Elizabeth Goodine, Pyka’s Manufacturing Lead, documents the West Oakland factory expansion.
First, we **developed the manufacturing map**, which identifies all parts and assembly work that happens on the shop floor.

The map informs us of work flow and what tools and inventory we need where.
Next, we launched a comprehensive manufacturing documentation project. There was very little documentation of any build processes, so we created a template for work instructions and a master document tracker that lists everything required for a production manual.

The slide to the left shows how the docs, map and workstations are all related.
Using the work instructions and the manufacturing map, Martine Neider from SFMade and I started to talk about facility expansion and layout.

I pieced together a loose plan and Martine helped me refine it for functionality and safety.

Once the final plan was on paper, I held a team meeting to get collective “buy in” on the plan before executing.

Here’s a snapshot of how that process began to unfold.
Here I am preparing the board for the final “buy in” meeting.

This is the full plan with scaled magnets of the equipment, tools, walkways, and work zones.
These are renderings of the space, which has now come to fruition.

They show the entrance to the new office and the use of 3 containers to create 2 fabrication zones and a storage area. The containers are fitted with electricity, lights, and castors.
Now: Bright, clean, organized. Still room to grow, but a vast improvement made possible by the support of SFMade!
Engineers working on a composite layup in the new space.
Engineers working on a current model of an agricultural service plane.