

Quantities with the Design and Computation Manager in GEOPAK 2004

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Design & Computation Manager

- What's New
- Tools
- Design Process
- Generating Quantities

What's New

- Pay Items are in Trns*port format
- Categories and Items have been reorganized
 - Moved items closer to top of tree for easier access
 - Separated Signing and Pavement Markings
- Symbology for all FDOT defined elements
- New 3pc files
- Compute mode has been completely rewritten
 - Units are no longer hard-coded – now uses a user definable csv file
 - More options are available
 - equations and adhoc attributes
- Adhoc attributes are placed with D&C
- Enhanced Adhoc Attribute Manager

What's New

- Additional Computation Methods
- Quantity Deduction adds as well as deducts
- Units csv file located in the GEOPAK bin directory

Parameters for Target Item: 0334 1 13

Edit

Computation Method

- ▶ Standard Unit N:thickness:100
- Criteria File
- Equation 0.01000 Round Up
- Adhoc Attributes Min/Max Station Quantity Factor: 1.00000

Quantity Deduction

Deduction Payitem ID	Description	Quantity
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0.00

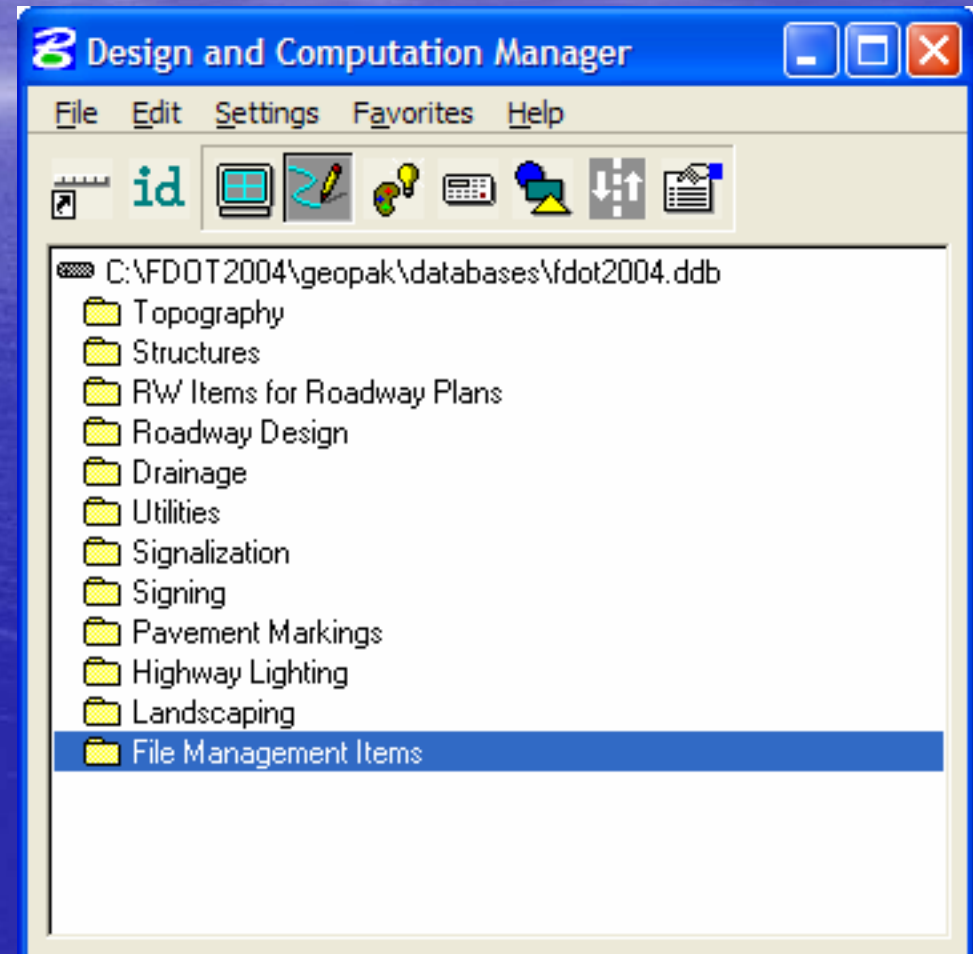
Length Computation

Break around semi-circles with sweep angle >= 0.01

OK Cancel

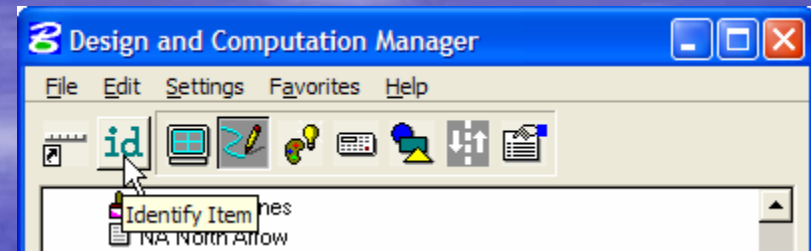
Tools

- Tool Overview
 - Identify Item
 - Display
 - Design
 - Set
 - Compute
 - Shape
 - Pavement Markings
 - Preferences



Identify Item

- Tool is used to identify elements in design file.
- If the element does not match any items within the database it will return the message – “No matching database item.”



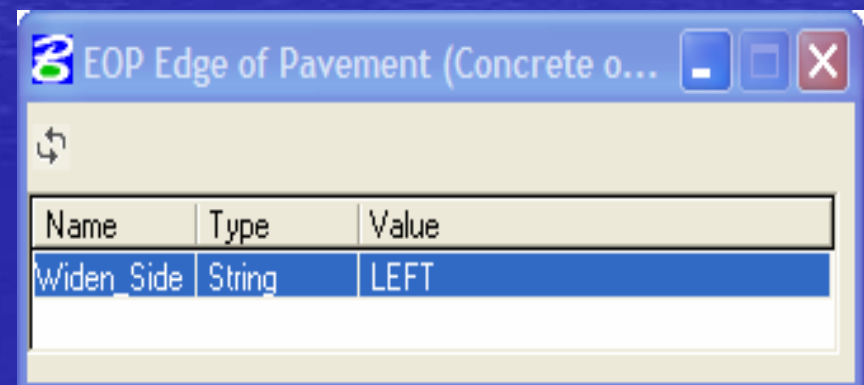
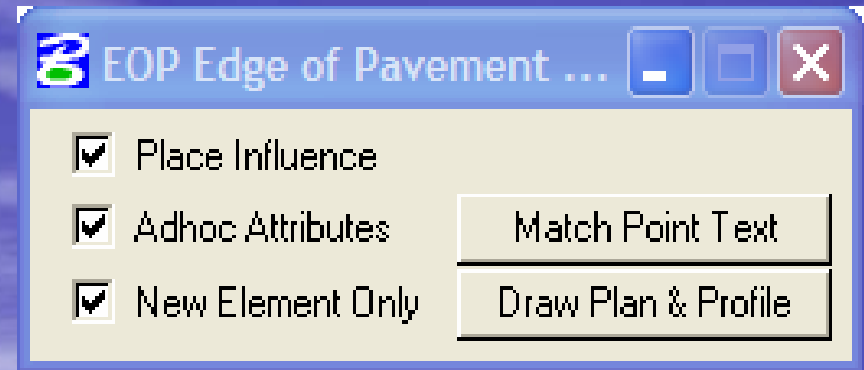
Display

- Normal Display
- Highlight Selection
- Hide Selection
- Display Only Selection



Design

- Set Drafting Standards and place attribute tags using Place Influence
- Plot COGO Elements
- Attach Adhoc Attributes to elements drawn
- New Element Only toggle



Design

- Uses Design Key-in commands when activated
- Can be customized with key-ins

Item Modify

Item ID: ▾

Description:

Placement: Attribute:

Class: ▾

Cell Name: ▾

Supplemental Search Criteria

Levels:

Colors:

Styles:

Weights:

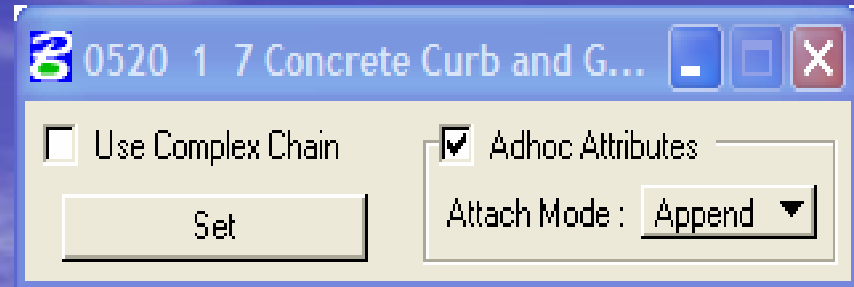
Key-in Commands

Design:

Set:

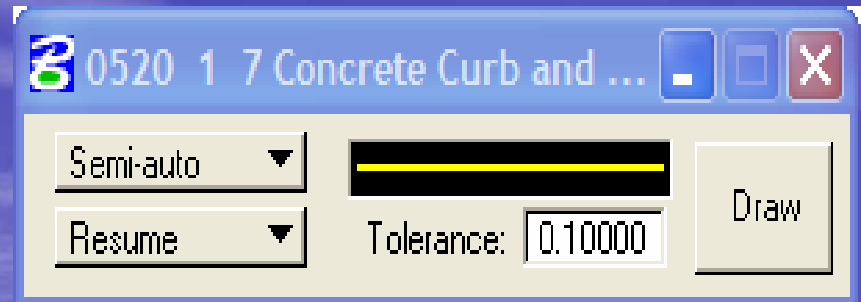
Display:

Set



- Valuable tool to set symbology, attribute tags, and adhoc attribute tags to existing elements
- Attach Mode will Append or Replace adhoc attribute tags
- Can set multiple items at once using selection sets

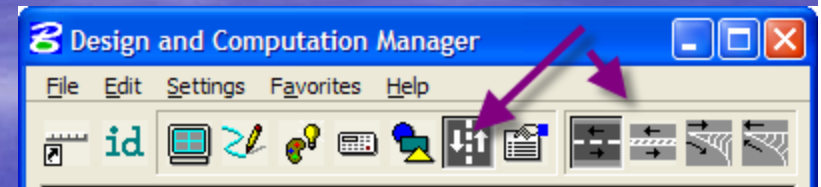
Shapes



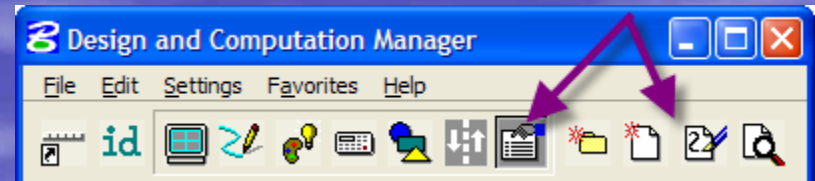
- Creates shapes to quantify area items
- Shape mode does not append adhoc attributes
- For items using adhoc attributes in the calculation of quantities the set command must be used after creating the shape – example: asphalt

Pavement Markings

- Draws Striping, Separations, Chevron Diverge and Chevron Merge
- Tools to place cells are no longer included in the D&C. GEOPAK has new tools to draw cells - Draw Cell by Feature and Draw Cell Group by Feature.



Preferences



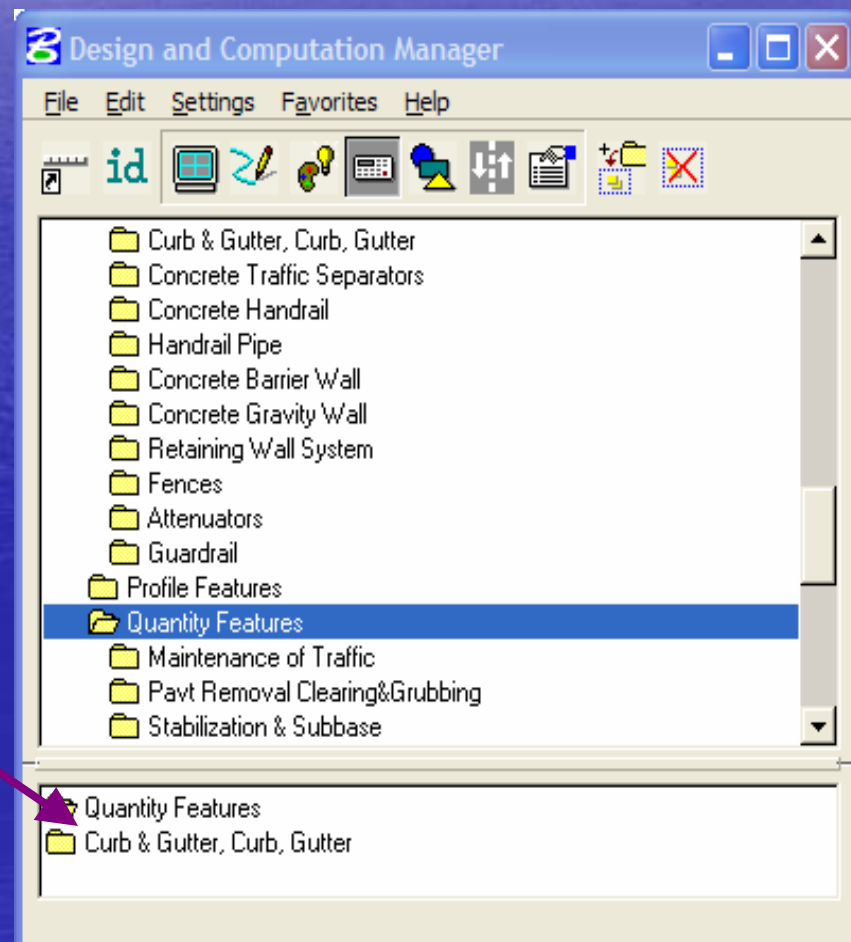
- Provides tools to quickly modify/review the database

Design Process

- Draw items using the Design & Computation Manager
- Set pre-existing items with the set tool
- Create shapes for area quantities
- Set Adhoc Attributes to shapes

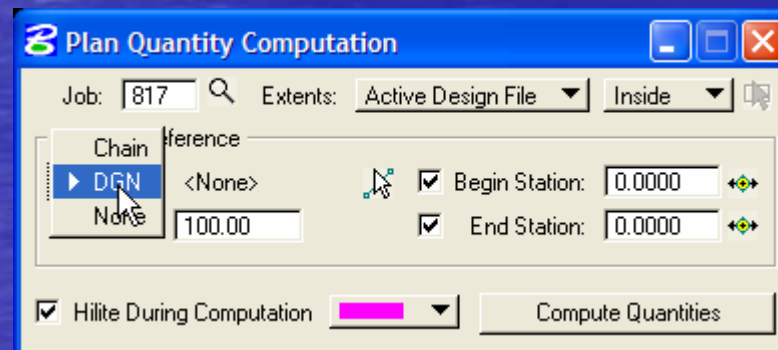
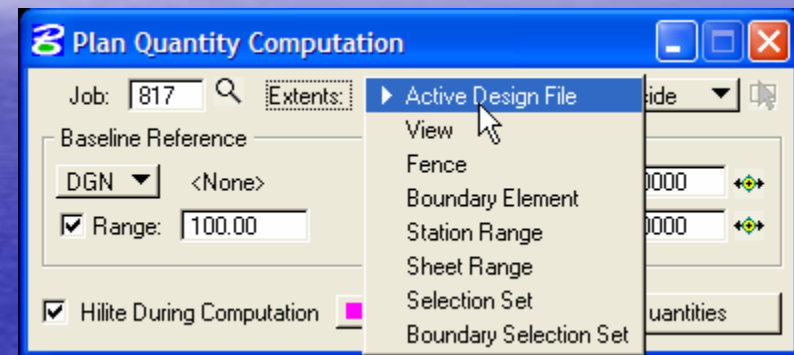
Generate Quantities

- Select the Compute Mode of the Design and Computation Manager
- Create a selection set of all the items to be quantified
- Specify by item or by category



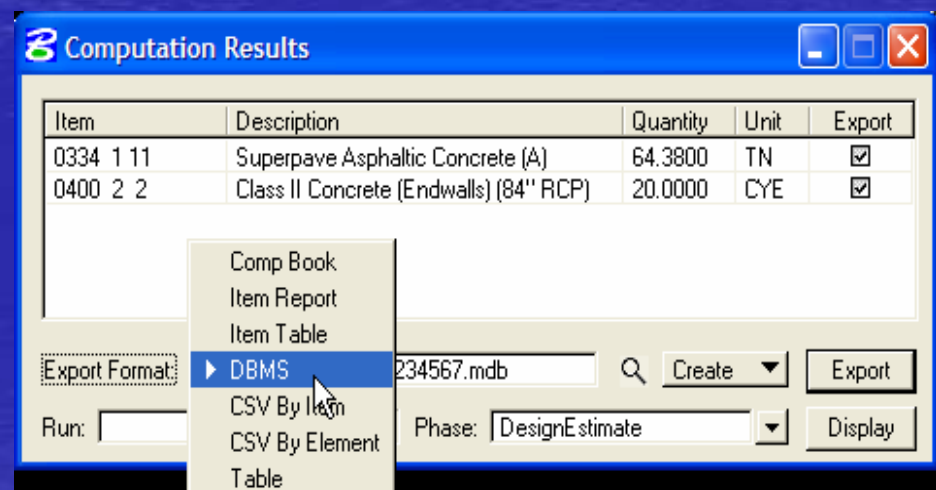
Generate Quantities

- Fill out dialog
- Many options
- Click Compute Quantities



Generate Quantities

- Select items to export
- Select DBMS format to export to Quantity Manager
- First time choose to create – thereafter select append
- Run – groups items





Questions????