Hardware Review #2

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What was discussed:

- Sensors need to be purchased
    - Delivery time expected is 2 months
    - Researching possible alternatives
- Sensor taps need to be places
    - Depends on sensor
- Rotameter ordered
    - Must be placed within the system to complete circuit
- Power for pump still needed
- Ensure system still needs to be fastened down
    - Mount Pump and reservoir
    - Need rotameter to determine exact placement of system

What was done up until this point:

- Keith:
    - Assisted in final construction for HR 2
    - Wrote additional sections for Mid Point Report
    - Preformed some of the edits for Mid Point Report
    - Preformed cavitation analysis to ensure that cavitation is not going to occur

- Cole:
    - Laid out pipe lengths and materials needed for construction
    - Cut pipes to desired lengths
    - Bought fasteners and planned supports for the pump
    - Laid out and helped with construction of build for hardware review 2

- Mark:
    - Constructed sections of system for HR 2
    - Soldered the pipe sections together
    - Wrote my sections of Mid Point Report
    - Edited parts of Mid Point Report
    - Researched sensors

- Michael:
    - Assisted in project construction for HR 2
    - Kept track of team Meeting Minutes and Agendas
    - Edited a majority of Mid Point Report to be past tense as requested

    - Performed noise and noise reduction analysis

Action Items each will do until Final Product Proposal:

- Keith:
    - Write-up instruction manual
    - Design poster draft and layout
    - Compile data for poster, and add to poster
    - Update and maintain website
    - Solder all electrical connections

- Cole:
    - Mount pump and reservoir to desired states
    - Assist with developing Labview VI
    - Assist in writing operation manual and poster
    - Adapt pressure sensors to the pipe system
    - Apply permanent fasteners to finalize system

- Mark:
    - Assist with writing the instruction manual
    - Assist with placing poster information
    - Write up LabView program
    - Write sections for Final Report

- Michael:
    - Update and add Meeting Minutes and Agendas to the website
    - Assist in developing the poster
    - Design and finalize the final CAD package
    - Assist in last steps of project construction

Appendix

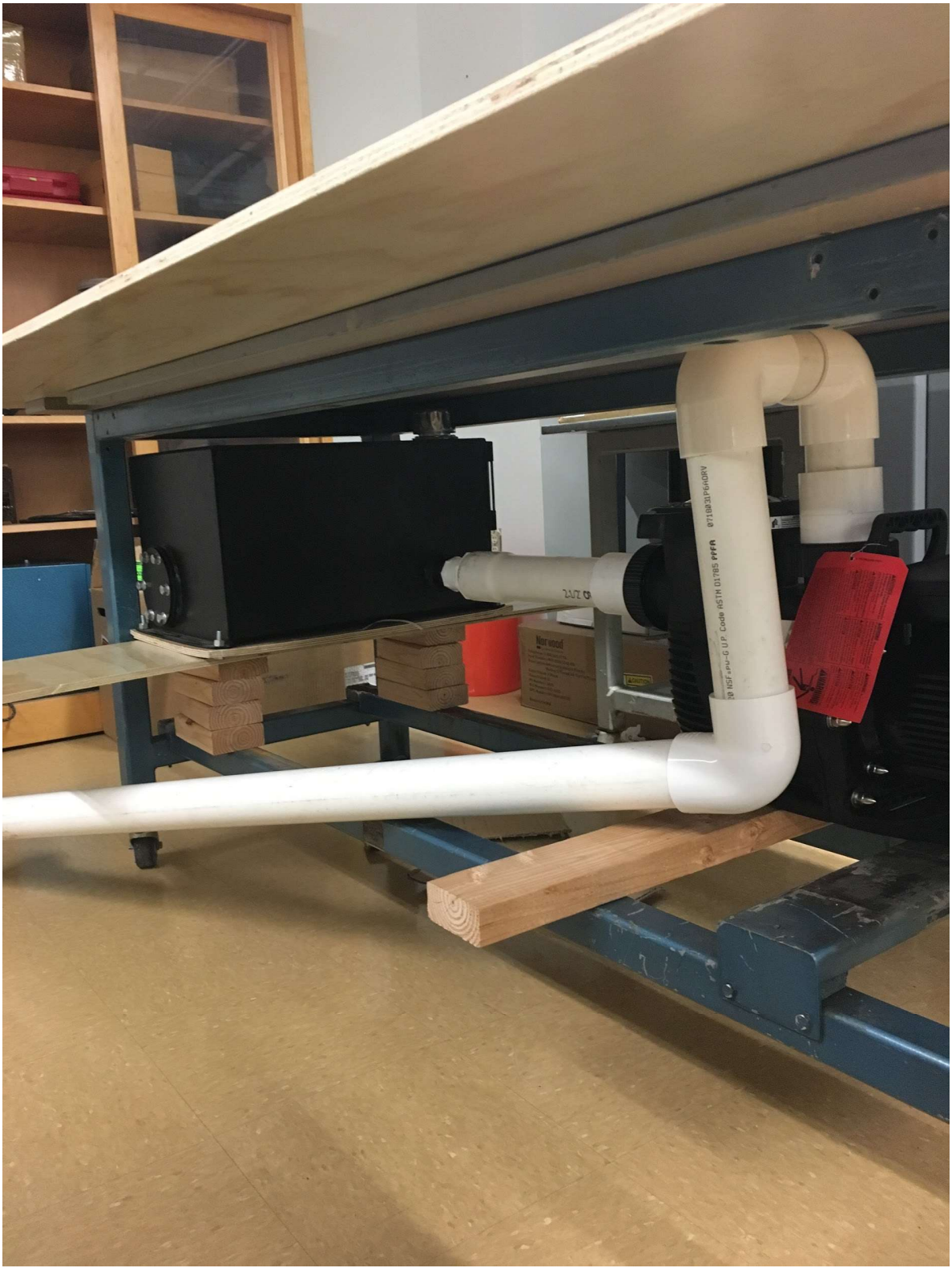

Figure 1 - Lower Section (Without Rotameter)

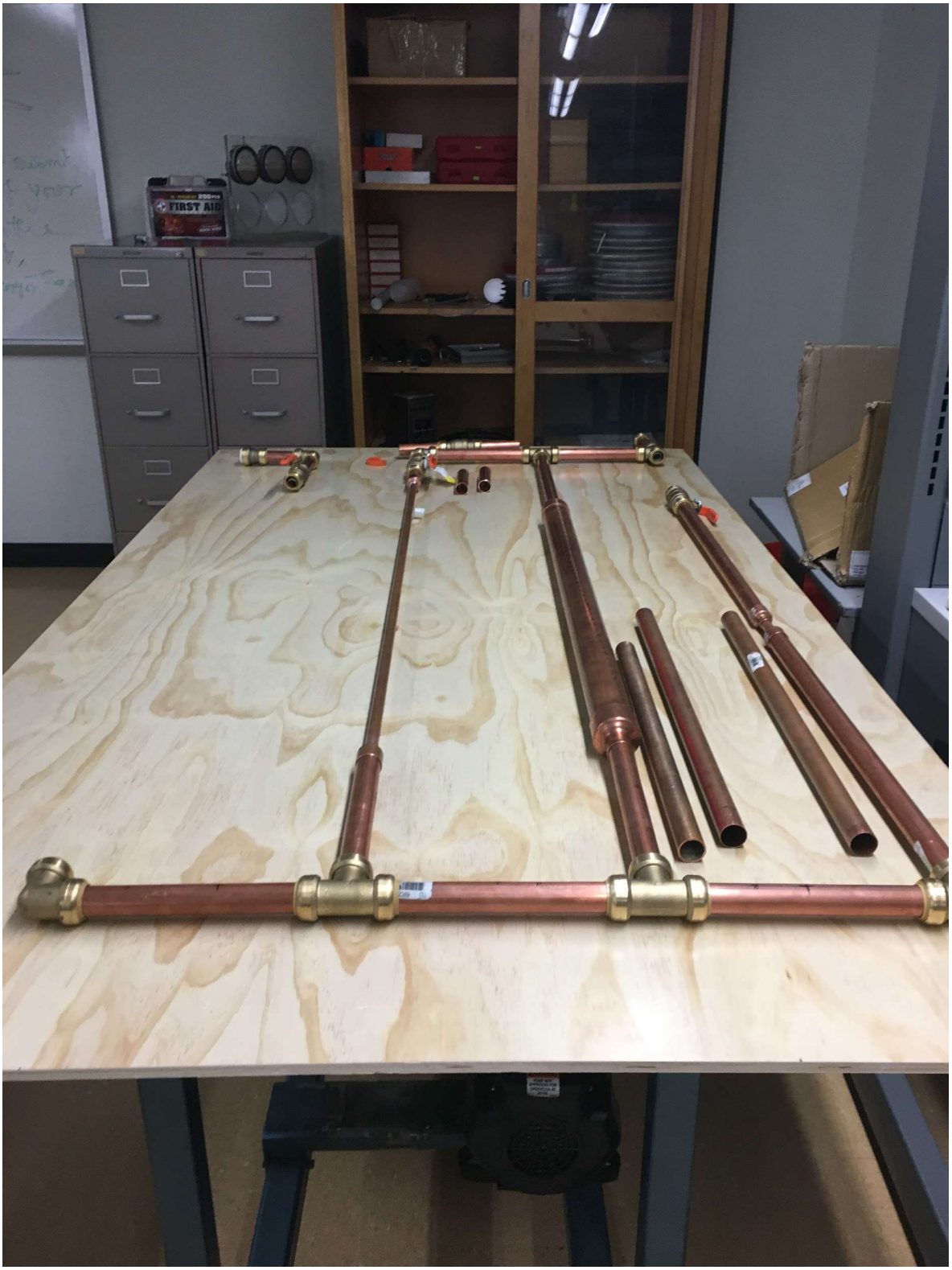

Figure 2 - Upper Section Partital Construction

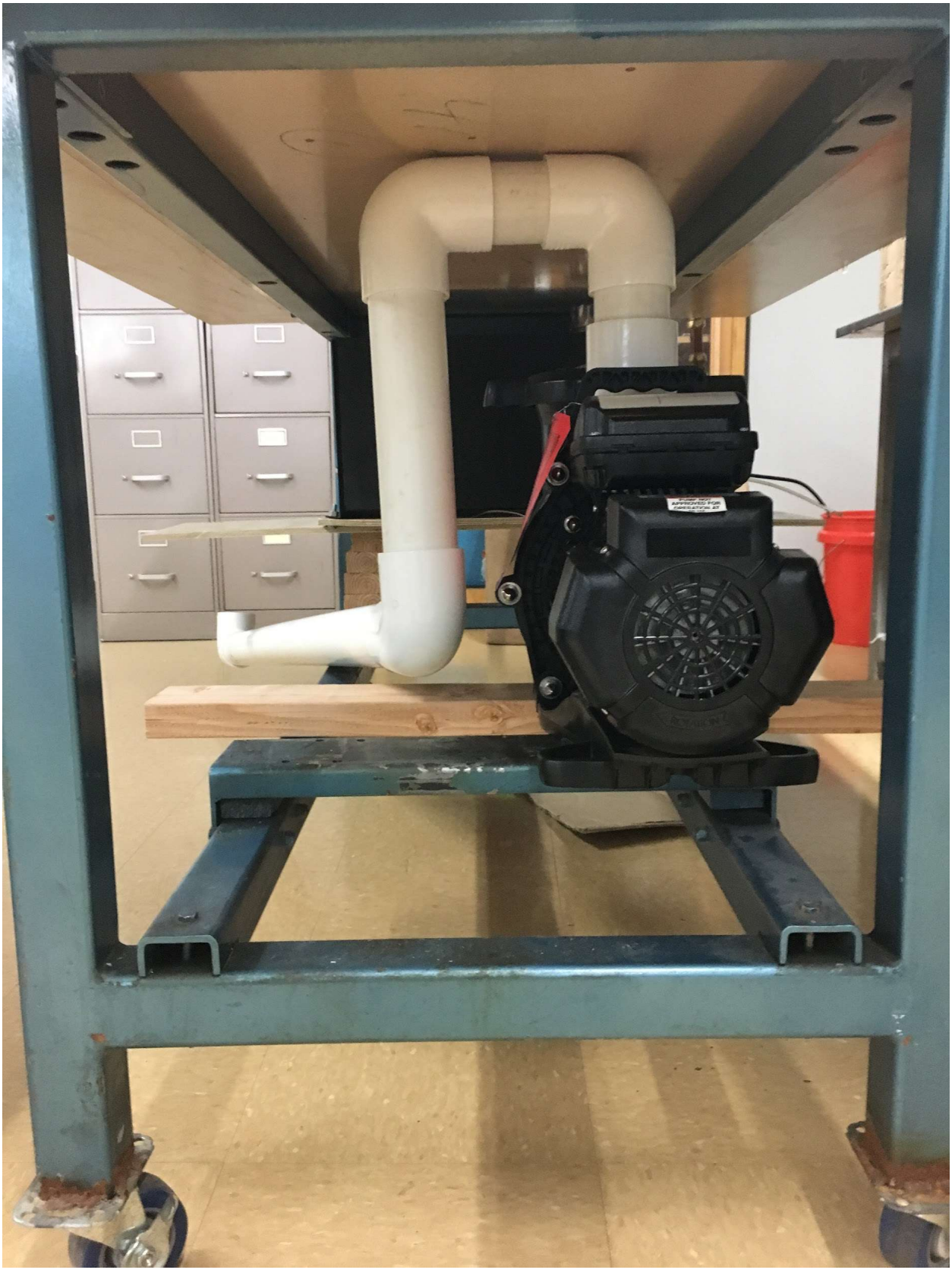

Figure 3 - Second View of Lower Section

Table 1 - Budget As of Hardware Review 2

Capstone Budget			
Item	Quantity	Price per unit ($)	Price ($)
1 in x 10 ft Copper Pipe	4	35.93	143.72
1/2 in x 10 ft Copper Pipe	1	9.76	9.76
1 in Copper Elbow Joint 90 deg	6	16.47	98.82
1 x 1/2 in Copper Reducer	4	4.51	18.04
1 in Copper Tee Joint	4	19.24	76.96
Hydrolic Reservoir	1	370.5	370.5
Centrifugal Pump	1	1291.15	1291.15
.452in x 48in x 96in Pine Table-top	1	46.25	46.25
NIBCO Ball Valve 1 in copper	5	24.43	122.15
1/2in Sharkbite Ball Valve	1	16.78	16.78
2in Sharkbite Ball Valve	1	88.77	88.77
1in x 3/4in PVC Adapter	1	0.98	0.98
1in Sharkbite PVC Adapter	2	18.97	37.94
1in x 2in PVC Pipe	1	2.34	2.34
4 oz PVC P-68 Primer	1	4.59	4.59
2in x 3ft Copper Pipe	3	44.15	132.45
1in 90 deg PVC Elbow	2	1.14	2.28
2-1/2in x 2in PVC Reucing Coupler	2	4.97	9.94
Total			2751.26
Dr. Ciocanel's Budget			
Item	Quantity	Price per unit ($)	Price ($)
Pressure transducers	11	182	2002
Rotometer	1	654.02	654.02
Total			2656.02