

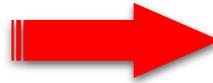
# Welcome to the New SS3 Workspace!!



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# Welcome to the New ~~SS3~~ Workspace!!



Don't Panic! Here are a few things you should know

## ECISO News Flash!!

- FDOT SS3 is being replaced with FDOT SS4.
- SS4 Release is basically a Maintenance Release with a new name!
- If a file has been created in SS3 and has civil features there will be an upgrade that has to be done.

- SS3 and SS4 cannot be installed at the same time
- There are some new tools and upgrades in SS4.
- Planned to be released in mid July.



# Topics Covered

- System Requirements
- New FDOT SS4 Menu
- New Cell Webpages
- New Help Documentation
- New Task Menus
- New FDOT tools
- FDOT Enhancements
- Level Changes
- Right-Click Menus
- Civil Tools
- Civil Features
- Project Explorer
- Multi-Model Views
- Popup Menus
- Key Shortcuts
- Function Keys
- Design Standards
- Civil Message Center
- Civil AccuDraw
- Civil Cells
- SS4 Template Library
- SS4 Conversion Tools
- One File Design Concept
- Clear Crash
- New Training Manuals



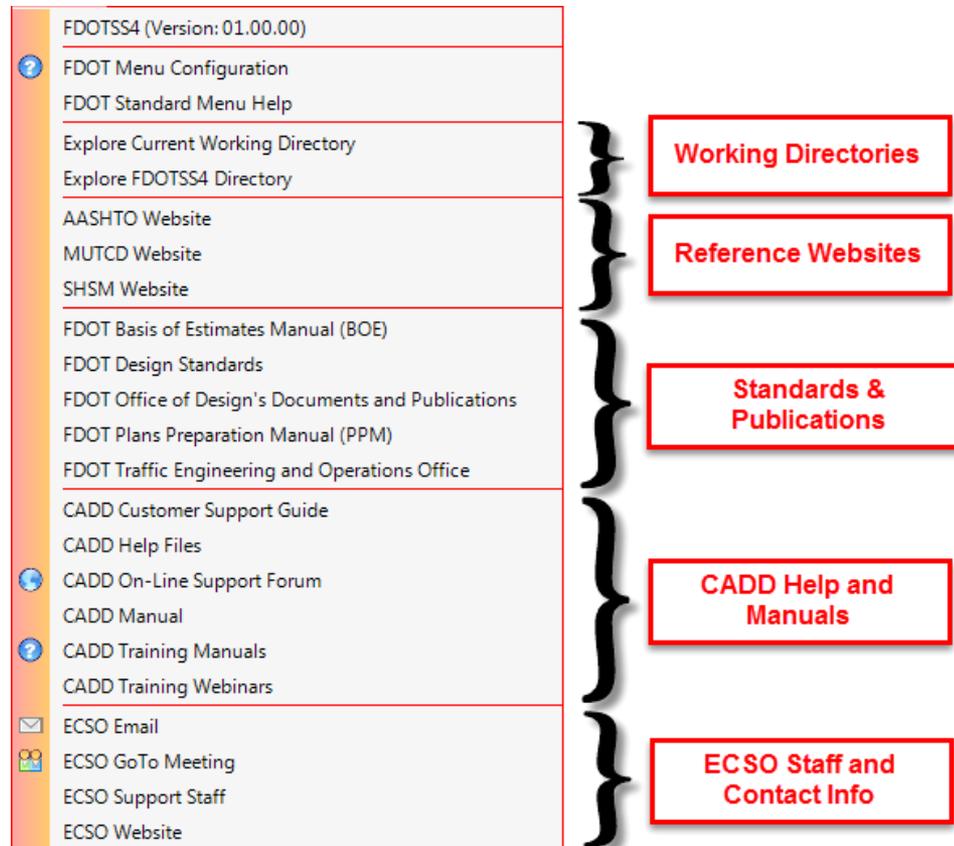
# System Requirements

- Windows 7
  - 32 bit and 64 bit
- Microsoft .NET Framework 3.5
- Microsoft Office 2013
- MicroStation V8i Select Series 3 (08.11.09.???)
- GEOPAK Select Series 4 (08.11.09.???)
- Or PowerGEOPAK Select Series 4 (08.11.09.???)



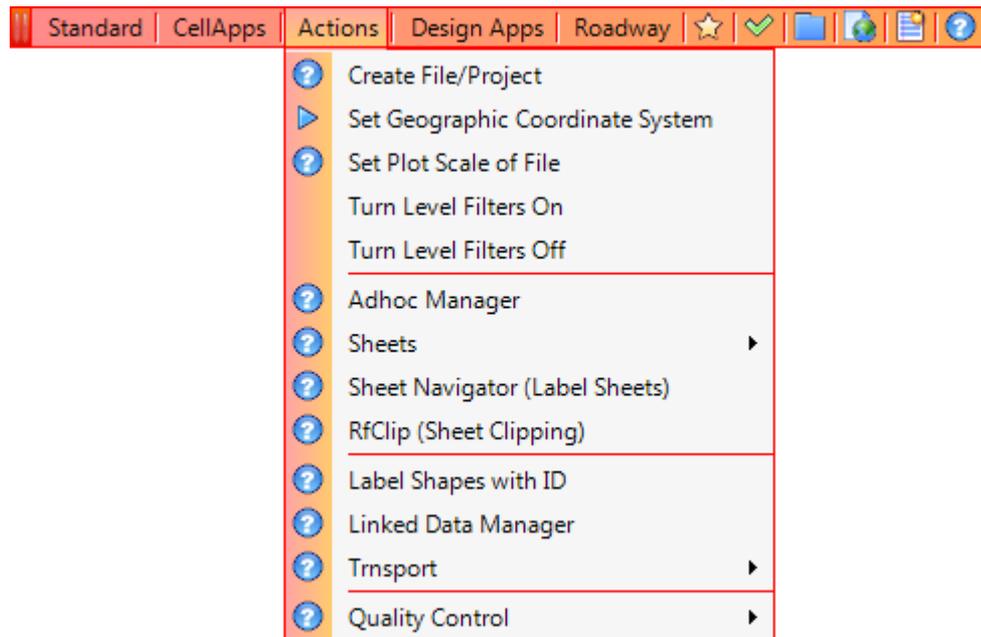
# New FDOT SS4 Menu

- The FDOT Menu has been drastically revised.
- Standard Menu:



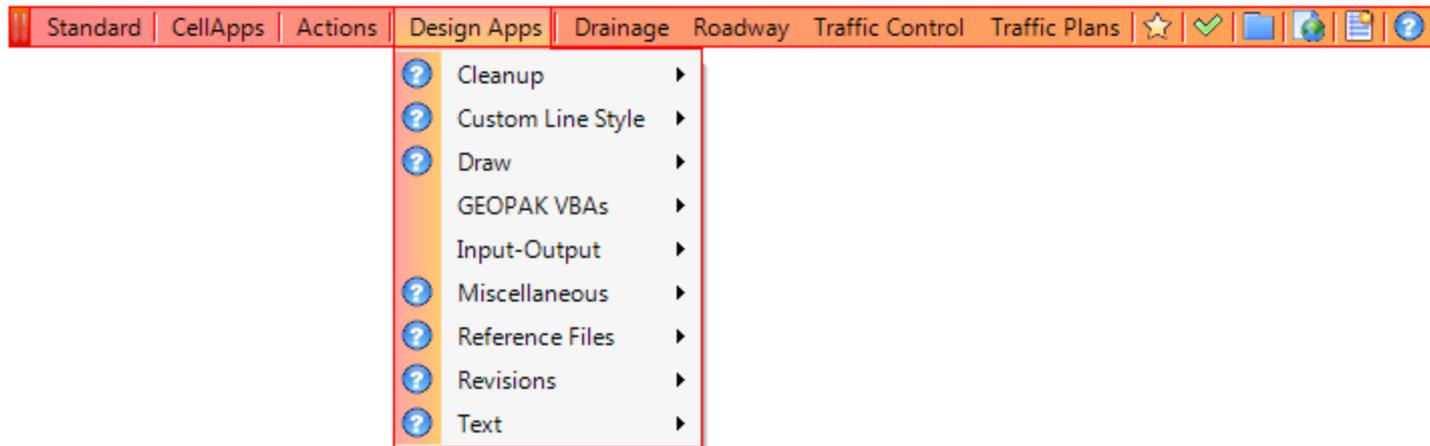
# New FDOT SS4 Menu

- Actions Menu:
  - These menu items include tools that are for creating and finalizing plans.



# New DesignApps Menu

- New DesignApps Menu:
  - These menu items include tools that are for drawing and plans cleanup.



# Component Menus

- The component menus have been reduced.
- Only tools that are unique to that discipline will be found on that menu.

## Construction

Alignments and Areas (MS to COGO)	
Construction Reports	▶
Create ASCII Data from GEOPAK COGO	
?	Cross Section Digitizer

## Drainage

Drainage Cell Library (Proposed)	
Drainage Cell Library (Existing)	
Drainage Cell Webpages	▶
Drainage Structure Cross Sections Cell Library	
?	Drainage Map Sheets
	Drainage VBAs

## Geotechnical

Geotechnical Cell Library	
Geotechnical Cell Webpages	▶
?	Core Boring Reports
?	Cone Soundings
Create/Edit Geotech CSV Files	
Erase Cross Section Boreholes	
Place Structure Sheet	

## Roadway

Roadway Cell Library	
Roadway Cell Webpages	▶
Typical Sections Cell Library	
?	Cross Section Labeler VBA
FDOT Corridor Modeling Conversion Tools	▶

## Traffic Control

Traffic Control Cell Library	
Traffic Control Cell Webpages	▶
DrawSIGN	
?	SAPM Draw Cell Group by Feature
?	SAPM Pavement Marking Program

## Traffic Plans

Intelligent Transportation Systems (ITS)	▶
Lighting	▶
Signals	▶
Signing and Pavement Markings	▶



# FDOT Cell Webpages

- The Cell Webpages have been updated and have a new look.
- The Webpage functions the same.

Cadpilot UI - Internet Explorer

file:///D:/FDOT/SS3/RESOURCES/Cell/fdotcells.html

**FDOT** Home Roadway Survey Traffic Plans Utilities

### FDOT Cell Webpages

- Drainage**
  - Drainage Library (Proposed)
  - Drainage Library (Existing)
  - Drainage Structure Cross Sections Library
  - Arrows... Underdrains
  - Cross Drain Mitered End Sections
  - Side Drain Mitered End Sections
  - Flared End Sections
  - Straight Endwalls
  - U-Endwalls
  - Winged Endwalls
  - Inlets
  - Ditch Bottom Inlets
  - J Bottom, P Bottom & Manholes
- Geotechnical**
  - Geotechnical Library
  - Primary Soil Patterns
  - Secondary Soil Patterns
- ITS**
  - Intelligent Transportation Systems (ITS) Library
- Landscape**
  - Landscape Library
- Lighting**
  - Lighting Library
- Roadway**
  - Roadway Library
  - Sheet Borders
  - Cross Sections Library
  - Typical Sections Library
- Signalization**
  - Signalization Library
  - Signal Poles Library
- Signing Pavement Markings**
  - Alphabet & Numbers Library
  - Distance & GuideSIGN Arrows Library
  - Sign Arrows
  - Florida Traffic Plans (FTP) Signs Library
  - Manual on Uniform Traffic Control Devices (MUTCD) Library
  - Pavement Markings Library
  - Toll Plaza Signs Library
  - Traffic Plan Labels Library
- Survey**
  - Survey Symbols for Roadway Library
- Traffic Control**
  - Traffic Control Library
  - Legends
  - Typicals
- Utilities**
  - Utilities Library

**Cell Web Page Instructions:**

The FDOT Cell Web Pages are browser based interfaces for selecting cells from the various cell libraries. They can be accessed from the drop down **Menu Bar** at the top of the FDOT Cell Web Pages browser window OR from the categorized linked **Library Titles** below the menu bar.

- Select the desired cell **Title** to open the respective cell web page displaying individual cell images and cell names.
- Click on the desired cell **Image** to activate MicroStation's **Place Active Cell** command. The cell will be attached your cursor ready for placement within your design file. The browser window will close.
- To RETURN to the previous browser window opened, select the **Open Browser** icon  from the FDOT Menu within MicroStation.

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# Help Documentation

- There is also a new website for help documentation and new button on the menu.

Standard CellApps Actions Design Apps Drainage Roadway Traffic Control Traffic Plans

Cadpilot UI - Internet Explorer

File

http://www.dot.state.fl.us/ecso/downloads/documentation/FDOTSS3/FDOTHelp.htm

**FDOT**

FDOT Standard Menu Construction Drainage Geotechnical Traffic Plans

### FDOT Help Files

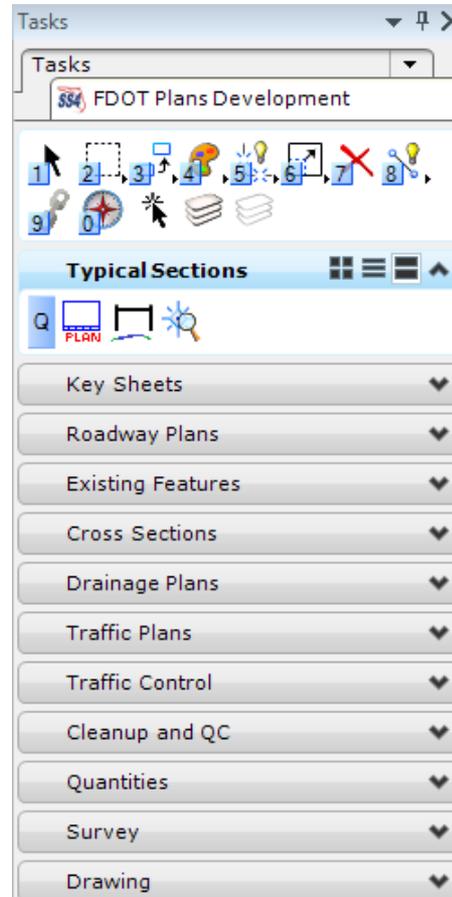
- Standard**
  - FDOT Menu Help
- CellApps**
  - Cell Libraries and Webpages
  - Cell Counter
  - Cell Search
  - Cell Utility
  - Delete Shared Cell Definitions
  - Export Shared Cells/DWG Blocks
  - Mirror Cells/Flip Custom Line Style
  - Randomly Splatter Cells
- Design Apps**
  - Cleanup Utilities
  - Custom Line Style Utilities
  - Draw Utilities
  - GEOPAK VBA-COGO
  - GEOPAK VBA-Cross Section
  - GEOPAK VBA-Adhoc
  - GEOPAK VBA-Draw
  - GEOPAK VBA-Label
  - Input/Output-CAICE CDG to V8
  - Input/Output-Importing CAICE
  - Input/Output-Using Theme Viewer
  - Miscellaneous Utilities
  - Reference File Utilities
- Drainage**
  - Drainage Map Sheets
  - Drainage Network Sketch
  - Drainage Pattern Lines
  - Drainage Profile and Nodes
  - Drainage Stub Out Report
  - Drainage Tabulation
  - Inlet Balloons
  - Summary of Drainage Structures
- Geotechnical**
  - Cone Soundings Application
  - Core Boring Reports

Done



# FDOT SS4 Plans Development Task Menus

- New FDOTSS4 Workflow Menus:



# New FDOT Tools

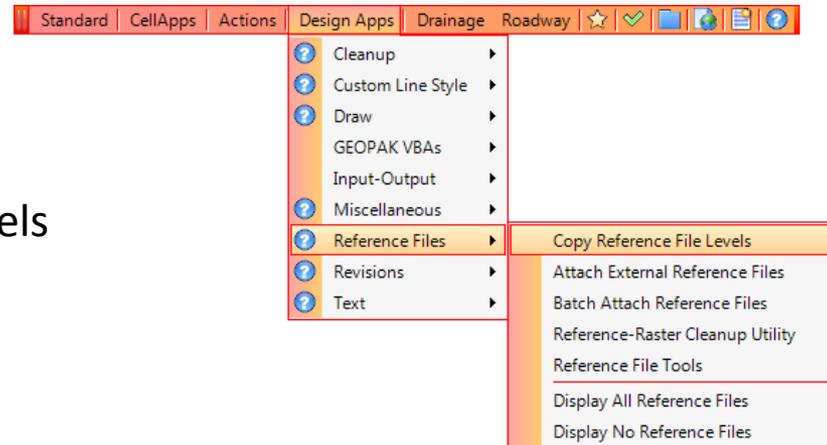
- Select All on Level by Element:

- Selects all elements on a specific level by selecting any element on that level.



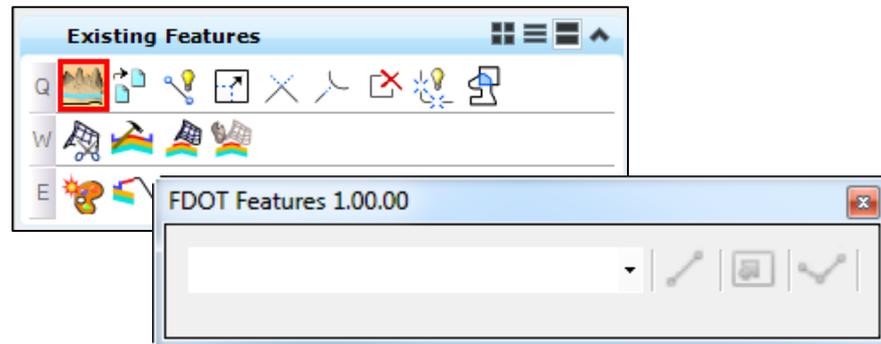
- Copy Reference File Levels:

- Copies elements on specific levels from attached reference files.



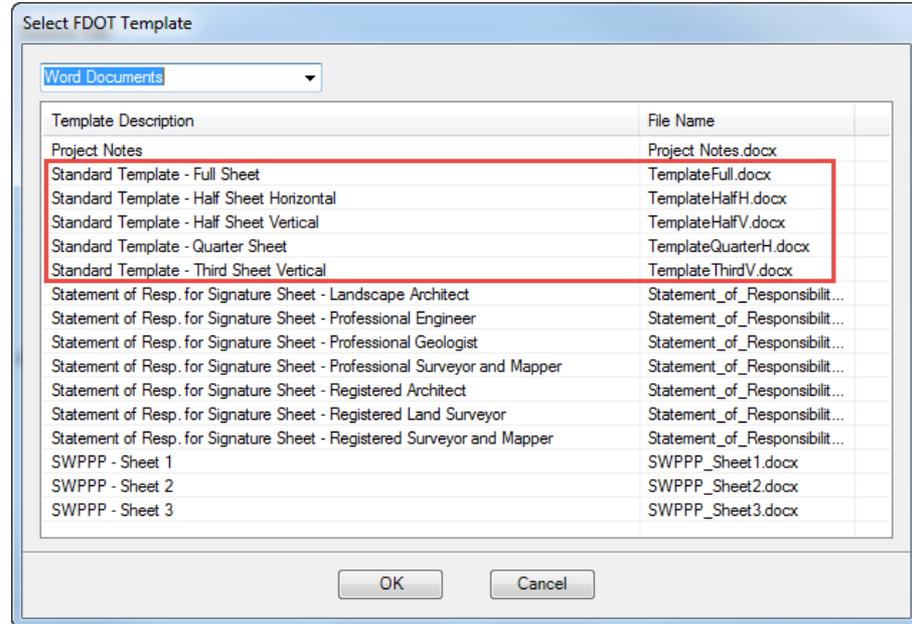
- Existing Features App:

- Aids in the new Existing Features process.



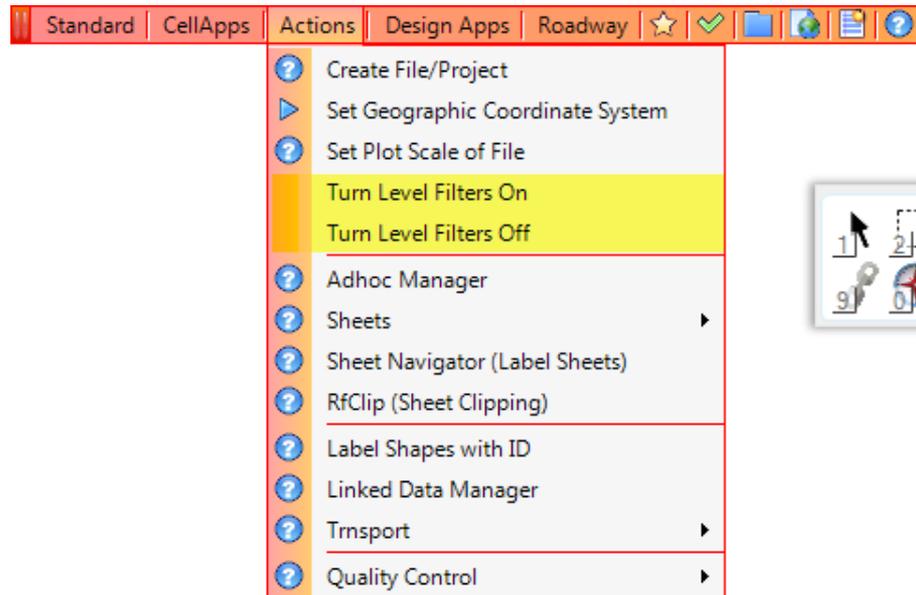
# New FDOT Enhancements

- LDM Enhancements:
  - LDM remembers rotation and size.
  - New blank Word templates.
- Sheet Nav. Enhancements:
  - Creates a PSET for Revision plans.



# Level Changes

- Level Filters can now be turned on and off:



- Level Changes:

- Many of the utility and survey levels have changed.
- The underground utility levels will now only include B, C, & D quality line styles.



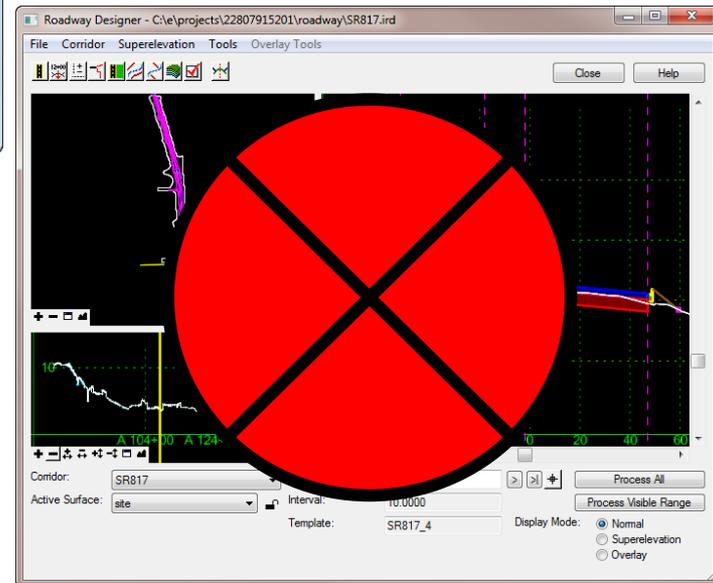
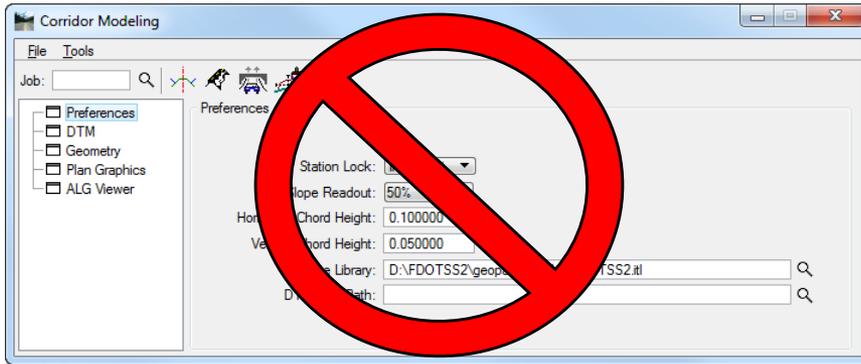
# Right-Click Menus

- There are additional options that are available from the right-click. The files listed below have right-click options.
  - All Keysheet files for all disciplines, **KEYSXX**
  - All Sheet Border Files, **BDXXRD**
  - Typical Sections, **TYP SRD**
  - Summary of Quantities, **SUMQ RD**
  - Summary of Drainage, **SUMDRD**
  - Clip Border file, **CLIPRD**
  - and Quantity Area files, **QTDSRD**



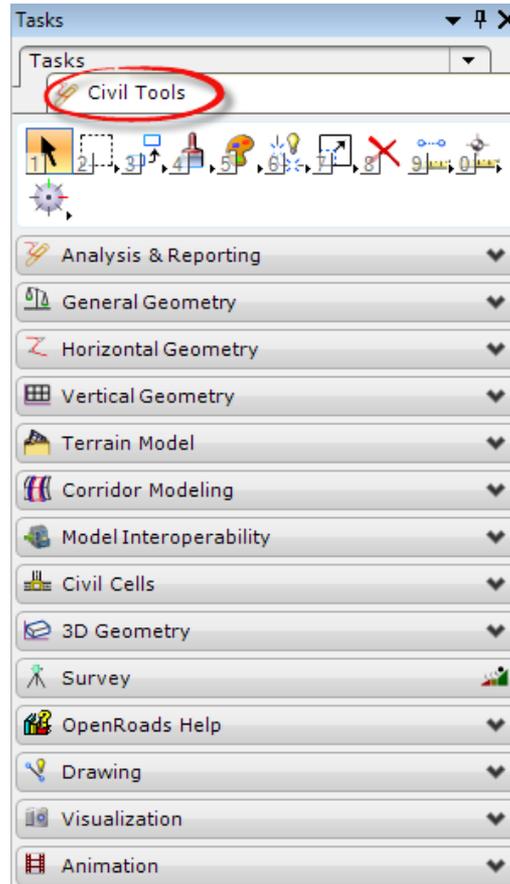
# Civil Tools

- The old tools are going away!



# Civil Tools

- The new tools are located on the Civil Tools task menu.



# Civil Tools

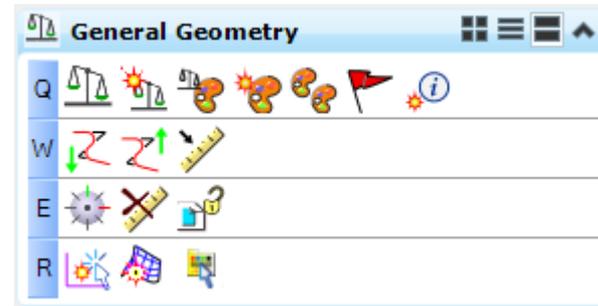
- Analysis & Reporting

- Reports
- Civil Analysis



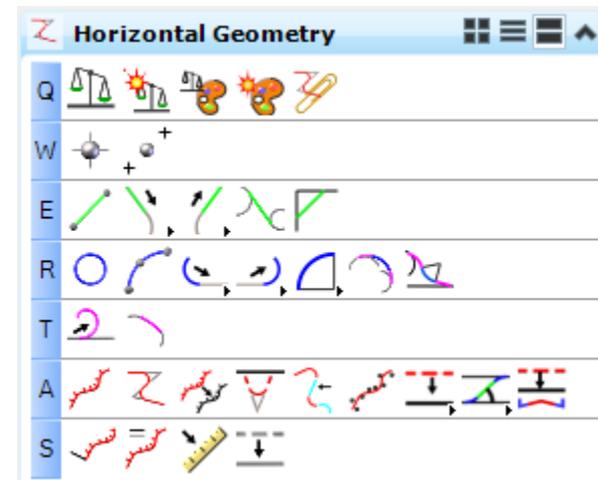
- General Geometry

- Geometry Toggles
- Geometry Import/Export
- Civil Toggles
- Design Elements



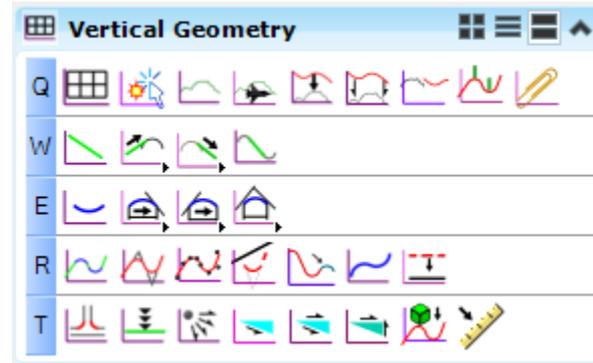
- Horizontal Geometry

- General Geometry
- Geometry Point
- Geometry Lines
- Geometry Arc
- Geometry Spiral
- Geometry Complex
- Geometry Modify

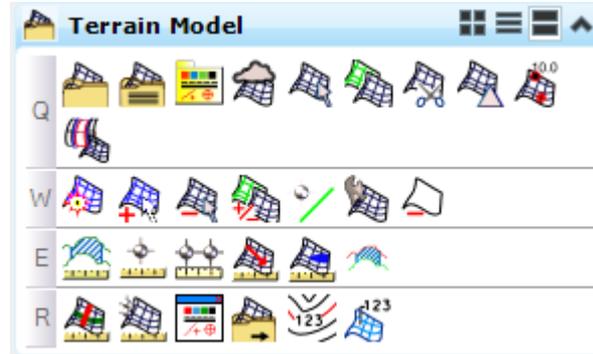


# Civil Tools

- Vertical Geometry
  - Main Vertical Geometry
  - Geometry Lines
  - Geometry Curves
  - Geometry Complex
  - Civil Profiles

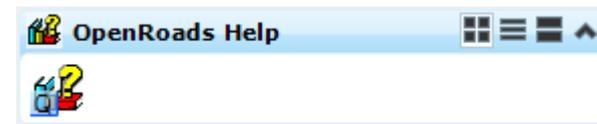
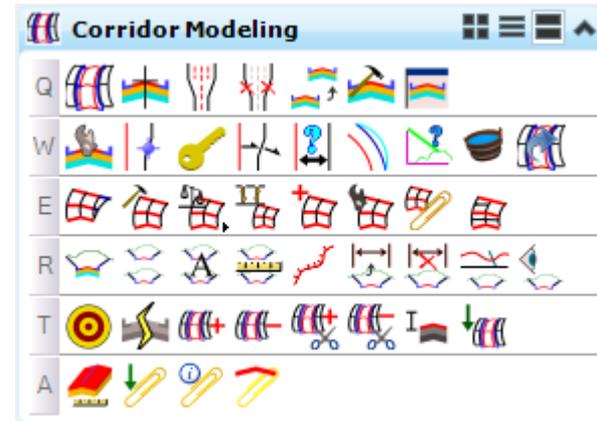


- Terrain Model
  - Terrain Model Create
  - Terrain Model Edit
  - Terrain Model Analysis
  - Terrain Model Misc.



# Civil Tools

- Corridor Modeling
  - Corridor Creation
  - Corridor Modifications
  - Superelevation
  - Cross Section Views and Layout
  - Corridor Misc.
  - Corridor Reports
- Civil Cells
  - Civil Cell Placment, Creation, and Modifications.
- 3D Geometry
  - 3D Tools
  - Edit 3D Geometry
- OpenRoads Help
  - Help Site



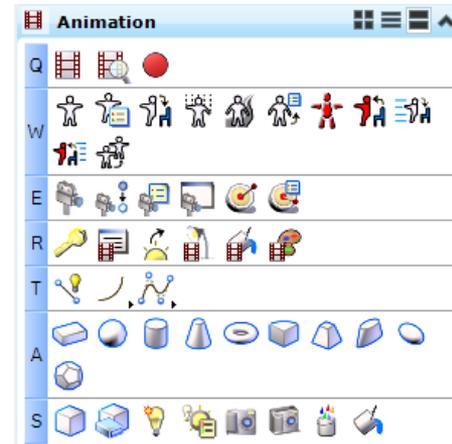
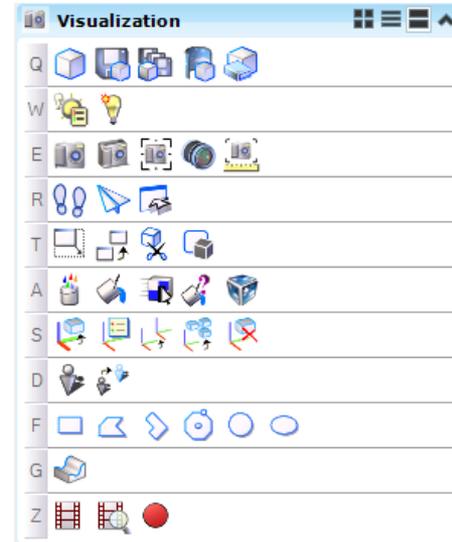
# Civil Tools

- Visualization

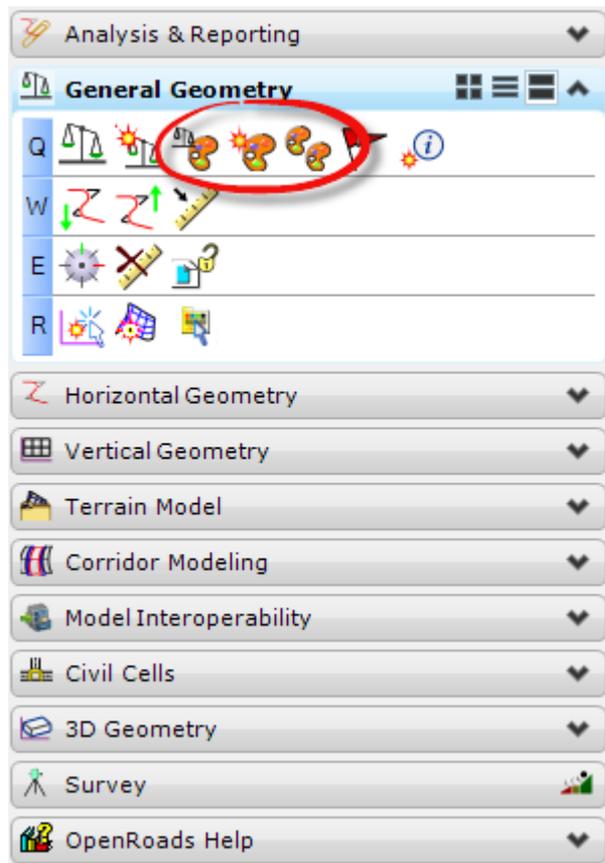
- Render
- Lighting
- Cameras
- Navigation
- Views
- Materials
- RPC Tools
- Visualize
- Animate

- Animation

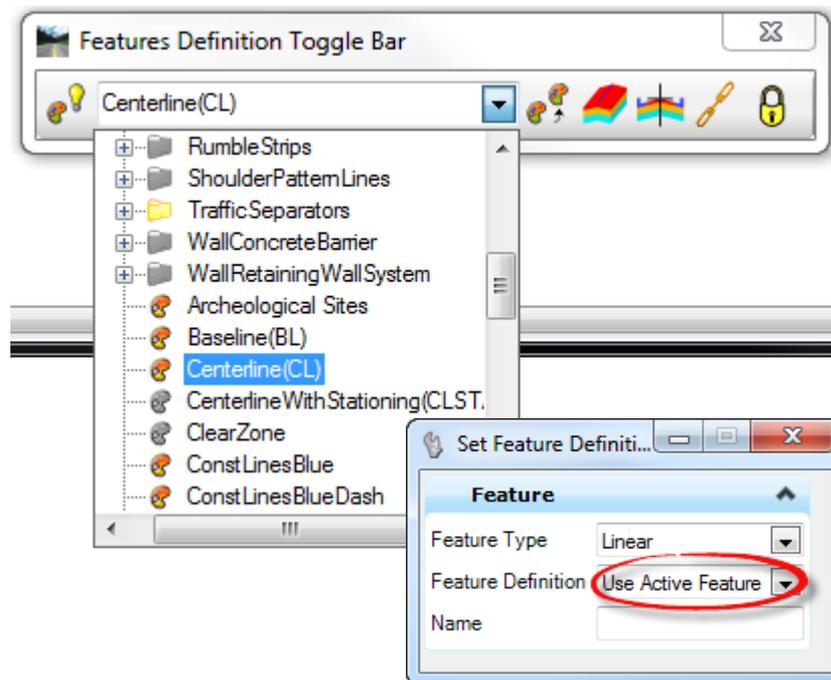
- Animation Settings
- Animation Actors
- Animation Cameras
- Properties
- Drawing/Solids
- Visualization



# Civil Features

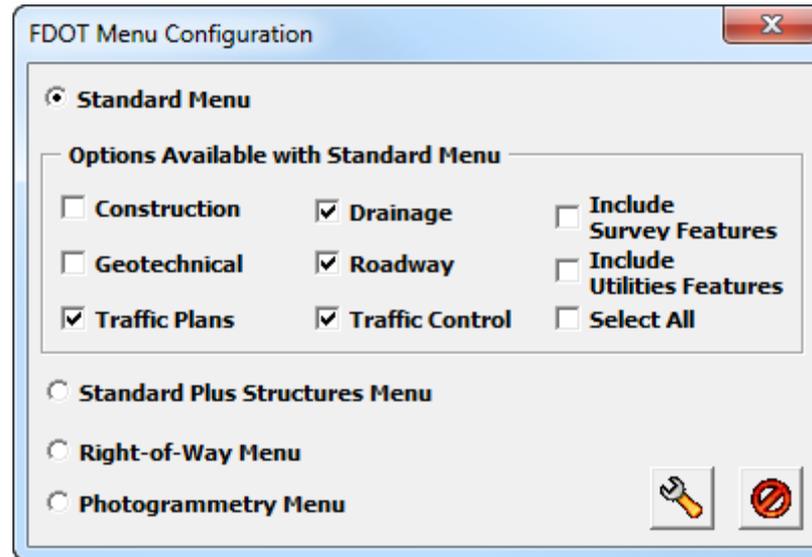


- Feature Definition Toggle Bar
- Set Feature Definition
- Match Feature Definition



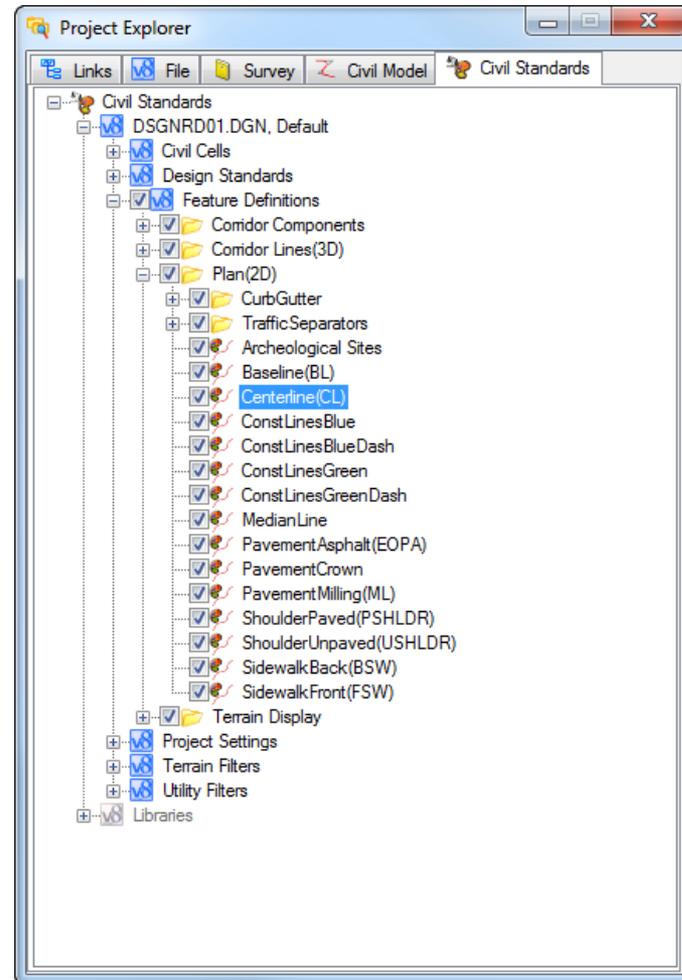
# FDOT Menu Configuration & Features

- The Menu configuration options have been updated.
  - Each option loads different features specific to that component.

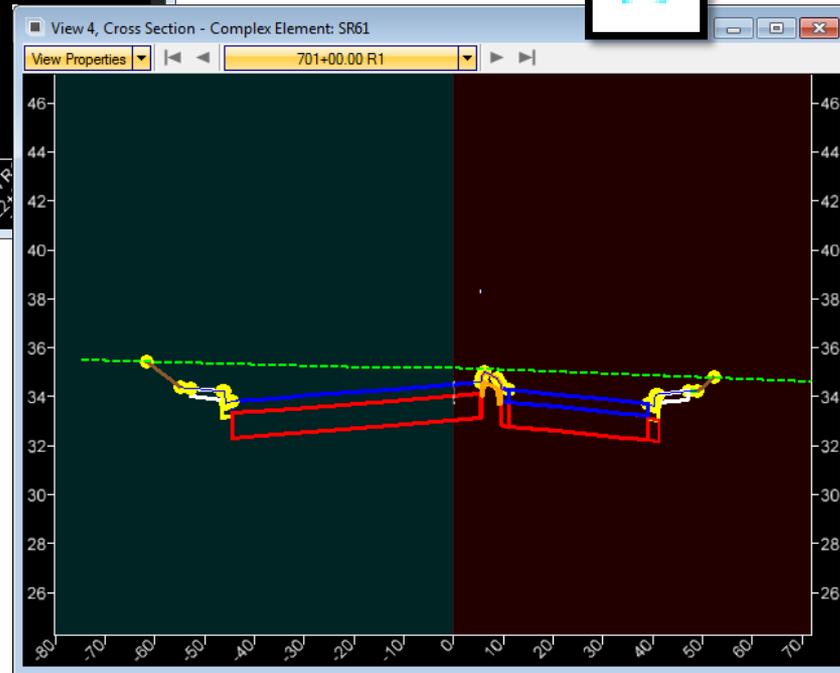
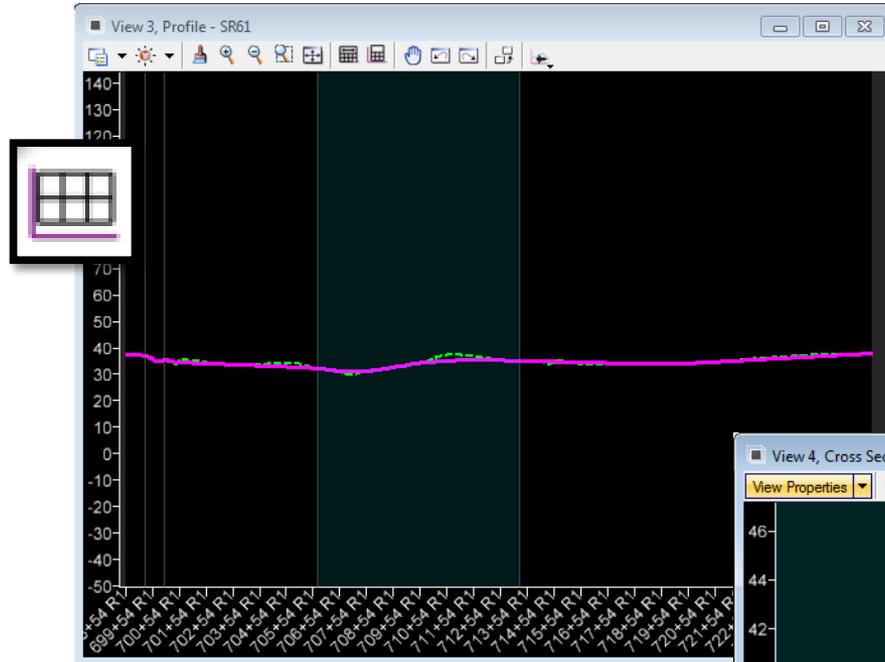


# Project Explorer

- All information placed in a file can be viewed from Project Explorer.

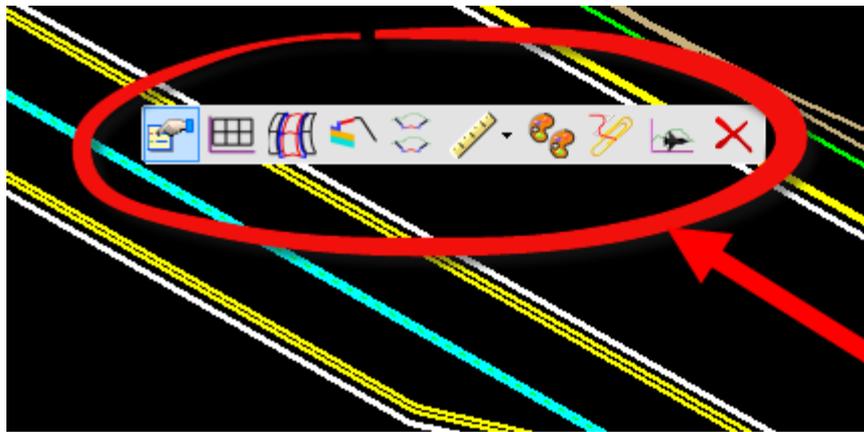


# Multi-Model Views



# Popup Menus

- With civil elements in SS4 there are also popup menus that have various tools available.
- Depending on the element selected is what is shown on the menu.

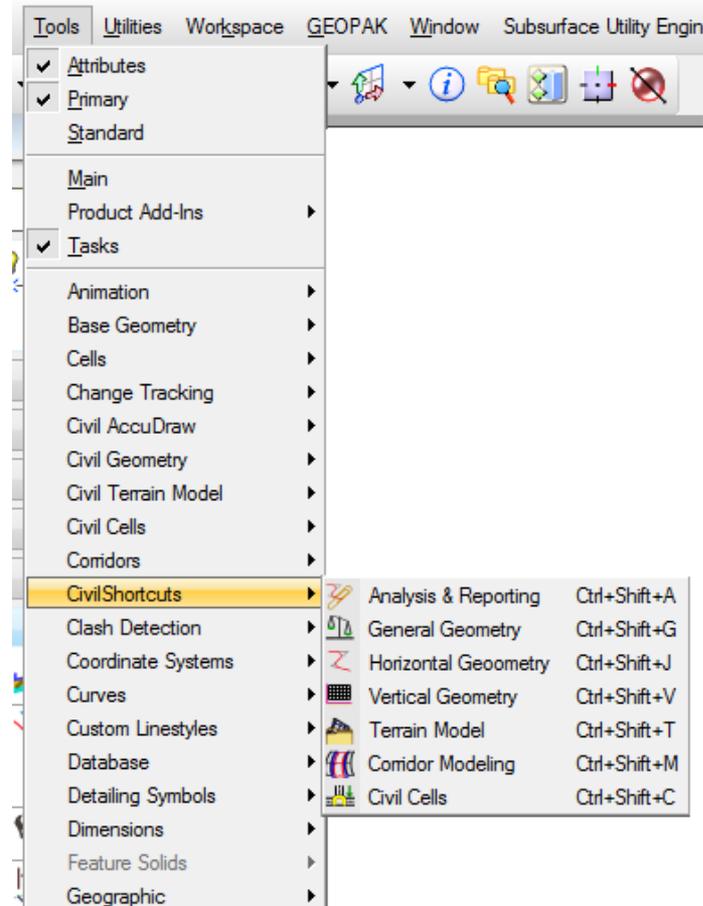


Popup  
Menu



# Key Shortcuts

- **Ctrl + Shift + A:** Opens the Analysis & Reporting tools.
- **Ctrl + Shift + G:** Opens the General Geometry tools.
- **Ctrl + Shift + J:** Opens the Horizontal Geometry tools.
- **Ctrl + Shift + V:** Opens the Vertical Geometry tools.
- **Ctrl + Shift + T:** Opens the Terrain Model tools.
- **Ctrl + Shift + M:** Opens the Corridor Modeling tools.
- **Ctrl + Shift + C:** Opens the Civil Cell tools.



# Function Keys

- **F2:** Opens the 2D and 3D views and fits both views.
- **F3:** Closes all views except View 1, the 2D view.
- **F4:** Opens 4 views. 2D, 3D, Profile, and Cross Section
- **F5:** Changes the background from black to white or back from white to black
- **F6:** Exits out of any command and activates Element Selector.



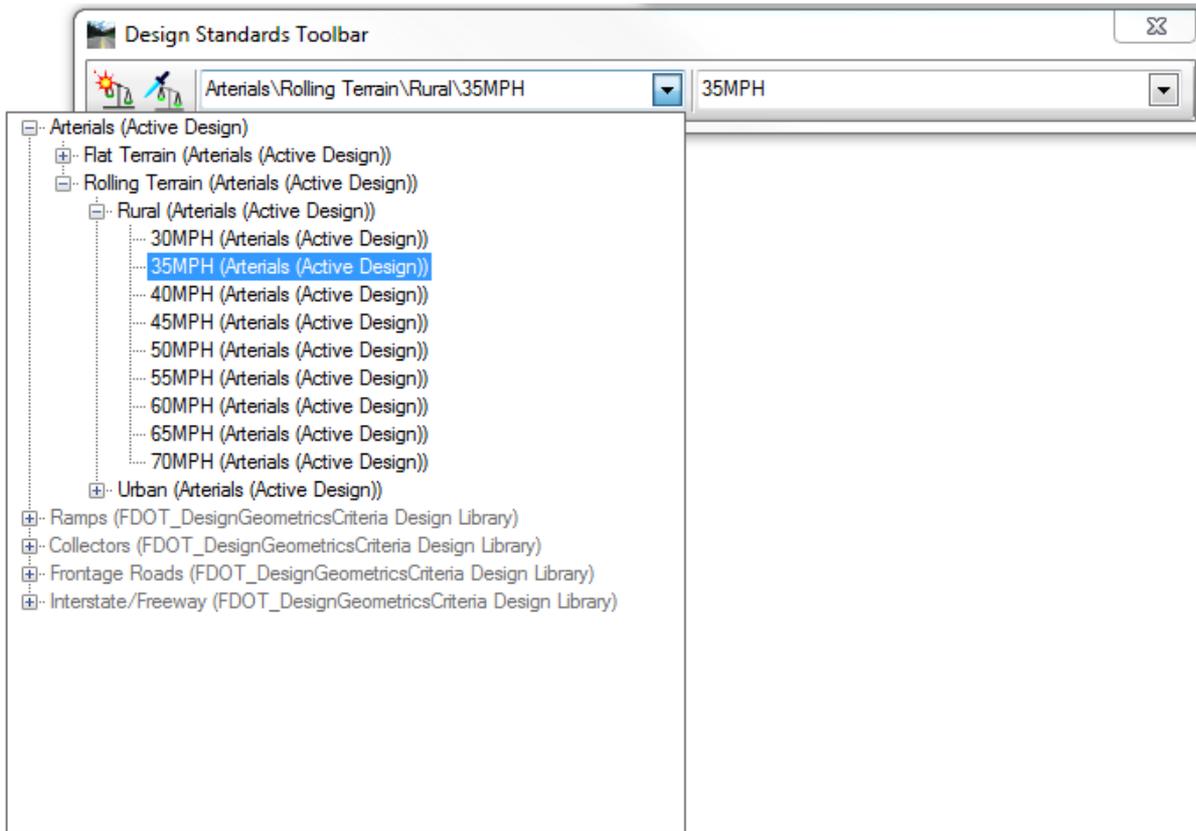
# Function Keys

- **F7:** Toggles on/off Construction elements.
- **F8:** Toggles off AccuDraw and toggles on Civil AccuDraw.
- **F9:** Prepares the file for a 3D deliverable by turning off the solids in the 3D view, leaving on the surface elements.
- **F10:** Turns the solids back on after they have been turned off by F9.
- **F11:** Opens Project Explorer.
- **F12:** Opens the Template Library.

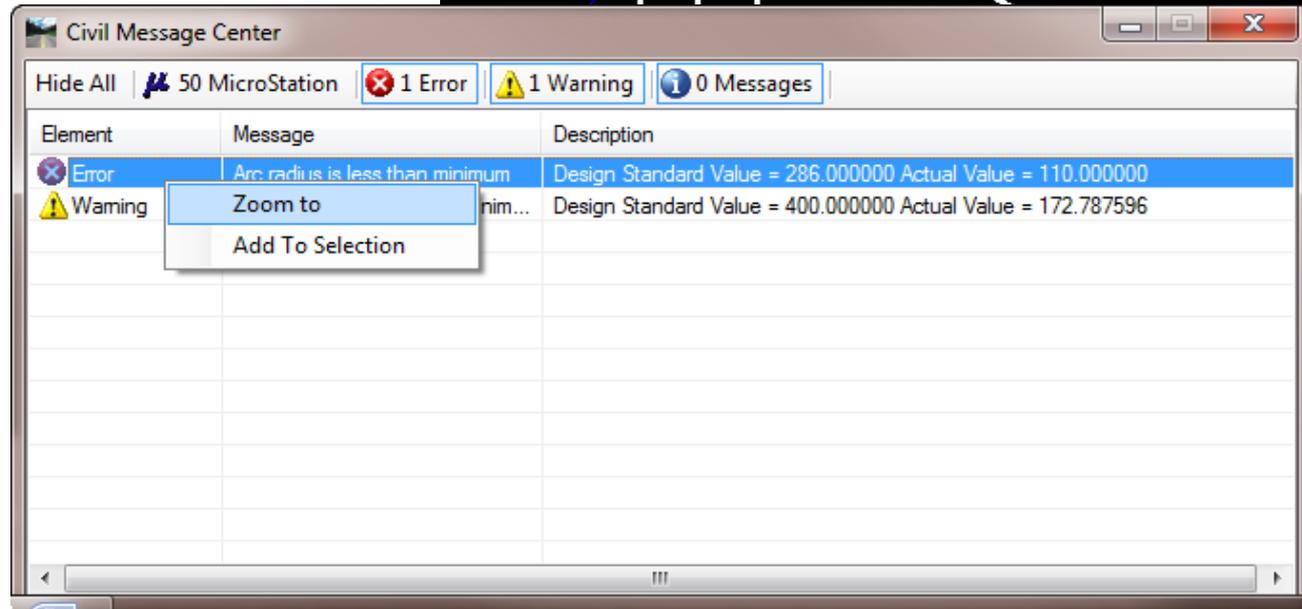
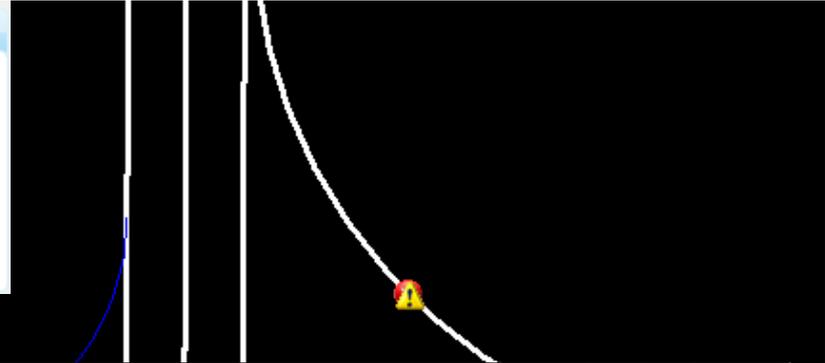
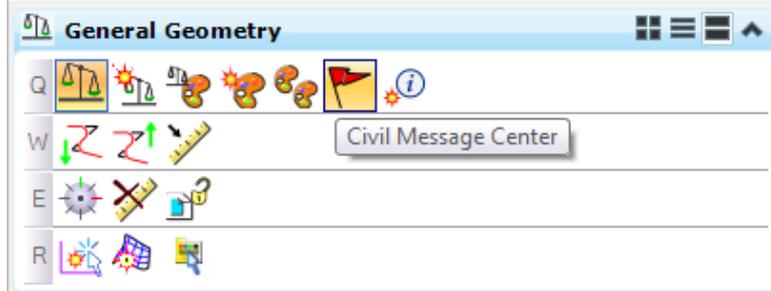


# Design Standards

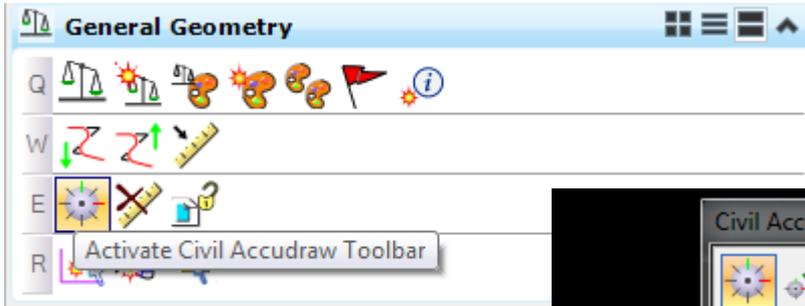
- There is now a Design Standards Toolbar which can be used to maintain standards when laying out alignments.



# Civil Message Center



# Civil AccuDraw



Civil AccuDraw

Civil AccuDraw Settings

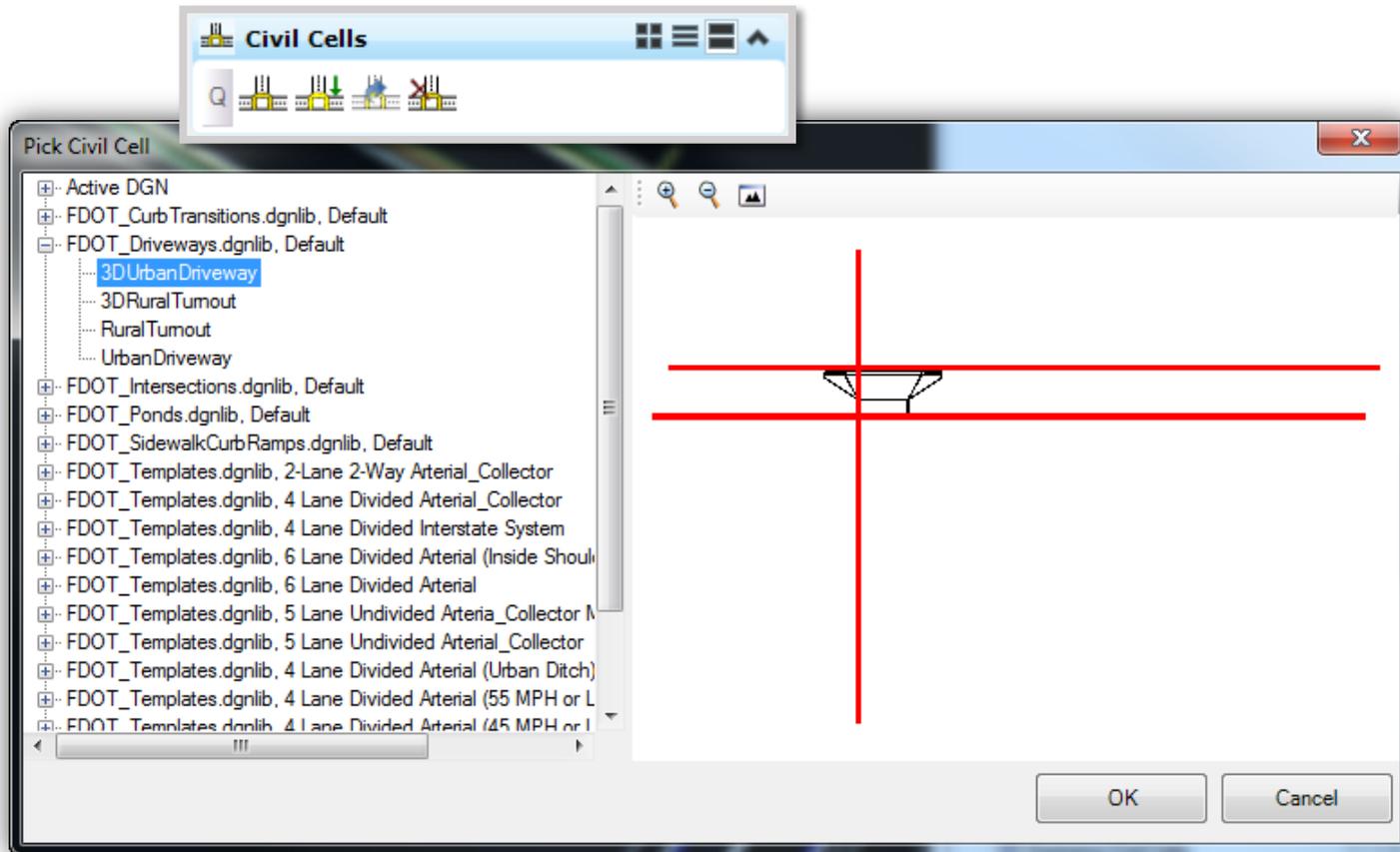
Operation | Display | Coordinates | Favorites

Name	Ordinate 1	Ordinate 2	Com...	Icon
Distance-Direction	Distance	Direction	Yes	Civil
Dist-Dir Unlinked	Distance	Direction	No	Civil
Dist-Dist	Distance	Distance	No	Civil
XY	X	Y	Yes	Civil
DX DY	DX	DY	Yes	Civil
Station-Offset	Station	Offset	Yes	Civil
DeltaStation-Offset	Delta Station	Offset	Yes	Civil

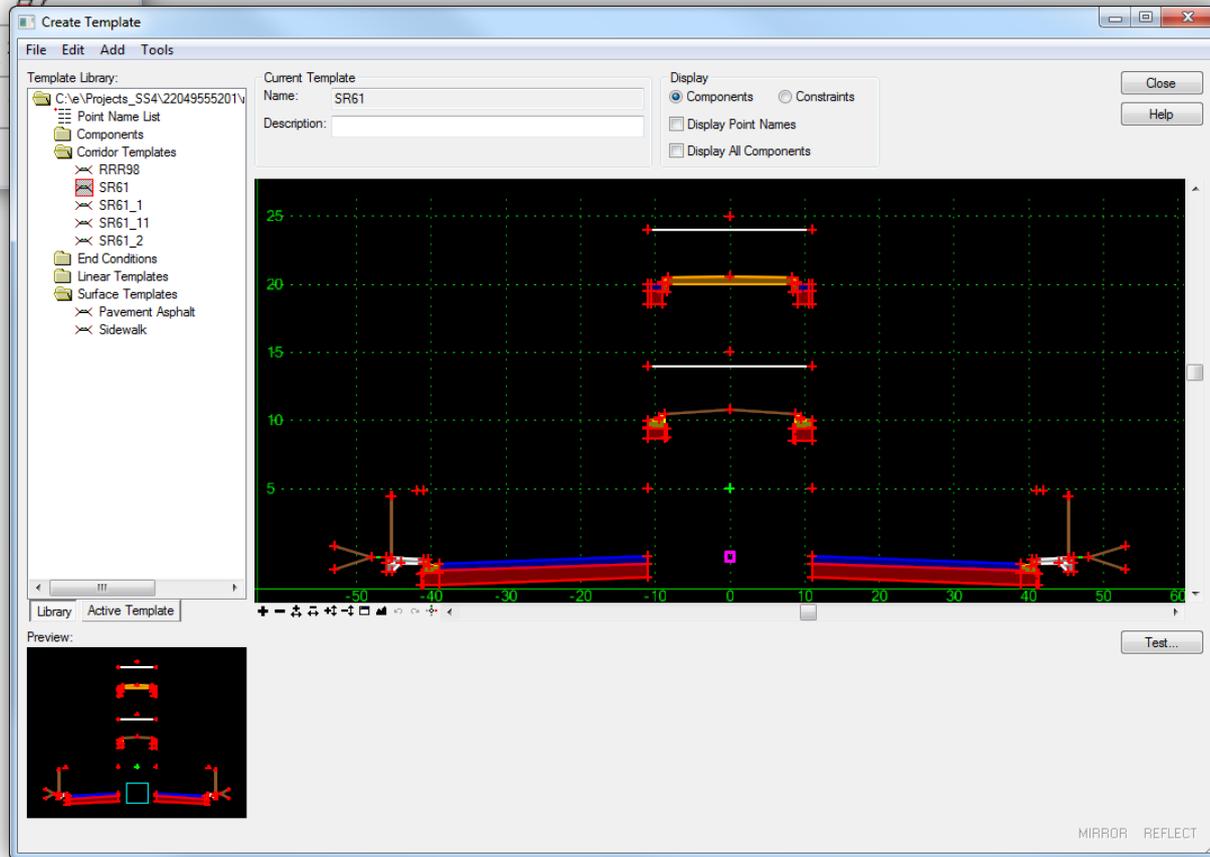
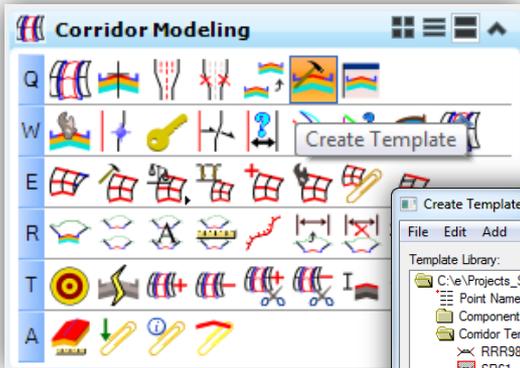
Add Edit Delete



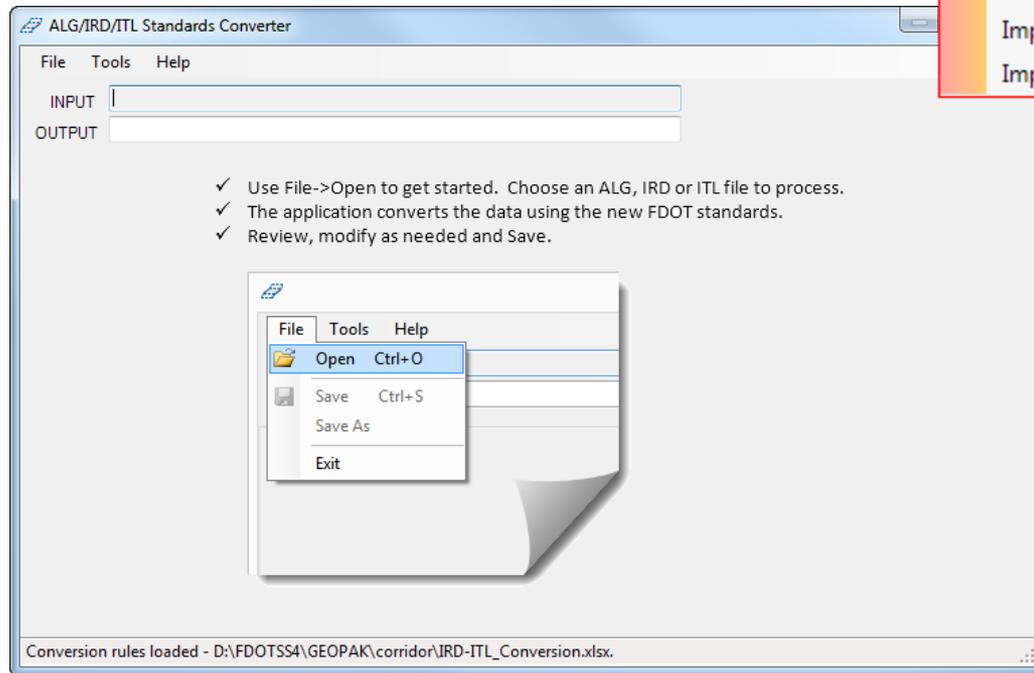
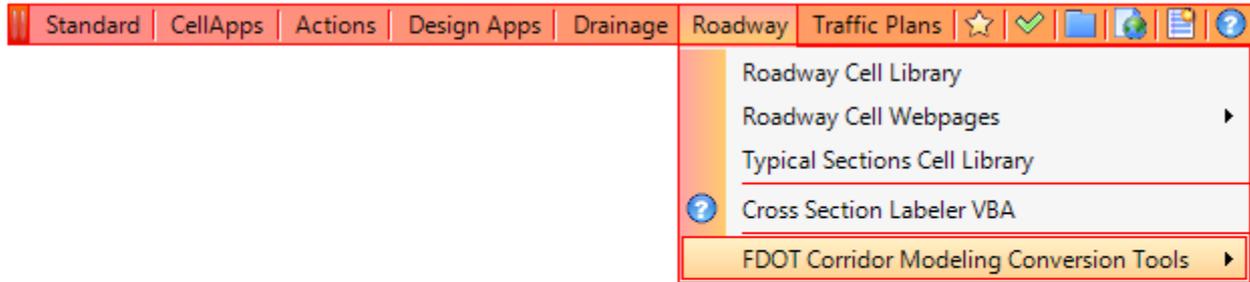
# Civil Cells



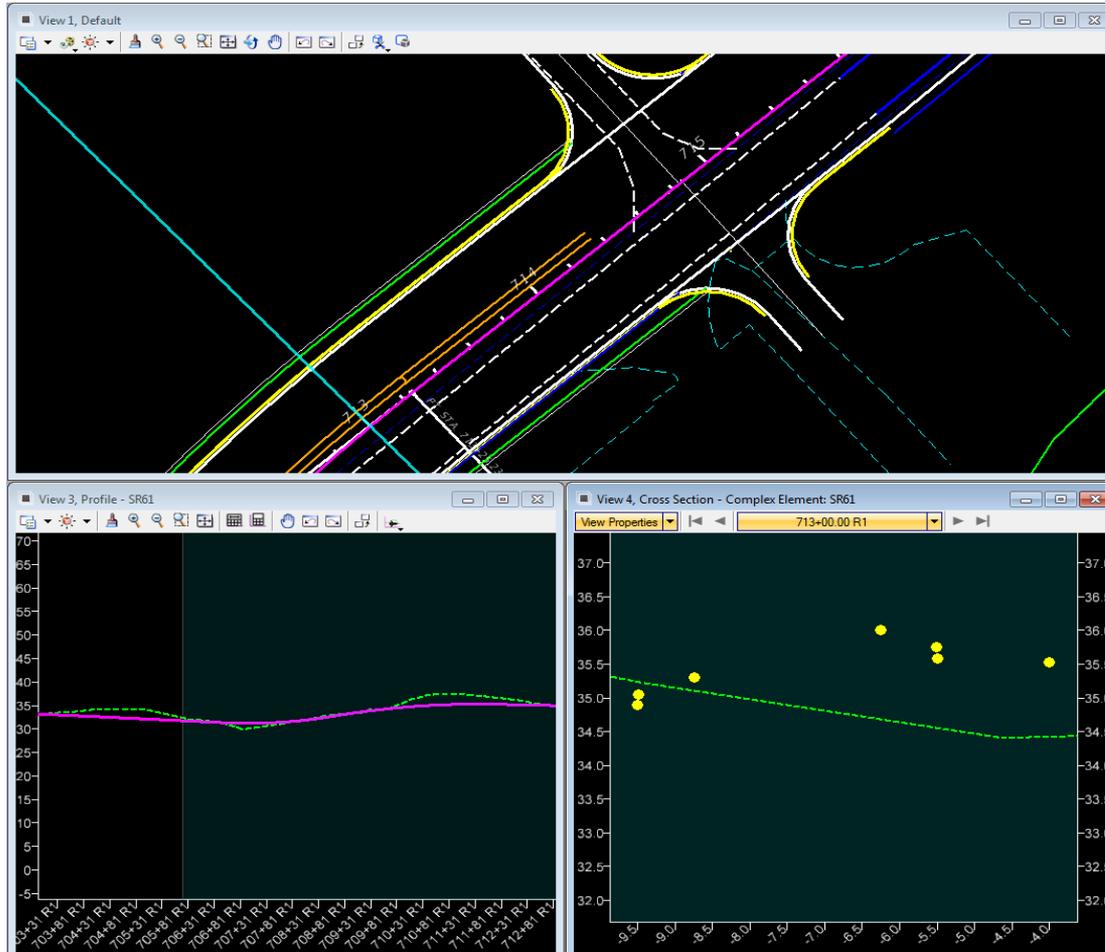
# SS4 Template Library



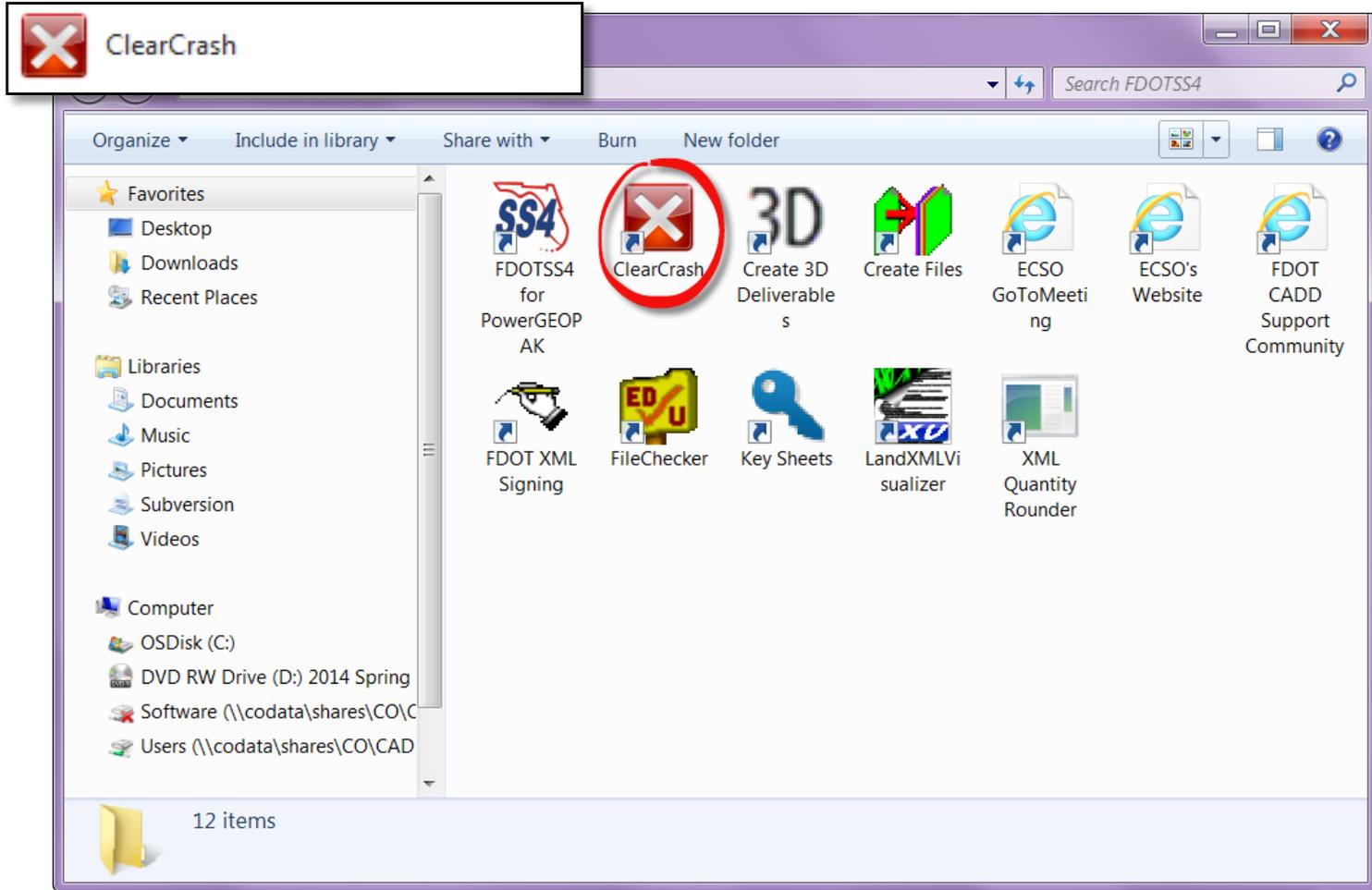
# SS2 to SS4 Conversion Tools



# One File Design Concept



# Clear Crash



# Training Manuals

- Many of the processes have changed for roadway design and for plans development, as well as drainage design and plans. For that reason we have created 3 new training manuals for SS4:
  1. FDOT Roadway Design and 3D Modeling for SS4
  2. FDOT Plans Development Workflows for SS4
  3. FDOT Drainage for SS4.
- These manuals will be available on our website at the following link:  
<http://www.dot.state.fl.us/ecso/main/FDOTCaddTraining.shtm>



# Questions?

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