Session01 BIM User Manual

Topics

Introduction & CAD Standards Concept

- Who
- What
- When
- Why – the big one

My thoughts

If they don't understand your position, your reasons and the value to their **own working environment** they will not follow your standards

KISS / Path of least Resistance

Best Practices

CAD v. Revit

Job Numbers, Project Folders & Project Setup

All these are the same / however; you will want to specific who sets up the new project

- Key points
- Folder location / Structure
- Project Template
- Title Blocks
- Loading
- Using
- Local File / Central File issue

File Naming AND Sheet Numbering

- Now Sheet and Sheet number naming
- I suggest building these into the project template
- However have documented Examples of names / prefixes / numbers

Layers

- Becomes Categories for basic modeling views
- Becomes linetypes for Drafting views

Standard Color Table

- Explain that this doesn't matter
- When you are printing in black and white
- Understand / explain Gray scale equivalent
- LOCATION FOR PRINT SETUPS
- WHO IS IN CHARGE OF THEM

Best Practices

Project open and close

- Opening a Project = opening all Views that were open when the project was saved
- Window>>Close Inactive Windows
- TIP: The Open/Close or Welcome Page

Central File / Local File

"Save before Standing"

- Save locally
- Save to Central
- Relinquish All

Dimensions locations

- Include picture
- Keynotes

Tips and Tricks

- Create Similar (CS)
- Select All Instances
- Project Browser View Settings
- "Activate View" on Sheets
- View Templates
- Family Creations

Text Style, Fonts & Drawing Scale Factors

- Scaling is irrelevant in Revit.
- All Model Categories scale based on the view settings
- All Annotation is Scale independent

How-to's

Loading System Families

- Loading
- FILE>Transfer Project Standards
- Bothe the Current and the Standard Content Project have to be open!
- Location
- Server\BIM Standards\2009\Revit Templates\System Families
- File Information
- Include a Screen shot of files
- Include a table with file names and families contained

Loading Standard Families

- Default
- Company
- Internet

Process for bringing in CAD drawings

- Always bring in from sub folder under Revit.

Import/Link Dialog

- I suggest you take a screen capture of this dialog

Always

- Use link
- Origin to Origin
- Invert colors

Sometimes

- Scaling
- Orient to view
- Know what level you are placing at

Detailing

- One of Two ways

The Good Process – Using the Revit Model and Views

- Use Sections and Callouts of the Model
- Set Detail Level and Scale
- Finish up detail using
- Masking and Filled Regions
- Detail Components
- Detail Linework
- Text with leaders

The Real Process – Using Imported CAD Details

Real Process - Start with a Blank Drafting View

- Import CAD Drawings (see "Import link Dialog")
- Finish up detail using
- Masking and Filled Regions
- Detail Components
- Detail Linework
- Text with leaders
- Placing the CAD Detail location
- Use Sections or Callouts
- Before placing the Section / Callout
- In the Options Bar Check "References another View"
- Select the Drafting View
- Place the Section /Callout appropriate to the detail

Detail components

Are Revit Families that are 2D representations of 3D objects? Use these in Drafting / Detail Views of the model to convey specific Design Intent.

- Loading
- FILE>Load from Library>>Load Family
- Location
- Revit Standard Content> Detail Components
- Placing
- Drafting Design Bar >> Detail Component

Multi-category tag

- This is up to you.

- This is a Tag that can reference parameters common to all families
- Quick Demo…..

Detail Library

- Location / folder name
  - \\Server\Revit_Standards\Revit Details
  - Instruction Documentation
  - Revit Details.rfa
  - \CAD Details
- Who can update it?

Plotting

Revit

- Plotting Standards Project location
  - Contains plot settings for all printers a`d print types
- View/Sheet Sets
  - Reasons for using
  - Saving

Exporting to CAD / PDF

- Uses Same View/Sheet Sets
- Archiving / Saving location

Project Development - PD –DD – CD

Primary Design Key Points

- Minimal custom content – Place Holders
- Almost no new families
- Shell and Core
- Design Intent
- Form and Function
- Schedules and Costs can be generated
- Project Information flushed out

Design Development

- Flushing out the Model
- Cleaning major construction components
    - Wall and Floor/Roof Joins
- Moving "Placeholders" to Final Components
- Project Browser showing "Views not on a Sheet"
- Sheet layouts built

Construction Document

- Use of Drafting tab for View Specific Content
- Use of "Lines" for 3D Linework
- Lots of Sections and Callouts
- Drafting Views Created where necessary
- Importing Revit Details
- Project Browser showing "Views on a Sheet"
- Use of "Activate View" for "White Space Management"

Acknowledgement Form

- BIM Standards - Acknowledgement Form
    - Team member signature
    - BIM Manager Signature