

Revit Architecture 2017 – Phasing (Part 2).

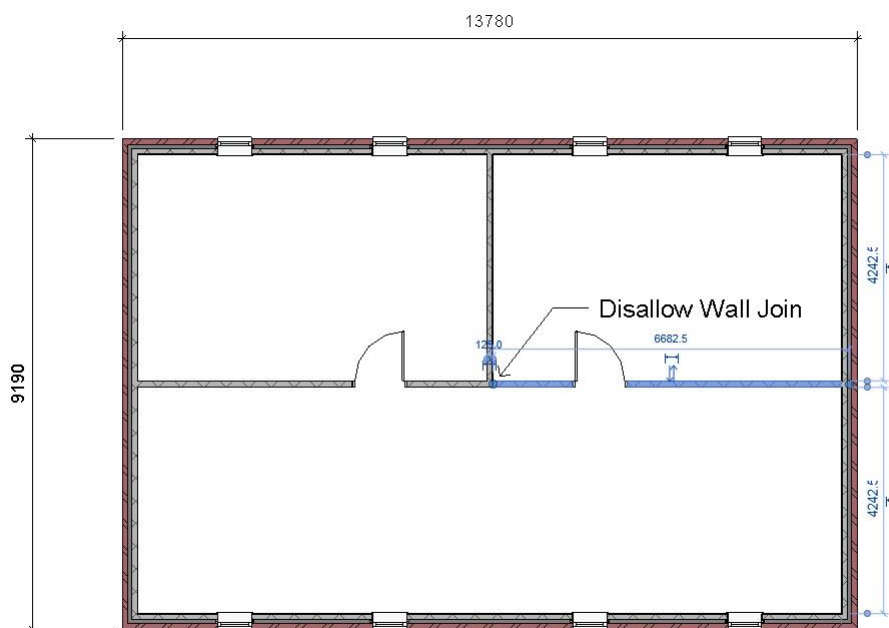
In this White Paper we will apply the phasing procedures outlined in my previous White Paper (RAC 2017 – Understanding Phases) to a simple worked example.

Worked Example: Phasing to show different stages in a Renovation Project.

On the Application Menu open a new project (Default Metric Template).

Start making a simple ground floor plan on level 1 with some interior walls, doors and windows Fig 1. Disallow the wall join as shown as this wall will be demolished in a later phase.

Fig 1: Small House Ground Floor Plan



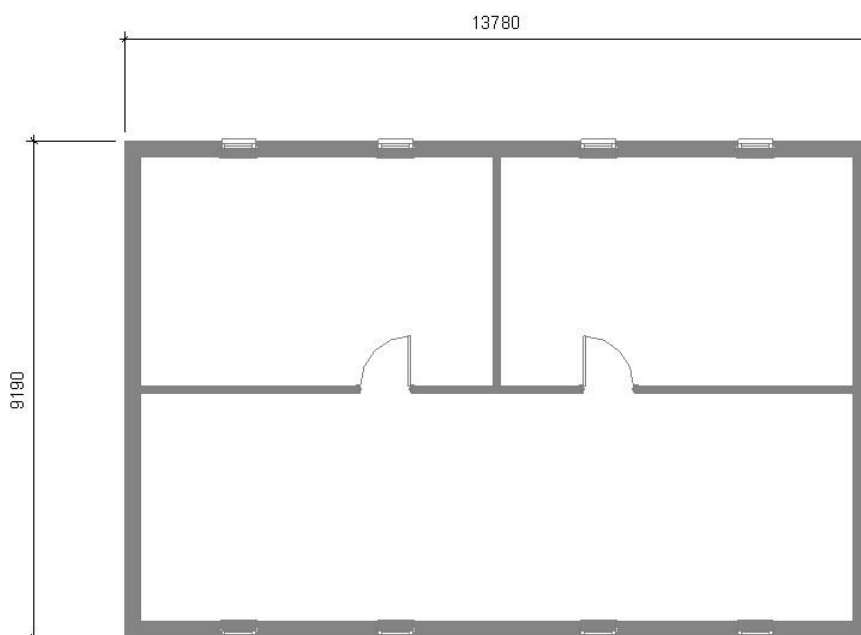
On the Properties Palette we will notice that everything by default gets placed on the phase called New Construction Fig 2.

Fig 2: Phase Options on Properties Palette



Select all building elements and change to existing phase and the graphic display changes Fig 3.

Fig 3: Existing Phase – Greyed out Appearance



Change the View Properties Phase to Existing and the floor plan will appear as fig 1 again.

Demolishing Objects

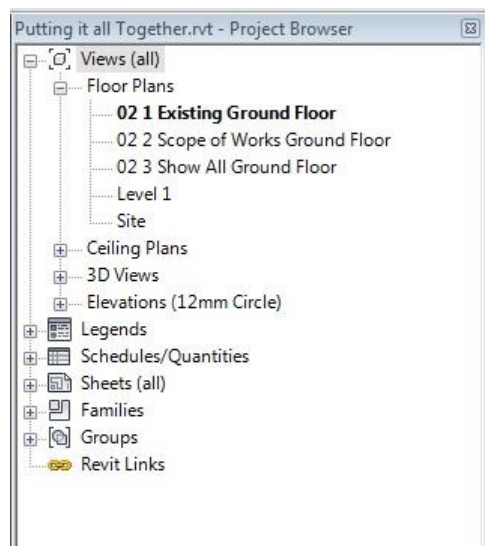
Before starting to demolish any elements – rename the Ground Floor plan and call it existing and create two duplicates of the Ground Floor Plan Fig 4.

02.1 Existing Ground Floor

02.2 Scope of Works Ground Floor

02.3 Show all Ground Floor

Fig 4: Ground Floor Plan Views



Initially these views will look similar when we open them. Change the view properties as per the following table.

02 1	Show All	Existing
02 2	Show Complete	New Construction
02 3	Show All	New Construction

To demonstrate what these filters do we will demolish some elements.

Demolishing Elements:

Method 1

On the Modify Tab on the Ribbon, select the Demolish Tool from the Geometry Panel and click on the elements to be demolished, or

Method 2

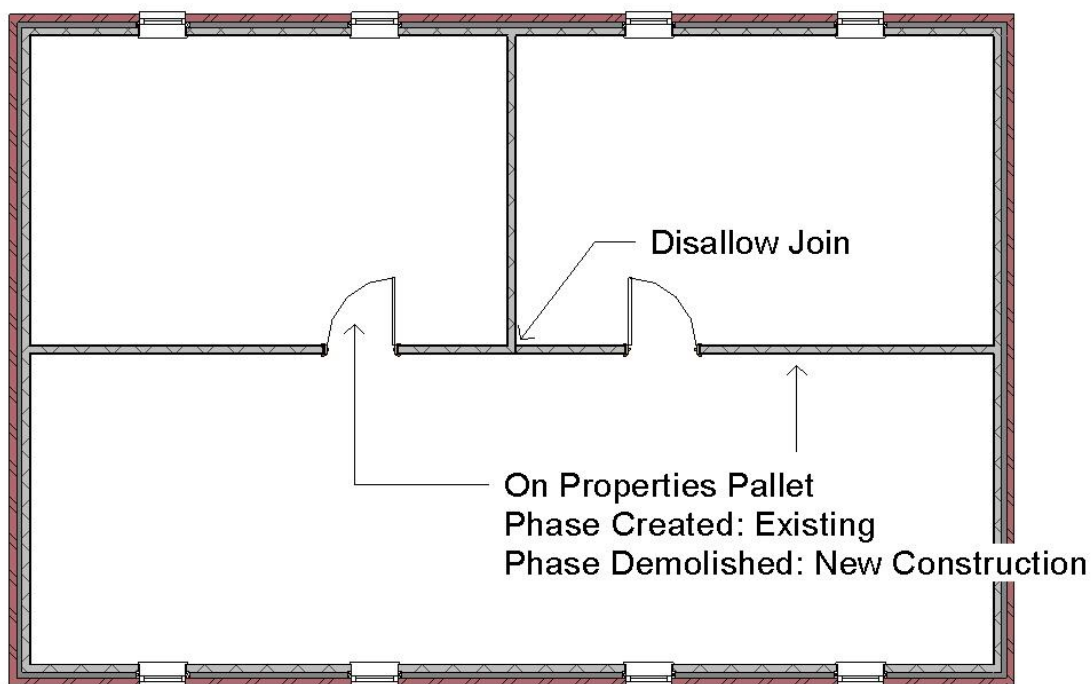
Select the elements to be demolished and use the phasing filters in the Properties Palette:

Properties: Phase Created – Existing

Phase Demolished – New Construction

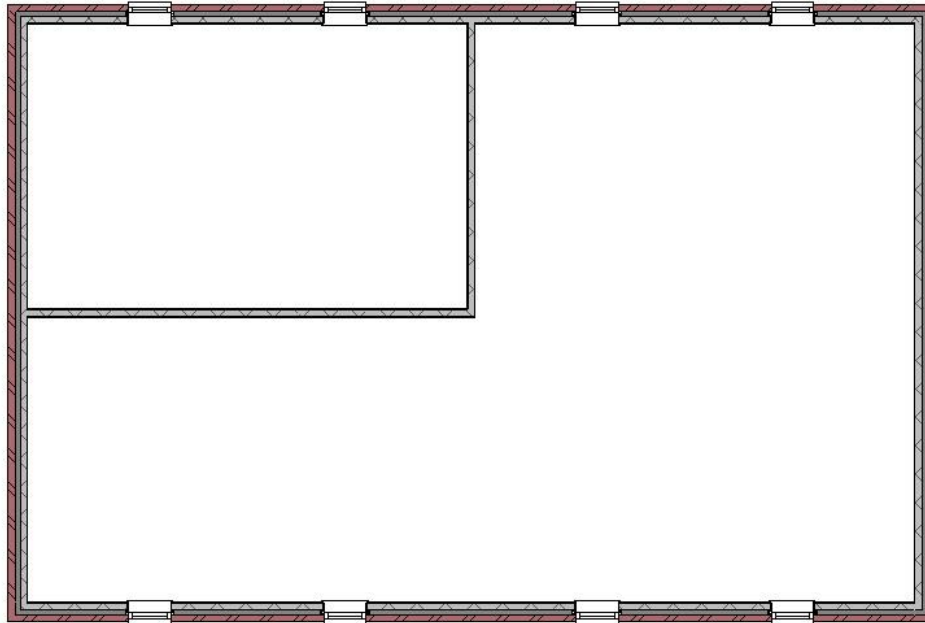
Use either method and demolish the right horizontal internal wall and the left side door (Fig5).

Fig 5: Demolish Elements in Existing Phase 02.1



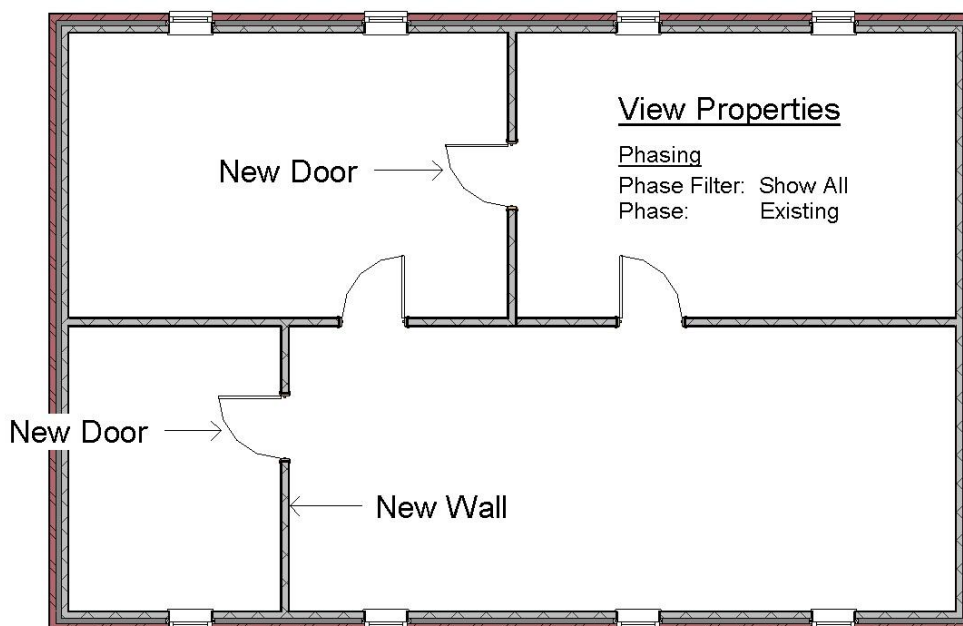
So far in the view called 02.1 Existing Ground Floor the wall and door selected for demolition are still there but if we switch views to view 02.2 Scope of Works Ground Floor they disappear (Fig 6).

Fig 6: View 02.2 Scope of Works Ground Floor (Phase Filter: Show Complete Phase: New Construction)



In the next step we will revert to view 02.1 Existing Ground Floor and draw a new wall and doors (Fig 7)

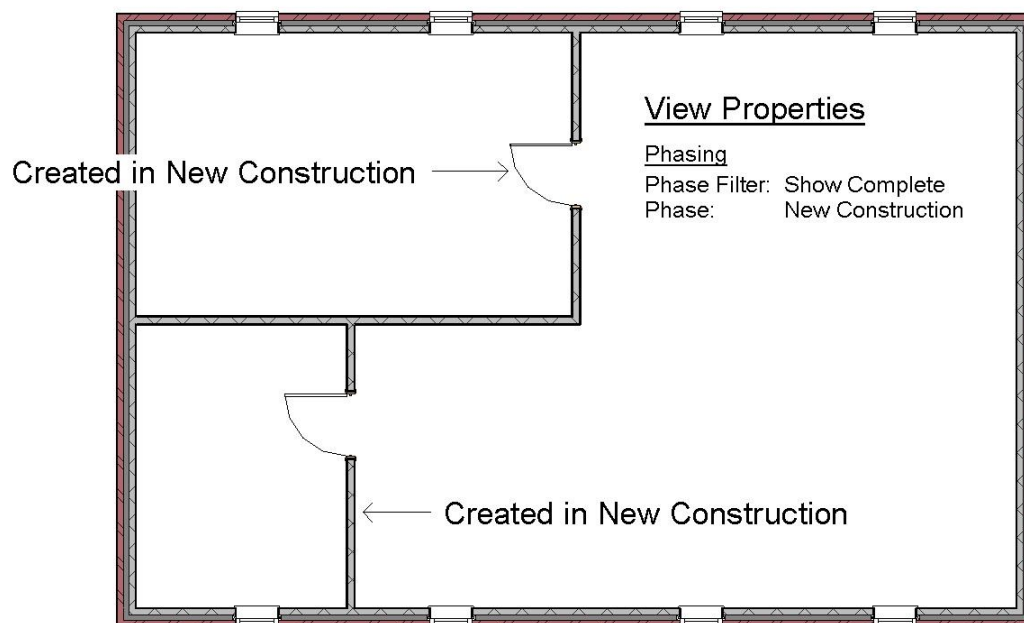
Fig 7: View 02.1 Existing Ground Floor (Phase Filter: Show All Phase: Existing)



If we now select the new wall and doors from the previous step and change the Phase Created to New Construction they will disappear in the existing conditions of view 02.1 (try it and see).

Switch to 02.2 Scope of Works Ground Floor with the phase properties indicated to see the new wall and doors that disappeared in the previous step (Fig 8)

Fig 8: View 02.2 Scope of Works Ground Floor (Phase Filter: Show Complete Phase: New Construction)



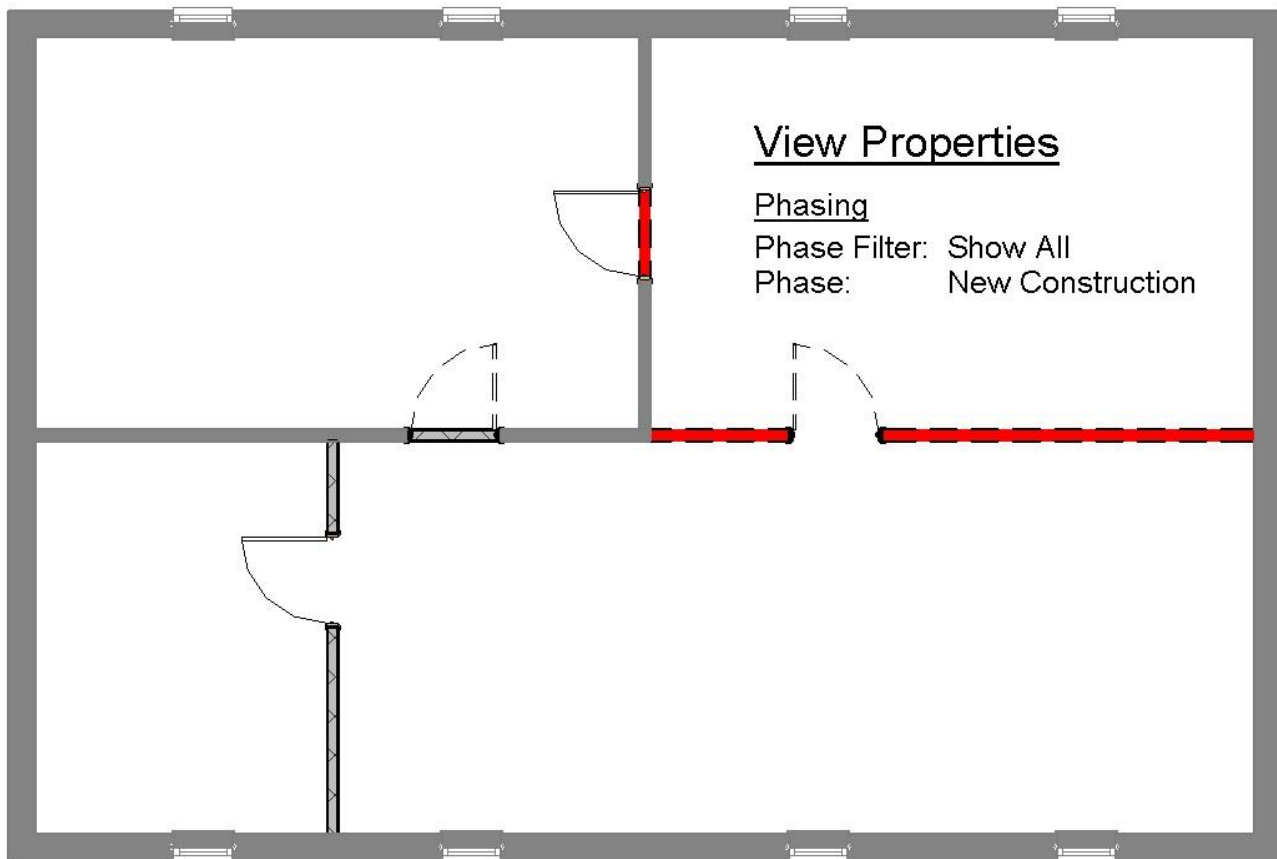
The last thing to look at is the Show All Ground Floor plan view 02.3 (Fig 9) and note the following:

- Demolished elements dashed.
- Existing conditions greyed out.
- New wall and doors – thicker lines.
- Door opening for demolished door is hatched showing contractor he needs to block up opening.

It may be necessary to do some wall clean up where elements have been demolished. Filled regions accessed from the Ribbon Annotation Tab are useful for running repairs on walls.

Finally we can put views on sheets and organise the Project Browser by Phasing

Fig 9: View 02.3 Show All Ground Floor (Phase Filter: Show All Phase: New Construction)



I hope this White Paper helps to clarify the procedures involved in applying Phases to your Revit Projects. Remember as you work, you can switch between views to add or edit geometry or simply edit the properties of an element to change its Phase settings after it is drawn. To access my previous White Paper – Introduction to Phasing, visit www.cadlinecommunity.co.uk