

# AutoCAD: Setting Up a Project Drawing Workflow with PlanGrid

Shaun Bryant

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CS317873



@notjustcad





# Shaun Bryant (who is this guy anyway?)



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- Owner/lead consultant – **CADFMconsultants**
- Prolific blogger – owner of the blog, **Not Just CAD!**
- Writer – AUGIWorld, Cadalyst, Redshift
- Content Author – **LinkedIn Learning (previously Lynda.com)**
- AutoCAD & Revit consultant and trainer
- Autodesk Expert Elite
- **Certiport** Subject Matter Expert (SME)
- **AMD** Subject Matter Expert (SME)
- AU Speaker Mentor
- 31+ years of AutoCAD experience
- 10+ years of Revit experience
- Singer/Songwriter – music on iTunes & other outlets
- Second album “under construction”
- Has been known to sound like the **Geico Gecko**
- **Ricky Gervais** stunt double



# Our objectives today...

**1.**

Work through the necessary housekeeping required to get AutoCAD drawings into a project format.

**2.**

Learn how to build the project folder structure to your internal CAD standard.

**3.**

Learn how to add the drawings to the PlanGrid project and release them to site.

**4.**

Learn how to work with PlanGrid, realizing the benefits of having a fully functional drawing management application to use while on-site.

# Objective 1

Work through the necessary housekeeping required to get AutoCAD drawings into a project format

- **Layers**
  - ON/OFF
  - FREEZE/THAW
  - PURGE
- **Layouts**
- **Blocks**



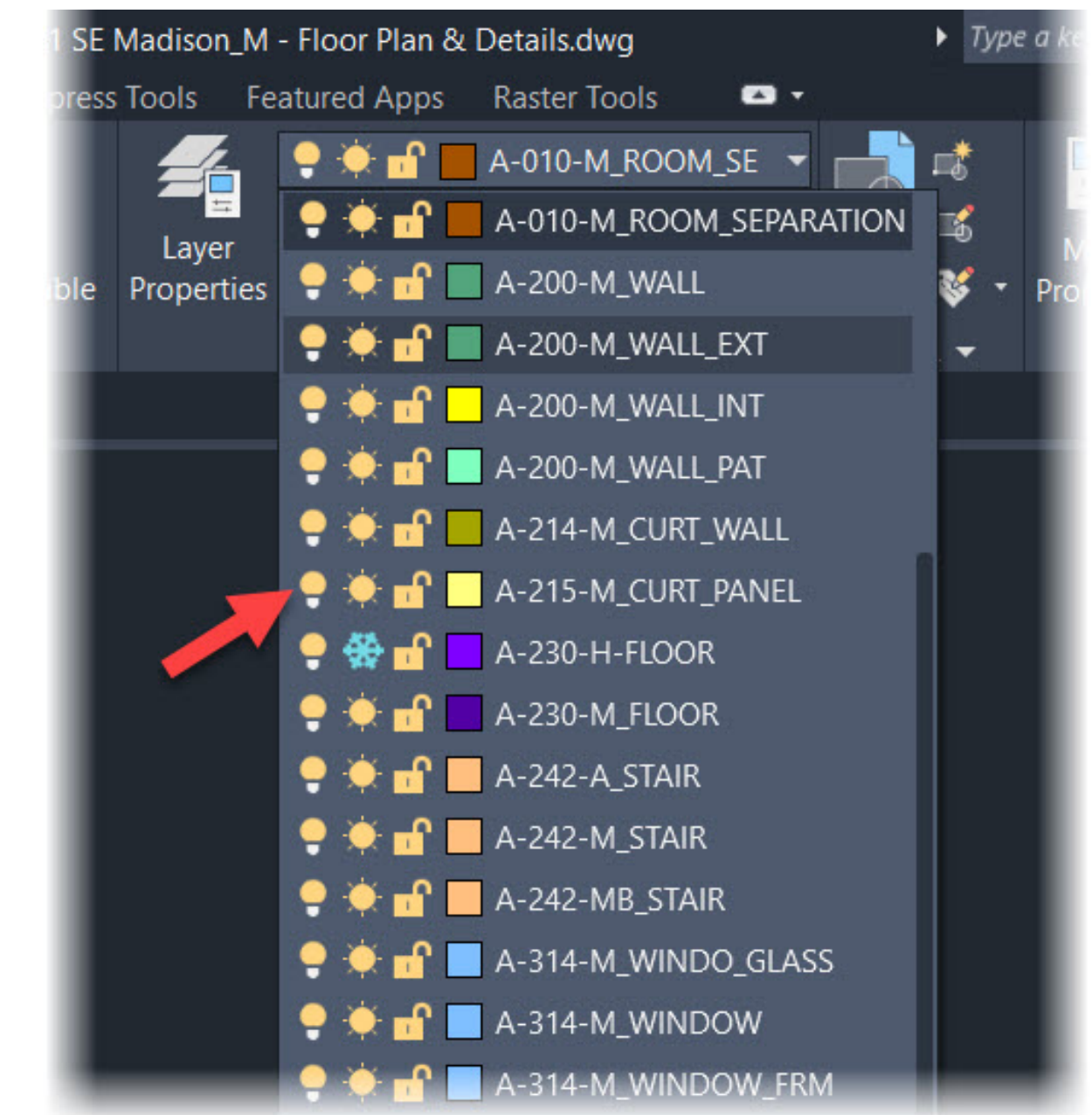
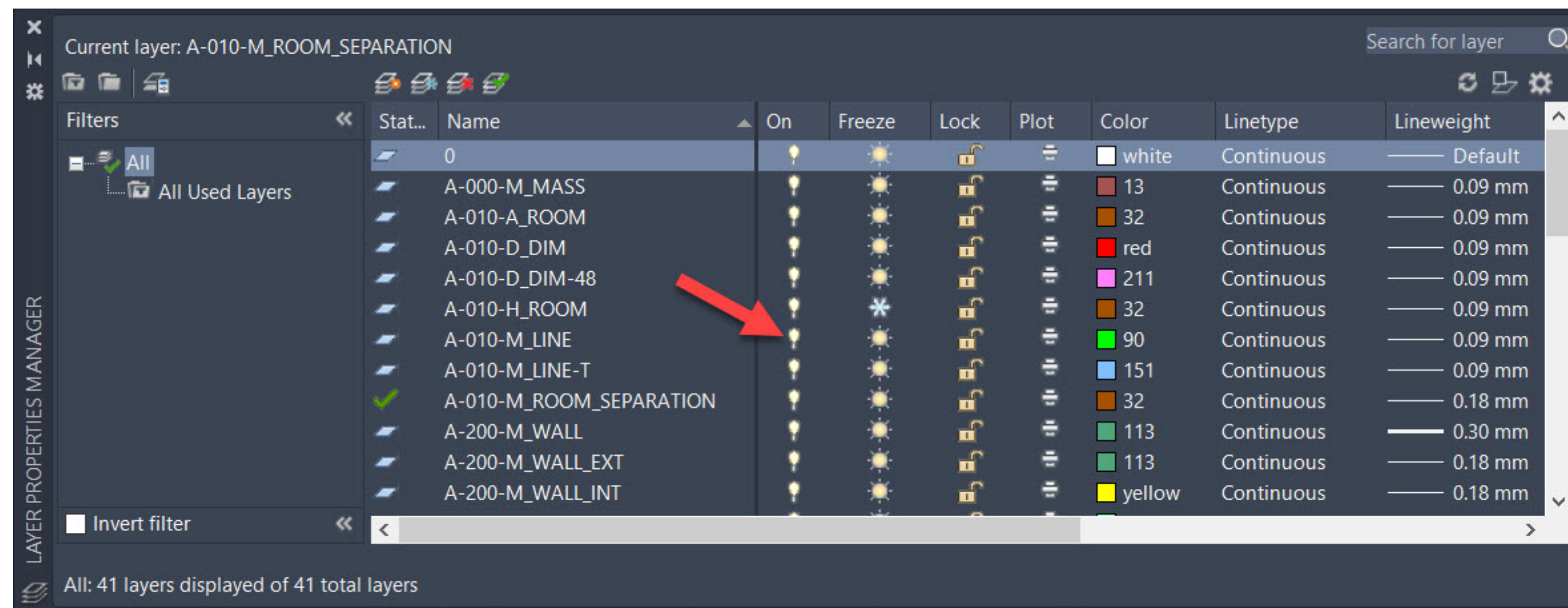
# Objective 1 - LAYERS

- Fundamental to your AutoCAD drawings
- Drawings overloaded with layers - the wood for the trees
- The data you **NEED** to see is obscured by the data you **DO NOT** need to see

# Objective 1 - LAYERS

## Layers

- ON/OFF
- Still considered when drawing is regenerated

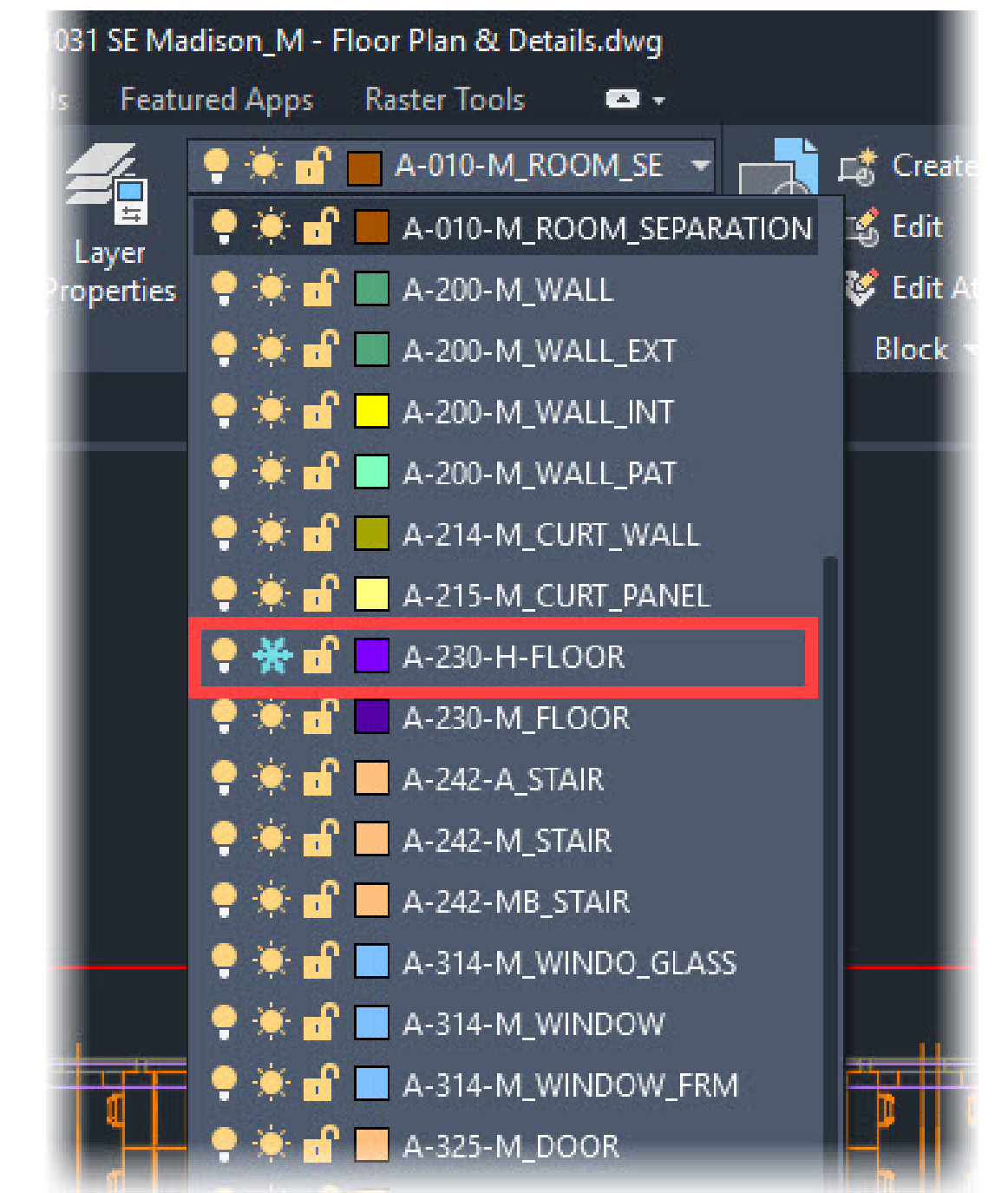
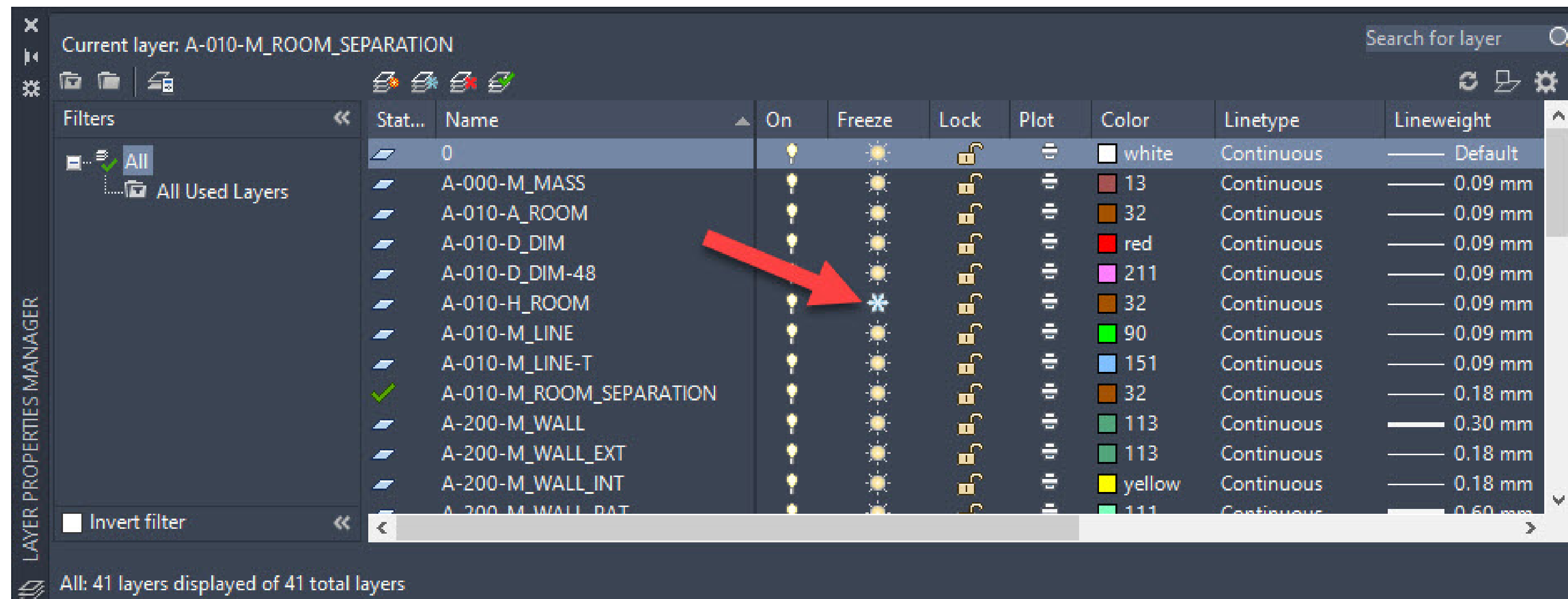




# Objective 1 - LAYERS

## Layers

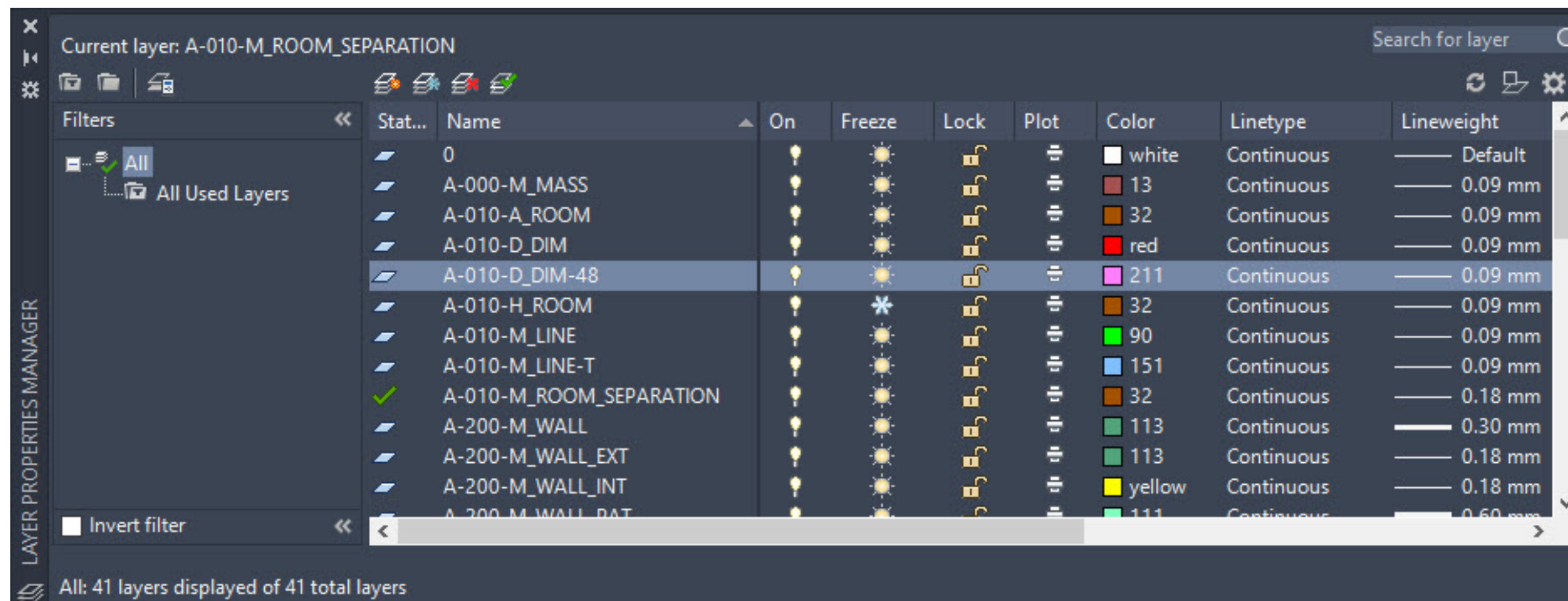
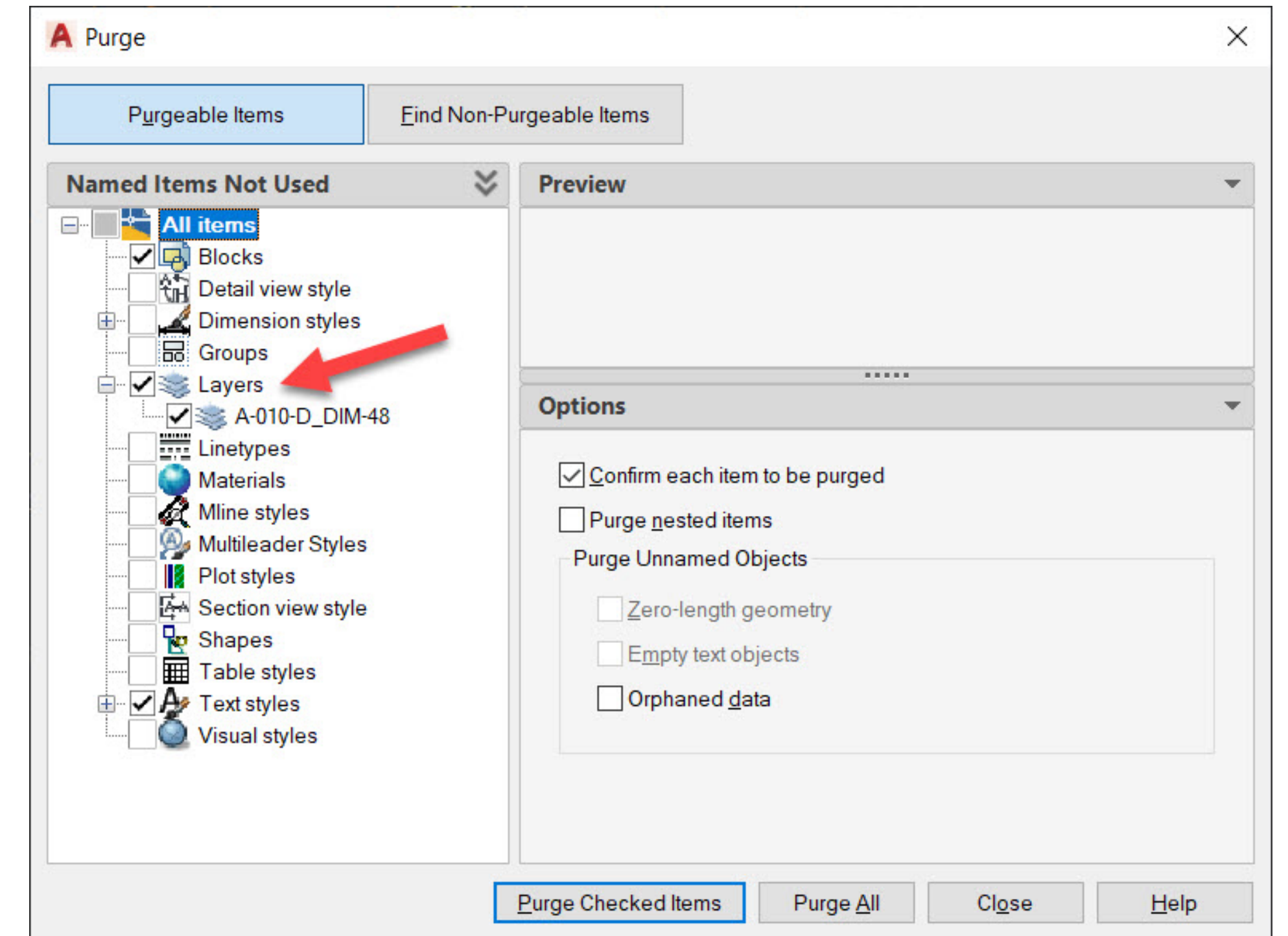
- FREEZE/THAW
- **NOT** considered when drawing is regenerated



# Objective 1 - LAYERS

## Layers

- PURGE
- Only purge what you do not need

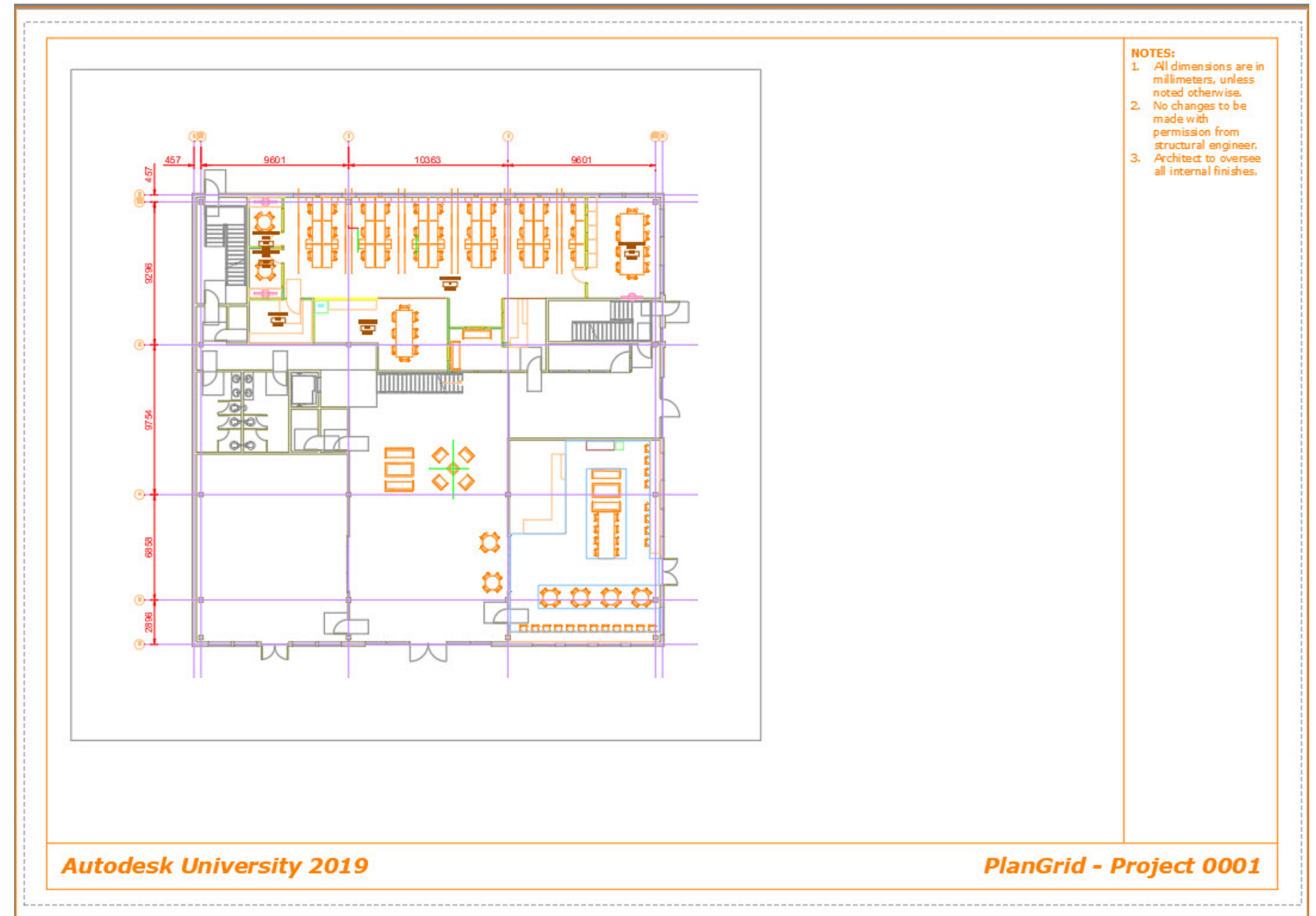




# Objective 1 - LAYOUTS

## Layouts

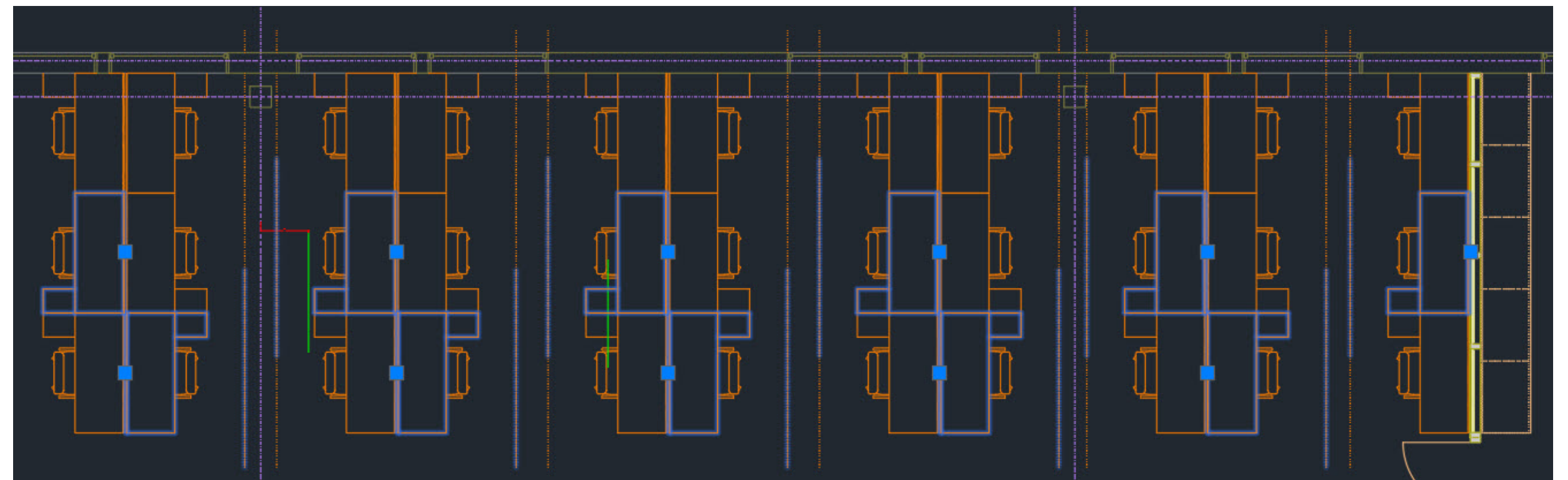
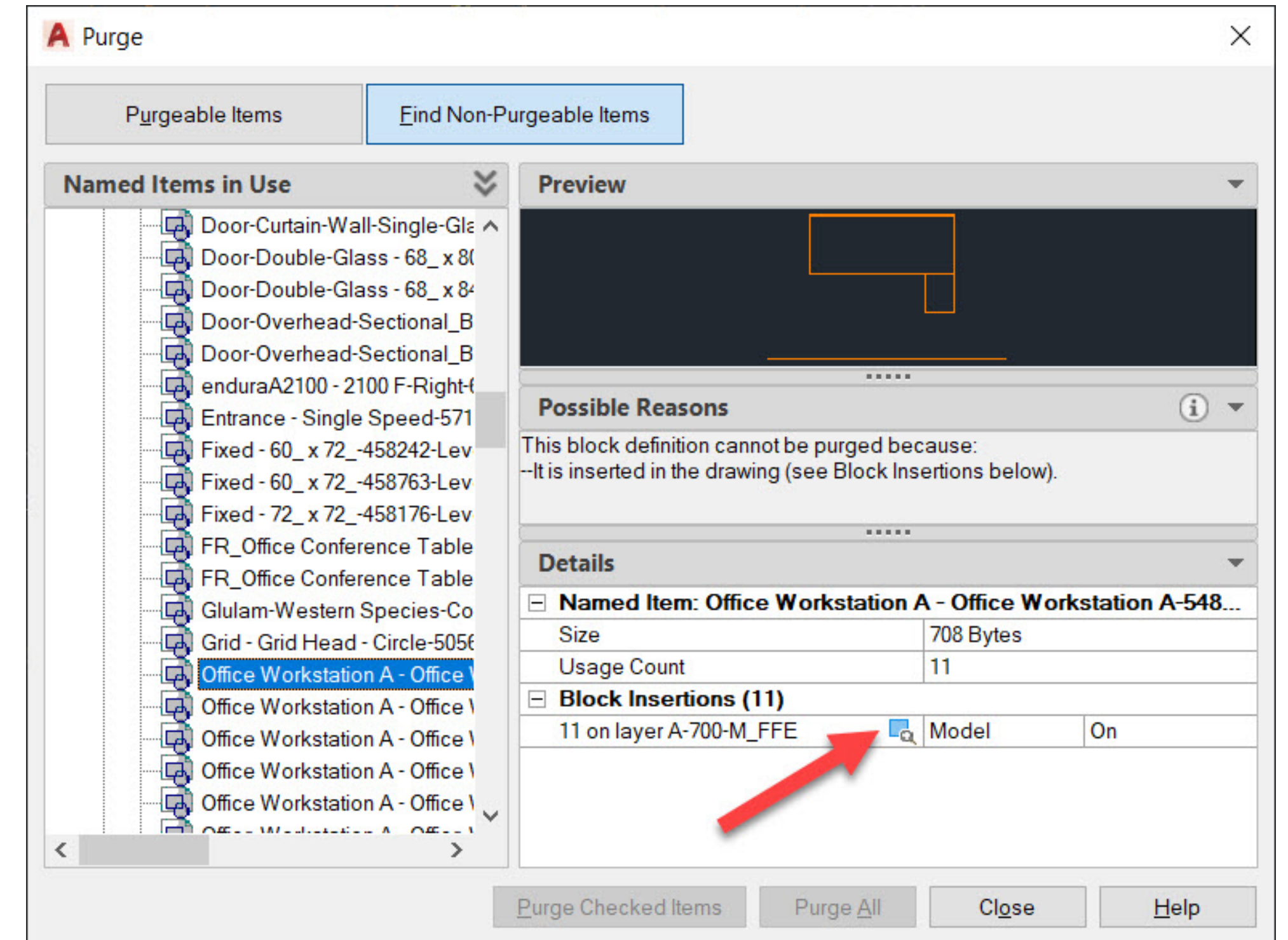
- Communicate design intent
- Show what **NEEDS** to be shown
- More than one can be used and published to PlanGrid



# Objective 1 - BLOCKS

## Blocks

- Display **non-purgeable** blocks
- Use **Select Objects**
- Remove non-necessary block references from the drawing





# Takeaway Tip – 1 of 3



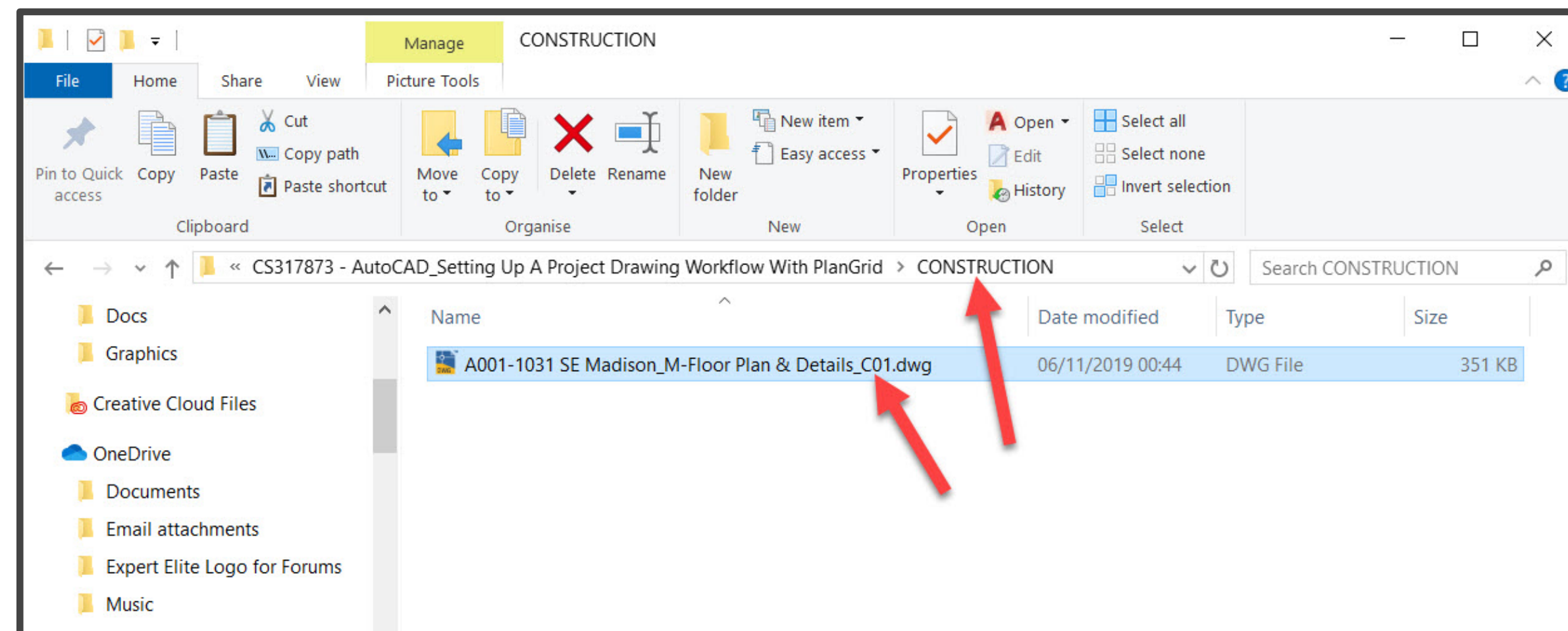
## *Save As...*

*Something I was taught many years ago when first using AutoCAD was to **ALWAYS** perform a **Save As...** on any drawing you were adding new information to and save it as the next revision, such as **Rev.C02 – For Construction**. It saves overwriting existing information and creates a revision audit trail. When published, these revisions can be added to your PlanGrid project.*

# Takeaway Tip – 2 of 3

## ***FOLDER MANAGEMENT***

Folder structure on a project is important. If you are saving new construction drawings at the construction phase always keep them separate to your design drawings. A **CONSTRUCTION** or **FOR CONSTRUCTION** folder makes all the difference!

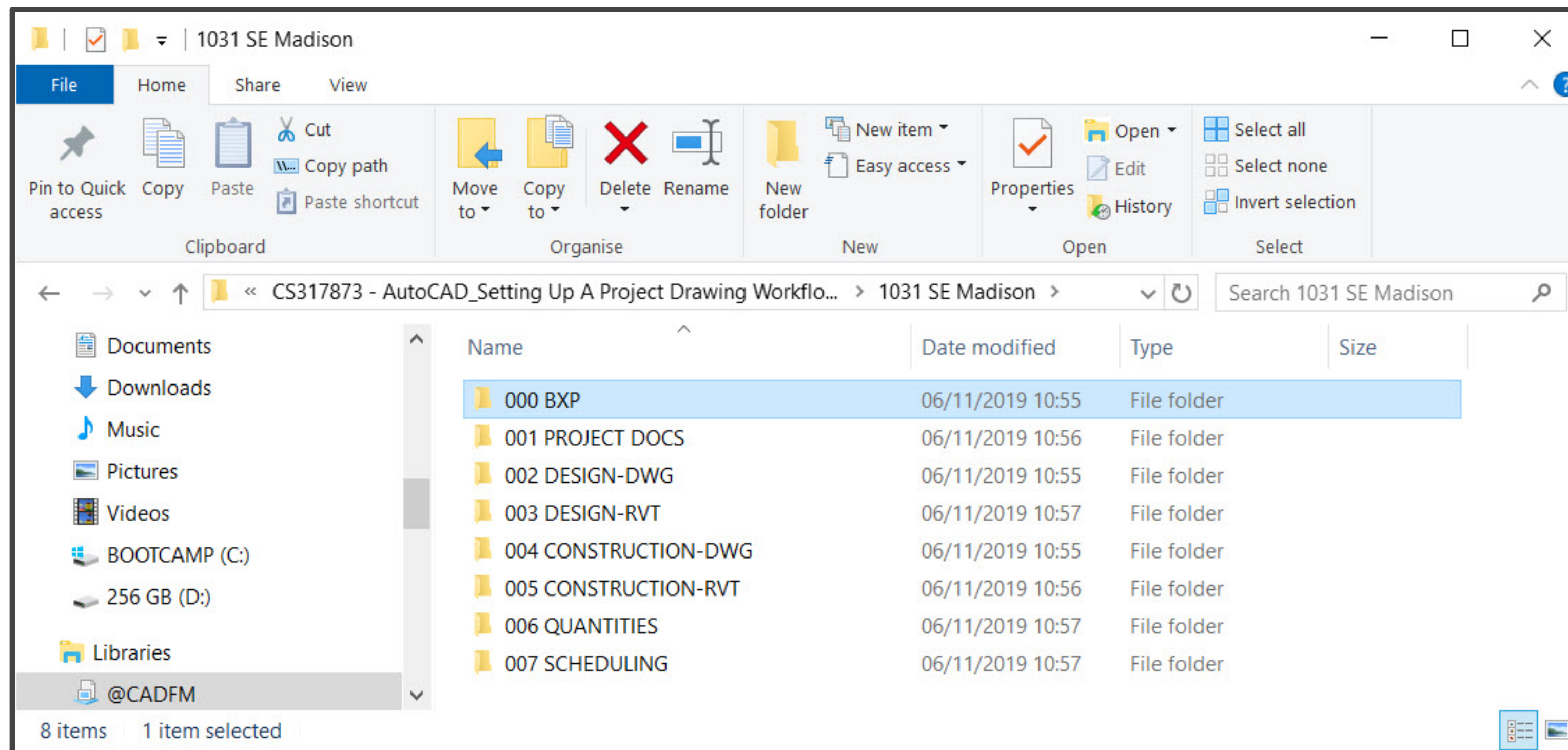




# Objective 2 – PROJECT FOLDER STRUCTURE

## 000 – BXP

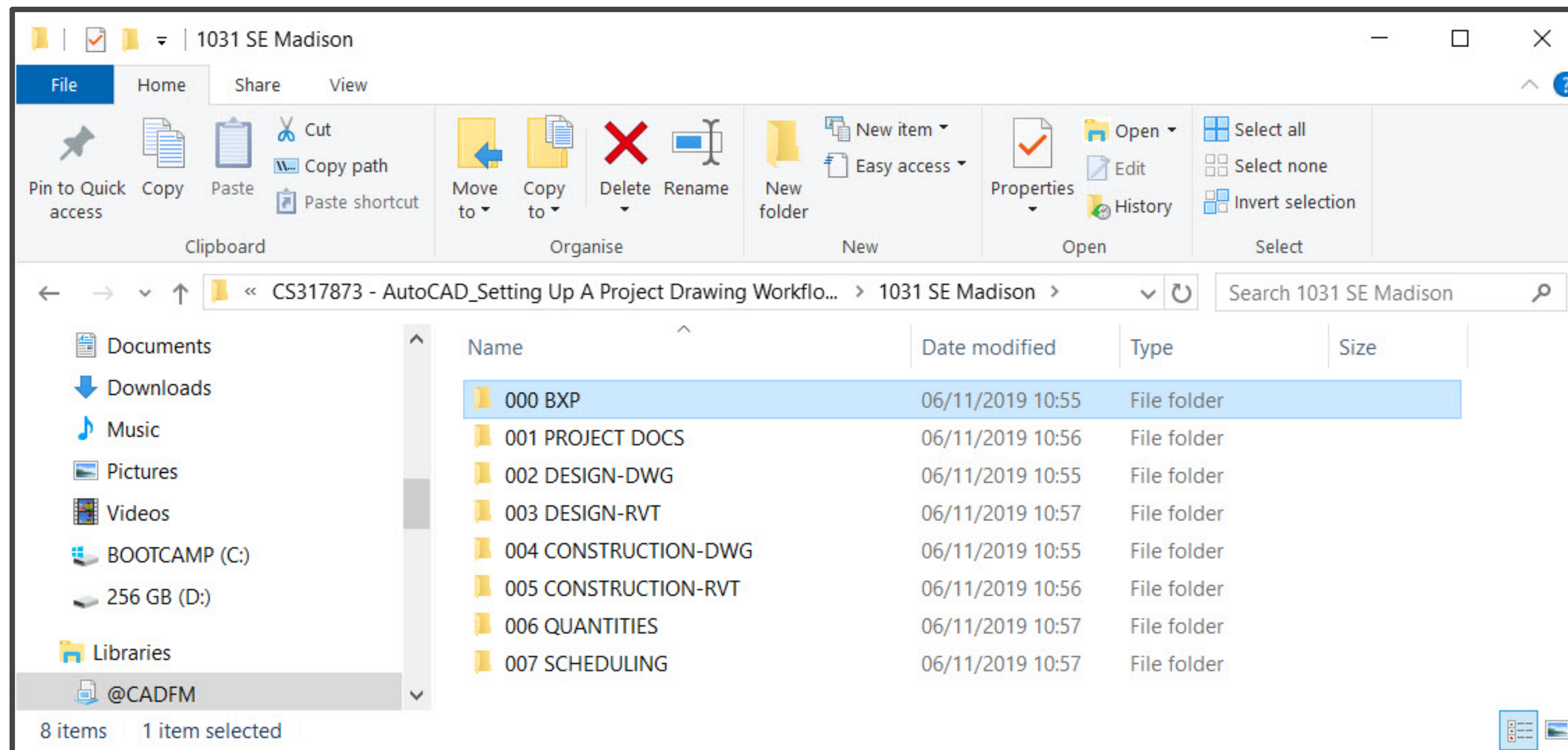
The BIM eXecution Plan (BXP). BIM-based projects. BXP documents



# Objective 2 – PROJECT FOLDER STRUCTURE

## 001 – PROJECT DOCS

CAD standards. Contracts. Other relevant documents

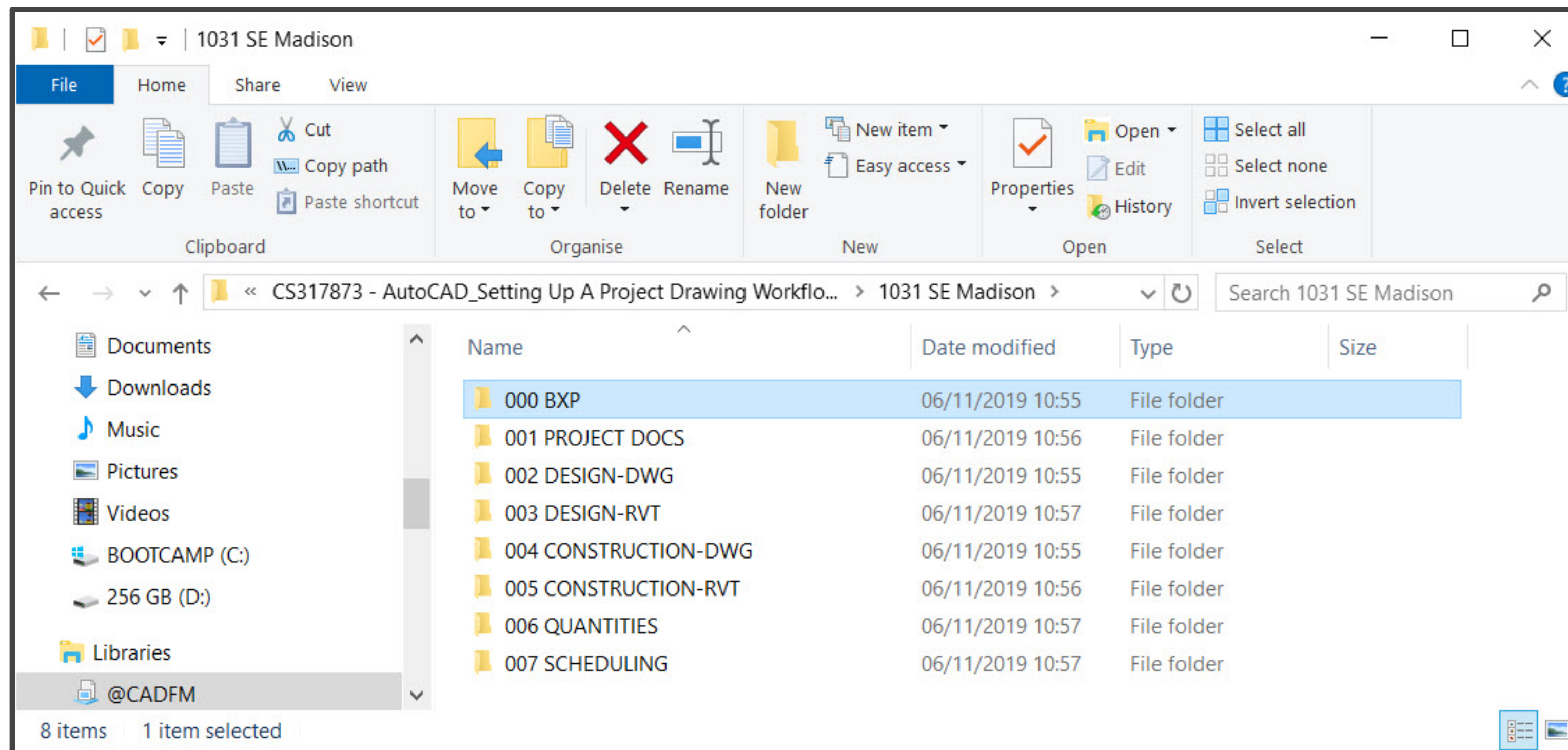




# Objective 2 – PROJECT FOLDER STRUCTURE

## 002 – DESIGN-DWG

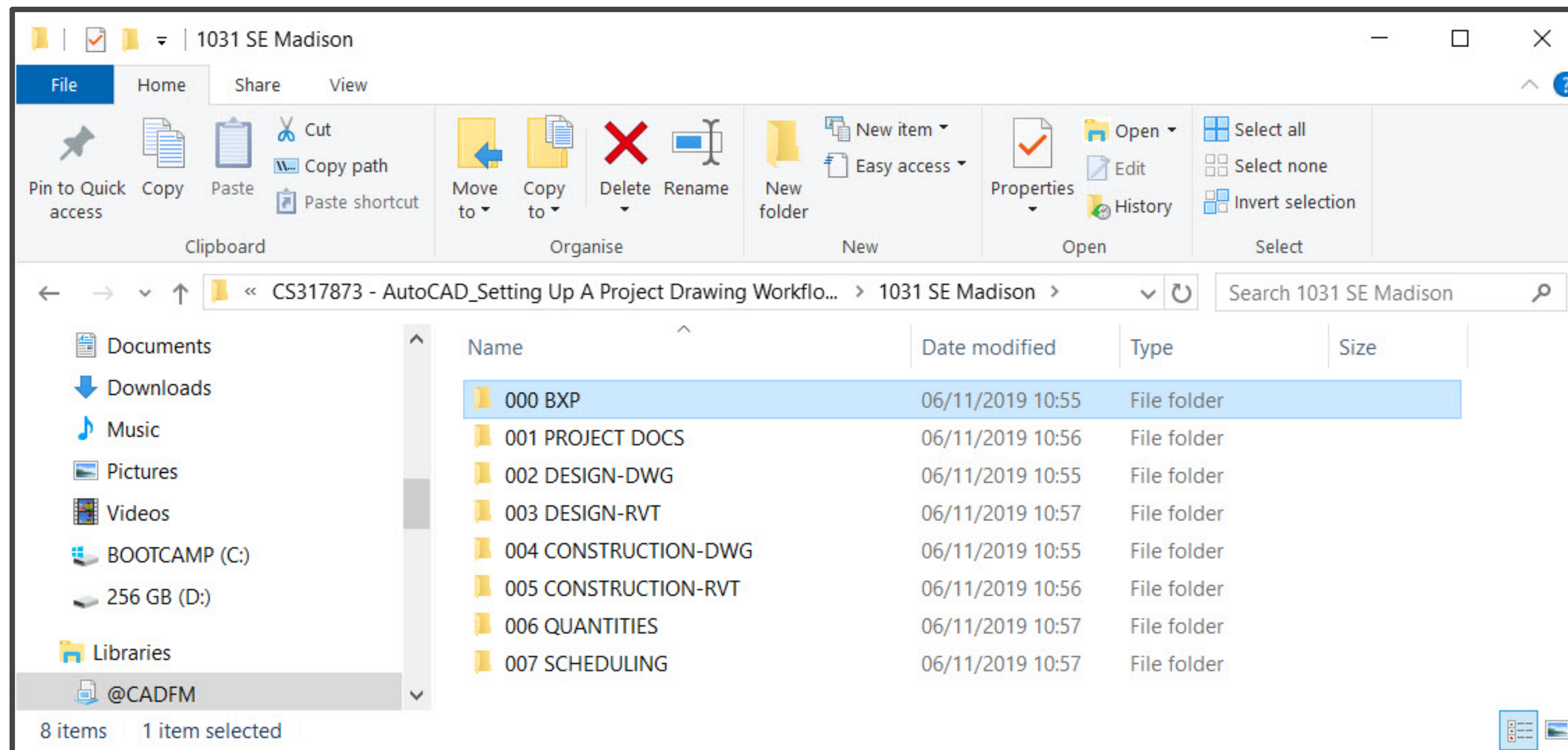
Design drawings. DWG format



# Objective 2 – PROJECT FOLDER STRUCTURE

## 003 – DESIGN-RVT

Design models. RVT format

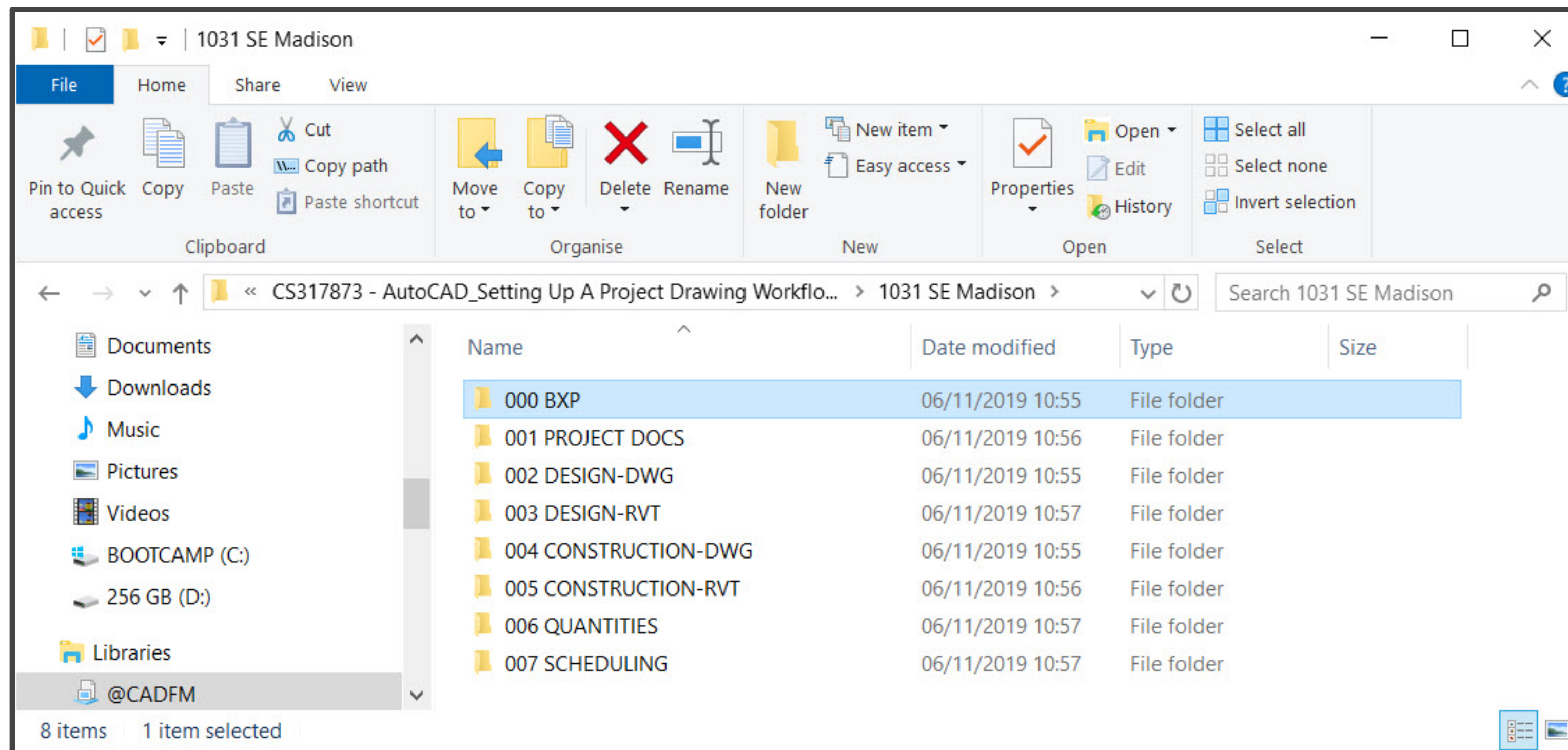




# Objective 2 – PROJECT FOLDER STRUCTURE

## 004 – CONSTRUCTION-DWG

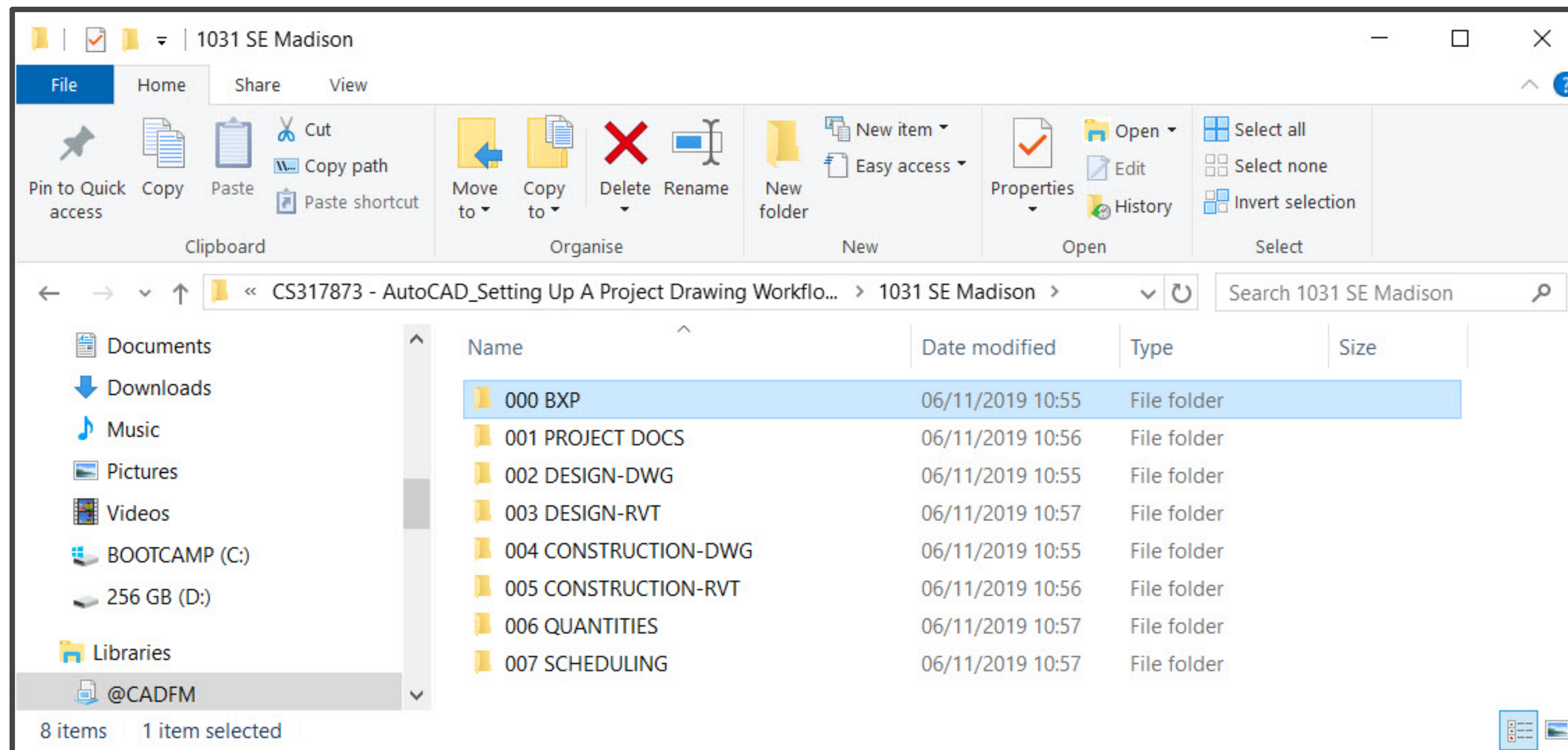
Construction drawings. DWG format



# Objective 2 – PROJECT FOLDER STRUCTURE

## 005 – CONSTRUCTION-RVT

Construction models. RVT format

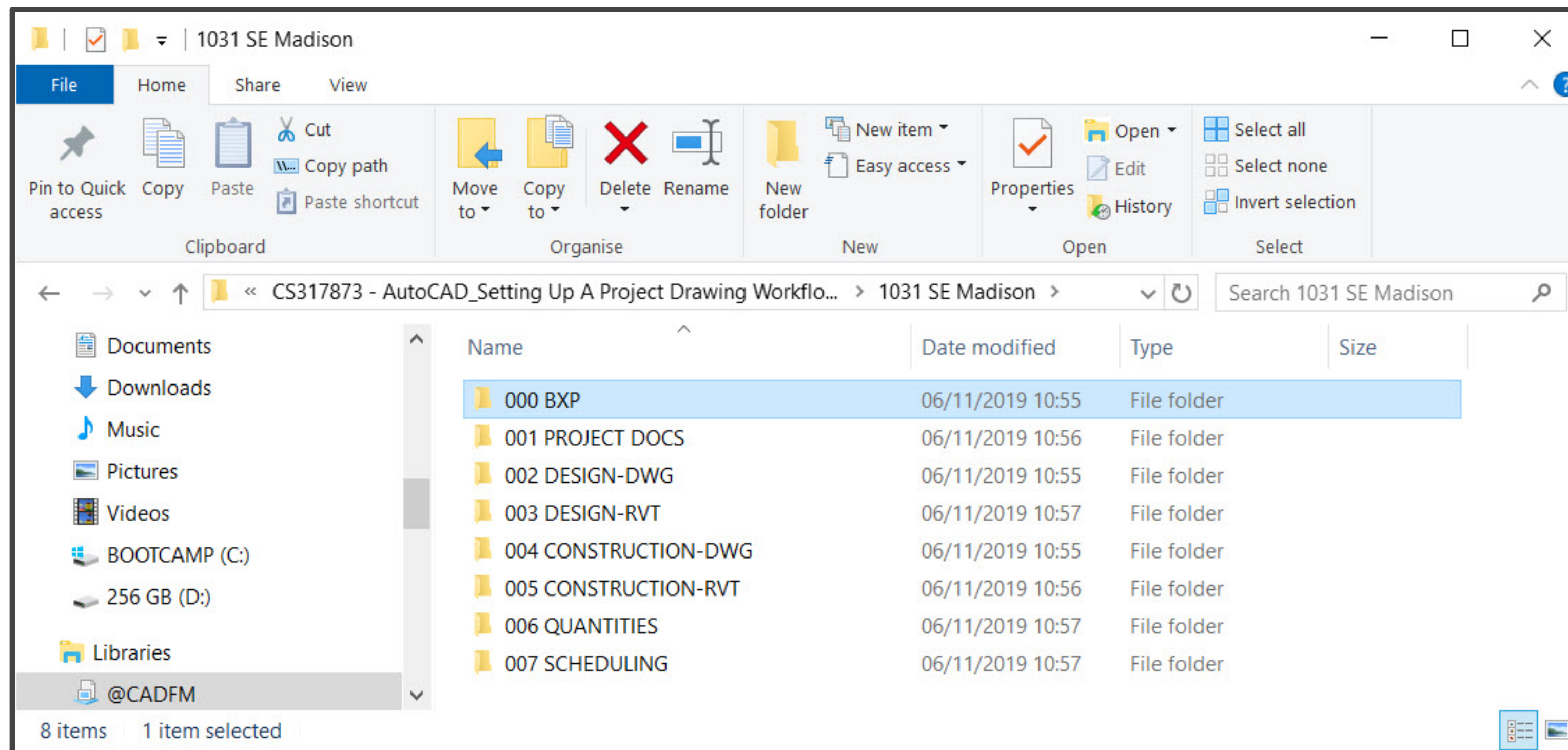




# Objective 2 – PROJECT FOLDER STRUCTURE

## 006 – QUANTITIES

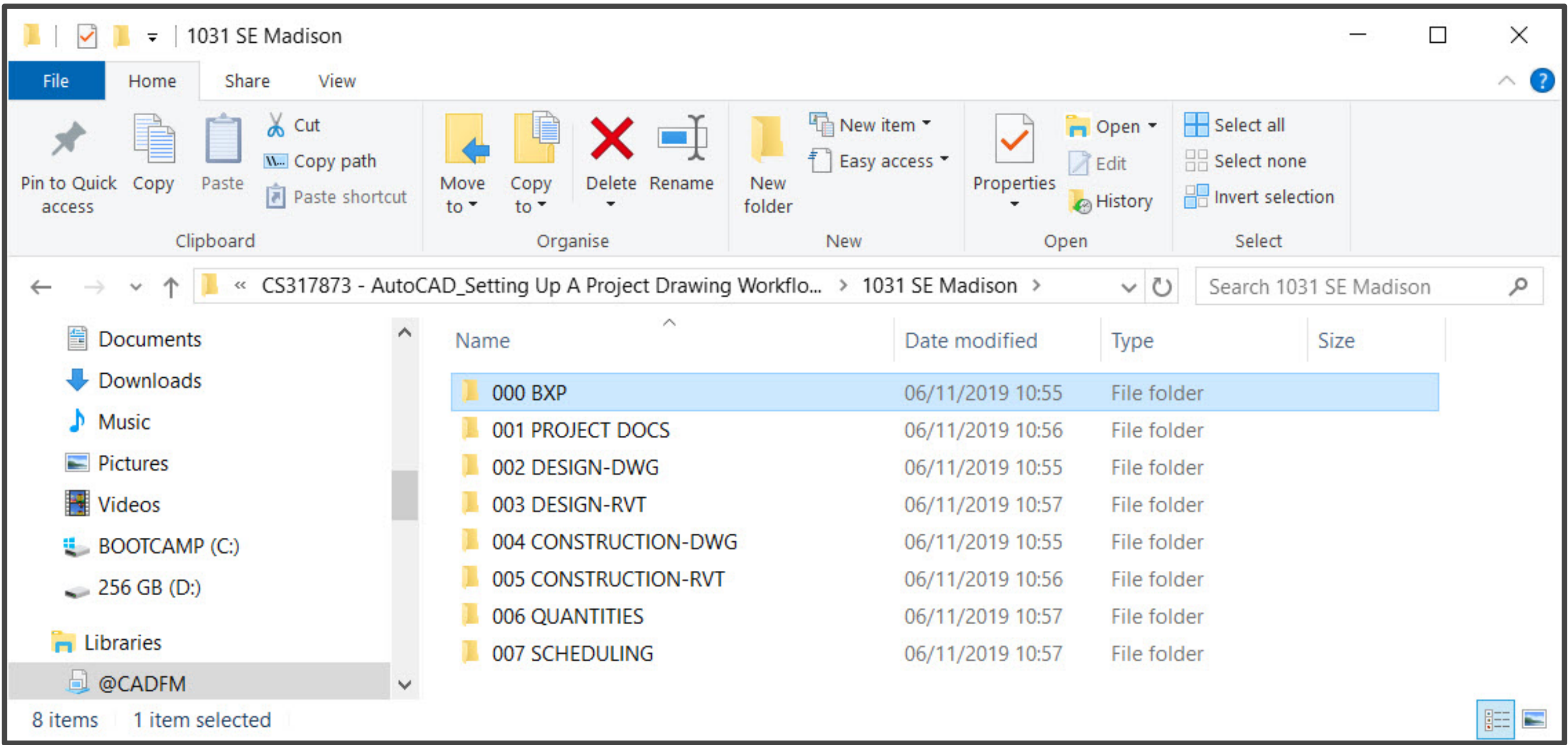
Quantities. Spreadsheets



# Objective 2 – PROJECT FOLDER STRUCTURE

## 007 – SCHEDULES

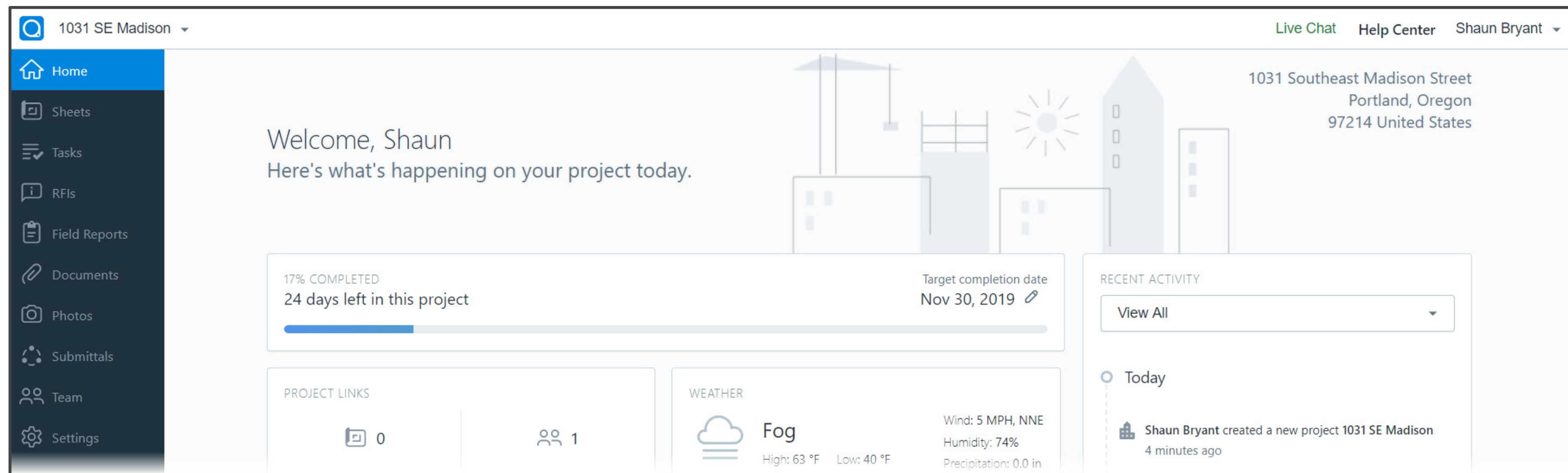
Column schedules. Material schedules, door schedules and window schedules





# Objective 3 – PLANGRID & YOUR DRAWINGS

- PlanGrid account ([www.plangrid.com](http://www.plangrid.com))
- Email addresses of the team, so that you can add them into your PlanGrid project.
- Project details – location (address), start date, finish date and so on.



## Objective 3 – PLANGRID & YOUR DRAWINGS

- Publish drawings from AutoCAD in **PDF** format
- PDF files then become **SHEETS** in PlanGrid
- Utilize the recent PDF print configurations (**PC3**) in AutoCAD



## Takeaway Tip – 3 of 3

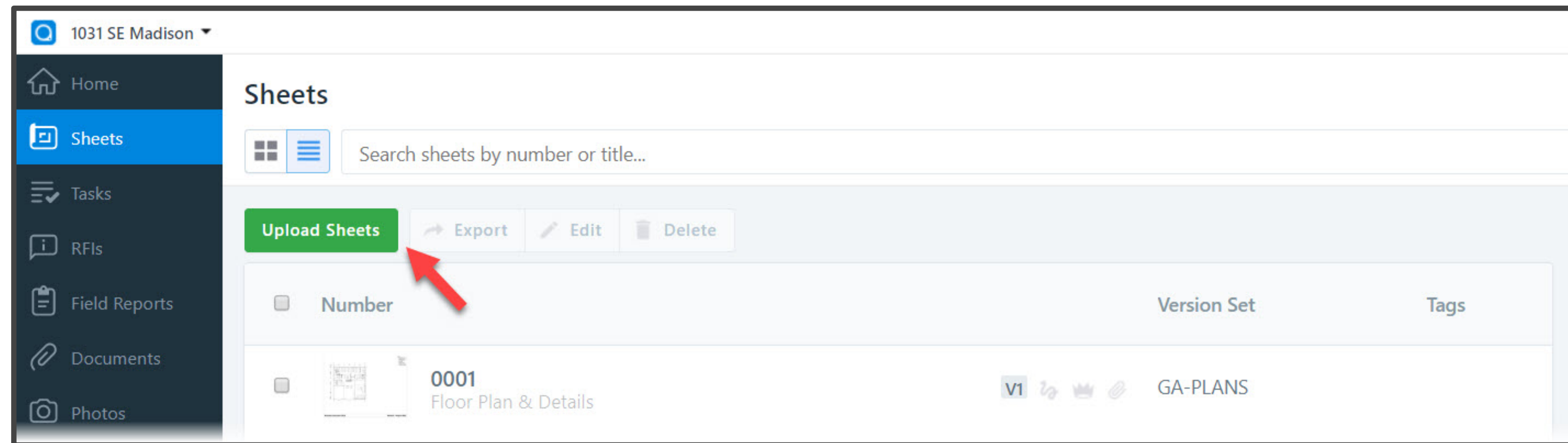
### *AutoCAD & PDFs*

*The AutoCAD PC3 files for output to PDF are as follows; **AutoCAD PDF (General Documentation).pc3**, **AutoCAD PDF (High Quality Print).pc3**, **AutoCAD PDF (smallest File).pc3** and **AutoCAD PDF (Web and Mobile).pc3**. The best suggested pc3 file to use for PlanGrid issues is the **High Quality Print pc3**. This will then give the best clarity on sheets when viewing them on mobile devices.*

# Objective 3 – PLANGRID & YOUR DRAWINGS

## Uploading your sheets into PlanGrid

- Browser based
- In the cloud
- Simple **FOUR** step workflow





# Objective 3 – PLANGRID & YOUR DRAWINGS

## Uploading your sheets into PlanGrid – Step 1 of 4

- Version set – new or existing
- Issue date
- Version set name

Step 1 of 4

Select a version set for sheets to go in [Learn more](#)

☐ New version set

Issuance date

Version set name

Examples: IFC, ASI, CPR, CCD, GMP

☒ Existing version set

→ GA-PLANS  
11/06/2019


# Objective 3 – PLANGRID & YOUR DRAWINGS

## Uploading your sheets into PlanGrid – Step 2 of 4


- Select published PDFs
- Cloud based
- PC based


Step 2 of 4

Upload sheets to GA-PLANS (11/06/2019)

 A001-1031 SE Madison\_M-Floor Plan & Details\_C02.pdf  
Upload complete

×

 Select From Your Computer

 Select From the Cloud

Back

Next



# Objective 3 – PLANGRID & YOUR DRAWINGS

## Uploading your sheets into PlanGrid – Step 3 of 4






- Review sheet numbers
- OCR text recognition
- Manual editing if required


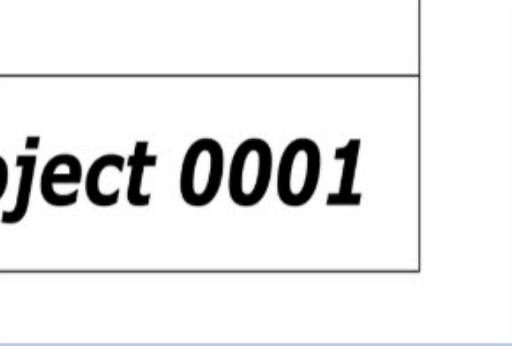
Publish Log > Uploading sheets to GA-PLANS (11/06/2019) > Step 3 of 4: Review your sheet numbers

STEP 3 OF 4

### Review sheet numbers

Our robot tried to read your sheet numbers automatically to save you time. Please scroll down and fix any that aren't correct.

☒ 1 Sheet Selected  90°  90°  180°  Choose Area for Sheet Number Extraction [Edit Sheet Numbers](#)  Delete Sheets

<input checked="" type="checkbox"/>	A001-1031 SE Madison_... Page 1			0001C02
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[Sheet Numbers Are Correct](#)

Final step is to add sheet titles and tags

# Objective 3 – PLANGRID & YOUR DRAWINGS

## Uploading your sheets into PlanGrid – Step 4 of 4

- Sheet titles
- Sheet tags (metadata)
- Multiple sheets

Publish Log > Uploading sheets to GA-PLANS (11/06/2019) > Step 4 of 4: Add sheet titles and tags

STEP 4 OF 4

Add sheet titles and tags

Adding titles and tags helps your team quickly find sheets while in the field. Select multiple sheets to add or edit many at once.

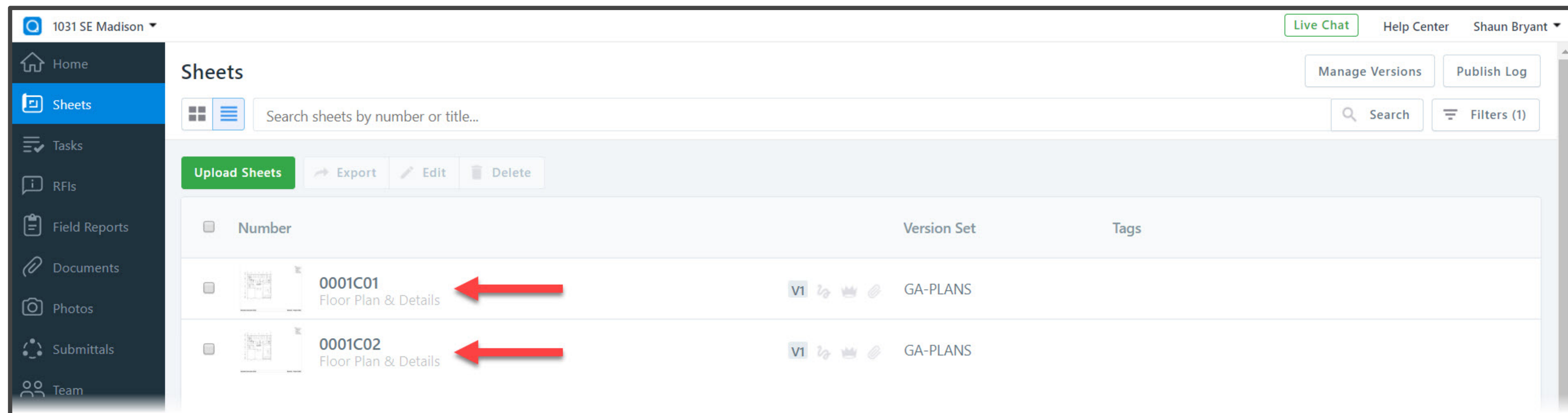
<input type="checkbox"/>	Sheet Number	Sheet Thumbnail	Sheet Title	Tags
<input type="checkbox"/>	0001C02	<div><div></div><div>nGrid - Project 0001</div></div>	<div>Floor Plan &amp; Details</div>	<div>+ Add new tag</div>



# Objective 3 – PLANGRID & YOUR DRAWINGS

## Uploading your sheets into PlanGrid – UPLOADED SHEETS

- Searchable sheet listing
- Filters
- Version numbering





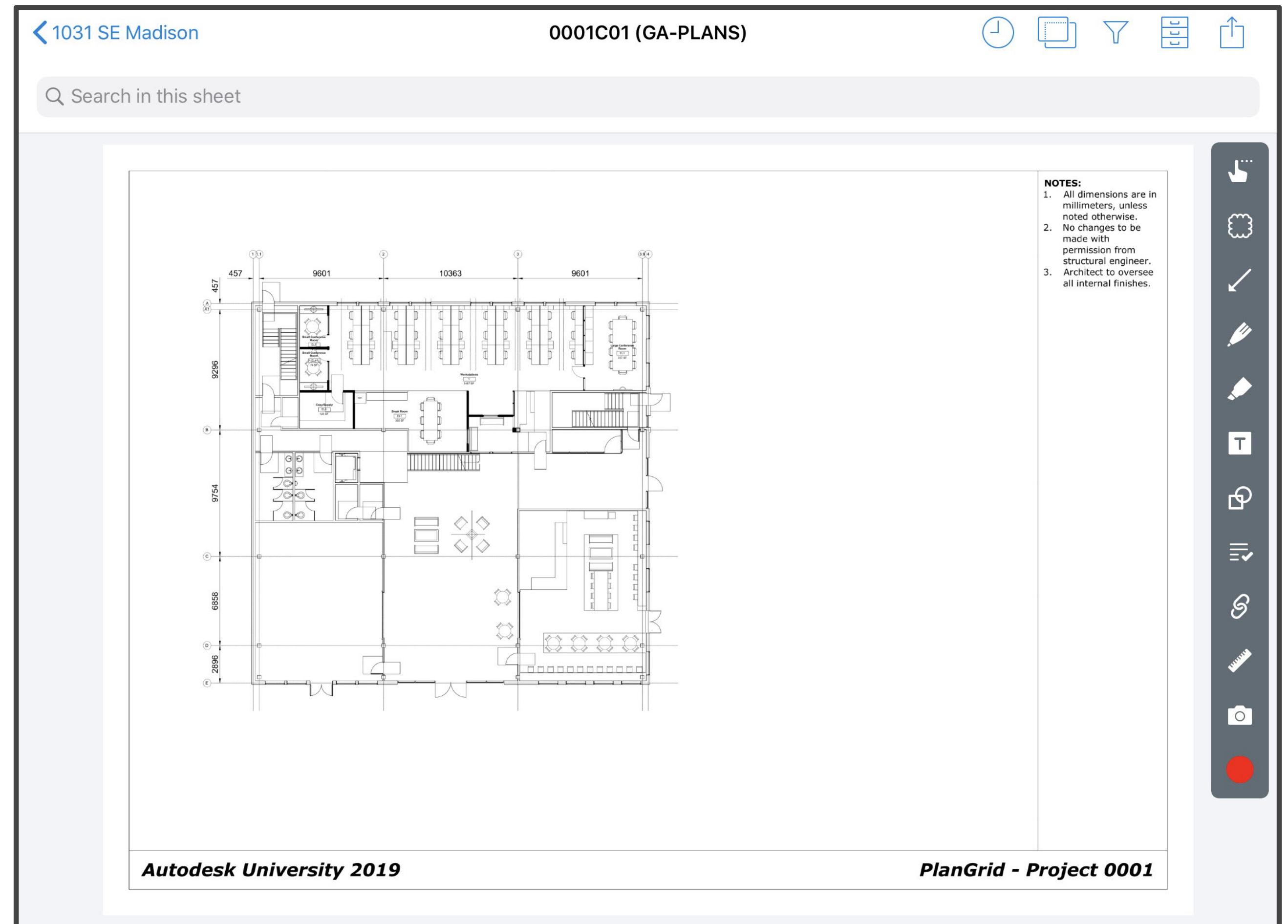
## Objective 4 – WORKING WITH PLANGRID





# Objective 4 – WORKING WITH PLANGRID

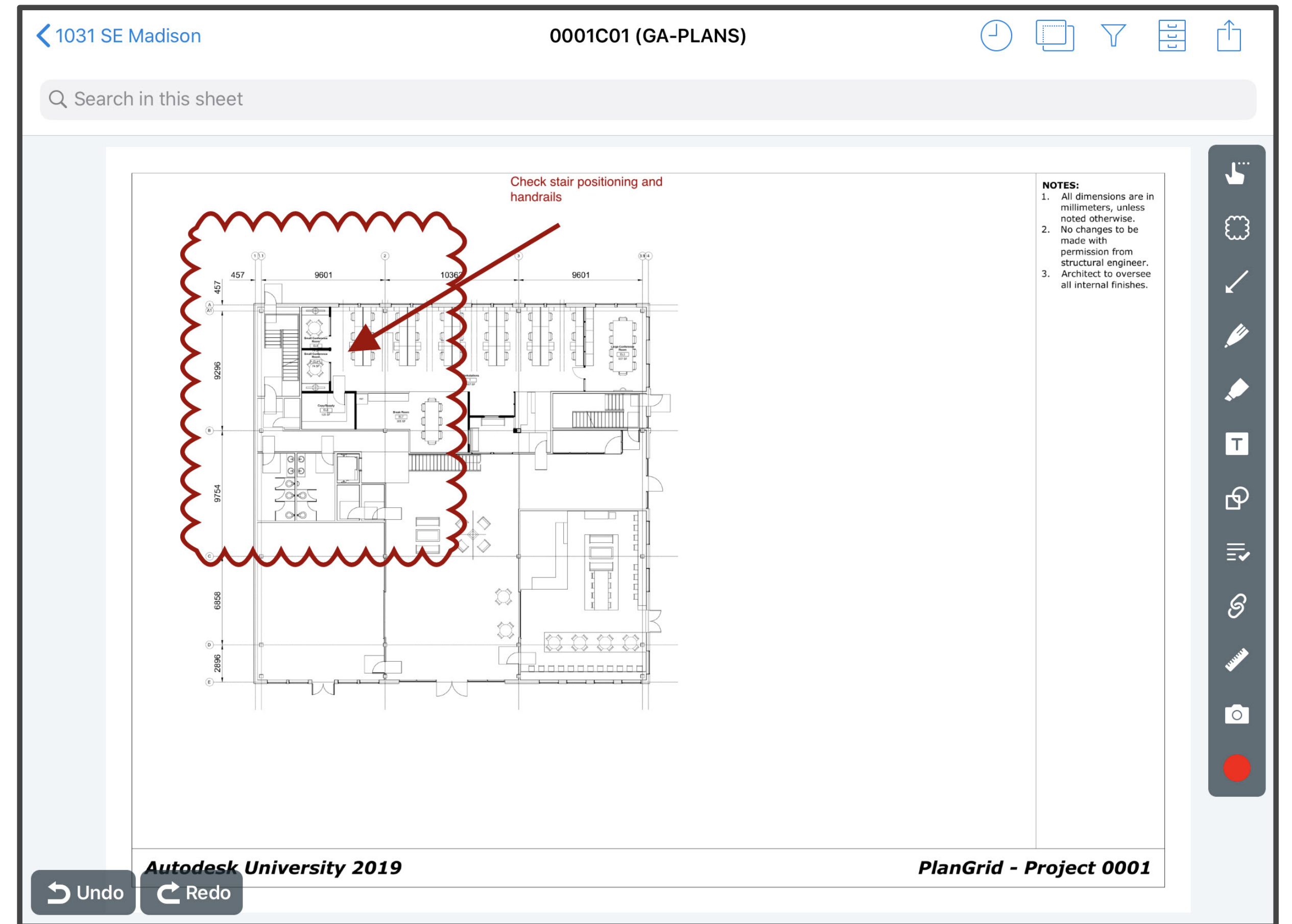
- Drawing management application
- Electronic drawings
- Totally mobile
- Provides time savings and efficiency on-site
- **NO MORE PAPER!**



# Objective 4 – WORKING WITH PLANGRID

## Redlining and markup

- Redline and markup in **REAL-TIME**
- Any type of tablet or mobile device (iPad Air)
- Complete mobility
- No paper drawings required!



# Objective 4 – WORKING WITH PLANGRID

## Task sheet association

- Recent update in PlanGrid
- Tasks can be assigned to a sheet
- Individual stamp type
- Hyperlink to associated sheet

The screenshot displays the PlanGrid interface with a sidebar on the left and a main task details panel on the right. The sidebar, titled 'Tasks', includes a search bar, a '+ New task' button, and a list of tasks. The first task, 'Position check-STAIRS', is highlighted with a red arrow pointing to it. The main panel shows the details for this task, including status, type, assigned to, watching, location, start and due dates, stamp, list, and sheet. A red arrow points to the 'Sheet' field, which is set to '0001C01'.

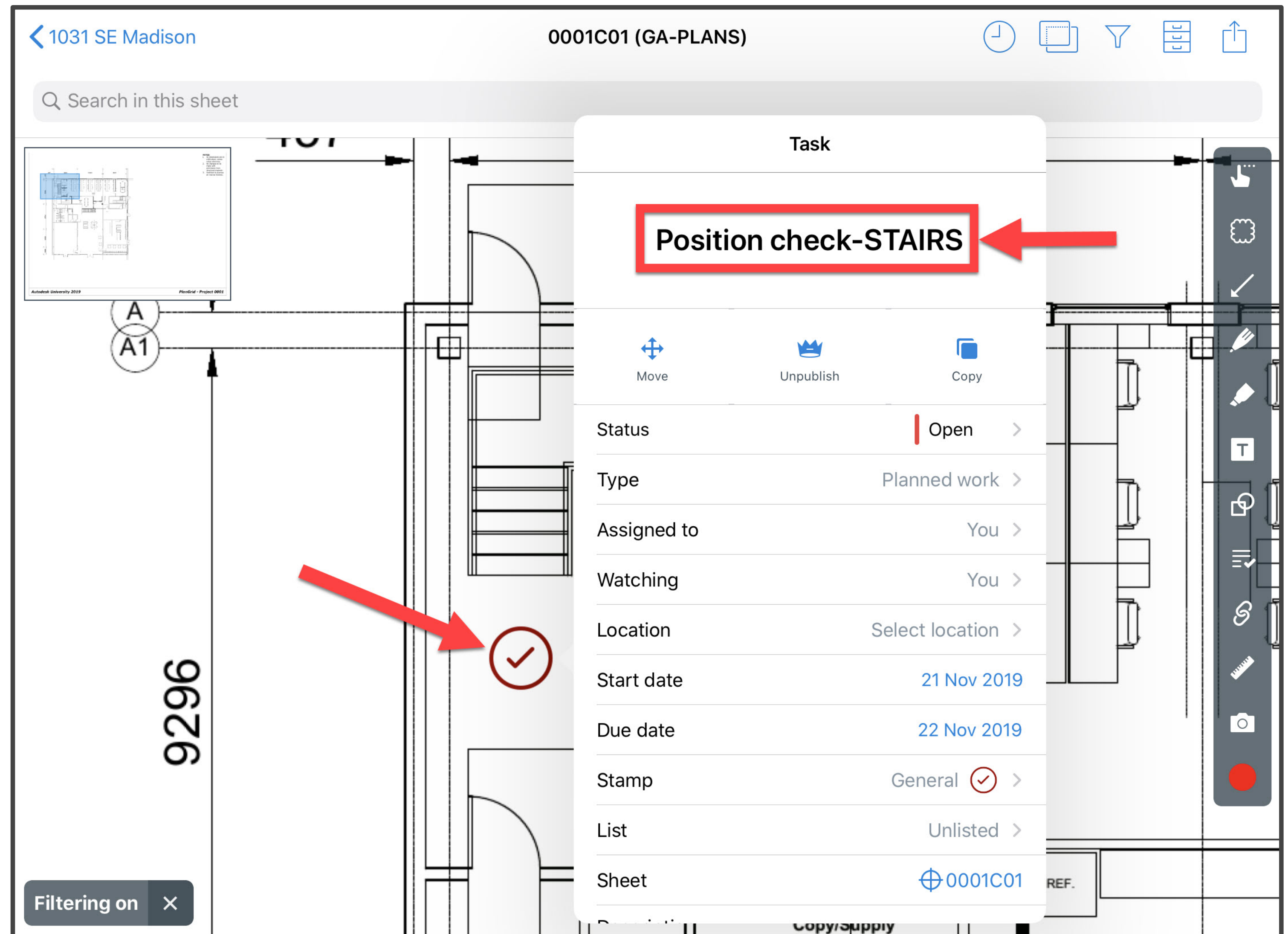
Task	
Position check-STAIRS	
<div>Move Unpublish Copy</div>	
Status	Open
Type	Planned work
Assigned to	You
Watching	You
Location	Select location
Start date	21 Nov 2019
Due date	22 Nov 2019
Stamp	General
List	Unlisted
Sheet	0001C01
Description Make sure staircase has been placed correctly and handrail bolts are tight	



# Objective 4 – WORKING WITH PLANGRID

## Task sheet association

- Easily located on a sheet
- Stamp recognition
- Easy access to all tasks on-site



# Objective 4 – WORKING WITH PLANGRID

## Task reports (web only)

- Browser based
- Live updating
- Customized name and description
- PDF or XLSX formats

The screenshot displays the PlanGrid web application interface. On the left is a dark sidebar with navigation links: Home, Sheets, Tasks (highlighted), RFIs, Field Reports, Documents, Photos, Submittals, Team, and Settings. The main content area is titled 'Tasks' and includes tabs for Overview, Tasks, Stamps, and Reports. Below these tabs are buttons for '+ Create Task', 'Import', 'Edit', 'Move', 'Delete', 'Export (All)', and 'Filters (0)'. A table lists tasks with columns for Stamp, Title, ID, Status, Due date, and Assigned to. One task is visible: 'Position check-STAIRS' with a red checkmark icon, description 'Make sure staircase has been placed correctly and handrail bolts are tight', ID '#1', status 'Open', due date '11/22/2019', and assigned to 'Shaun Bryant'. On the right, an 'Export Report' sidebar is open, showing 'All 1 tasks'. It contains a 'Name' field with 'PlanGrid Task Report - Nov 7, 2019', a 'Report description (optional)' field with 'GENERAL SITE TASKS', a 'File format' section with radio buttons for 'PDF - for printing and sharing' (selected) and 'XLSX - for use in spreadsheet applications', a 'Sort by' dropdown set to 'ID', and an 'Order' dropdown set to 'Highest → Lowest'. A 'Generate' button is at the bottom. Two red arrows point to the 'All 1 tasks' header and the 'PDF' radio button. The bottom of the interface shows 'Showing 1-1 of 1' and a 'Chat with us now!' button.

Stamp	Title	ID	Status	Due date	Assigned to
	Position check-STAIRS Make sure staircase has been placed correctly and handrail bolts are tight	#1	Open	11/22/2019	Shaun Bryant

# Objective 4 – WORKING WITH PLANGRID

1031 SE Madison  
1031 Southeast Madison Street, Portland, Oregon

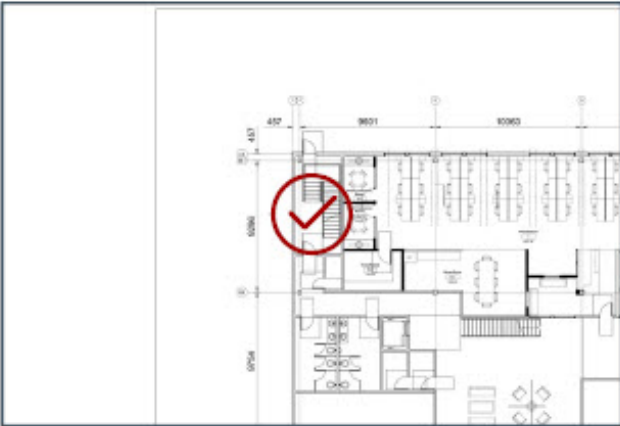
## PlanGrid Task Report - Nov 7, 2019

Prepared by Shaun Bryant  
Nov 7, 2019

Description  
GENERAL SITE TASKS

1031 SE Madison  
1031 Southeast Madison Street, Portland, Oregon

### #1 Position check-STAIRS

<b>Status</b> Open	<b>Assignees</b> shaun.bryant@cadfmconsult.co.uk	<b>Sheet</b> 0001C01
<b>Type</b> Planned Work	<b>Watchers</b> shaun.bryant@cadfmconsult.co.uk	
<b>Description</b> Make sure staircase has been placed correctly and handrail bolts are tight	<b>Start Date</b> Nov 21, 2019	
	<b>Due At</b> Nov 22, 2019	
	<b>Created</b> Nov 7, 2019 12:32 PM shaun.bryant@cadfmconsult.co.uk	
	<b>Last Updated</b> Nov 7, 2019 12:37 PM	



# Why use PlanGrid?

- PlanGrid is an incredible mobile construction tool
- It will revolutionize how you take your AutoCAD drawings on-site for construction
- Speed and efficiency
- Mobility utilizing the latest technology

*.....Plus, it sure beats trying to hold a large paper drawing down in the snow and the wind, right?*

# Thank you for attending my class!

My contact details are as follows: -

**Shaun Bryant**

**Director – CADFMconsultants Limited, UK**

**Email:** [shaun.bryant@cadfmconsult.co.uk](mailto:shaun.bryant@cadfmconsult.co.uk)

**Skype:** shaunbryant

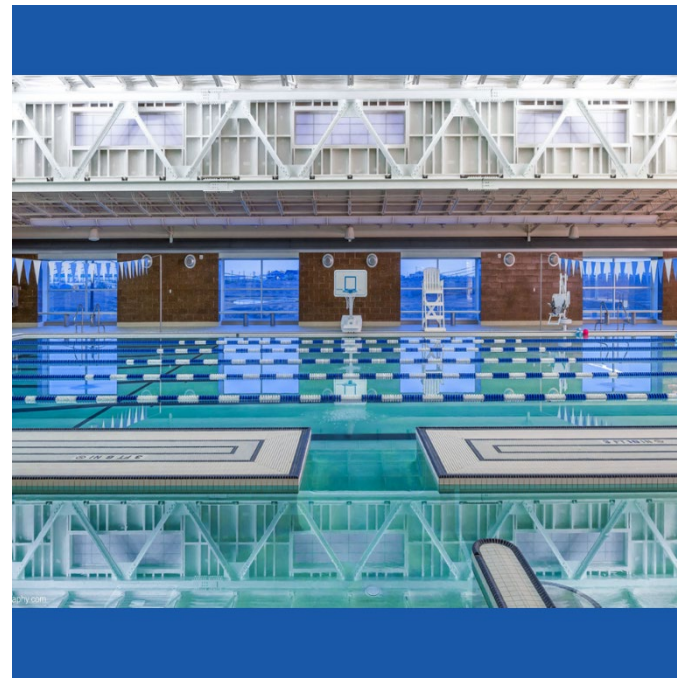
**Cell:** +44 (0)7951 945179

**Web:** [www.cadfmconsult.co.uk](http://www.cadfmconsult.co.uk)

**Twitter:** @notjustcad

**Instagram:** notjustcad





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Share your story with us for a chance to be featured in our upcoming marketing efforts.





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