11 through 14 to the Concrete Barrier Wall > Effective 7/18 category. Moved 521-1-1 Median Barrier Wall Conc. Precast to the Valid thru 6/18 category. fdotss4.ddb
- Additional changes to 521 pay item. Moved 521-1 and 521-1 A=2-5, 7, 10 & 11 to the Valid thru 6/18 category. Added 521-72 AA=40-45 to Effective 7/18 category. Also removed "Wall" from descriptions of 521-72 AA=24-27. fdotss4.ddb
- Created 3 new Rule Files:
 - gisalgn - Geographical Information System Alignment
 - gispar - Geographical Information System Parcels
 - gisrwdt - Geographical Information System Right of Way Lines

Created 3 new Right of Way File Names

gisalgn* - Baseline Survey/Center Line Construction Alignment(s)
 gispar* - Parcels (Parent Tract, Fee Simple, Easements, License Agreements)

gisrwdt* - Project Right of Way Lines (after acquisition)

Created 3 new Survey Feature Codes and re-assigned Survey Feature Code (BL)

Line	Code	Zone	Level	Description
L	BL	6	BaselineSurvey	Baseline Survey
L	BLF	6	BLSurveyField_ep	Baseline Survey Field (Calculated from BLC)
L	BLSS	6	BaselineSideStreet	Baseline Side Street
L	LOC	9	ConstLimits	Construction Limits

Moved Level BaselineSideStreet from RWLevels.dgnlib to fdot_common_levels.dgnlib

Corrected GIS Level Names

From: GISParentTrackParcel to: GISParentTractParcel

From: GISParentTrackParcelRaw to: GISParentTractParcelRaw

Assigned Rules to GIS Levels:

Rule	Level#	Level
rweng10	601	GISAlignmentRaw
rweng10	603	GISEaseParcelPerpRaw
rweng10	605	GISEaseParcelTempRaw
rweng10	607	GISExcessParcelRaw
rweng10	609	GISFeeSimpleParcelRaw
rweng10	611	GISLicenseParcelRaw
rweng10	613	GISParentTractParcelRaw
rweng10	615	GISROWCntyLineRaw
rweng10	617	GISROWCtyLineRaw
rweng10	619	GISROWLALineRaw
rweng10	621	GISROWLineRaw
rweng10	623	GISSurplusParcelRaw
gisalgn	600	GISAlignment
gispar	602	GISEaseParcelPerp
gispar	604	GISEaseParcelTemp
gispar	606	GISExcessParcel
gispar	608	GISFeeSimpleParcel
gispar	610	GISLicenseParcel

gispar	612	GISParentTractParcel
gispar	614	GISROWCntyLine
gispar	616	GISROWCtyLine
gispar	622	GISSurplusParcel
gisrwdt	618	GISROWLALine
gisrwdt	620	GISROWLine

Assigned survrd Rule to Temporary TopoDOT Levels for automation system:

Blue Point	Temporary TopoDOT Level (DO NOT USE)
Data Tiles	Temporary TopoDOT Level (DO NOT USE)
Green Point	Temporary TopoDOT Level (DO NOT USE)
Orange Point	Temporary TopoDOT Level (DO NOT USE)
Red Point	Temporary TopoDOT Level (DO NOT USE)
Scan Positions	Temporary TopoDOT Level (DO NOT USE)
Teal Point	Temporary TopoDOT Level (DO NOT USE)
TopoDOT Temp	Temporary TopoDOT Level (DO NOT USE)
Yellow Point	Temporary TopoDOT Level (DO NOT USE)

/APPS/ustnQCInspector/MasterStandards.xlsx

- Added Type E Drop Curb template.
- Renamed category from "ConcreteBarrierWall" to "Concrete Barrier"
- Added "Effective 7/18" category and "Valid thru 6/18" category.
- Moved existing features for barriers (pay items 521-1, 521-1-1 and 527-72-AB, AB = 2-5, 7, 10 & 11) to the Valid thru category.
- Added new features for barriers (pay items 521-1-AB, AB = 11-14 and 521-72-AB, AB = 24-27 & 40-45).
- Deleted features for Pedestrian Longitudinal Channelizing Devices (ED and LF) (pay items 102-74-5 and 102-74-6 - no longer valid in BOE).
- Added new feature for "Channelizing Device - Pedestrian LCD (Longitudinal Channelizing Device)" (pay item 102-74-7)
- In Maintenance of Traffic>Temporary Roadway Features, added new Category Temporary Barrier with sub categories Effective 7/1/2018 and Valid thru 6/30/2018.
- Moved Barrier Wall, Temporary features (Pay items 102-71-AB, AB = 11, 12 14, 21, 22 & 24) to Valid thru 6/30/2018.
- Added new Temporary Barrier features (Pay items 102-71-AB, AB = 15, 16, 25, & 26) to the Effective 7/1/2018 folder.
- added place blank file in the Users Temp folder if it does not exist.
- Added new PMStripeVibe and PMStripeRumble levels

- new Rumble Stripes and Pavement Marking Auditory & Vibratory Levels
- In Roadway Design > Plan Features > Rumble Strips category:
 - * Changed "Sets" category to "Raised Rumble Strips (Sets)"
 - * Changed "Ground-In" category to "Ground-in for Limited Access"
 - * Changed "Valid thru 12/31/2017" category to "Valid thru 6/30/2018" to match BOE.
- In Pavement Markings > Thermoplastic > Standard category:
 - * Changed "Rumble Stripes" category to "Rumble Stripes Valid thru 6/18" to phase out old pay items and previous Line Style and Placement methods
 - * Added "Audible & Vibratory Treatments" category to provide new Line Styles and adhoc configurations as well as new pay items.
 - * Relocated "Profiled" category previously under "Pavement Markings > Thermoplastic" and renamed to "Profiled Thermoplastic" under the "Pavement Markings > Thermoplastic > Standard > Audible & Vibratory Treatments" category.
 - * Changed placement and line style for the profiled thermoplastic, standard, concrete surfaces items, and added items for profiled thermoplastic, standard, asphalt surfaces.
- Note: Pavement markings for audible and vibratory treatments for arterials and collectors are now placed with a single line representing the thermoplastic, with adhoc for paint, thermoplastic and ground-in rumble strips. The designer must call out locations for rumble strips in the plans with notes/labels, and reference the associated standard detail. For double stripes in the centerline, the designer should use the D&C Pavement Marking - Draw Striping tool to place the double stripe, with one item identified as AVT, and the other as a solid or skip thermoplastic item.
- Add a message box to notify users that MicroStation is about to close and why - LevelFilterOnOff.mvba
- Added new category under Roadway Design > Plan Features named "Misc Drafting & Criteria Items" and relocated all individual/uncategorized items from Plan Features into this folder.
- Audible and Vibratory Treatments : added category with items for Ground-In > Open Graded Asphalt and Ground-In > Other Surfaces Relocated Profiled category and renamed to Profiled Thermoplastic with categories for Asphalt Surfaces and Concrete Surfaces
- Updated descriptions of 0536 85 AA items to match the BOE.
- changed feature on points from Bottom_pm to Barrier Wall_pm on all wall points and on coping to Wall Retaining_pm
- updated the wall point to be WallBarrier_pm on traffic Railings Standard 6110
- Create new RumbleStrip level [#5087 RumbleStrip Rumble Strip Sets (Transverse) that does not include the longitudinal rumble strip line style to rules: drxsrd,dsgnrd,pdxsrd,qtdsrd,rdxsrd,rdxssp
- - Corrected RumbleStrip3 Level No from 5083 to 5085
- - Corrected RumbleStrip4 Level No from 5084 to 5086
- Update drxsrd,dsgnrd,pdxsrd,qtdsrd,rdxsrd,rdxssp Rules Filter_Syntax tab to add new 5087 RumbleStrip Level.

- Create new RumbleStrip level [#5087 RumbleStrip Rumble Strip Sets that does not include the longitudinal rumble strip line style and add to rule filters: drxsrd,dsgnrd,pdxsrd,qtdsrd,rdxsrd,rdxssp
- Revised Raised Rumble Strip Sets 0546 71 to use new RumbleStrip level and quantify PS (per set). Eliminated extra subsets that used old linestyle.
- Updated Plan2D Feature for Rumble Strip Sets to match changes to ddb.
- Added level number 180 (BaselineSideStreet) to SURVRD Standard File Names filter.
- also include new BaselineSideSteet Level to all Rules inclusive of BaselineSurvey Level:
alnrd,drmprrd,drxsrd,dsgnrd,dsgnsg,dsgnsp,itssp,keysht,pdxsrd,planrd,plprrd,rdxsrd,rdxssp,rwdtrd,rweng10,survr,tcdsrd,ty
pdrd
- also include new BaselineSideSteet Level to all Rules inclusive of BaselineSurvey
level:alnrd,drmprrd,drxsrd,dsgnrd,dsgnsg,dsgnsp,itssp,keysht,pdxsrd,planrd,plprrd,rdxsrd,rdxssp,rwdtrd,rweng10,survr,tcd
srd,typdrd
- Added columns for Pay Item, Description, and Units. Removed columns for Absolute Begin and End Station and Curve Correction. Organized columns to more closely match the format of the summary of quantities tables. Need to make sure that the include.xml file is either part of the Bentley load, or is delivered with the rest of the style sheets.
- Generates volumes of each component including subsoil, formatted better than Bentley's VolumesToCSV.xml
- Generates an ASCII file with subsoil area and volume suitable for import as earthwork quantities in the Layout Cross Sections tool.
- FDOTVolumesToCSV.xml - updated so Fill volume accounts for replaced subsoil
- Modified Performance Turf pay items 0570-1-1 and 0570-1-2 to change the compute value to equation $[SY=Element_Area/9*\sqrt{1+(Slope*Slope)}]$ and add Adhocs to provide the slope value, and instruct the designer to enter the slope value in decimal format. Including this change per direction from Director Tim Lattner to provide all performance turf/sod quantities along the slope.
- Updated Typical Section package sheets for digital delivery to add functionality for sheet navigator page numbers for both sheets and FPID number for data sheet.

FDOTSS4 Maintenance Release (MR) 5

FDOTSS4 MR5 contains updates necessitated by changes to Design Standards, Plans Preparation Manual (PPM), and the Basis of Estimates (BOE) as well as bug fixes to address reported issues.

The FDOTSS4 MR5 Release is intended for use with PowerGEOPAK (Select Series 4) 08.11.09.878, or MicroStation V8i (Select Series 4) installations on version(s) 08.11.09.832 and GEOPAK (Select Series 4) version 08.11.09.878.

The following is a list of fixes and additions since Maintenance Release 4, October 6, 2017.

- Updated Topography and Utilities theme.
- Add BL, BLF, LOC to SURVRD Standards Level Filter
- Updated ROW (Existing Right of Way) feature color from red to cyan.
- Connected 2D Geometry Chain templates to Right of Way elements and baseline elements for Horizontal Geometry functionality.
- Added Survey_Display Feature > 2D Geometry Chains templates for right of way elements.
- Added text files back for C3D per Randy Roberts
- Correction to LOC feature description.
- Added features for Geometry Chains (Right of Way Elements)
- Updated Digital Delivery Borders for Typical Section Package.
- Add LOC (Limits of Construction), BLF (Baseline Field), Revise BL to Baseline Survey.
- Removed internet connection check timeout
- Updated table based on mark up from Andre Pavlov and Ed Cashman. Deleted Pole Length (L) column and Shaft Length (DA) column. Changed Dimension (A) column to read Concrete Pole Depth (D).
- completed updates to design criteria for FDM, including vertical RRR and minor changes to vertical criteria to account for curb/flush differences in minimum slope
- Added Themes for Geometry Chains and Alignments.
- Add BLF (Baseline Field) to Topography list, Add LOC (Limits of Construction) to Control Survey list.
- Added LOC (Limits of Construction), and revised to show BL as Baseline Survey and BLF as Baseline Field.
- Added new category "Temporary Barrier" to Roadway Design > Quantity Features > Temporary Roadway features. Divided up Temporary Barrier into 0102 71 13/23 which remains as-is and added new sub-folders for "Valid thru 6/30/2018" for old pay items AB = 11, 12, 14, 21, 22, and 24, and "Effective 7/1/2018" to add new pay items AB = 15, 16, 25, and 26.
- Changed the name of the Rotate Cell macro calls in the Civil Standards>Project Settings>Survey>FDOT Survey Settings as per Bob Thorburn's MVBA name change.
- updated Vertical alignment design standards. Added category for FDM RRR to cover different RRR crest K values, still needs editing
- added a 44" pier protection barrierWall
- Update to SlopeBarrier Walls changed the below grade points to match. Above grade points have a slight slope to the vertical faces. Set a display rule to the short grade separator.
- made changes to the bottom points of the single slope barrier Walls All points below grade are bottom_pm
- updated to match FDM table 210.9.2

- Fixed scaling issue on PM-Stripe2'_2'skip
- Corrected the pay item columns in box 2 to match box 1.
- Signed the executable to allow web access through a desktop application for non-admin users.
- Fixed exception being thrown when user typed in invalid path characters in the pdf file path textbox.
- Updated with new Single Slope Barriers for Different Heights 38" 44" 56" Single Slope Barrier Walls
- Decision was made that the next release would be a MR instead of a hotfix. Adjusted version number accordingly for MR5.
- Deleted obsolete Concrete Sheet Pile Wall cell link. Corrected link to 400-289
- Updated cell library from James Frederick to fix text/dimension scale issues in some cells, delete obsolete cell for Concrete Sheet Piles, and add revision note to Default model.
- Updated element templates for guardrail for cross section cells
- Updated features to place 25" guardrail cross section cell for 2018 standards
- Revised dimension for sign panel FTP-82-08 to be 24" x 36" (instead of 24x30) to match the Standard Index 700-102 Sheet 9 of 11.
- Added Left, Right and Double 25" tall guardrail to match new 2018 standards
- Updated Drainage Index Reference Updater help button with link to new help file.
- Added Drainage Reference Index Updater tool and help icon to bar menu. Need to add link to help document once it's completed.
- Changed pay item options for single post Back to Back, 3S & 4S to use pay item 0700 1 14 instead of 0700 1 74, since these options may have a larger sheeting area than 30sf, but not exceed a 30sf wind load, and in that case AB=14 is a valid pay item.
- updated with preliminary FDM structure for horizontal and vertical design criteria
- Mike Robertson recompiled LandXMLGrouper.exe and LandXMLAssembly.dll. Together these two files fixed point zones not being read.
- Updated TOPORW Group to FDOTSS4 MR4 Standards.
- Revised section Pavement Markings>Thermoplastic>Standard>Rumble Stripes to add new pay items per the BOE. Separated the old entries into Valid thru 12/31/17 folder and added new folder Effective 1/1/18 for the new pay items.
- Deleted extraneous 8" entry in Roadway Design>Plan Features>Rumble Strips>Ground-In>Effective 1/1/2018, per Gevin McDaniel and Ed Cashman, who stated that only 16" ground-in rumble strips are valid on Roadway plan features.
- Updated Key Sheet Cells to reflect new "Governing Standard Plans" note, per the FDM
- updated links with new structure for PPM/FDM horizontal and vertical criteria
- Added Subsoil feature to the Corridor Components
- Recreated the file from scratch in Excel 2016 to correct an error that was showing up in ACAD/C3D.
- Changed "Design Standards" to "Standard Plans" and updated link. Updated Version to 01.04.01.

- Initial checkin, application searches for Index references places by Criteria and replaces with new index numbers.
- 11/21/17 STRUCTURES.CTL file for the Create File application: Updated the Non-Bridge Related filenames format from "<filename>* " to "<filename>.dgn"
- Edited pay item 102-60 to add an adhoc for number of panels per post and modified computation to be panels*days to comply with BOE/DQE instruction to pay for each work zone sign panel per day.
- Reduced size of Quality Level A, B, C, D point location cells for readability.
- Added FDOT Common Levels to list of DGNLIBS that are attached in Structures workspace.
- EDIT NOTE AT TOP OF SHEET TO REFERENCE NEW FDM PART/CHAPTER INSTEAD OF PPM
- Changed reference to Standard Index Number to Florida Design Manual Index Number.
- Changed reference to Standard Index 300 to Florida Design Manual Index 520-001.
- - Updated FDOT Menu Cell tab with the Structure changes in the Cell Libraries
- - Removed TTF_v8semi-standards cell library and webpage (.htm) information
- - Added TTF_StdDataTables cell library and webpage (.htm) information
- Corrected details on delineators (pay items 705-11-3 & 705-11-4) where key in cell name and item ID cell name did not match and would not compute. Cell name and key in now match and items compute correctly.

FDOTSS4 Maintenance Release (MR) 4

FDOTSS4 MR4 contains updates necessitated by changes to Design Standards, Plans Preparation Manual (PPM), and the Basis of Estimates (BOE) as well as bug fixes to address reported issues.

The FDOTSS4 MR4 Release is intended for use with PowerGEOPAK (Select Series 4) 08.11.09.878, or MicroStation V8i (Select Series 4) installations on version(s) 08.11.09.832 and GEOPAK (Select Series 4) version 08.11.09.878.

The following is a list of fixes and additions since Maintenance Release 3, April 3, 2017.

- Revised MasterStandards.xlsx added 8 inch options for Rumble Strips with new Levels (RumbleStrip3 & RumbleStrip4), LineStyle/LineType (PM-RumbleSolid8in & PM-RumbleSkip8in) and updated Description to reflect option size.
- Updates to ddb
- Added Overbuild Style Sheets.

- Add Erosion Control Levels
- CAiCE - Revise feature descriptions to match master standards
- Create3DDeliverablesData.xml Changed Corridor to Model.
- FDOTSS4.ddb Deleted items valid through 6/30/17 (or before); Coordinated item descriptions with BOE.
- Standards.xml Revised version to FDOTSS4 MR4 (Version: 01.04.00)
- StructuresPayItemStandardBuilder.exe Updated standards release date
- Updated to use web based help
- Changed to web address to production address
- Added Structures Standards Packager link and Help file link. Made all the help file link icons "?" consistent with all the other bar pull-downs.
- Need to correct new Endangered Species levels to be consistent:
 - Lv# Level Name
 - 1204 EndangeredL change to: EndangeredL_ep
 - 1205 EndangeredP change to: EndangeredP_ep
- Need to correct new Endangered Species levels to be consistent:
 - Lv# Level Name
 - 1204 EndangeredL change to: EndangeredL_ep
 - 1205 EndangeredP change to: EndangeredP_ep
- Need two new Survey Levels for the two new Feature Codes for Endangered Species. Level to apply to TOPORD and SURVRD Rules.

<u>Lv#</u>	<u>Level Name</u>	<u>Description</u>	<u>Co</u>	<u>Style</u>	<u>Wt</u>	<u>Feature Code</u>	<u>Zone</u>
1204	EndangeredL	Endangered Species Line	4	2/DGN2	2	ESL	1
1205	EndangeredP	Endangered Species Point	4	0/Continuous	1	ESP	1
- Added 1204, 1205 (ESP, ESL) to SURVRD level filter.
- Added Endangered Species levels EndangeredL_ep, EndangeredP_ep (1204,1205)
- Embed MR4 Survey feature tables.
- ADD Feature Codes ESL, ESP (Endangered Species Line/Point)
- Added ESL, ESP (Endangered Species Line/Point) feature codes.
- Added folder of new FDM Templates
- Added ESP (Endangered Species Point) cell
- Added 1204, 1205 (ESP, ESL) to TOPORD level filter.
- Update CAiCE with latest MR4 seed files.
- Added back in to the Project Explorer>Survey Tab - Survey Zone Filters.

- Added ESP (Endangered Species Point) and ESL (Endangered Species Line) point and chain feature codes to TOPORD theme.
- Added Endangered Species Point cell (Temporary)
- Added USHLDER to the Civil Cell Entrance Ramp_Single Lane_Parallel Type
- Minor reposition of various cell origins.
- Revise SSP level SpanWire_ep to SpanWireP_ep
- Added and revised Right of Way level filters to MR3 standards.
- Corrected Pay Items and Descriptions to coordinate with BOE.
- Deleted Exit Gore Signs, Motorist Aid Call Box, Delineators.
- Added shoulder curb to Entrance ramp taper type
- Update Ramp Civil cells with shoulder curb and renamed civil cells
- Updated 306-4, 306-5, 306-6 with Curb Type E or F according to the FDM Exhibit and to run quantities
- Deleted Exit Gore Signs from Ground Mount > Single or Multi-Post.
- Deleted Delineator and Motorist Aid Call Box from Ground Mount.
- Added Relocate section to Overhead > Static Sign Structure.
- Disabled Length and Area in Overhead > Static Sign Structure > Remove section.
- Deleted Delineator from Panel Only section.
- Made Sign Type NA for all Electronic Display Mounting options for Relocate and Remove Sign State.
- Deleted Replace Beacon from Electronic Display.
- Deleted Sign Only - Existing, Structure - Existing, Pedestal, Span, and Cantilever Mounting options from Dynamic Message Signs (These are all covered in the other options).
- Separated out the proposed Furnish and Install in Internally Illuminated Signs > Signals > Proposed into Furnish and Install Ground Mount and Furnish and Install Overhead Mount.
- Removed duplicate levels found in the Common and Roadway Level Libraries. If needed must attach these libraries to access. Levels will still pass in the spst10 rule file.
- Added civil cells for ramps
- Single Ramp with 3 Thru Lanes
- Double Ramp 3 Thru Lanes with Aux Lane
- Taper Type Entrance Ramp
- Parallel Type Entrance Ramp
- Changed RS-014 to RS-114A, Removed R03-08, Removed R03-10B
- Make FDOT Template active when opening Create Template dialog box. Was opening with driveway template as active after previous edit.

- renamed FDOT_DirectionalMedianOpening.dgnlib to FDOT_DirectionalMedianOpenings.dgnlib to follow the naming convention no changes were made to the civil cells
- Place a Blank.dgn file in the AppData\Local\Temp\ folder
- Corrected PLNT level to LandscapeBordr_ep. Added TALR feature (Turn Arrow Left or Right).
- Removed Common Levels #124 and #125 erroneously entered in the fdot_v8_levels.dgnlib
- Updated TS Sheets to remove signature blocks and added separate signature sheet as requested in Innovators email.
- Updated CADPilot Menu Program folder(FDOTSS4\Menu\Program\) to work with Windows Creators Update 1703.
- Updated level numbers for levels:
 - GSBWFill 2811 to 7503
 - GSColorFill 2812 to 7504
 - GSDims 2813 to 7505
 - GSOOutline 2814 to 7506
 - GSSign 2815 to 7507
 - AdhocPoint_dp 201 to 101
 - PlotBorder_dp 216 to 150
 - TextNotes 310 to 213
 - Viewport 450 to 300
- Removed level Monument_ep and moved to Survey_Levels.dgnlib
- Corrected level numbering and filters (dsgnsg, dsgnsp, gswksp, itssp, rdxssp)
- Added help menu link to the County General Highway Maps link.
- Corrected attribute and adhoc for guardrail end treatment pay item 536- 85- 28.
- Change old ClipBorder level In RWCLIP Model to ClipBorder_dp to be consistent with Roadway Design.
- Initial folder creation to hold Geopak Drainage addins to replace VBAs
- Added new preference for labeling existing ground elevation on cross sections.
- Corrected Line Style settings for levels: LARWLine, EaseTempLine_ep, GISROWCntyLine, & GISROWCtyLine

FDOTSS4 Maintenance Release (MR) 3

FDOTSS4 MR3 contains updates necessitated by changes to Design Standards, Plans Preparation Manual (PPM), and the Basis of Estimates (BOE) as well as bug fixes to address reported issues.

The FDOTSS4 MR3 Release is intended for use with PowerGEOPAK (Select Series 4) 08.11.09.878, or MicroStation V8i (Select Series 4) installations on version(s) 08.11.09.832 and GEOPAK (Select Series 4) version 08.11.09.878.

The following is a list of fixes and additions since Maintenance Release 2, February 9, 2017.

- Added new drainage features for FDOTSS4 MR3
- - Changed "Digital Signature" to "Signature Sheet" for all SignXX.dgn files
- - Level Tables_dp moved to Common Library in previous change. Mark old entry with "D" for deletion in all applicable rules.
- Updated to FDOTSS4 MR3 cells. (Note SYENG_SS4.CCL and RWENG_SS4.CCL are identical files with different names).
- Per John Hazlip - correct Line Styles for the following Survey Levels:
- 1046 GovQtrSectCnrEW_ep - change line style to: 0
- 1047 GovQtrSectCnrNS_ep - change line style to: 0
- 1405 DrainGrate_ep - change line style to: 1
- Per John Hazlip: We need to lower the DrainGrate_ep line style from 3 to 1.
- Revert to previous version as directed by Roadway Design Office, until changes can be vetted and coordinated with PPM.
- Corrected typo in description of Paint Guide Lines 0710 11241 to use / instead of -.
- - Updated all Roadway MicroStation Level Filters to reflect the changed from the Survey Feature Code and Level restructuring.
- - Removed duplicate entries
- Updated all Roadway Level Filters to reflect the changed from the Survey Feature Code and Level restructuring.
- Added FDOTSS4 MR3 New Feature Codes.
- Attached FDOTSS4 MR3 Survey Features with New Features for MR3.
- Added element templates for existing right and left guardrail crossing point features.
- Updated Existing Guardrail feature definition to place guardrail cell in cross section view for left and right existing guardrail
- Added MR3 Cells for New Point Features.
- Revised all Drainage cell levels to DrainMisc_ep
- Added back Survey level: 1250 Wetland_ep Wetlands (Existing) 1 RD-Wetland-Existing RD-Wetland-Existing 0
- Added back level: Wetland_ep Wetlands (Existing) 1 RD-Wetland-Existing RD-Wetland-Existing 0
- Updated 3D guardrail linestyle height from 7' to 6.5'
- Updated Element Template EX_OFOE level from FOEElecAer_ep to FOEAer_ep
- Updated Element Templates EX_BFOE_B level from FOEElecBurB_ep to FOEBurB_ep
- Updated Element Templates EX_BFOE_C level from FOEElecBurC_ep to FOEBurC_ep

- Updated Element Templates EX_BFOE_D level from FOEElecBurD_ep to FOEBurD_ep
- Update Feature Definitions Corridor Component Features > Existing_ex level from FOEElecBur_ex to FOEBur_ex
- Update Feature Definitions Corridor Component Features > Proposed_px level from FOEElecBur_px to FOEBur_px
- Made adjustments to guardrail components to so 3d linetypes appear in right locations.
- Updated menu to remove Report of Core Borings from XML file which is no longer supported by UofF.
- Updated Temp Barrier Wall cell levels from WallTempBarrier to TempBarrier. Per level changes to Master Standards
- Updated Temp Barrier Wall cell levels from WallTempBarrier_px to TempBarrier_px. Per level changes to Master Standards
- Level FlowLine_ep - set new Line Style to RD-FlowLine
- Added old existing survey level DrainMisc_ep removed in error and added back to rules survrd and drexrd.
- Added FDOTSS4 MR3 Cells. SYENG_SS4.ccl
- Restructuring of Survey Feature Codes and Levels for levels PoleElec_ep, PoleElect_ep, Tower_ep, SanitaryFM_B_ep, SanitaryFM_C_ep, and SanitaryFM_D_ep.
- Revised existing database items to update affected item levels based on new and/or revised Survey level changes. Added the following items based on Survey level additions: ESB Electric Service Box (Large)EGASTM Gas Test & Miscellaneous ETELSB Telephone Service Box (Large) Split EABGV Vaults Above and Below Grade into two items: EAGVVaults Above Grade EBGV Vaults Below Grade
- Updated some cell levels to coincide with newly created survey levels.
- Restructure of the Survey Feature Codes and Levels
- Renamed Temporary Barrier Walls to exclude the word "Wall":
 - WallTempBarrier Rename to: TempBarrier
 - WallTempBarrier_px Rename to: TempBarrier_px
- Removed Structures Feature DGNLIB because they were out of date and not being used.
- Restructuring of Survey Feature Codes and Levels
 - - Moved common levels from Roadway, Right of Way and Survey libraries to Common library
 - - Create new levels unique to each existing feature code
 - - Create new feature codes with new levels
 - - Delete obsolete feature codes and levels
 - - Create 4 new Range numbers: Survey/Topo (1000-1399); Survey/Drainage (1400-1499); Survey/Utilities (1500-1784); Survey/Software Only (1785-1799)
 - - Resorted per range specification and renumbered Survey Library levels
 - - Save changes in survey_levels.dgnlib to backup file survey_levels.csv
- Restructuring of Survey Feature Codes and Levels

- - Moved common levels from Roadway, Right of Way and Survey libraries to Common library
- - Moved 200 Range numbers to Survey, Resorted ROW levels and renumbered into new range (1800-1999)
- - Save changes in rwlevels.dgnlib to backup file rwlevels.csv
- Restructure of Survey Feature Codes and Levels
 - - Moved shared levels to the Common level library
 - - Renamed Fiber Optics Electrical levels:
 - FOEElecAer to FOEAer
 - FOEElecBur to FOEBur
 - FOEElecBur_ex to FOEBur_ex
 - FOEElecBur_px to FOEBur_px
 - - Corrected level ValveWaterNP description
- Restructuring of Survey Feature Codes and Levels
 - - Moved common levels from Roadway, Right of Way and Survey libraries to Common library
 - - Renamed GIS Levels
 - - Resorted and renumbered Common Library levels
- Added the following pay items:
 - 0711- 11-102 THERMOPLASTIC, STANDARD, WHITE, SOLID, 8" FOR INTERCHANGE AND URBAN ISLAND
 - 0713-103-102 PERMANENT TAPE, WHITE, SOLID, 8" EXIT LANE AT INTERCHANGE ON CONCRETE PAVEMENT
 - 0713-103-103 PERMANENT TAPE, WHITE, SOLID DROP LANE MARKING, 12" FOR CONCRETE BRIDGES
- Added existing Level to following rules and updated filters to be in sync with MasterStandards.xlsx

Rule File	Level No.	Level Name
dsgnsg	7590	PMStripeRumbleCL
dsgnsp	7590	PMStripeRumbleCL
itssp	7590	PMStripeRumbleCL
qtdsrd	7590	PMStripeRumbleCL
rdxssp	7590	PMStripeRumbleCL
tcdsrd	7590	PMStripeRumbleCL
typdrd	7590	PMStripeRumbleCL
- Updated the filters: dsgnsg dsgnsp itssp qtdsrd rdxssp tcdsrd typdrd to be in sync with masterstandard.xlsx
- Revised templates to match pay items in the .ddb/D&C manager
- Changed website link text from "Turnpike Traffic Plans - Guide Drawings Website" to "Turnpike Handbook (TPPPH) - Guide Drawings" because the user must click on the TPPPH link on the linked page to get to the Guide Drawings and it cannot be linked directly.

- Removed unnecessary symbol groups and corrected display title from "Boring Log Generator" to "WELD Help". Left spaces for referenced examples, but corresponding images not yet located.
- Replaced structures cell library with missing (17743) and revised (21800) cells. Intended November 2016 release changes were as follows:
 - Updated 17743 - Standard Mast Arm Assemblies Data Table
 - Updated 20900 - Approach Slab Table of Dimensions
 - Deleted 20910 - Approach Slab Index No. 20910 Table of Dimensions
 - Updated 21800B - Post-Tensioning Bar Data Table
 - Updated 21800T - Post-Tensioning Tendon Data Table
 - Added 22440-CSPC - Concrete CFRP/GFRP & HSSS/GFRP Sheet Pile Wall, Cantilever Data Table
 - Added 22440-CSPDA - Concrete CFRP/GFRP & HSSS/GFRP Sheet Pile Wall with Dead Man Anchors Data Table
 - Added 22440-CSPSA - Concrete CFRP/GFRP & HSSS/GFRP Sheet Pile Wall with Prestressed Soil Anchors Data Table
- Renamed Level SedimentBarrier Style/LineType settings SWP-SilkFence / SWP-HayBales to SWP-SedimentBarrier and updated Description from "Synthetic Bales and Staked Silt Fences" to "Synthetic Bales, Staked Silt Fences, etc"
- Renamed Level InletProt Style/LineType setting SWP-RockBags to SWP-InletProt and updated Description from "Rock Bags and Sand Bagging" to "Rock Bags, Sand Bagging, etc."
- Renamed Style/LineType SWP-SilkFence to SWP-SedimentBarrier and updated Description from "Synthetic Bales and Staked Silt Fences" to "Synthetic Bales, Staked Silt Fences, etc."
- Renamed Style/LineType SWP-RockBags to SWP-InletProt and updated Description from "Rock Bags and Sand Bagging" to "Rock Bags, Sand Bagging, etc."
- Removed Linestyle SWP-HayBales
- Renamed SWP-SiltFence to SWP-SedimentBarrier
- Renamed SWP-RockBags to SWP-InletProt
- Updated DDB (Erosion Control > Sediment Barriers > 0104 10 3)
- Modified the calculate item - Removed the Supplemental Search for the Silt Fence CLS and added the adhoc attributes DESIGN NOTES & SORTBY
- Deleted the 2 default items HayBales & SiltFence
- Updated database to remove item for pay items blocked as of 12-31-16. Reorganized items for new "effective" items as of 1-1-17 to remove the extra folder.
- Updated the column designations for the pay items to match the update to the xlsx file and the Design Notes column.
- Deleted columns for old special post pay item (536-7), install & relocate pay items for bridge anchorage assembly/approach transition to rigid barrier (536-8-31, 32, 33, 41, 42, 43) and replace reflector pay item (536-10-401 no longer in DQE) Modified columns for 536-8-61, 62, & 63 to 30, 40, & 60 to represent the install, relocate & remove options with B=0 per DQE.) corrected pay item number for bridge anchorage assembly - relocate (536-8-3 not 2)

- Updated the Guardrail Features to match the items in the DDB. (Removed obsolete items and moved new items from "Effective" folder to the Guardrail folder. Deleted the "Effective" folder.)
- Updated the Syeng cell webpage:
 - Removed cells: REG, STATRN, TA, WIN
 - Added cells: AHEAD, BIKE, BIKELN,BUS, HUMP, LANE, MERGE, ONLY, RXR, SCHOOL, SIGNAL, SLOW, STOP, TALR, TURN, WIM, WIELD, ZONE
- Added print styles for 8.5x11 and 8.5x14 to FDOT PDF print styles.
- Added 8.5X11 8.5X14 sheet sizes to driver
- Removed Concrete Traffic Railing with Junction Slab pay item columns (521-8-A). These items go on the bridge & should be included on the Summary of Structures Quantities.
- Modified the cell EndTreatDoubleFace by removing the "rounded" end. The Design Standards group were asked to show the approach terminals and trailing anchorage differently in the standards to make it easier to determine which one is being shown in the indexes. The cell has been modified so that the approach treatment is shown with a flat end and the trailing anchorage is shown as rounded. The description was also modified for clarity.
- Added new Guardrail End Treatment pay item (536-85-28 - Double Face Trailing Anchorage)
- Added Mast Arm Pole & Arm items to place cells.
- Added mast arm luminaire cell and double checked levels on all the new cells.
- Modified the pay item columns to match updated XLSX. Adjusted Design Notes column.
- Modified Descriptions for End Treatments. Added columns for End Treatment (Double Face Type II Trailing Anchorage)
- Added new mast arm pole and arm cells to go with new indexes.
- Structures File Name: strborder – changed File Group to PLANS SHEETS
 - Moveable Bridge - Structures File Group - corrected Control File to MECHELEC and identified the File Groups for Bascular Pier and Bascular Span
 - Added missing File Name: B#BL-ArmJointDet
- Correct the strborder file name to be located under the PLANS SHEET section.
- Revised the PavementExisting feature and Element template to use the new level name.
- Added structure for new pay items for Mast Arms, Light Poles, High Mast Poles, and Luminaires for Mast Arms. (Still need new cells for Mast Arms & Luminaires) Deleted Existing Conduit item from Signalization > Conduit category.

FDOTSS4 Maintenance Release (MR) 2

FDOTSS4 MR2 contains updates necessitated by changes to Design Standards, Plans Preparation Manual (PPM), and the Basis of Estimates (BOE) as well as bug fixes to address reported issues.

FDOTSS4 MR2 will also implement two significant changes for the CADD Office and for FDOT.

1. Engineering \ CADD Systems Office (ECSO) has been merged with the Production Support Office. Engineering \ CADD Systems Office will now be referred to as the Production Support Office|CADD or more generally instead of ECSO we will just use CADD. As part of the rebranding effort we tried to update all references to Engineering \ CADD Systems Office or ECSO. As part of the rebranding effort the ecso.support@dot.state.fl.us email address for support requests is being replaced with cadd.support@dot.state.fl.us .
2. FDOT's web addresses will be changing after close of business October 7th. All web links in FDOTSS4 MR2, including the help files, have been updated to use the new addresses. More information about the change in web addresses is available here: <http://infonet.dot.state.fl.us/domainchange/questions-staff.pdf>

This is the **FDOTSS4** Maintenance Release 1 (MR1) Hotfix 2 CADD Software Suite. The FDOTSS4 MR1 Hotfix 2 Release is intended for use with PowerGEOPAK (Select Series 4) 08.11.09.845, or MicroStation V8i (Select Series 3) installations on version(s) 08.11.09.714 and GEOPAK (Select Series 4) version 08.11.09.845. This Hot Fix is intended for the Structures workspace and includes updated and new cells related to the creation of Key Sheets as defined in [Roadway Design Bulletin 16-03](#), cells for the single slope traffic railings and updates/corrections to the links on the FDOT Menu. The cells for the single slope traffic railings are developmental and provided as a courtesy as cells only.

FDOTSS4 version 1.1.1

This is the **FDOTSS4** Maintenance Release 1 (MR1) Hotfix 1 CADD Software Suite. The FDOTSS4 MR1 Hotfix 1 Release is intended for use with PowerGEOPAK (Select Series 4) 08.11.09.845, or MicroStation V8i (Select Series 3) installations on version(s) 08.11.09.714 and GEOPAK (Select Series 4) version 08.11.09.845. This Hot Fix is intended to address Roadway Design Bulletin 16-03 regarding Key Sheet changes.

FDOTSS4 version 1.1.0

This is the **FDOTSS4** Maintenance Release 1 (MR1) CADD Software Suite. The FDOTSS4 MR1 Release is intended for use with PowerGEOPAK (Select Series 4) 08.11.09.845, or MicroStation V8i (Select Series 3) installations on version(s) 08.11.09.714 and GEOPAK (Select Series 4) version 08.11.09.845.

FDOTSS4 version 1.0.0

This is the original release of the **FDOTSS4** CADD Software Suite. The FDOTSS4 Release is intended for use with PowerGEOPAK (Select Series 4) 08.11.09.845, or MicroStation V8i (Select Series 3) installations on version(s) 08.11.09.714 and GEOPAK (Select Series 4) version 08.11.09.845.

Bentley SELECT subscribers can download the specified versions of Bentley software from the Bentley SELECT Website.

If your client or local workstation installations do not have the previously mentioned software versions required by the FDOTSS4 Release already installed, DO NOT install this FDOTSS4 CADD Software Release.

The FDOTSS4 Release is specifically designed for these versions, and will not operate properly on any other versions. Also, the FDOTSS4 Release has been certified on and is designed to be used with Windows 7.

Other versions of the Windows Operating System have not been tested and may not work.

Installation Overview

The FDOTSS4 Suite can be installed in two configurations.

1. *Server/Client* configuration is ideal for sites with multiple computers. In this configuration a FDOTSS4 directory is installed on a server with the clients accessing the FDOTSS4 resources from the server. This allows the administrator to update the FDOTSS4 resources on an unlimited number of clients by just updating the server.

Note This configuration is done through two installations. First the FDOTSS4 Server must be installed and then the FDOTSS4 Client software can be installed on the client computers.

2. *Stand-Alone Workstation* configuration should only be used when a computer will not always have access to the server, such as a laptop, or when a network is not always present. This configuration has been provided to create the FDOTSS4 directory locally and configure MicroStation to access the FDOTSS4 software locally.

System Requirements

- Microsoft Windows 7
- 32 bit or 64 bit Operating Systems
- Microsoft .NET Framework 3.5
- Microsoft Office 2013 (can be configured for Office 2003, 2007 or 2010)

PowerGEOPAK 08.11.09.845 -or- MicroStation 08.11.09.714 and GEOPAK Suite 08.11.09.845

- CAiCE Transportation 10 sp7 (optional)

Recommendations/Requirements for Client/Server Deployment

A Server/Client installation is the recommended method of installation for the FDOTSS4 CADD Software platform. This will require that Microsoft .NET Framework Security be configured to allow applications to be run from the server.

For instructions on the configuration of .NET Framework, please see:

http://communities.bentley.com/communities/user_communities/fdot_cadd_support/f/343080/t/71583

Other Installation Notes about FDOTSS4

To properly install the software on a server, or stand-alone workstation installations, you must have administrator privileges. This is necessary for the install to write to the registry, create shortcuts in the appropriate directories, and to add dll files. (Please see the SOFTWARE VERSION NOTIFICATION section of this file for details on supported and certified versions of MicroStation, GEOPAK, and Windows Operating System.)

The software will set system environment variables:

- "*FDOTSS4_SERVER*" - This variable points to the location of the FDOTSS4 Server directory for a Client/Server installation or to the Local Workstation install if a Workstation installation is performed.
- "*FDOTSS4_Local*" - This variable points to the location of the FDOTSS4 directory on the local machine. Specifically points to location of standalone apps for client.
- "*FDOTSS4_Projects*" - This variable points to the location of the configured projects directory.

The Client and Workstation Installation programs will also set the Following registry entries:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\FDOT\FDOTSS4\Platform\DataPath
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\FDOT\FDOTSS4\Platform\ProgID
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\FDOT\FDOTSS4\FDOTSS4_LOCAL
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\FDOT\FDOTSS4\FDOTSS4_PROJECTS
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\FDOT\FDOTSS4\FDOTSS4_SERVER
```

Note The Server Installation doesn't set any registry entries or environment variables on the server.

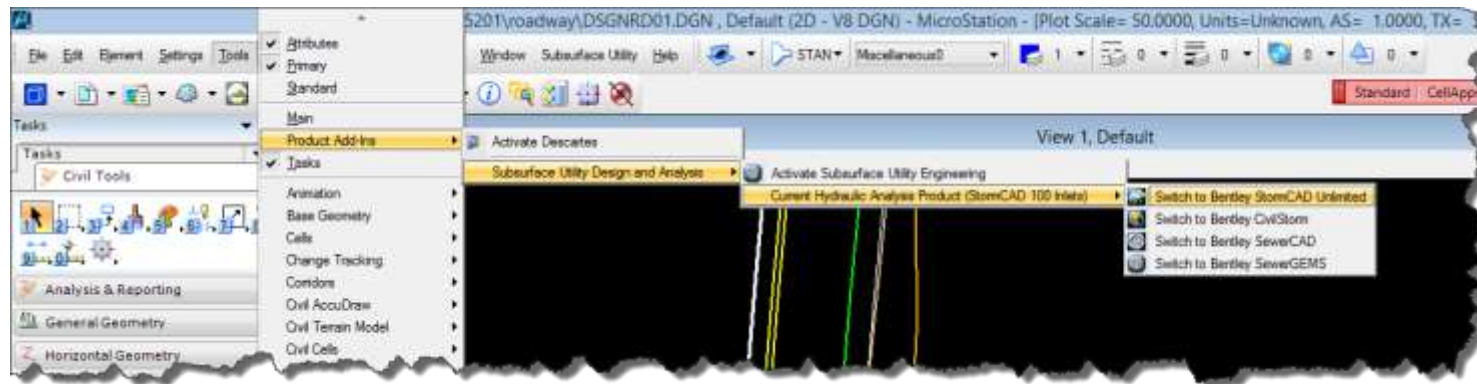
The FDOTSS4 Client installation creates a local folder named \FDOTSS4. The FDOT software utilizes the client folder for files, generally preferences; that have to be accessed by the user for modifications. Once an application is run in one of FDOT's workspaces, the local client folder is populated with any file that is necessary for the user or application to modify.

If the path to the \FDOTSS4 directory changes, it is best to reinstall the Clients so the new path is recorded properly in all of the necessary places. It is not recommended to modify the UCF file, since applications other than MicroStation use this information to locate the \FDOTSS4 Directory.

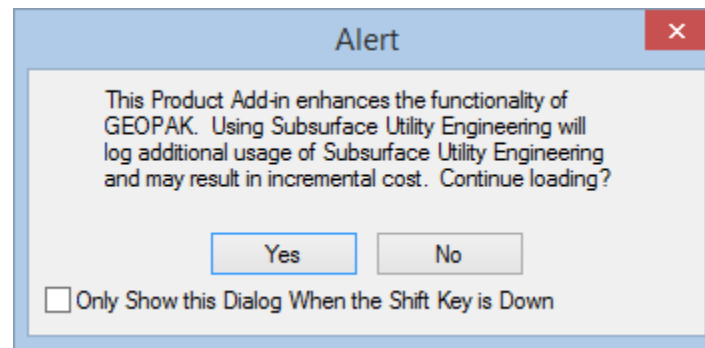
Previous Maintenance Releases - None at this time as this is the base install for the FDOT CADD software, FDOTSS4 install. This section will be updated when Maintenance Releases are deployed.

GEOPAK Product Add-Ins

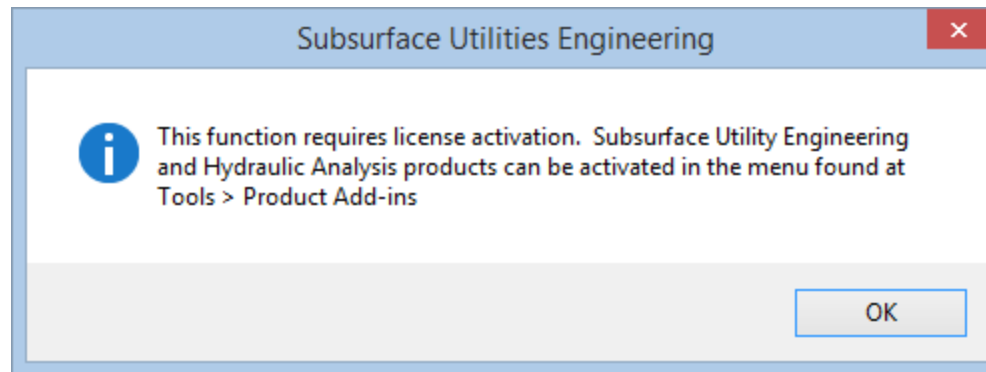
There are now several additional products distributed by Bentley with PowerGEOPAK and the GEOPAK Suite. These products can be activated using the “Tools > Product Add-Ins” menu.



Although distributed with GEOPAK these “Product Add-Ins” are not covered as part of your PowerGEOPAK and the GEOPAK Suite license agreement. If activated, these “Product Add-Ins” will alert the user that activating the selected “Product Add-In” will log additional license usage and may result in additional cost. Pay careful attention to the Alert box shown below, and the potential consequences.



The Subsurface Utility Engineering module has three main functions: It models utilities, does clash detection, and provides enhanced attribution of utility features. The modeling of utilities is provided for in PowerGEOPAK and the GEOPAK Suite licensing. However, the use of tools related to clash detection, or enhanced attribution of utilities will require the SUE Product Add-In” to be activated. If a user tries to utilize he enhanced features a message directing them to the “Tools > Product Add-Ins” menu will appear.



It is strongly recommended that you contact your Bentley account representative to get detailed information on how these additional “Product Add-Ins” are licensed, and to review your account coverage.

The FDOTSS4 workspace utilizes some of the basic modeling functionality provided by the Subsurface Utility Engineering product to model utility lines. The functionality the FDOTSS4 workspace uses is covered by your basic PowerGEOPAK or GEOPAK Suite license. Therefore it is necessary to install the Subsurface Utility Engineering product, but the user’s ability to activate the product may be disabled by customizing the MicroStation workspace.

If CADD managers would like to exercise more control over the activation of “Product Add-Ins” to reduce the chance of unexpected costs some minor customization can be done. A customized DGNLIB is provided with the FDOTSS4 workspace which gives CADD managers the ability to disable each of the “Product Add-Ins” using configuration variables.

To enable this capability

1. Copy the **CivilCommands.dgnlib** from the **\FDOTSS4\RESOURCES\Dgnlibs\General** folder on the server to the **C:\Program Files (x86)\Common Files\Bentley Shared\Civil Platform\08.11.09** folder on each client PC.
2. Add the following variables to a file named CustomVars.txt file in the **\FDOTSS4\Workspace\Users** folder on the server.

FDOT_DISABLE_DESCARTES=TRUE

FDOT_DISABLE_SUE=TRUE

FDOT_DISABLE_STORMCADUNLIMITED=TRUE

FDOT_DISABLE_CIVILSTORM=TRUE

FDOT_DISABLE_SEWERCAD=TRUE

FDOT_DISABLE_SEWERGEMS=TRUE

If the value is set to TRUE the associated “Product Add-In” will be disabled. If it is not set or set to anything other than TRUE the menu option to activate the associated “Product Add-In” will be enabled.

To allow only specific users the ability to enable a product(s) the associated variable(s) can be placed in the bottom of the users **FDOTSS4.UCF** file located in the local **\FDOTSS4\workspace\users** directory on the user’s PC.

FDOTSS4 Directory Structure

The installation will create a directory \FDOTSS4 where the user specifies. This directory can be created at the root directory level of the drive (recommended), or under an existing directory folder. FDOT recommends the user install the FDOT software at the default directory level on the drive selected.

Nearly all of the FDOT programs and support files are now located under the \FDOTSS4 directory as described above.

FDOTSS4 Sub-Directory Structure

APPS	(Electronic Delivery Application and Support Files)
CAiCE	(CAiCE support files)
GEOPAK	(GEOPAK support files)
Help	(MS Word, Adobe PDF and HTML format documentation files)
macros	(MicroStation macros)
MDLAPPS	(MicroStation MDL programs and MDL Support Files)
Menu	(FDOT Menu Files)
Project_Template	(Seed FDOT project directory structure)
RESOURCES	(Standard resources used by MicroStation in FDOT workspaces)
Temp	(Temporary files directory)
VBA	(MicroStation VBA Applications)
Workspaces	(MicroStation configuration files and toolboxes)

The local FDOTSS4 folder, on the client computers, and all of the associated subdirectories MUST be open for Modify rights.

HTM/HTML Help Files

Help documentation is available in HTML format from the FDOT MENU. To access the help click on the document icon just left of the menu item. (Internet access is required to access help files)

MicroStation Configuration Files

There are 8 configuration files delivered with the FDOTSS4 software:

\FDOTSS4 \Workspace\users\FDOTSS4.*ucf*

\FDOTSS4 \Workspace\users\GIS.txt

\FDOTSS4 \workspace\users\photogrammetry.txt

\FDOTSS4 \workspace\users\ProjectDir.txt

\FDOTSS4 \workspace\users\Rightofway.txt

\FDOTSS4 \workspace\users\Roadway.txt

\FDOTSS4 \workspace\users\SiteFdot.txt

\FDOTSS4 \workspace\users\Structures.txt

- FDOTSS4.ucf - User configuration file for the FDOTSS4 workspace. This file contains configuration variables that are normally user specific such as which FDOT menu is displayed, which project was last opened from MicroStation Manager, and so on. This file can be edited with a text editor, or from within MicroStation's menu option: Workspace > Configuration.
- GIS.txt - is a site configuration file for the FDOT Right of Way Menu. The GIS.txt file sets the configuration variables used for the FDOT customizations in Bentley Map. The user configuration file is set by the CadPilotUI.mvba loaded from the FDOT Menu > Standards Submenu > Configuration submenu which calls this file when the Right of Way Configuration is selected.
- photogrammetry.txt - is a site configuration file for the FDOT Photogrammetry Menu. The photogrammetry.txt file sets some of the standard configuration variables, such as those for cells and custom line styles. The user configuration file is set by the CadPilotUI.mvba loaded from the FDOT Menu > Standards Submenu > Configuration which calls this file when the Photogrammetry Configuration is selected.
- ProjectDir.txt - is a site configuration file for the all FDOT Menus. The ProjectDir.txt file defines the directories that are created when someone creates a new project from MicroStation Manager.

- *rightofway.txt* - is a site configuration file for the FDOT Right of Way Menu. The rightofway.txt file sets some of the standard configuration variables, such as those for cells and custom line styles. The user configuration file is set by the CadPilotUI.mvba loaded from the FDOT Menu > Standards Submenu > Configuration which calls this file when the Right of Way Configuration is selected.
- *roadway.txt* - is a site configuration file for the FDOT Roadway Menu. The roadway.txt file sets some of the standard configuration variables, such as those for cells and custom line styles. The user configuration file is set by the CadPilotUI.mvba loaded from the FDOT Menu > Standards Submenu > Configuration which calls this file when the Roadway Configuration is selected.
- *sitefdot.txt* - is a site configuration file for the FDOT standard files. The sitefdot.txt file sets all of the standard configuration variables, such as those for cells and custom line styles. It also initiates the FDOT MDL applications. The user configuration file, FDOTSS4.ucf calls this file.
- *structures.txt* - is a site configuration file for the FDOT Structures Menu. The structures.txt file sets some of the standard configuration variables, such as those for cells and custom line styles. The user configuration file is set by the CadPilotUI.mvba loaded from the FDOT Menu > Standards > Configuration which calls this file when the Structures Configuration is selected.

CADpilot.UI – CAD User Interface Components, Menu Bars, Toolboxes, TreeViews, etc.

The release of the FDOTSS4 CADD Software includes CADpilot UI for the deployment of custom user interfaces within MicroStation and AutoCAD. This includes the floating menu toolbar which is used as the primary interface for the FDOTSS4 customized working environment within the host CAD applications.

Components of CADpilot UI

- Floating toolbars with menus and buttons
- Configuration-based component layering for standards, projects, clients, disciplines, etc.
- Space-saving pop-up command windows for lists, HTML, TreeViews, and browser-based content
- Optional TreeView style interface for navigating pull-down menus which accepts keyboard-driven navigation and selection
- UI Editor to quickly create, manage, and deploy interface components
- Content data files stored as text-based XML
- Distribution licensing available

LICENSING

Florida Department of Transportation has purchased a distribution license for distributing a locked version of the CADpilot UI application with their workspaces. For more information regarding the licensing terms please read the CADpilot UI EULA (End User License Agreement) located in the CADpilot UI Licensing folder within the FDOT workspace.

The distributed version uses locked content files which cannot be modified by the end user. For a full version of CADpilot UI, which can be used to create and modify your own content, please contact CAD Management Resources at info@cadmanage.com or (207)221-2911.

CADpilot is a registered trademark of CAD Management Resources, Inc. <http://www.cadmanage.com>

Support and Services Information

For additional questions regarding this installation, please contact the FDOT CADD Office at (850) 414-4711 or email questions to: cadd.support@dot.state.fl.us.

For updates to the files on this delivery, please check the FDOT CADD Website: <http://www.fdot.gov/cadd/>