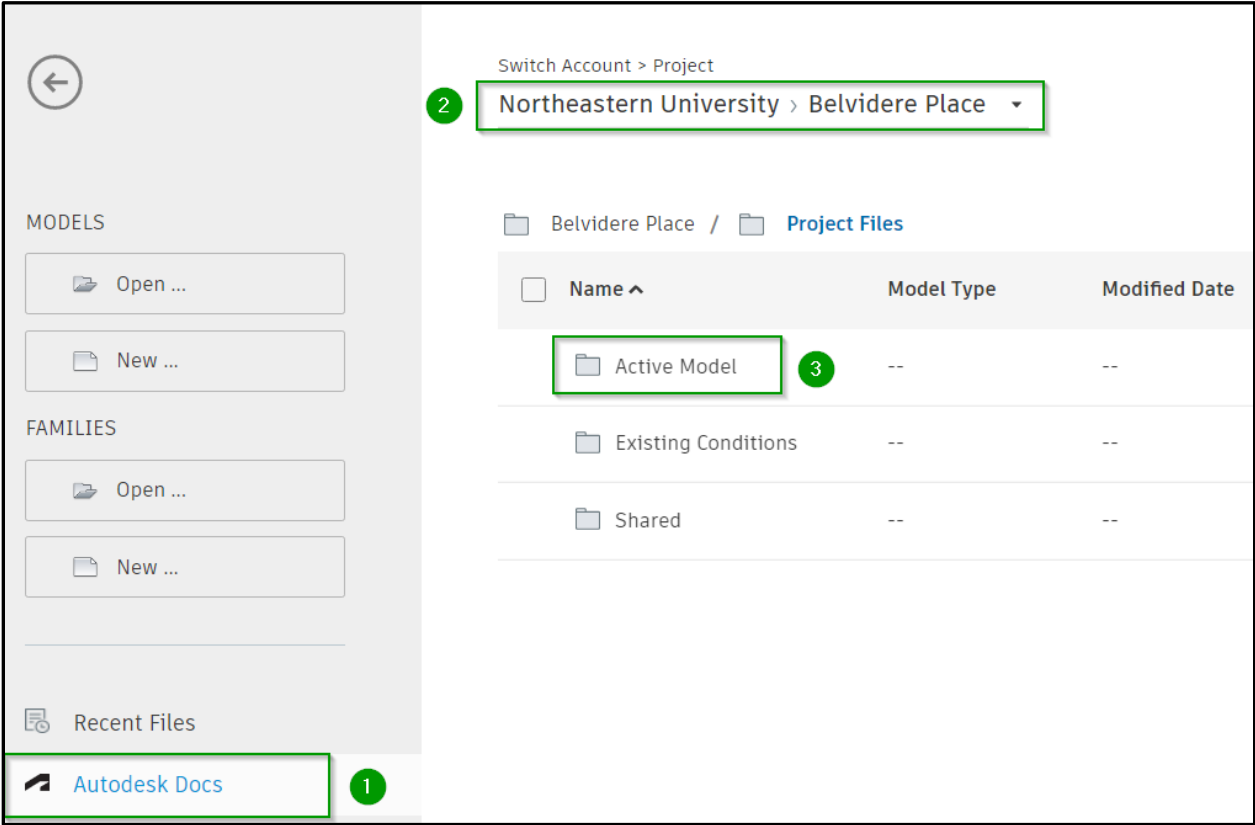


BIM Procedures

Opening a Model

All models are kept on Autodesk Construction Cloud (ACC). This is the new version of BIM360, which we will not be using. When you are added to a project, you will see the building it is in appear in your Project List. These projects can be viewed in browser at acc.autodesk.com. When opening Revit, you will only see buildings/projects that are saved in the version of Revit you have open. This ensures you won't open in the wrong version.

Upon opening Revit, navigate here to find your project:



Existing Conditions contains the last vetted, flattened building file. This can be relied upon as the accurate condition, not including any ongoing work.

Active Model contains the file that is currently being edited by any ongoing projects in the building. This is where you will go to find your project.

Shared contains any files being shared to/from external sources. Folders in here can be directly linked to external consultants, whether or not they have ACC accounts.

Welcome Screen

Upon opening a building model, you will see a screen containing important information. Please review the Best Practices listed here regularly. Note the Revit Version year in the top right corner. The ACC logo in the top left will be present for any cloud project.





Northeastern University

CAPITAL PROJECTS - PLANNING, REAL ESTATE, & FACILITIES
216 MASSACHUSETTS AVE - BOSTON MA 02115

2023

Template Building

Enter address here

Building Model Last Updated: 01/01/2001

TEMPLATE LAST UPDATED: FEBRUARY 15, 2023

REVIT BEST PRACTICES

GENERAL GUIDELINES

- Pay attention to the active workset you are working on.
- Do not upgrade models. If you open a model in the wrong version, close without saving and reopen.
- Use caution when editing view templates. Other views affected are listed in the top right.

DESIGN OPTIONS

- Be aware that creating new family types in a design option can cause unexpected issues.
- Limit the use of rooms in design options.
- Keep design options only as long as they are relevant, then remove unused ones.

AUTOCAD IMPORTS

- Minimize the number of imported DWG files.
- Avoid importing unnecessary data like hatching.
- Delete unnecessary elements of the DWG file in AutoCAD
- Run the overkill command in AutoCAD to reduce lines.
- Do not link DWGs into all views. Utilize "Current view only" checkbox.

FAMILIES

- Create new independent families instead of in-place families when possible.
- Use families instead of groups, when possible.
- Limit use of excessively parametric or constrained families.

SMART MODELING

- Use detail components when possible in detail drawings.
- Limit joined geometry to necessities.
- Delete unused groups from the project browser.
- Regularly review and fix warnings with the help of the BIM Manager.

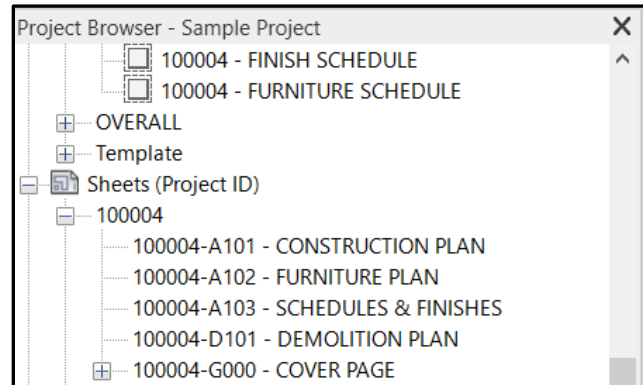
VIEWS

- Minimize view depth where possible in 2D views.
- Use section boxes to limit the visible geometry when working in a 3D view.
- Do not use the *Hide Elements in View* function without applying temporary view properties.
- To hide individual elements, use the Visual/Graphics settings (VV) and hide by category.
- Close unnecessary views while working.
- Close views when syncing to speed up the process.

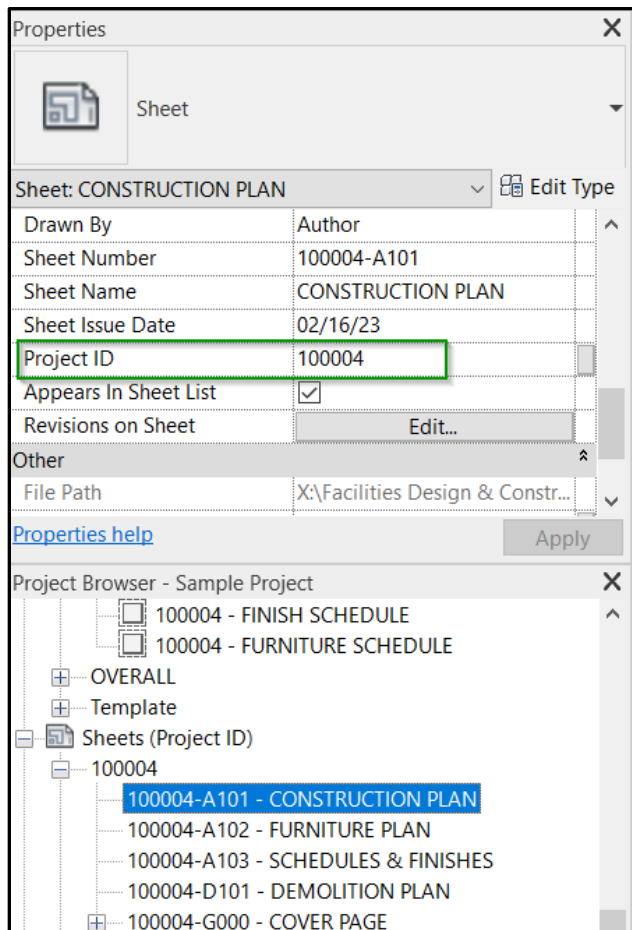
Project Browser

On the left side of the screen is the **Properties Palette** and the **Project Browser**. The Browser shows all views, schedules, sheets, legends, families, groups, etc.

In our template, the **Project Browser** has been organized by Project Number. When you open a building model you will see your project number under each category, with its respective views/sheets etc nested underneath it. You will also see Overall views which refer to the entire building, and Template views which are used to set up new projects.



Because Revit does not allow duplicate view/sheet names, please always use a project number prefix.



If you select any view/sheet/schedule and look in the **Properties Palette**, you can see a parameter called Project ID. If you create new views, ensure that this is filled out with your project number so that it sorts correctly in the **Project Browser**.

Project Information

Because each Revit project is for an entire building, the Revit default Project Information only contains info that applies to the whole building. The following project-specific Information parameters have been added to keep track of your project info. These are linked to views, sheets, and schedules.

- Project ID Project Number
- Project Name_ByID Project Name
- SheetNumber_ByID Sheet Number (since there cannot be duplicates)
- Sheet Type Architectural, Demolition, etc. Used to sort cover page sheet list
- Set Issue Date On cover sheet, date of set issuance

Scope Boxes

Each project has a scope box named after the project ID. This will be set up by the BIM Manager. You can use scope boxes to set the bounds of a viewport. This does not replace the project boundary line, which is drawn manually.

Key Plan

Each project will have a key plan preset. Simply adjust the filled region on the view to cover the project boundary. Drag & drop this view onto the cover sheet, and change the scale to fit.

Project Phase

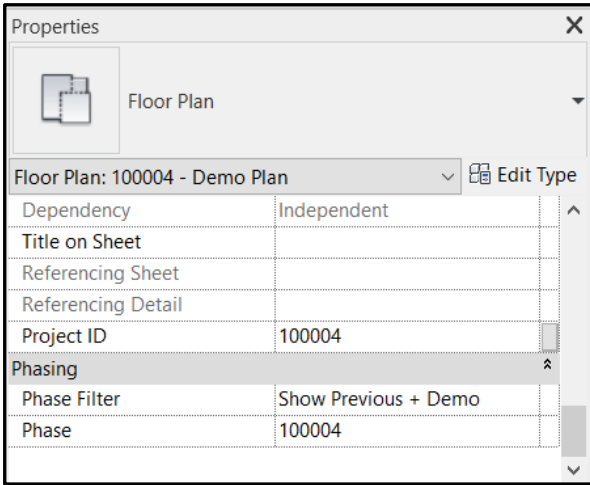
We will be using Project Phases to distinguish between projects. Each project has its own phase, in which Phase Name = Project Number and Project Description = Project Name.

PAST	
Name	Description
1 Existing	
2 100004	Sample Project Phase
3 New Construction	

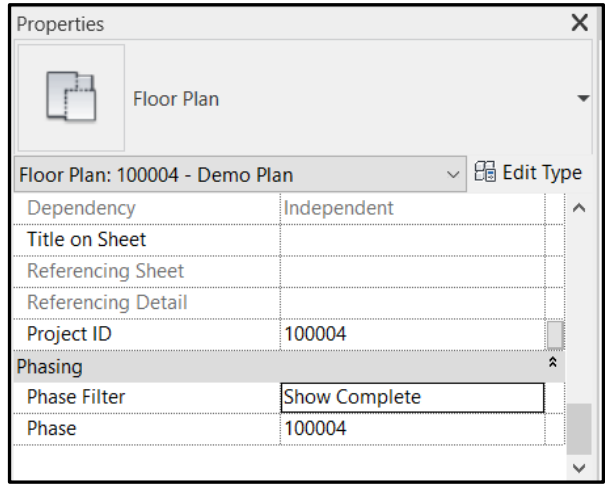
FUTURE

There are many places in Revit where project information is organized by Phase. You can also utilize *Project ID*, which is a custom parameter that has been added to all models.

A typical demo view's settings would look like this:

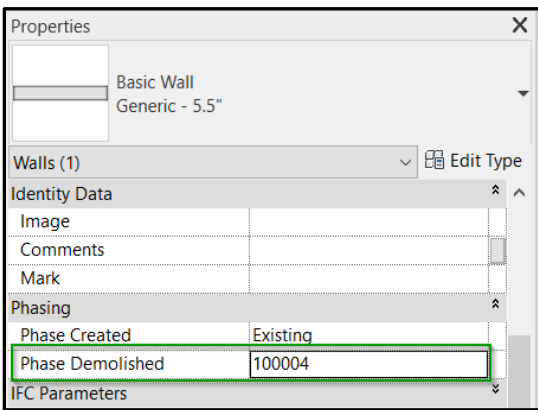


A typical construction view's settings would look like this:



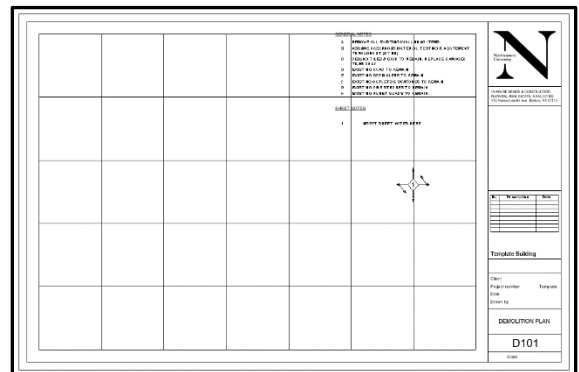
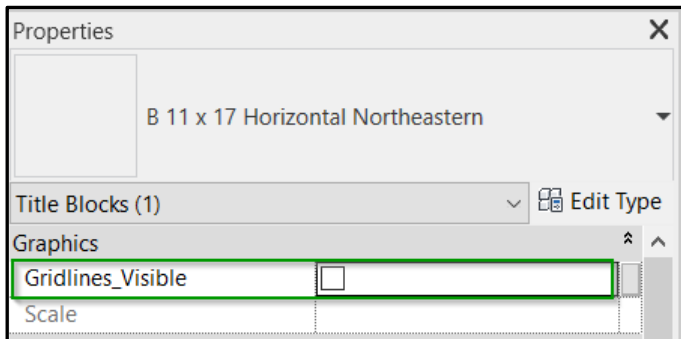
Demolition

Mark elements for demolition as shown here.



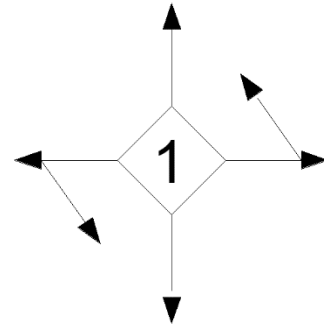
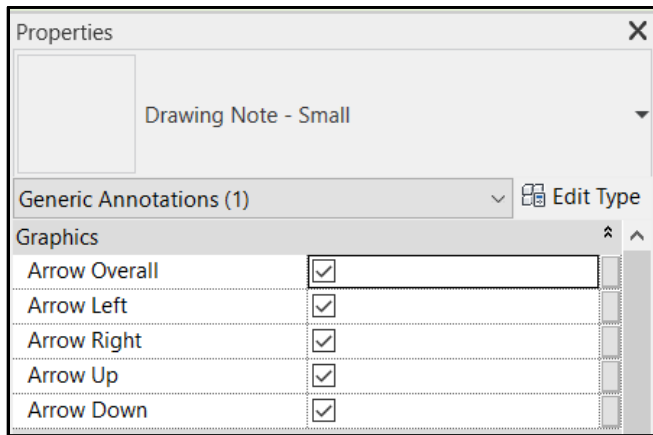
Drawings

The titleblock has a built-in grid that can be used for alignment. This can be turned on with the checkbox in the **Properties Palette**.



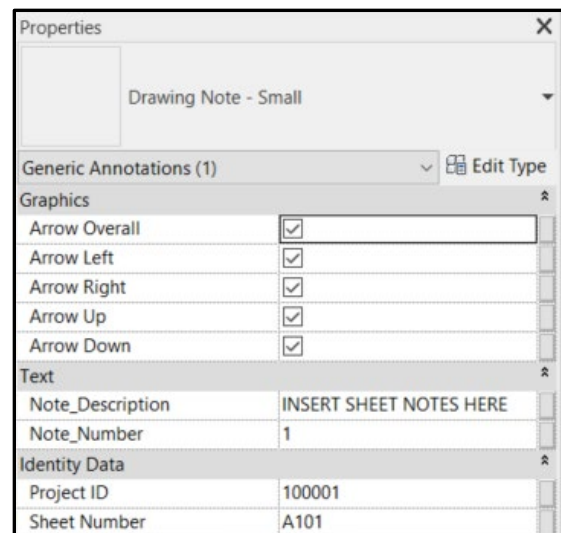
There is a drawing note family pre-placed on the A101 and D101 sheets.

Turn on/off directional arrows in the **Properties Palette**



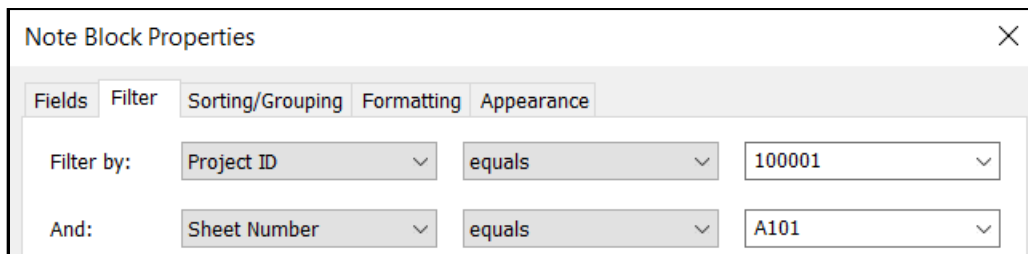
Drawing notes are directly connected to the sheet notes schedule that is pre-placed on the page.

You can copy and paste the note annotation to create more. You can update the info for each note in the **Properties Palette**. Be sure to include the Project Number and Sheet Number.



You can also edit the sheet notes directly in the Schedule. Double click the schedule on the sheet to open it up for editing.

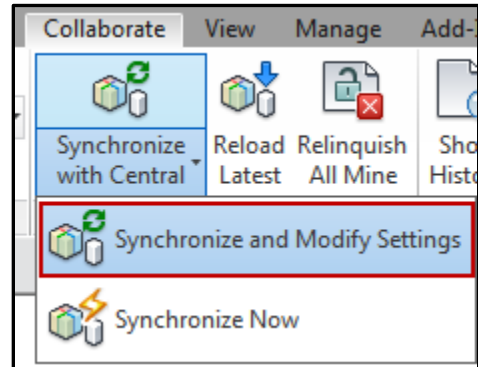
By default, sheet notes are filtered so that only the notes on that page show up. This will be set up for A101 and D101 by default, but any new sheets will need to be updated manually.



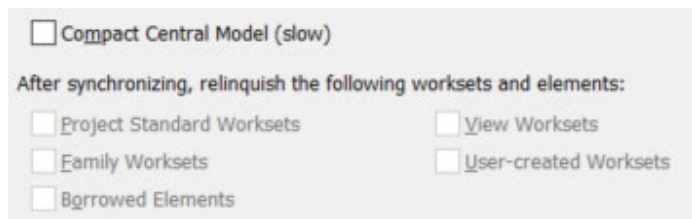
Printing

Saving & Syncing

In Revit, saving a file with the typical save icon only saves a local copy of your changes. Changes must be synced back to the central model before closing out. This pushes your changes to the shared model and ensures other users can see them. When syncing, use the below button. Be sure your shortcut has the green circle symbol, not the lightning bolt.



The settings when you sync look like this.



You don't need to compact the central model, but check that any other checkbox that is not greyed out is checked. This relinquishes elements that you have been editing, and allows other users to work with them if needed. If you do not relinquish your elements, you may "lock out" other users from working on certain items or views.