Appendix

Figure 1: Original Proposed Design (p1/2)

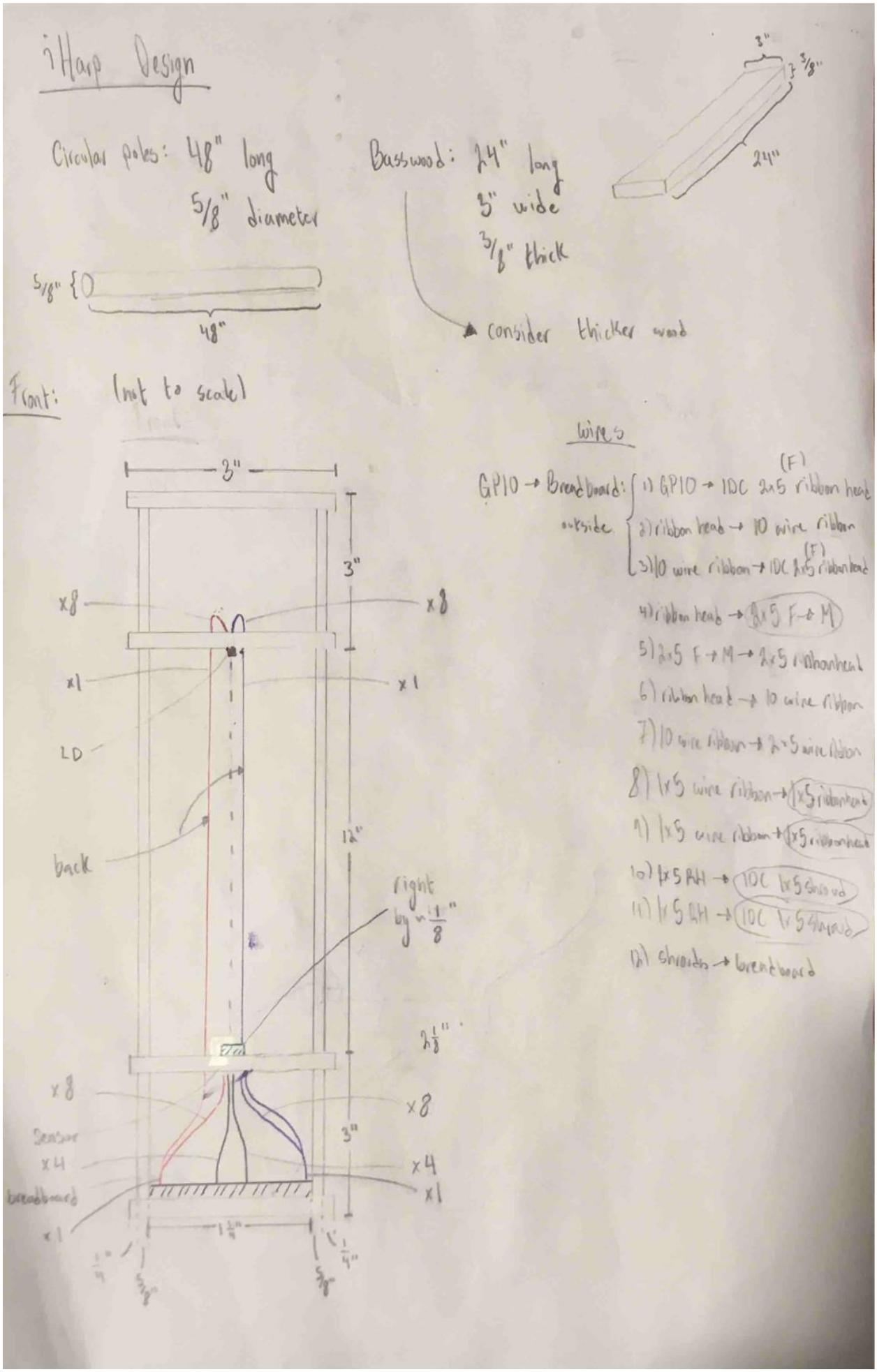

Figure 2: Original Proposed Design (p2/2)

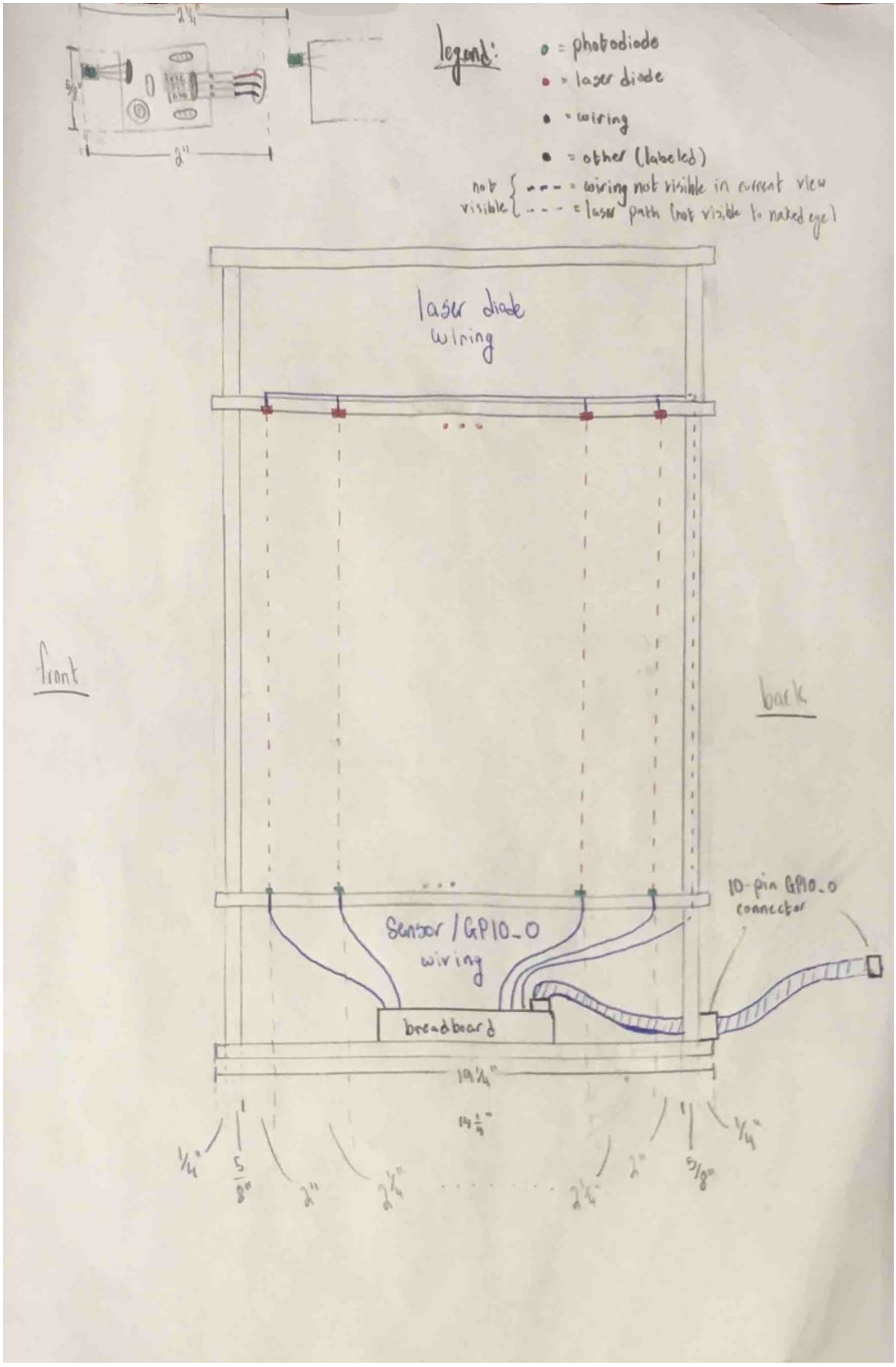

Figure 3: Process of Physical Design

Figure 4: Wire Management

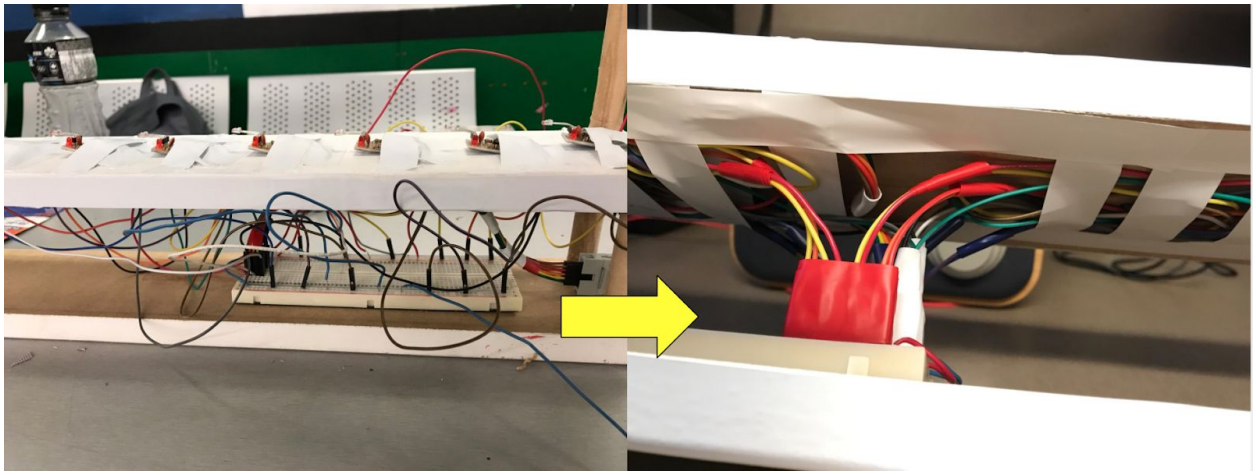

Figure 5: Outcome of Design

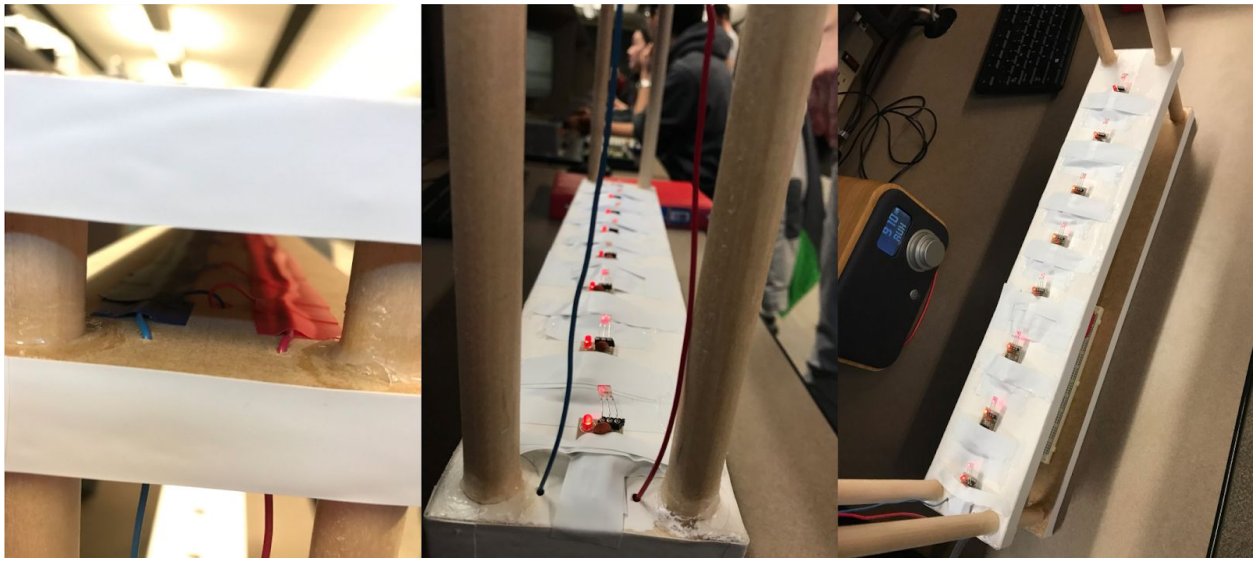

Figure 6: Final Design

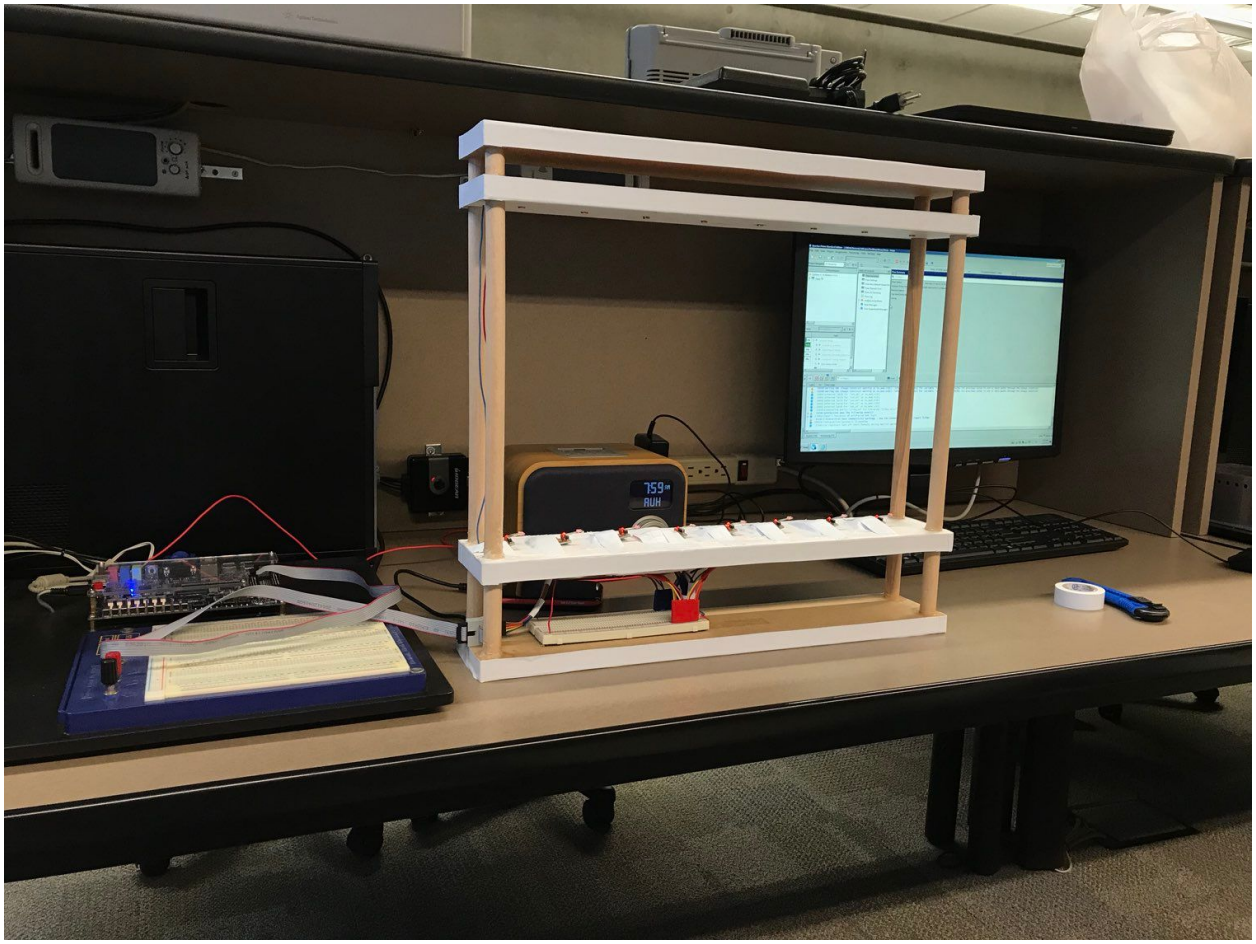

Figure 7: Verilog Code Progression

- iHarp_backup.v
- iHarp_v2_backup.v
- iHarp_v3.v
- iHarp_v4 (1).v
- iHarp_v5.1.v
- iHarp_v5.2.v
- iHarp_v5.v
- iHarp_v6.1 (1).v
- iHarp_v6.v
- iHarp_v7.01.v
- iHarp_v7.2.v
- iHarp_v7.3.1.v
- iHarp_v7.3.2 (1).v
- iHarp_v8 (1).v
- iHarp_v9.v
- iHarp_v10_sensor.v
- iHarp_v11_sensor.v
- iHarp_v11.01_sensor-OLD.v
- iHarp_v11.1_sensor.v
- iHarp_v11.2_sensor.v
- iHarp_v11VGA_sensor.v
- iHarp7.1.v
- o_mod_v2.v
- o_mod.v
- os_mod_v3 (1).v
- os_mod_v3.v
- os_mod_v4_sensor (1).v
- os_mod_v4_sensor.v
- slike_rd_v1 (1).v
- slike_rd_v1.1.01_sensor.v
- slike_rd_v1.1.v

Materials Purchased/Used:

- 8x Red Laser Pointer (5V)
- 8x Laser Detector Module
- Breadboard
- Various Ribbon Connectors
- Various Pin Connectors
- Wires
- Building Materials (i.e. wood, tape, epoxy, etc.)