

FDOT 2004
Cross Sections

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What's New in FDOT 2004 & V8

- Brand new criteria delivered for Typical Section Generator and Drainage.
- Limited files are being delivered.
- You can still use input files. However you will be responsible for updating to FDOT 2004 standards.
- All variables are found in one file (variables.x).
- Editable Re-definable Variables (ERV's)
- Criteria uses DDB features.
- Very important!!!! Use the D&C. New criteria looks for attribute tags and adhoc's on the elements.

What's New in FDOT 2004 & V8

- Read the help documentation provided with the Typical Sections.
- Criteria will flag cross sections with warnings. Not enough existing ground, slope problems etc.
- New Seed file set up with models.
- Layout is done with a dialog instead of an input file.

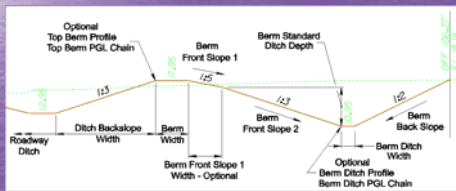
What's New in FDOT 2004 MR3

- Urban Ditch
 - Triggered from BSW adhoc
- Sidewalks – Rewritten
 - Controlled through Adhocs

Name	Type	Value
Sidewalk Thickness	Numeric	0.933
Sidewalk Cross Slope %	Numeric	-2
Sidewalk Buffer Width	Numeric	1
Sidewalk Buffer Slope %	Numeric	-2
Sidewalk Back Profile	String	NONE
Sidewalk PGL Chain	String	NONE
Utility Slope %	Numeric	5
Urban Ditch Y or N	String	N
Handrail Y or N	String	N
Handrail Type P or B	String	P

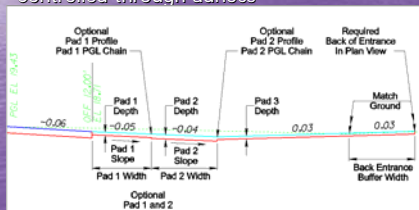
What's New in FDOT 2004 MR3

- Berms
 - Triggered from plan graphics
 - Controlled through adhocs



What's New in FDOT 2004 MR3

- Driveways - Rewritten
 - Triggered from driveway line located at back of the driveway connection
 - Controlled through adhocs

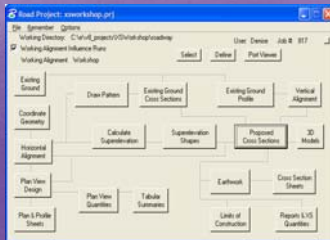


Warnings/Helpful Hints

- GEOPAK does not recognize models when searching DGN files.
- The first DGN file of the dgn variables specified must exist.
- There must always be an even number of edges of pavement.
- When re-running cross sections and the drawing of the sections gets noticeably slower, minimize MicroStation and bring it back up.
- There is a noticeable pause when processing cross section. This is due to the way it handles the ddb file.

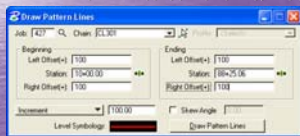
Getting Started

- New criteria is only available through the Project Manager.



Getting Started

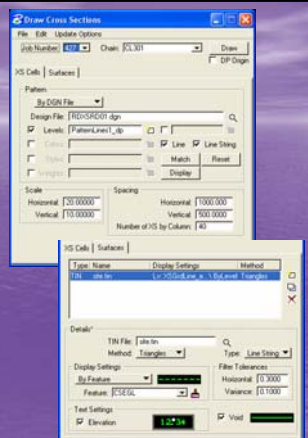
- Draw Pattern Lines
 - Visual representation of where cross sections will be cut.
 - Drawn into current file/model.



- Increment
 - Even
 - Once
 - Control Points-Horizontal
 - Control Points-Vertical
 - Superelevation Transitions

Existing Ground

- Menu Bar
- Update Options
- XS Cells tab
- Surfaces tab
- DP Origin toggle



Ancillary Features

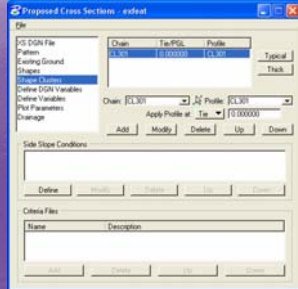
- GEOPAK tool that replaces the old ancillary input files
- Places existing underground utilities into the cross sections using a depth of cover or profile.
- Can also be used to plot other elements into the cross section view using plan view graphics

Proposed Cross Sections

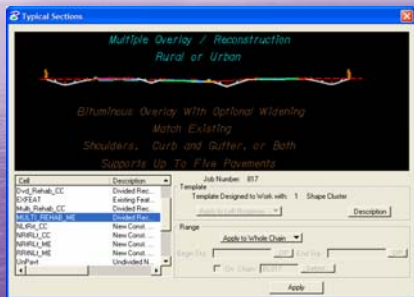
- Additional Ground Work
- Check edges of pavement
- Median Lines?
- Special Ditch Lines?
- Check for Attribute Tags and Adhoc Attributes
 - GEOPAK 3PC Adhoc Attribute Manager

Proposed Cross Sections

- Proposed Cross Section Dialog
- Must be accessed through Project Manager



Proposed Cross Sections



Criteria Choices

Answer a few questions.....

Existing Features

New Construction vs. Reconstruction

Crown Correction vs. Match Existing

Widening Only

Miscellaneous (Draw R/W, Reports)

Proposed Sections

Common questions and Errors

What if the sections won't run?

check shapes, edges of pavement #'s

It's not drawing what it's supposed to.

Check design elements

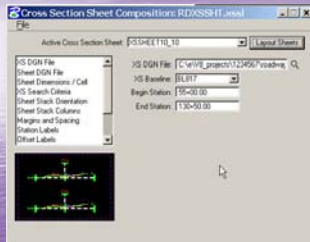
I'm getting an error message that the "_s_xxxx" variable is not defined.

Reapply typical. If divided make sure that you apply the typical from left to right.

Borehole Navigator

- GEOPAK tool used to plot soil boring information into plan, profile, or cross section view
- Can Import boring information using various csv file formats or V7 format ancillary input files.
 - Supported csv file formats are documented in the CADD Production Criteria Handbook in the Geotechnical chapter.
 - Tip... If station offset information comes in but not the material information, check the input file and make sure it reads "soils type".
- Preferences file is included with the FDOT2004 software.
- Note: A data file, *.gtd, must be created before importing or inputting soil boring information.

Cross Section Sheets



- No longer use layout input files to create sheets.
- Cross Sections are referenced to the sheets.
- Sheet Scale must match the scale of the cross sections.

Cross Section Sheet Composition Tool

- Caution: Project Manager does not save the changes made to the settings set up in the xssl file. It will save the xs dgn file, sheet dgn file, earthwork quantity file and the toggle to Detach Existing Sheets Before Processing.
- If you want to change the settings within the xssl file, copy down locally to project.

GEOPAK Cross Section Reports

- GEOPAK has several reports, however, the following reports are most commonly used by FDOT.
 - DTM Proposed 3D
 - Multi-Line
 - Profile Grade
 - Seeding
- FYI – Limits of Construction is now a separate tool and not found with the GEOPAK Reports.

Questions????

Thank-you
