REVIT FOR PRESENTATION
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Class Description
People spend too much time trying to have the perfect graphics using all kind of extra software... There are many ways of creating stunning drafting and presentation packages using only Revit. I will describe how to produce great graphic presentations with Revit. I will show you tips and tricks to get the most of Revit and what can be done with tools including visibility graphics, colour schemes, filters, phases, shadows and more.....

About the Speaker:
Originally from Switzerland I came to Australia in the early eighties, to work as an Architect in Brisbane. I was first exposed to CAD in 1984 with AutoCAD. I have learned and used a broad range of software but since my first involvement with Revit in 2006 I have not stopped learning it, using it and teaching it.... I’m currently the Revit Manager for The Buchan Group, responsible for a full Revit implementation, on-going training of staff as well as internal development for the office standards.
THE TOOLS

OBJECT STYLES
- The Object Styles tool specifies line weights, line colours, line patterns, and materials for different categories and subcategories of model objects, annotation objects, and imported objects in a project. It is a global project setting.

VISIBILITY GRAPHICS (VG)
- The settings that you are overriding are those specified at the project level set in the Object Styles. This override is View dependant.

PHASES/ PHASE FILTERS
- Show the Different Phases as Existing, Demolition and New Phase.

VIEW RANGE
- The View Range set the cutting plane and a bottom (or top) clipping plane. The View depth is an additional plane outside the primary range. Model elements in that extra view range can be displayed differently.

FILTERS
- Filters provide a way to override the graphic display and control the visibility of elements that share common properties in a view.
GRAPHIC DISPLAY OPTIONS

- The Graphic Display Options controls the way the model is displayed using different Styles, Transparency, Shadows and Lighting.

LINEWORK (LW)

- The Linework tool overrides the current line style of the selected line and applies a different line style.

PAINT TOOL / SPLIT FACE

- Override a material on a specific face or part of a face of an element.

ROOMS AND AREAS

- Allow to get colours to rooms and area according different parameters like the names, areas, usage or even personalised parameter to fit a specific scheme.
RENDER

- A Render creates a photorealistic image of the building. The results will depend on the Quality settings, the Materials applied or overridden and the type of lighting used.

IMAGES

- Images can be used in the Background for a render or a Realistic View.
- Images are used in a Decal, it will be visible in a Render or in a Realistic View.
- An Aerial Image can be the background of a Site plan.
- An Image of a Tree can be used in Elevation or plan.
- The image can also be a scanned hand drawing.

VIEW TEMPLATES

- Saving a View Template from a specific view will allow to save the settings to apply them to other views.
- Specific View Templates can be set in a “sample file” to be used later in an other project, they will be loaded using the “Transfer Project Standards”.

TIPS AND TRICKS

- **Visibility hierarchy**
  1. Line Work Tool
  2. Override Graphics in View > By Element > Halftone
  3. Graphic Display Options – Silhouette Edges
  4. Override Graphics in View > By Element
  5. View Filters
  6. View Depth - “Beyond” Line Style
  7. Phasing Graphic Overrides
  8. Visibility / Graphic Overrides > Override Host Layers > Cut Line Styles
  9. Visibility / Graphic Overrides > Projection \ Cut Lines
  10. Project Object Styles

- **Transparency**
  1. Use transparency to see through a wall or a roof.
  2. Transparency looks great in an axonometric view, but it does not cast any shadows
• **Images**
  1. Use images to add character to the view.
  2. Use PNG or Tiff to have a transparent background.
  3. Save typical images in a specific folder.
  4. Place image in Drafting View to be used on a sheet as Background.
  5. Always check the image size.

• **Sheets**
  1. Don’t overcrowd a Sheet
  2. Add small axonometric View to illustrate the design.
  3. Overlay Views for special effects,
View type:
Floor Plan
Detail Level:
Coarse
Visual Style:
Hidden lines
Shadows:
N/A
Override Type:
N/A
Comment:
Model elements only

View type:
Floor Plan
Detail Level:
Fine
Visual Style:
Hidden lines
Shadows:
N/A
Override Type:
N/A
Comment:
Typical floor plans with annotations. Plan used in the DD set.
View type: Floor Plan
Detail Level: Fine
Visual Style: Hidden lines
Shadows: Set in Sun Settings
Override Type: N/A
Comment: Model elements only,
The extent of the Shadow is set by the
Cut Plane in the View Range dialog box.

View type: Floor Plan
Detail Level: Fine
Visual Style: Hidden lines
Shadows: N/A
Override Type: N/A
Comment: Easier to pickup the different finishes
View type: Floor Plan
Detail Level: Coarse
Visual Style: Hidden lines
Shadows: N/A
Override Type: Colour scheme applied
Comment: Colour schemes for Room and Area are set on Room and Area parameters.
The smaller plan show a different scheme.

View type: 3D Floor Plan
Detail Level: Fine
Visual Style: Hidden lines
Shadows: N/A
Override Type: Filters to override the Surface pattern of floors.
Comment: Rooms and Area colours do not display in a 3D View.
View type: Floor Plan
Detail Level: Fine
Visual Style: Hidden
Shadows: N/A
Override Type: Graphic override for the Furniture category, surface pattern set to a brown solid fill pattern
Comment: The override helps with the clarity of the furniture layout.

View type: 3D Floor Plan
Detail Level: Fine
Visual Style: Shaded
Shadows: Set in Sun Settings
Override Type: N/A
Comment: N/A
View type: Site Plan  
Detail Level: Fine 
Visual Style: Hidden lines 
Shadows: Normal 
Override Type: N/A 
Comment: 
Trees as RPC in the top view. 
Trees replaced with a graphic tree plan representation in the view behind.

View type: Site Plan  
Detail Level: Fine 
Visual Style: Shaded 
Shadows: Normal 
Override Type: Transparency to Carpark 
Comment: 
Aerial image in the background in lieu of the Revit Topography.
View type:
Site Plan
Detail Level:
Fine
Visual Style:
Realistic
Shades:
Normal
Ambient
Override Type:
N/A
Comment:
The contours are displayed to show the site slope.

View type:
Site Plan
Detail Level:
Fine
Visual Style:
Shaded
Shades:
Normal
Ambient
Override Type:
N/A
Comment:
Images of trees added to give a hand sketch look.
View type: Perspective Site Plan
Detail Level: Fine
Visual Style: Ray Trace
Shadows: As per Sun Settings
Override Type: N/A
Comment: RCP trees
View type: Elevation
Detail Level: Fine
Visual Style: Hidden
Shadows: N/A
Override Type: N/A

View type: Elevation
Detail Level: Fine
Visual Style: Hidden
Shadows: Normal
Override Type: N/A

Comment: Transparency apply to the Planting

View type: Elevation
Detail Level: Fine
Visual Style: Hidden
Shadows: Normal
Override Type: Ambient

Comment: Linework override to edges of awning and roof

Comment: Gradient Background
View type: Elevation
Detail Level: Fine
Visual Style: Shaded
Shadows: N/A
Override Type: N/A
Comment: Elevation original, part of the DD set.

View type: 3D Elevation
Detail Level: Fine
Visual Style: Hidden
Shadows: Normal Ambient
Override Type: Phase Override for a Cardboard look
Comment: All Glass Subcategories have been hidden to see trough.
**View type:**
Section
Detail Level:
Fine
Visual Style:
Hidden
Shadows:
N/A
Override Type:
N/A
Comment:
Section original, part of the DD set.

**View type:**
Sections
Detail Level:
Coarse
Visual Style:
Hidden
Shadows:
N/A & Ambient
Override Type:
N/A
Comment:
The Ambient shadows adds depth to the view.

**View type:**
Axonometric Section
Detail Level:
Coarse
Visual Style:
Hidden
Shadows:
N/A
Override Type:
N/A & Ambient
Comment:
Coarse mode Poche Material set with a Red Solid fill Pattern.
View type: Perspective View
Detail Level: Fine
Visual Style: Hidden
Shadows: Normal
Override Type: Phase Override to all
White
Comment: interesting

View type: Perspective View
Detail Level: Fine
Visual Style: Render
Shadows: Sun Settings
Override Type: N/A
Comment: The softness of the shadows is created by having an early morning setting.

View type: Perspective View
Detail Level: Fine
Visual Style: Hidden
Shadows: Normal
Override Type: Phase Override with Balsa Material
Comment:
View type: Perspective View
Detail Level: Fine
Visual Style: Hidden
Shadows: Normal
Override Type: Phase Override with White Material
Comment: RPC Trees

View type: Perspective View
Detail Level: Fine
Visual Style: Hidden
Shadows: Normal
Override Type: Phase Override with White Material
Comment: Trees are replaced with 3D Trees and Flat People (Thanks to Andy Milburn) are placed. Different Backgrounds definitely create a different feel in the image.
The whole topography has been modelled in “layers” to mimic a Balsa model.

A touch of colour to highlight features and semitransparent trees

(Images from Architectus, Brisbane)
View type: Plan and Axo
Detail Level: Fine
Visual Style: Hidden / Shaded
Shadows: N/A
Override Type: Phase Override
Comment: Visually enhancing the differences between the different phases
View type: Axonometric
Detail Level: Fine
Visual Style: Shaded
Shadows: N/A
Override Type: N/A
Comment: Exploded View created with the new Revit 2014 feature.
Conclusion:

They are many ways of controlling the display of a Revit model.
In the end, it will depend on what the View will be used for.
Use your imagination, combine the tools, have fun!