

## David Sellers

**From:** David Sellers  
**Sent:** Thursday, May 18, 2023 4:59 PM  
**To:** Ryan Stroupe (R2S2@pge.com)  
**Subject:** Instructions for the System Diagram Exercise

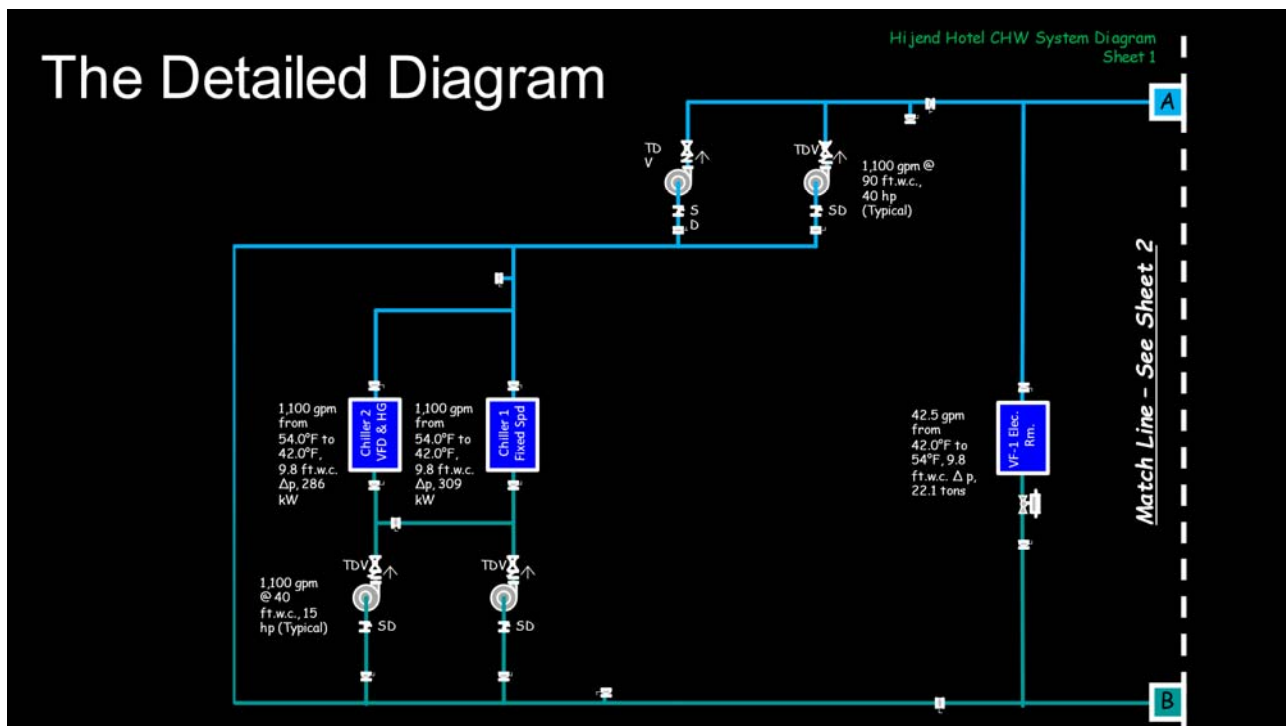
Hi Ryan,

Here is what I am suggesting you send out to re-iterate the assignment I gave.

Hi everyone,

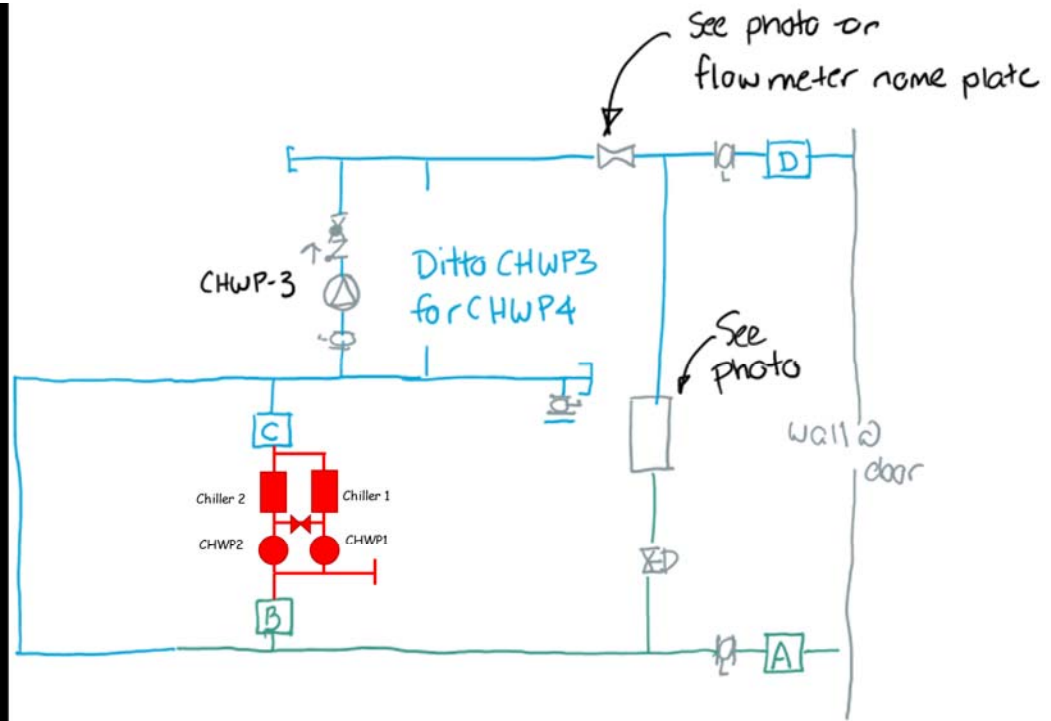
To recap the instructions I gave you in class regarding working with the system diagram we have been developing, here is what I am asking you to do.

1. Start with the central plant portion of Joe DeNuguy's system diagram that he developed from the project documents; this slide.



2. Compare it to the installed reality to see if the installed reality matches the design intent; i.e. field verify it. There are several ways you could do that.
  - a. You could compare it to the sketch we ended up with when we traced the system out in class today.

# The Distribution Loop



- b. You could open up the model and trace it out in the model, which would be the most realistic experience compared to actually doing this in the field.
- c. You could use the video I showed you that is a fly-through of the model as a way to trace it out as if you were in the central plant with out having to worry about using SketchUp.
  - i. The video is located on this page of the website - <https://www.av8rdas.com/blog-support.html#HijendCHW> - just page down until you see the heading Flythrough Videos.
  - ii. This is the direct link to the video - <https://www.screencast.com/t/qYFui3kzjxL>

If you want the more detailed version of developing the distribution loop - what I did in the class today - these three videos will show you that in three 20-25 minute modules (this is the link to the play list).

<https://www.screencast.com/t/nrP7HPrii>

In it, you will see concurrent images of me moving through the model while you see me concurrently drawing it on the iPad, with labels showing up on the model that match the labels on the iPad sketch, with links to other resources; you'll laugh, you'll cry, it will change your life.

This should not take you much longer than 15-30 minutes, so if you are feeling lost after spending that amount of time, don't bang your head against the wall. Rather, reach out to Ryan and he will help you or will hook you up with me so I can help you. If enough people are feeling frustrated, we will just schedule a little supplementary webinar to work on it together.

With regard to the chiller plant Sketchup model, I will reiterate a couple points I made in class regarding the information on the Sketchup models page (<https://www.av8rdas.com/blog-support.html#HijendCHW>).

1. A good starting point is to make sure your machine can handle SketchUp by using their checking tool, which is at this link - <https://help.sketchup.com/en/sketchup-checkup>.
2. If the "full meal deal" version of the model is challenging you (plant\_v44r2.skp or plant\_v44r2\_suv8.skp), try working with the versions of the model that break it up into the central plant area (plant\_v44r2\_no\_tunnel\_or\_cw\_pump\_room.skp or plant\_v44r2\_no\_tunnel\_or\_cw\_pump\_room\_suv8.skp) and the tunnel and condenser water pump area (plant\_v44r2\_-\_tunnel\_and\_cw\_pump\_room\_only.skp or plant\_v44r2\_-\_tunnel\_and\_cw\_pump\_room\_only\_suv8.skp).

The files with SUv8 in the file name are back to a fairly old version of SketchUp, The only reason for using them is if you can not load SketchUp viewer on your machine because you don't have a 64 bit machine

3. If those versions still challenge your machine, then try using the iPad versions of the models, plant\_v44r2\_ipad.skp, plant\_v44r2\_no\_tunnel\_or\_cw\_pump\_room\_ipad.skp, and plant\_v44r2\_-\_tunnel\_and\_cw\_pump\_room\_only\_ipad.skp. At the technical level, there is no difference in the file type you run with SketchUp on an iPad vs. SketchUp on a desktop.
4. But the graphic processing power and memory for the iPad is significantly less than many desktops. So, to make the models run on an iPad, I turned off some of the features that push the graphics processor hard and as a result, they will not look quite as realistic; there are no shadows for instance and the way some of the lines are represented is modified.

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