

Site Modeling Setup

Surveyor Training - 2 - Revit - IHT2

Purpose:

The purpose of this role is to process and validate all survey data received from the field team to ensure it is complete, accurate, and ready for production. This includes reviewing photos, point clouds, field documentation, and any related project deliverables.

Responsibilities:

The data processor is responsible for confirming that all required information outlined in the project scope has been uploaded. This includes verifying that the point cloud files are present and uncorrupted, the photo sets are complete and clearly labeled, and any field notes or forms have been submitted in full.

In addition, the processor must ensure that all files follow FSU naming conventions and organizational standards. If a water test kit was part of the survey, the processor should confirm that the correct tracking number has been uploaded and is clearly labeled for the appropriate site.

If any portion of the deliverables is missing, mislabeled, or unclear, it is the processor's responsibility to promptly notify the Project Manager and the surveyor so the issue can be resolved in a timely manner.

Workflow:

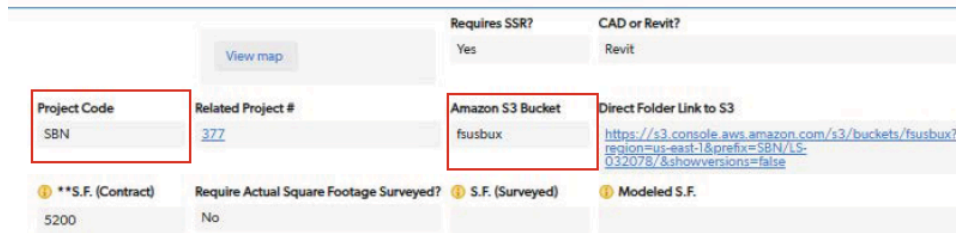
FSU uses **Amazon S3** to store point cloud scans, organized into **buckets**. To efficiently download these scans, use **S3 Browser** ([Download here](#)). The **Pro version** is optional but improves speed and supports multi-thread uploads. Alternatively, you can mount S3 buckets as drives using **TNTDrive** ([Download here](#)).

For this program the drive used is: **FSU365**

1. Mount the **FSU365** drive or access it via S3 Browser.
2. Navigate to the relevant

Surveyor Training - 2 - Revit IHT2 project folder, identified by the **Project ID** (found in QuickBase under the **Site Info** tab).

3. Open the **Scan Files** sub-folder and download the **RAF file** (Register 360 data).
4. Save the **RAF file** directly into your **Cyclone Register 360 Archive Folder** to maintain organization.

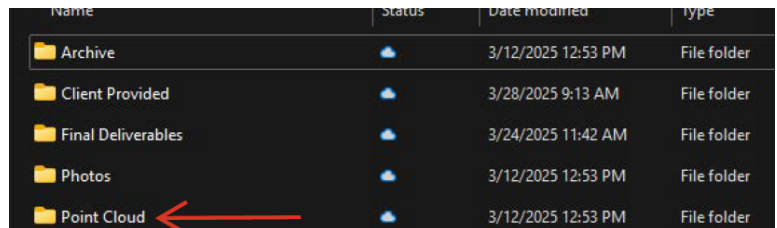


Follow the steps for Registering a site: [Registration](#)

Once registration is complete, export the following deliverables from Register 360:

- LGS File (For virtual tour viewing)
- RCP File (For integration into Revit)

Upload both files to Dropbox (Right), inside the Point Cloud Folder of the respective project.

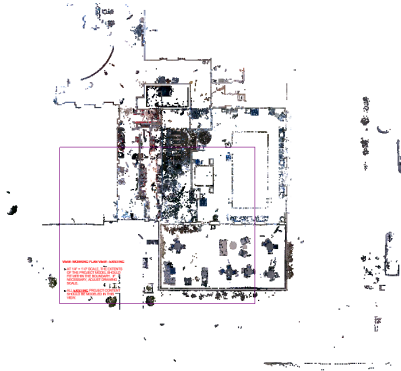


Once the files are completely exported from Register 360, Open Revit. In this case of this project it is **Revit 2025**.

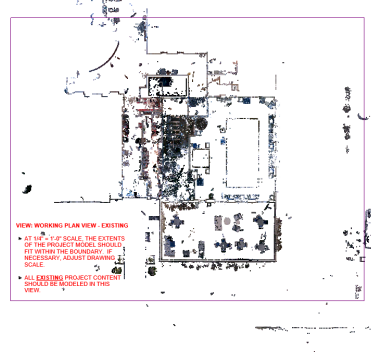
The FSU Standard template can be found in this location: \\FSU Team Dropbox\3D team\FSU Revit Library\Templates

1. Navigate to 1st Floor - Working Plan - Existing view.
2. Go to the Insert tab → Insert Point Cloud (or use Manage Links).
3. Use Positioning: Origin to Internal Origin to correctly place the floor at the proper elevation.
4. Adjust the working view extents to fit within the Purple Border. If needed, scale the point cloud accordingly.

Incorrect:



Correct:



- 1) Align Levels:
 - a) Create a left-to-right section through the entire building (ideally covering the annotated area).
 - b) Set the view depth to 1-2 feet to ensure level accuracy.
 - c) Align the floor level to the Interior 1st Floor Level and adjust as needed.
- 2) Align Horizontally:
 - a) Create an up-down section through the building.
 - b) Set the view depth to 1-2 feet and align the Interior 1st Floor Level correctly.
 - c) Align the floor level to the Interior 1st Floor Level and adjust as needed.
- 3) Fine-tune in Ceiling Plan:
 - a) Open Ceiling Plan: 1st Floor - Working Ceiling - Existing.
 - b) Change the Top Primary Range to 10 feet to view ceiling walls clearly.
 - c) Place a Reference Plane along a long exterior or interior wall for alignment.
- 4) Final Adjustments:
 - a) In the Floor Plan, extend the section view range to capture the full space.
 - b) Adjust the Interior 2nd Floor Level to align with the highest point of the decking.

Save the Revit model using the naming format: **“Site ID” - assign**

Export the RAF from register 360 but add “-clean” at the end of the file name to ensure the QC’ed and finished point cloud is differentiated from the survey deliverable. Upload this file back to the same location that you downloaded the original RAF from.