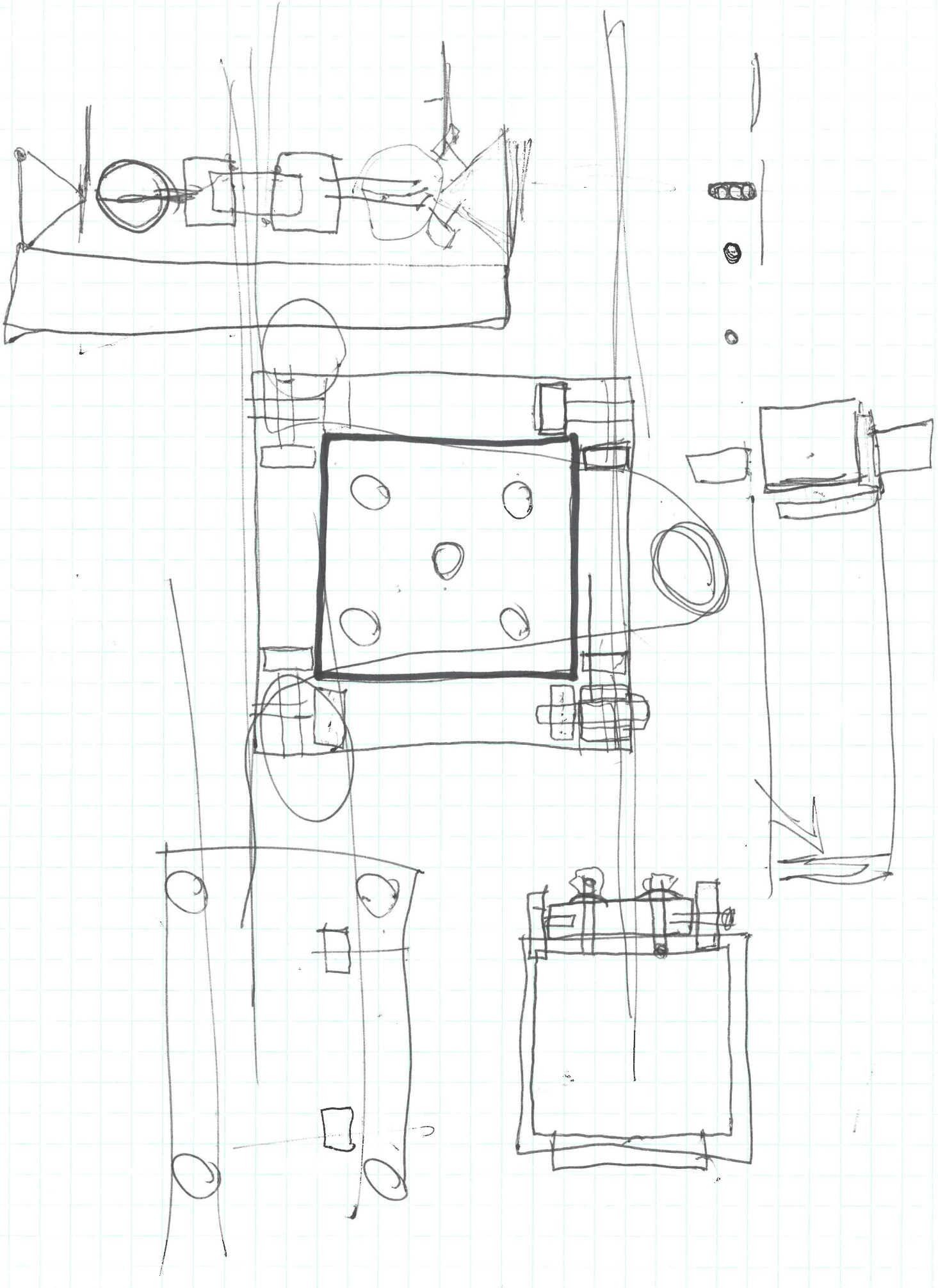
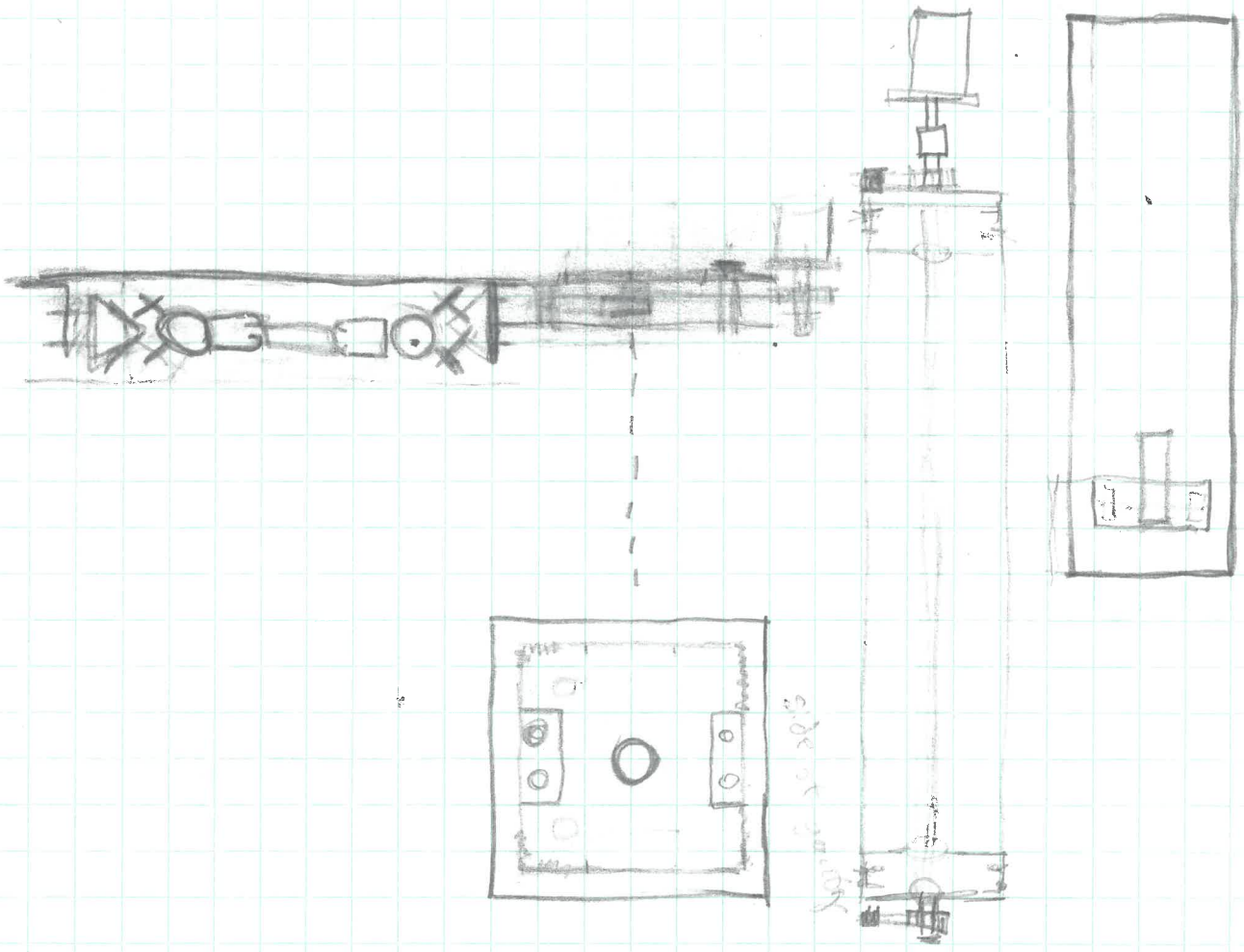
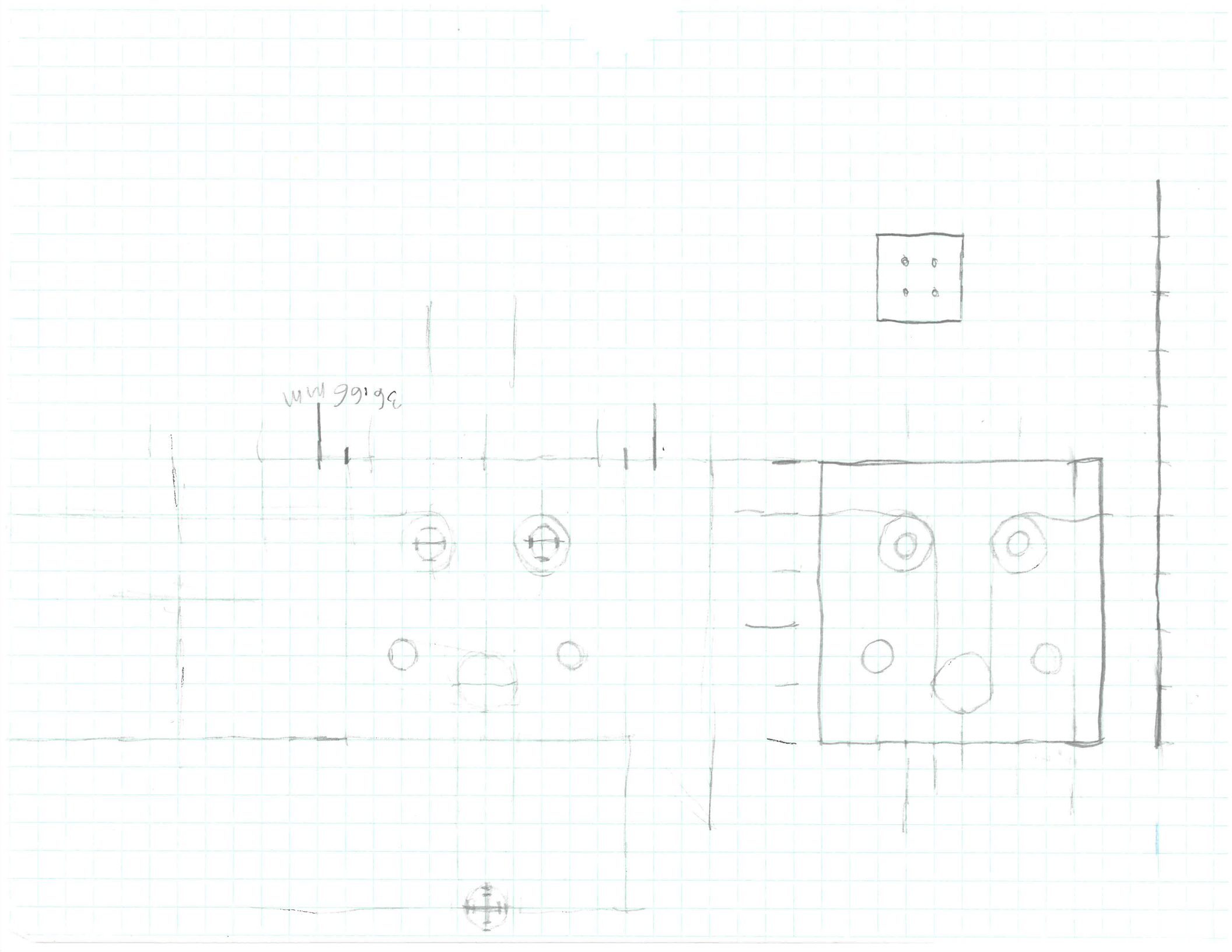
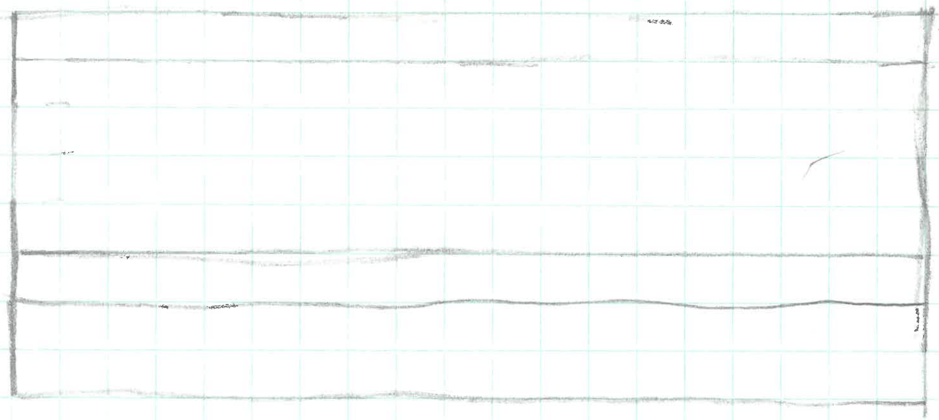
CNC 1

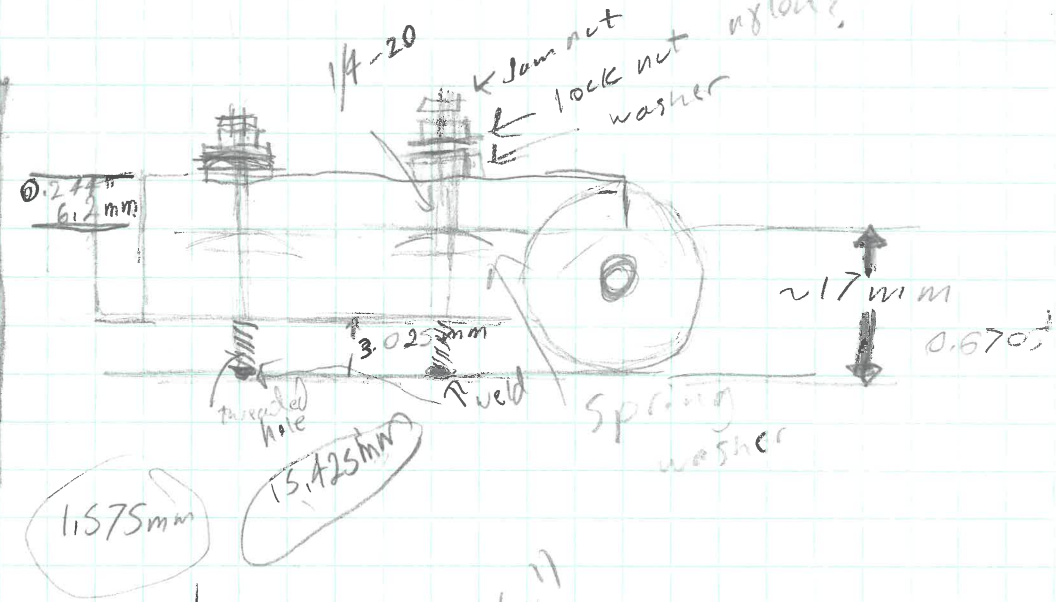
CNC 1

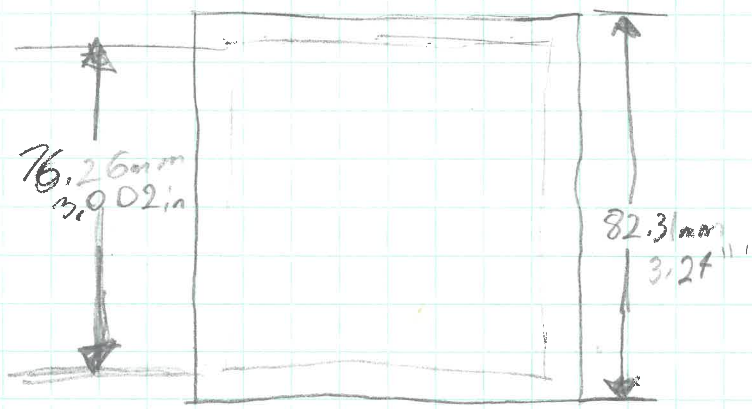


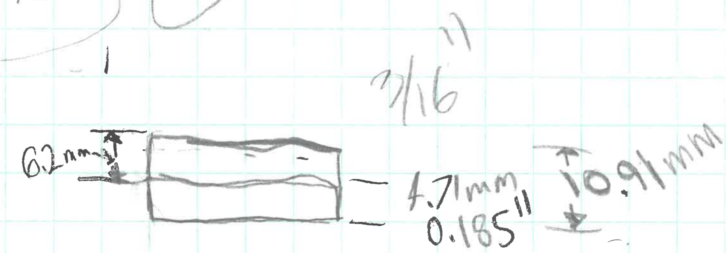



99.95 mm
36.66 mm









1mm = 0.039278316 in

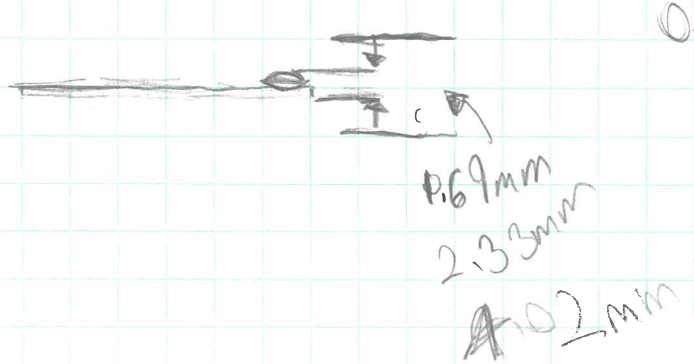
0.034" → 0.048"

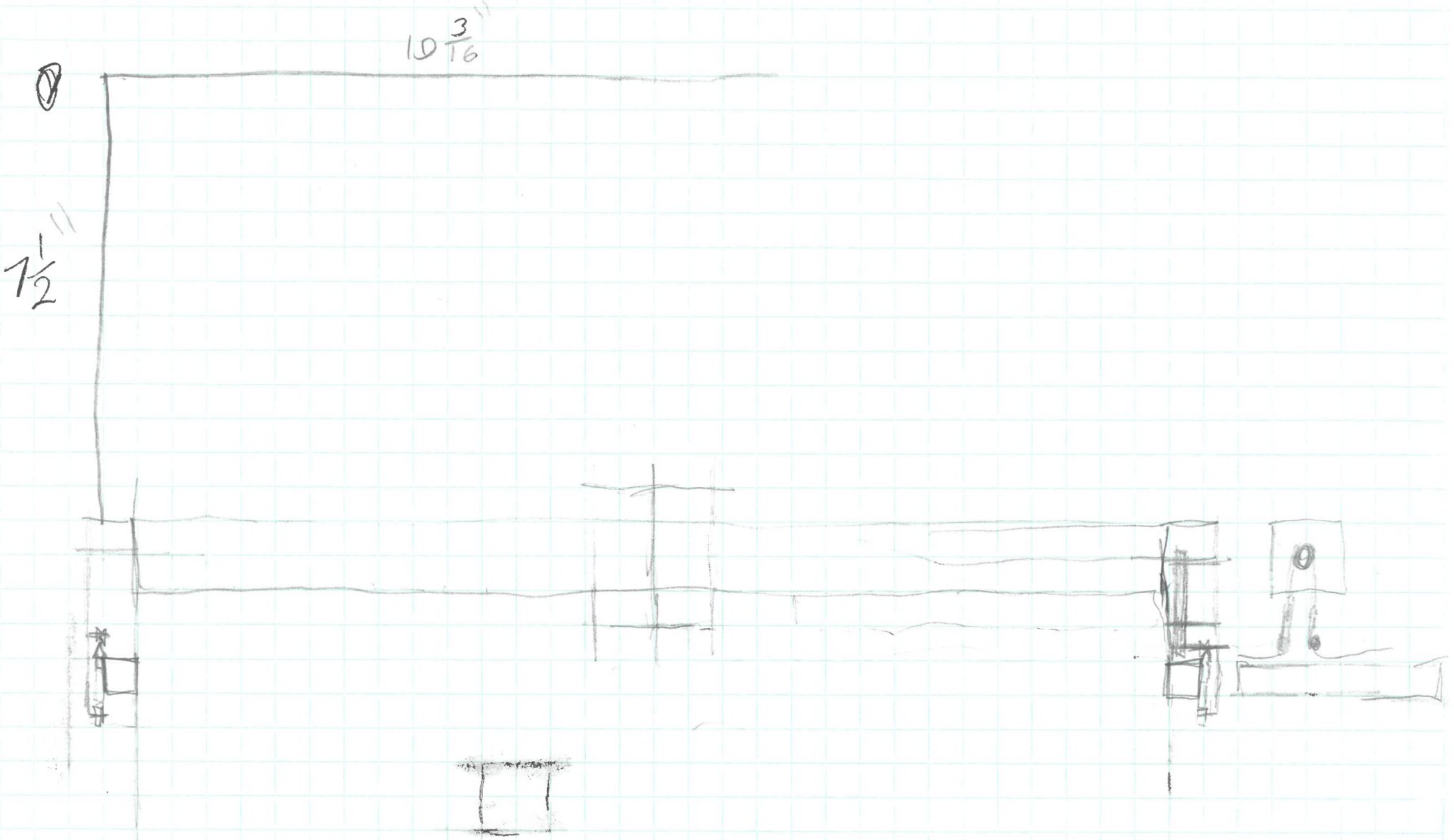
0.8656mm → 1.22205mm

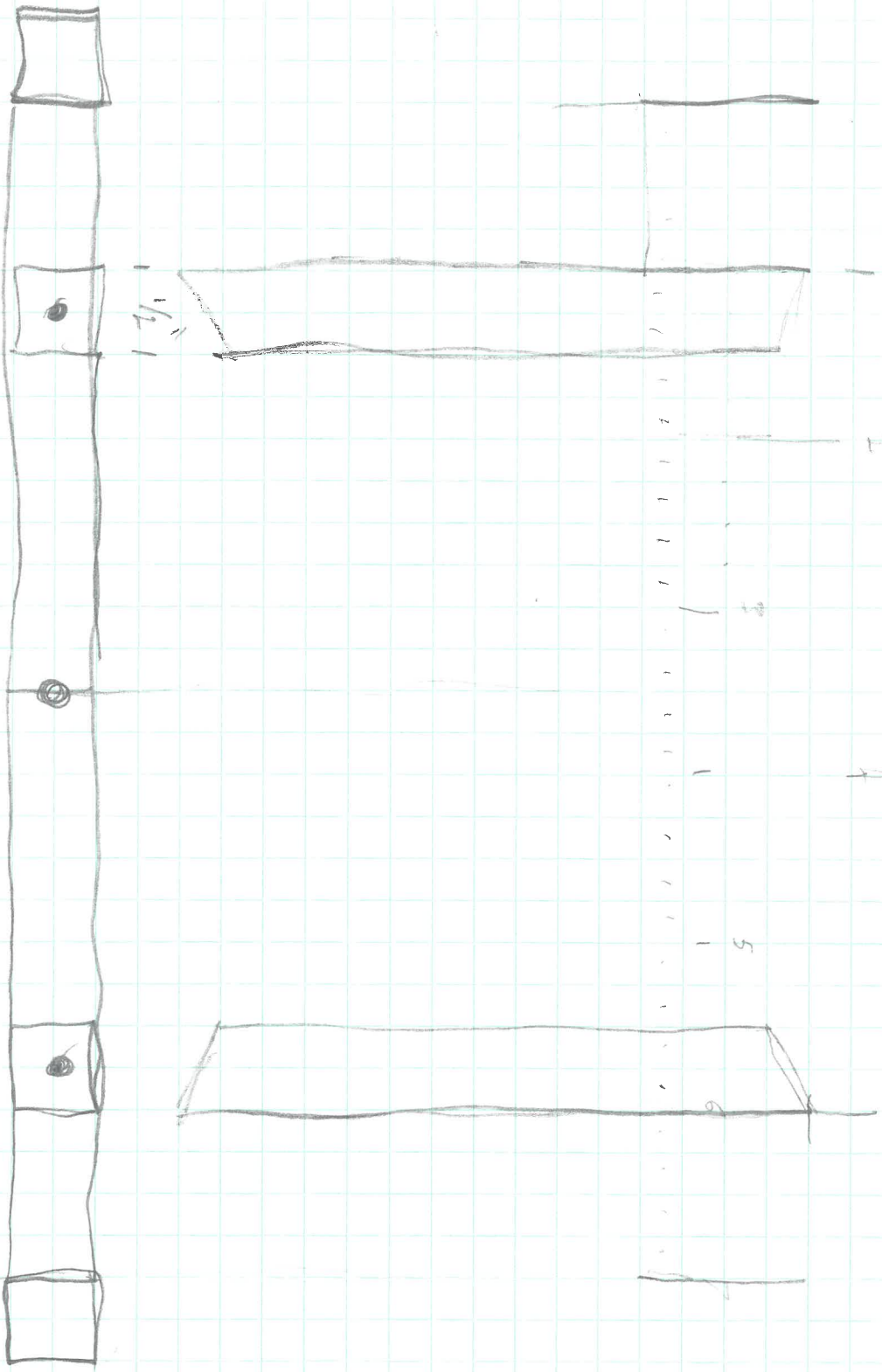
0.0013in 0.01" shim

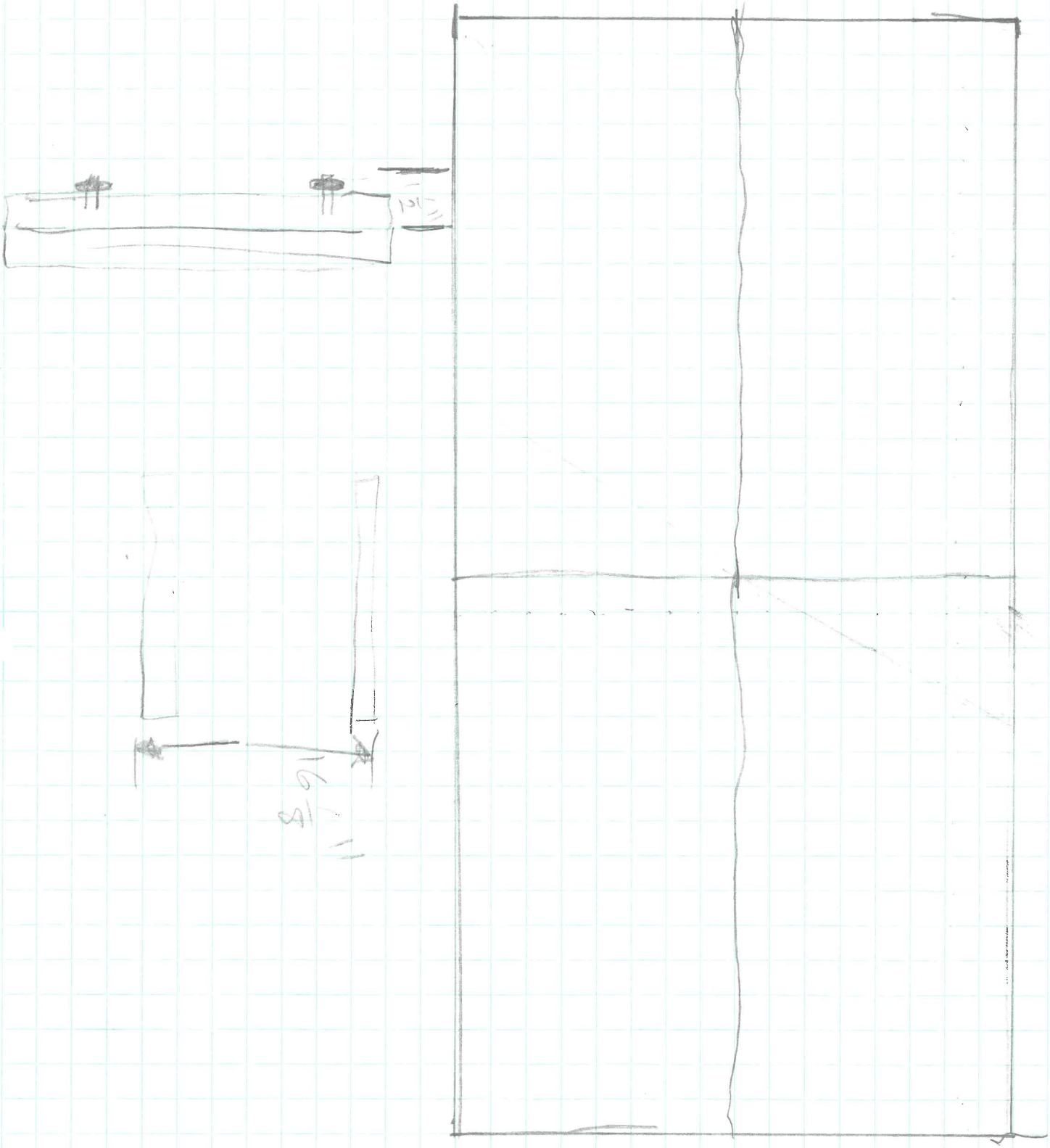
0.35295mm

0.7094mm = 0.027863906in




10 3/16"
8
1 1/2"





36"

3" x 1/8

2" x 1/4 bar stock

2" x 1/2

3" x 1/4

1" x 1/2

1 1/2"

2" x 1/4 angle iron

1 1/2" x 1/8

---

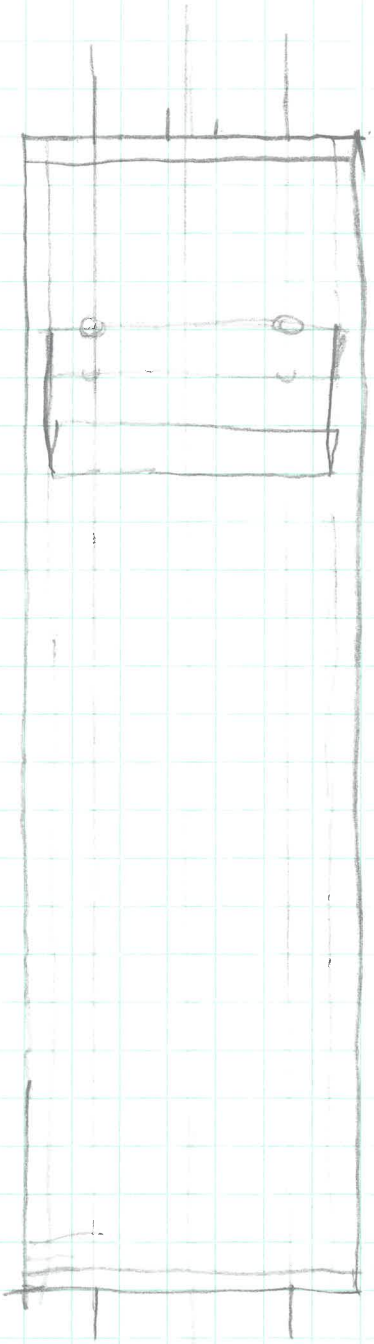
1 1/2" x 1/2"

5/16" x

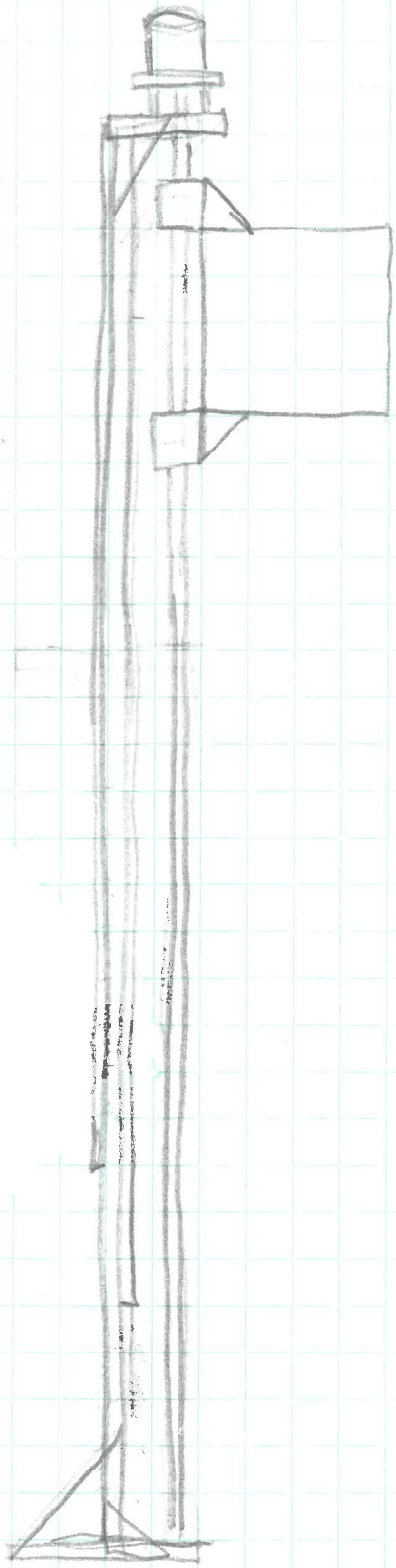
1/2" x

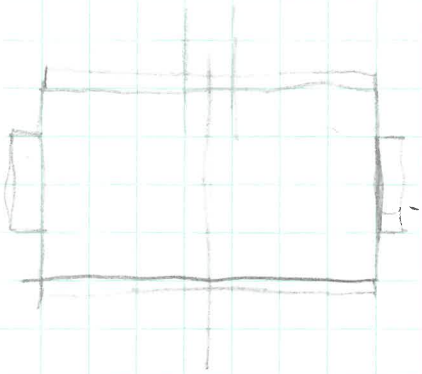
Gl

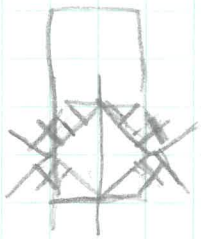
M- ; A36?



CYMAT







— AIGLX

/usr/share/X11/xorg.conf.d/

/etc/X11/xorg.conf.d/

/etc/X11/xorg.conf

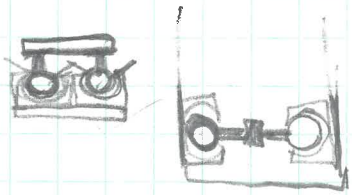
/etc/X11/xorg.conf

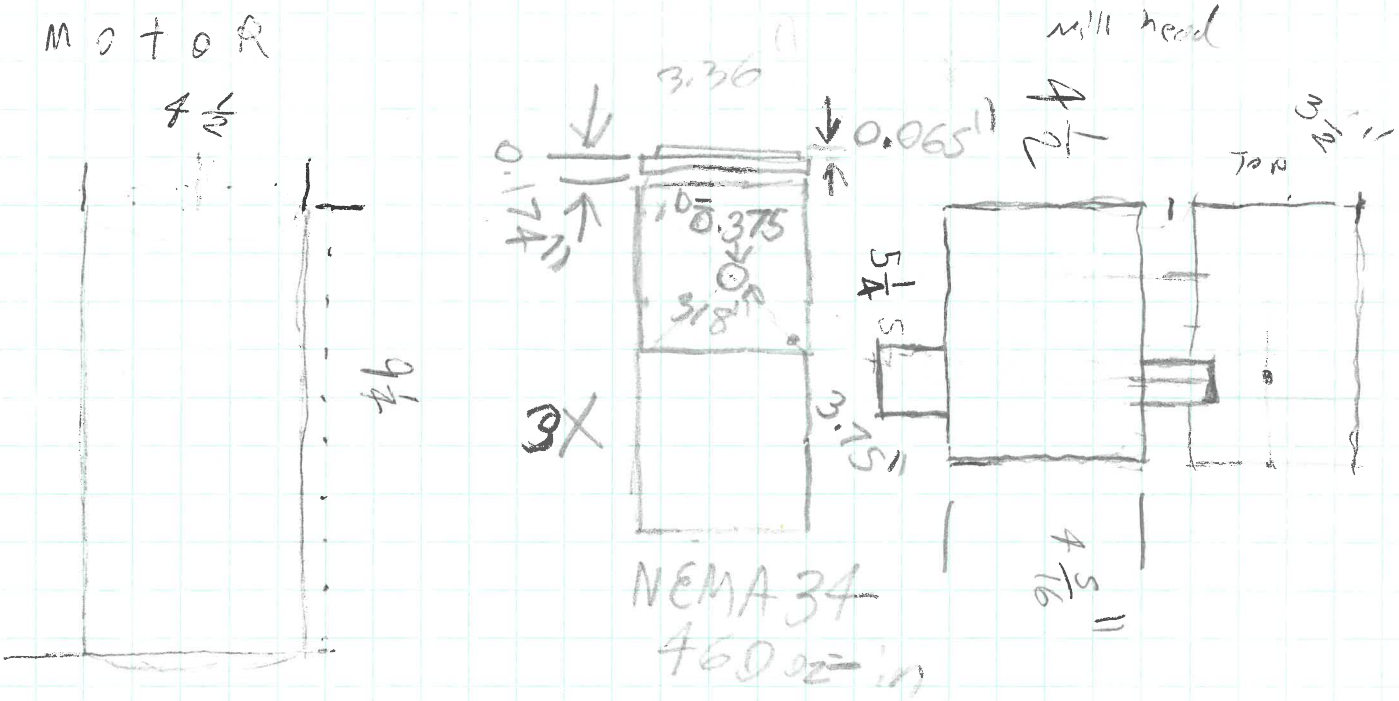
/etc/modprobe.d/

/etc/sysctl.d/

/var/log/Xorg.0.log

/usr/lib/dri/i915_dri.so





Mill head

$3\frac{1}{2}" + \frac{3}{8}$

$\frac{4}{8}$

$3\frac{7}{8}$

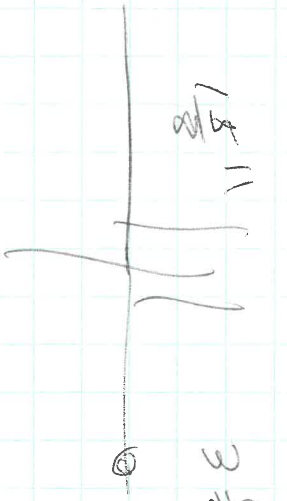
$\frac{24}{8} + \frac{7}{8}$

$\frac{48}{16}$ $\frac{14}{16}$

$\frac{02}{16}$

$\frac{31}{16}$

$1\frac{15}{16}$

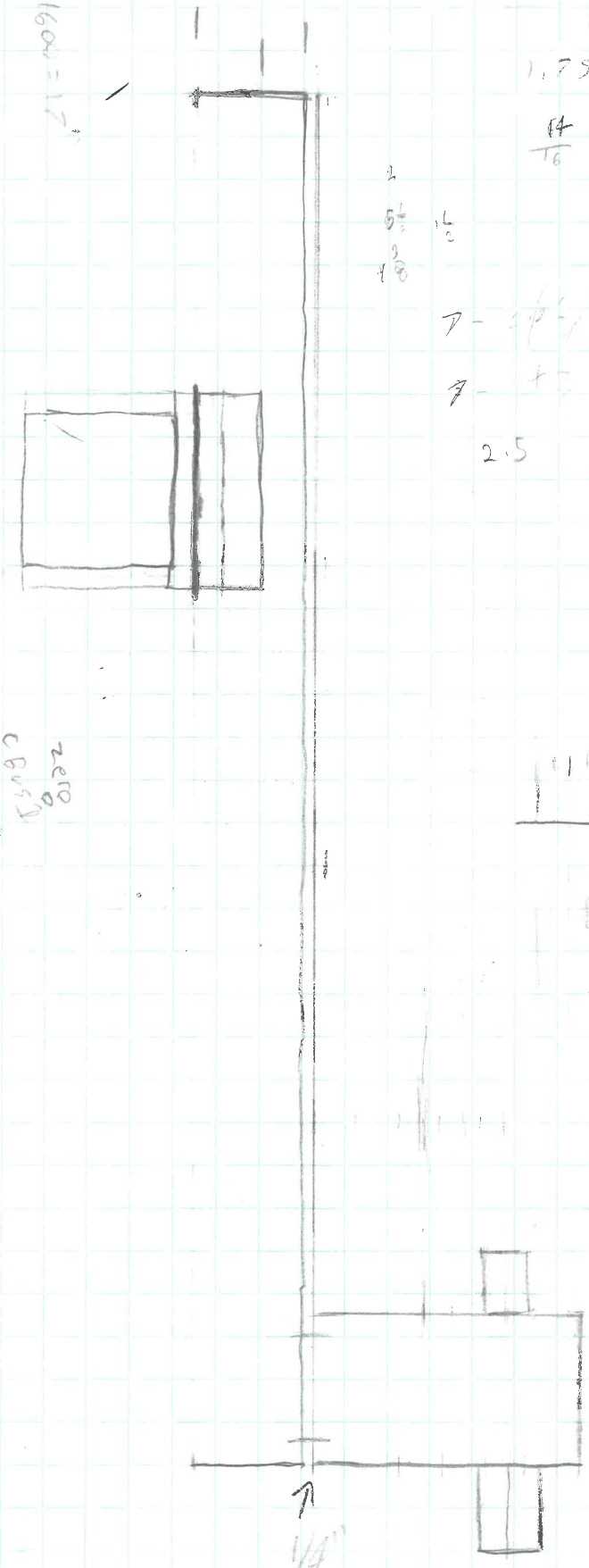


Spindle

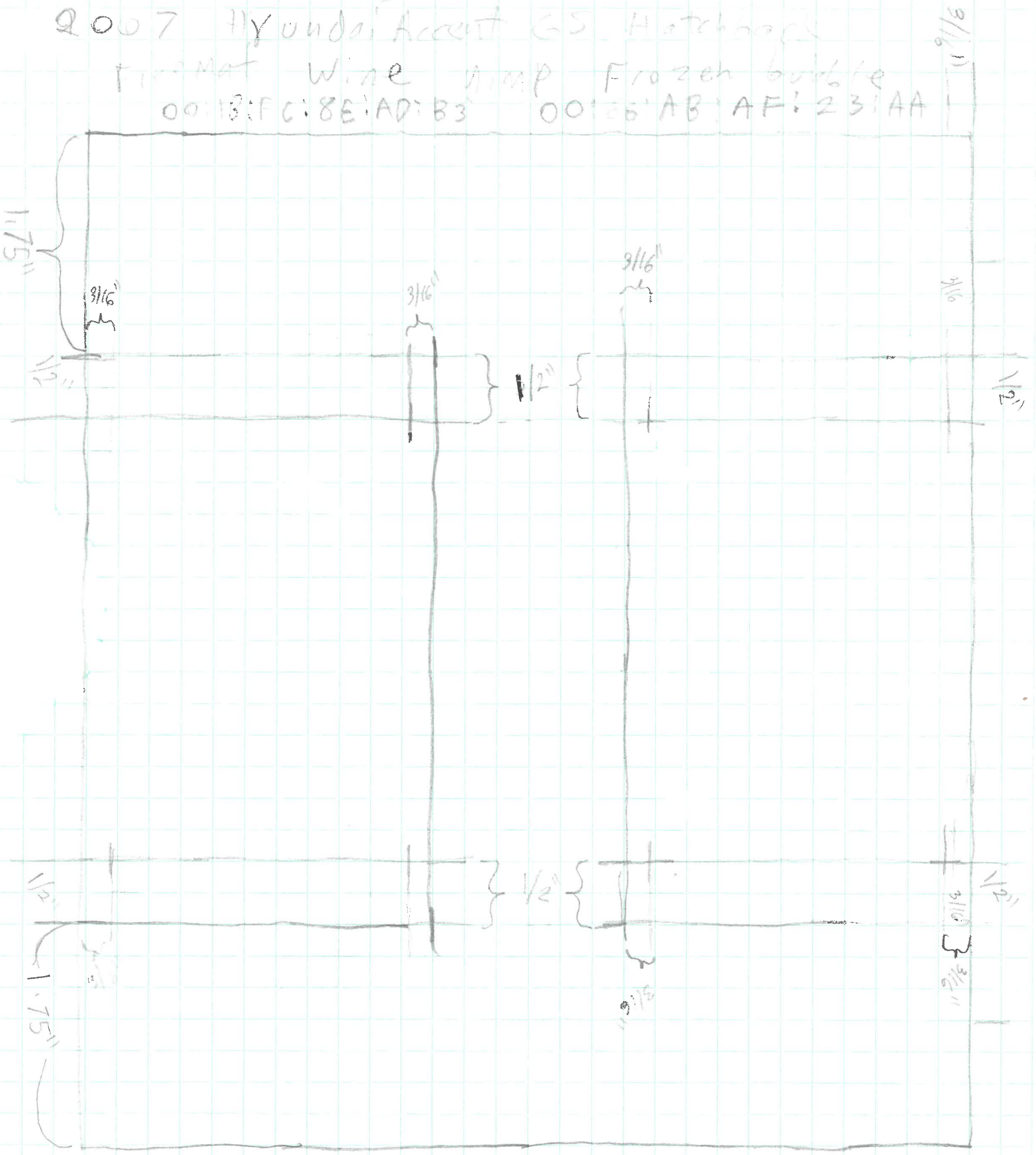
1 1/2" wide

1 1/2" wide

4 1/2"



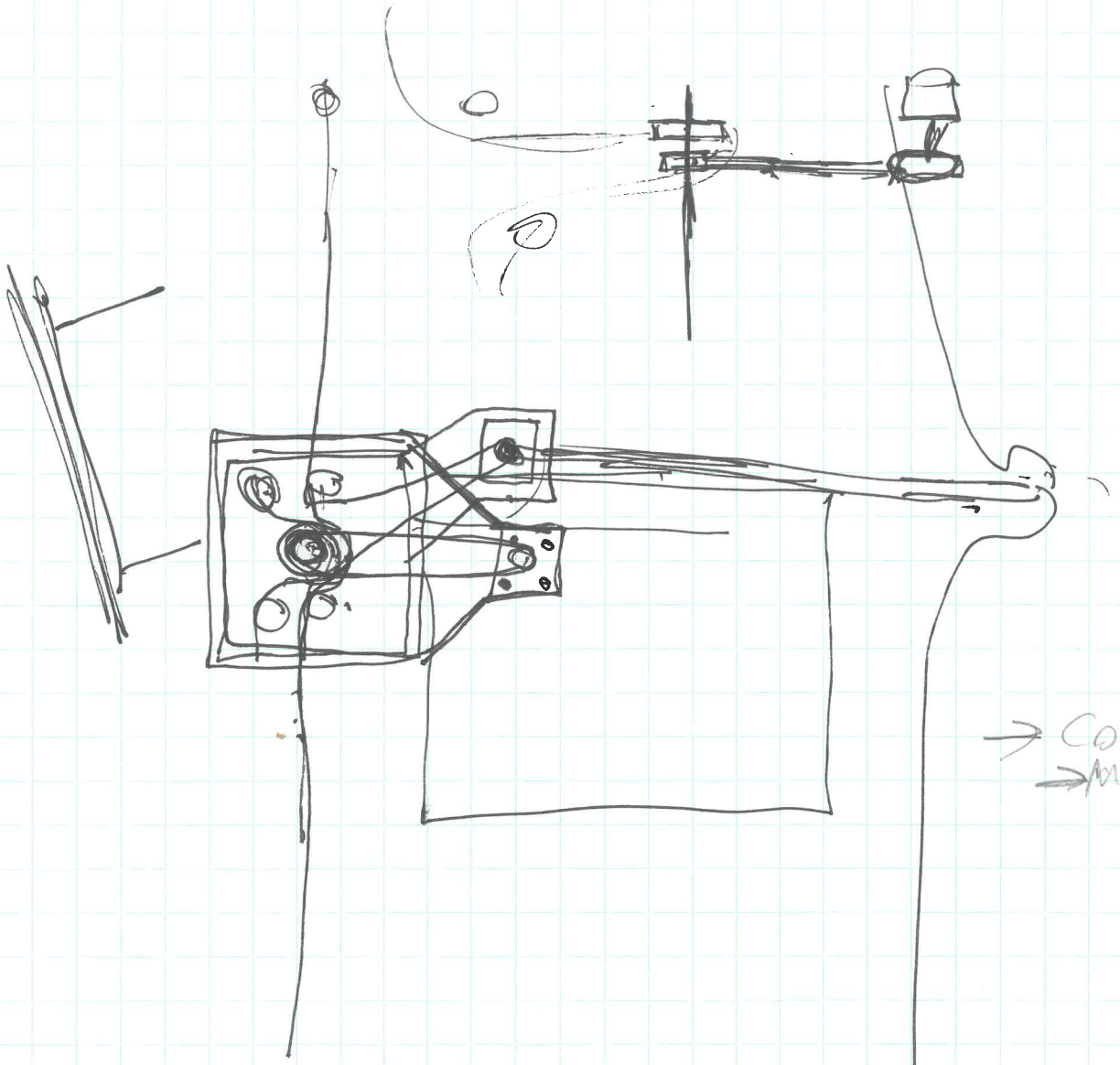
CARS Cob Osiris 2 16 20
I S S
2007 Hyundai Accent GS Hatchback
Tire Mat Wine Jump Frozen bubble
00:13:FC:8E:AD:B3 00:25:AB:AF:23:AA



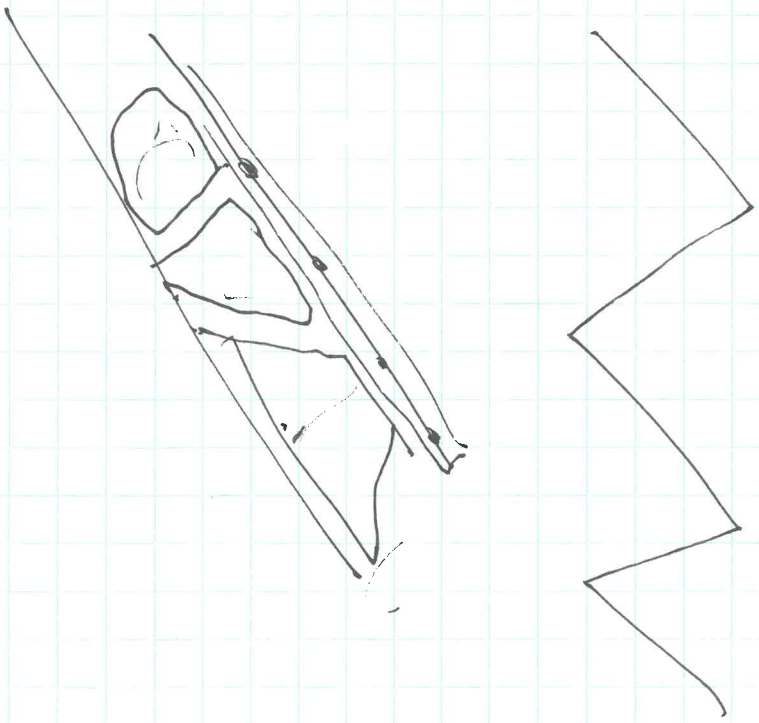
linear rail

linear rail

1/4 scale
2"
2"
1/2"
1/2"

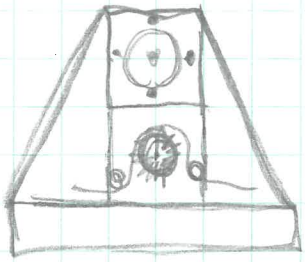


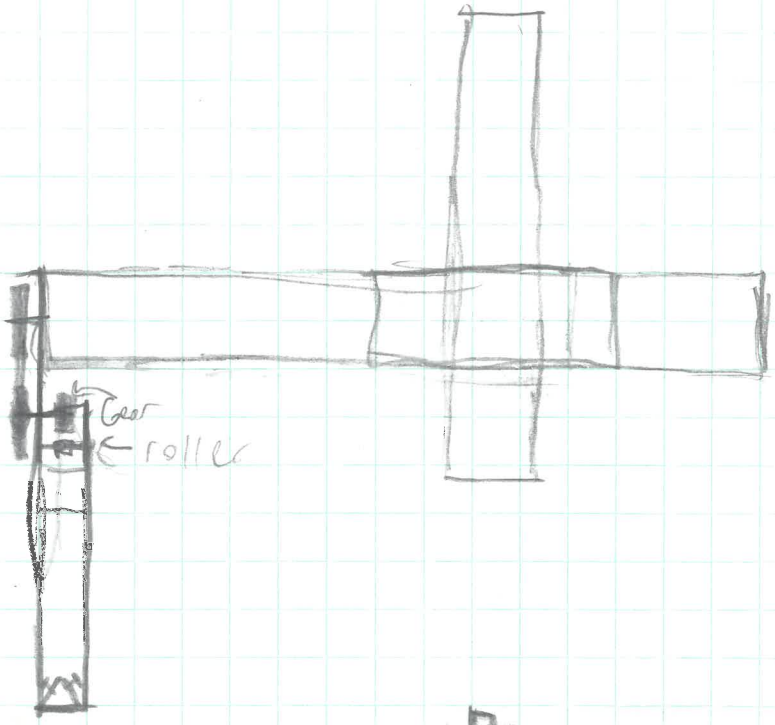
→ College
→ Matlab

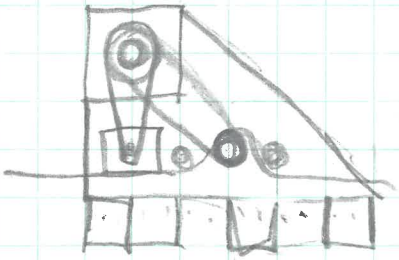


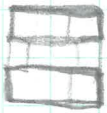
→ Tesla coils
→ CNC →
→ reprap →
→ Mill →

→ Embedded systems
→ ARM
→ ATmega

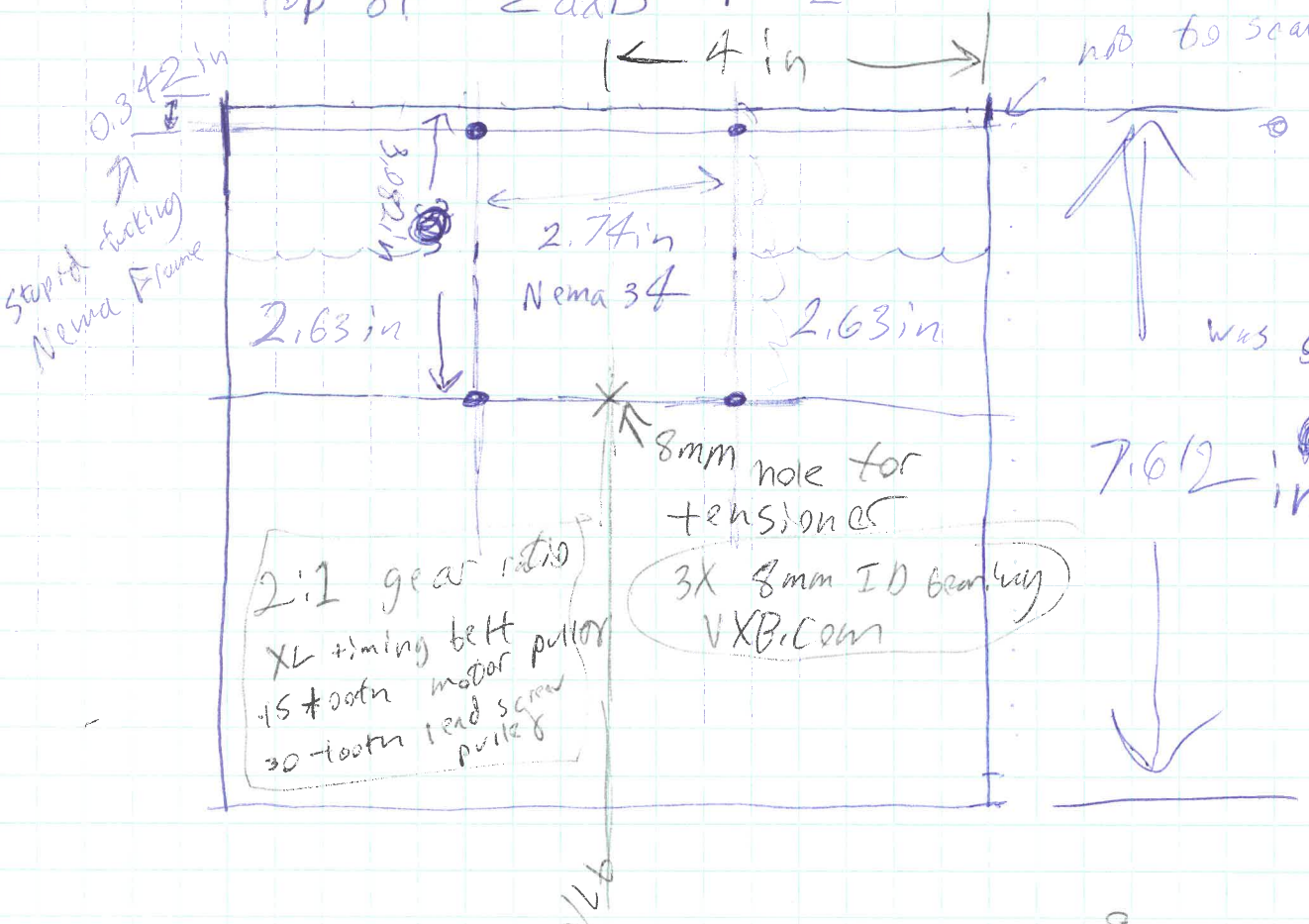



Gear
roller





Top of Z axis l = 1/2"



important

Hot swap balls

Testing

@ speeds > 5000 mm/min protoface lead screw "inches"

63 steps per mm

steps

= 315000/sec

way too fast

max feed rate = 5000

500 · 63 =

31,500 steps/~~sec~~

lot stepping mode ← (P)

step F max = 200KHz

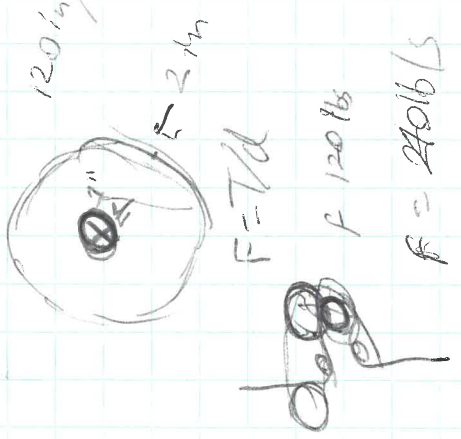
2000 steps = 1 rev

2:1 ratio = 4000 steps →

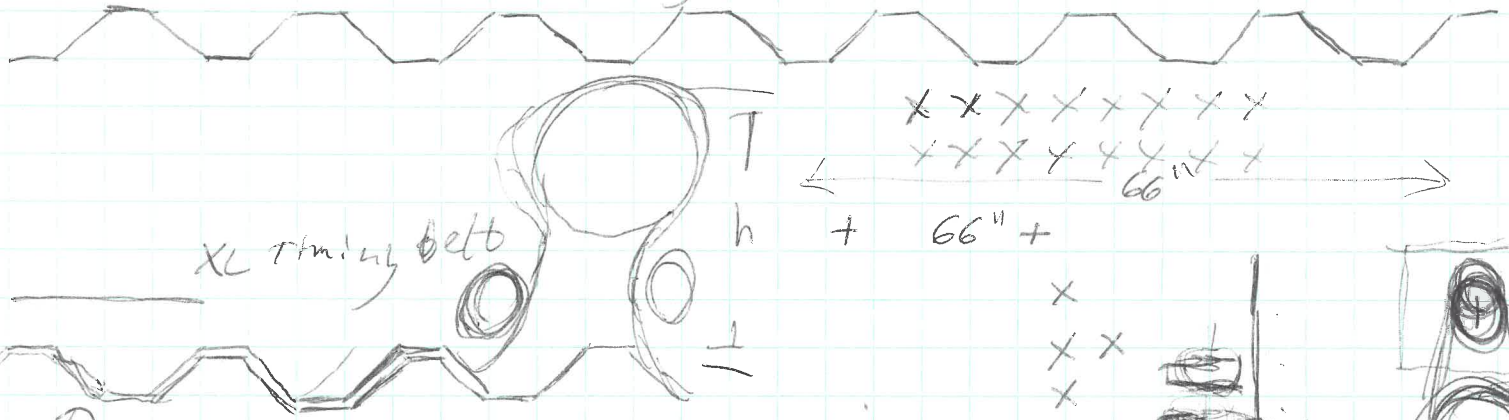
1 rev leadscrew =

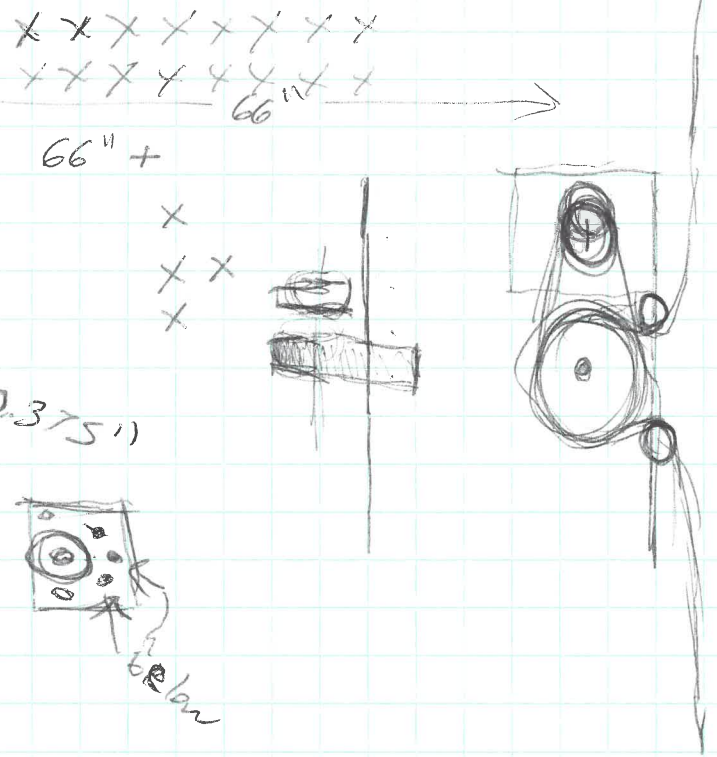
10 rev = 1 in

40000 = 1 in

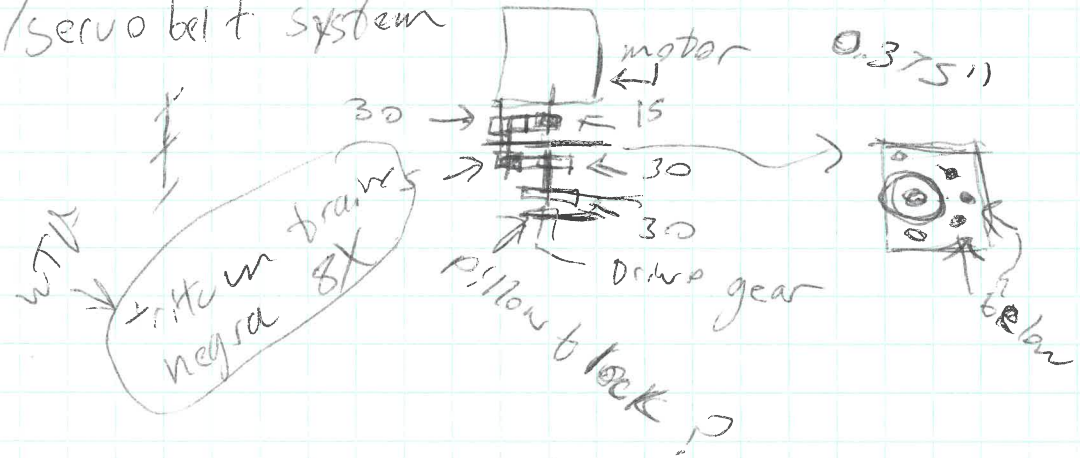


XL timing belt 0.2 in pitch



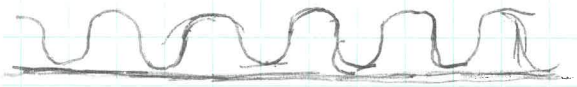


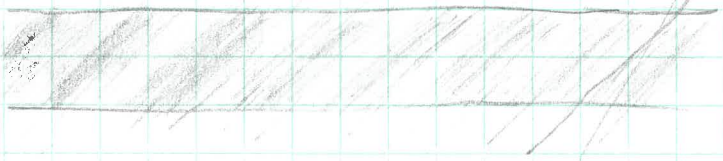
servo belt system



timing belt

(5in belt → curvilinear belt for servobelt applications)





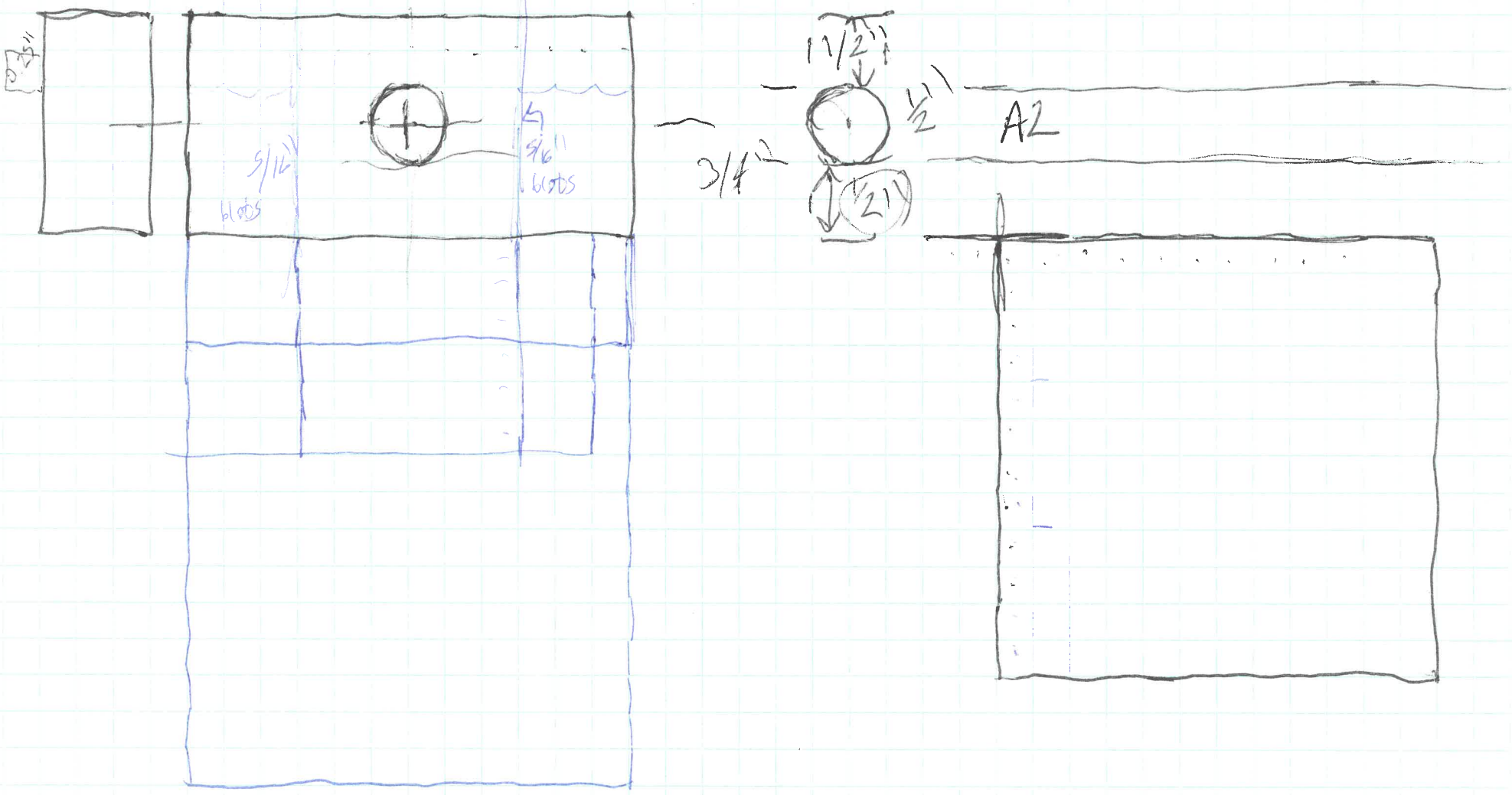
63 1/4"

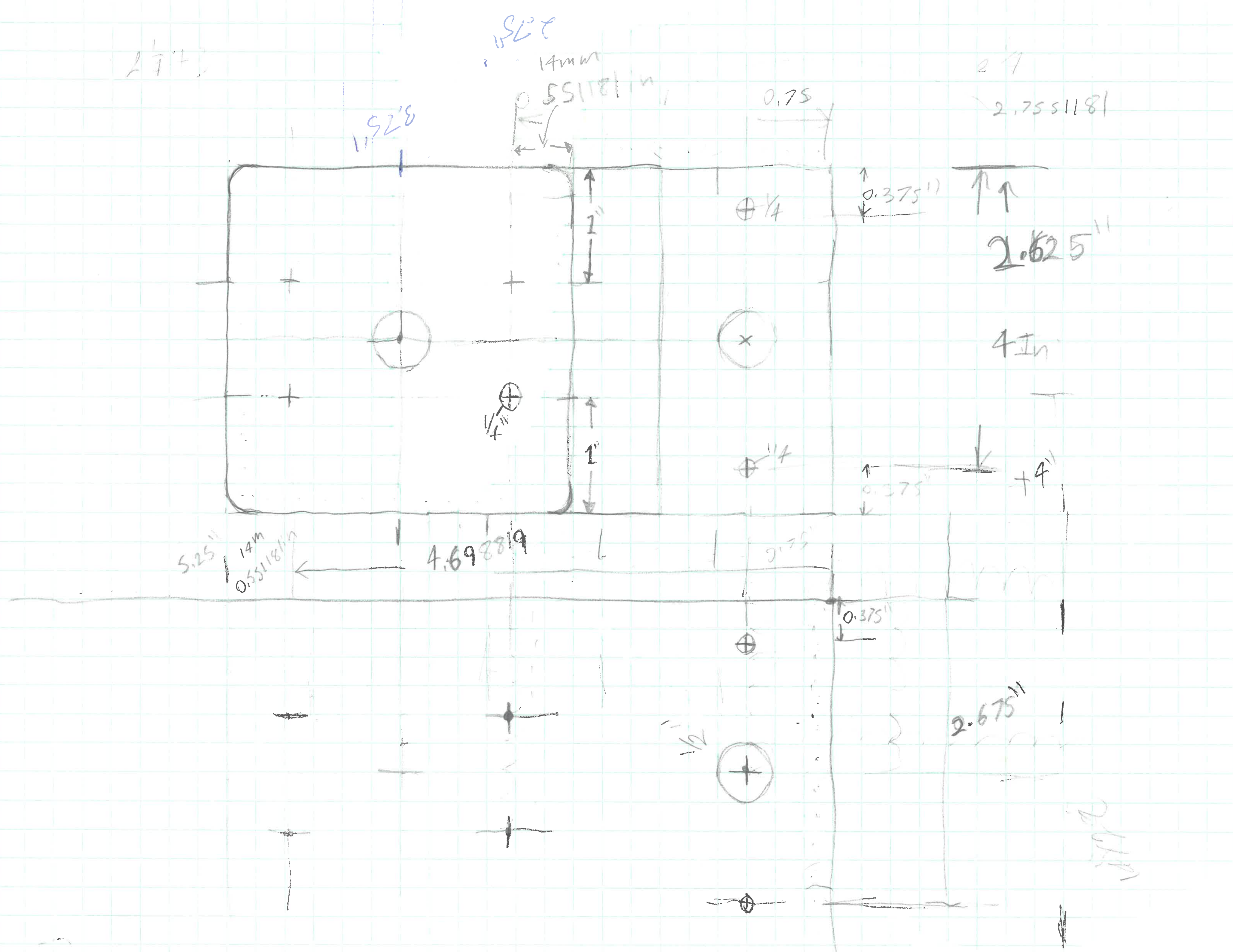
72"

8.75"

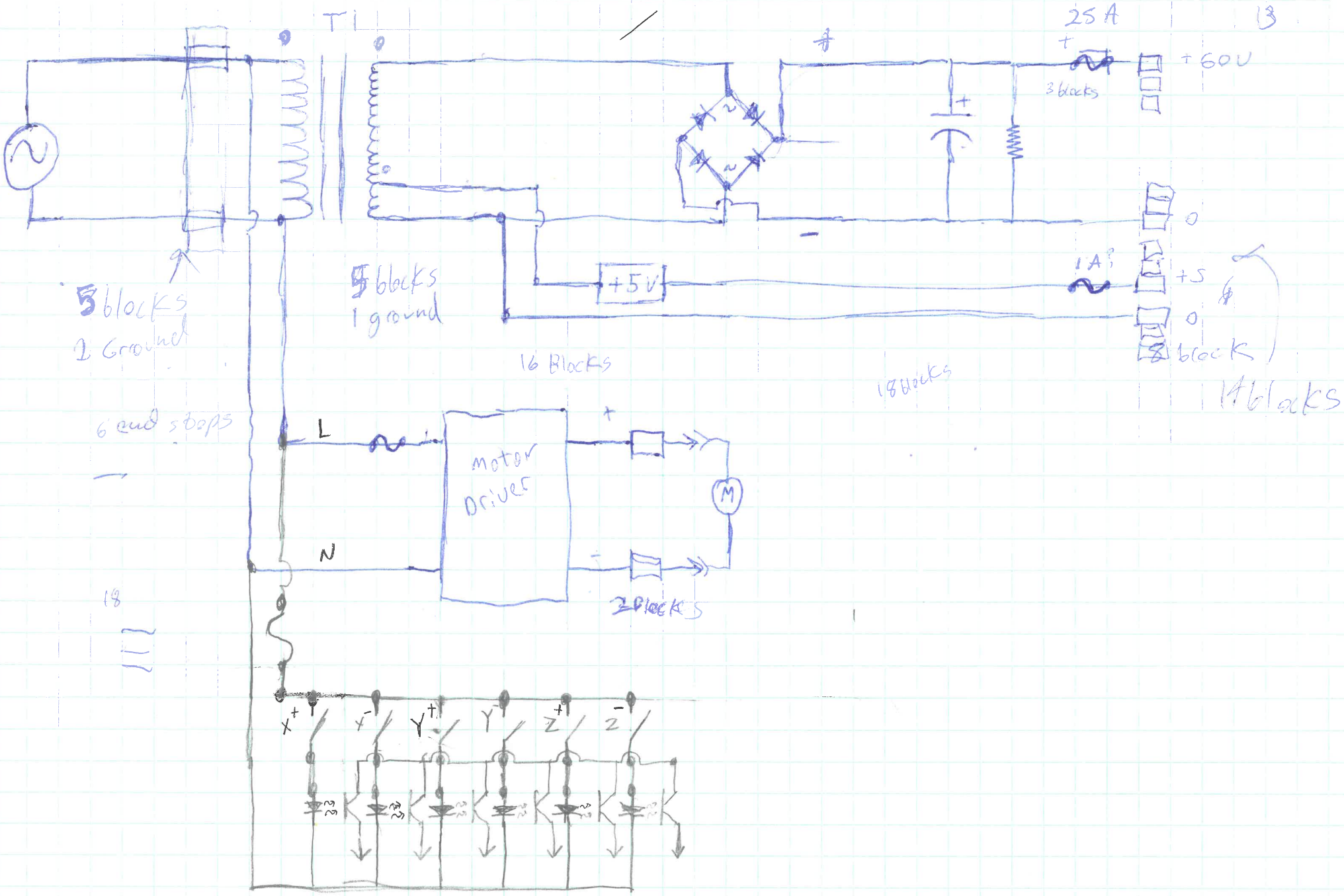
72" - 63.25" = 8.75"

8.75/2 = 4.375"

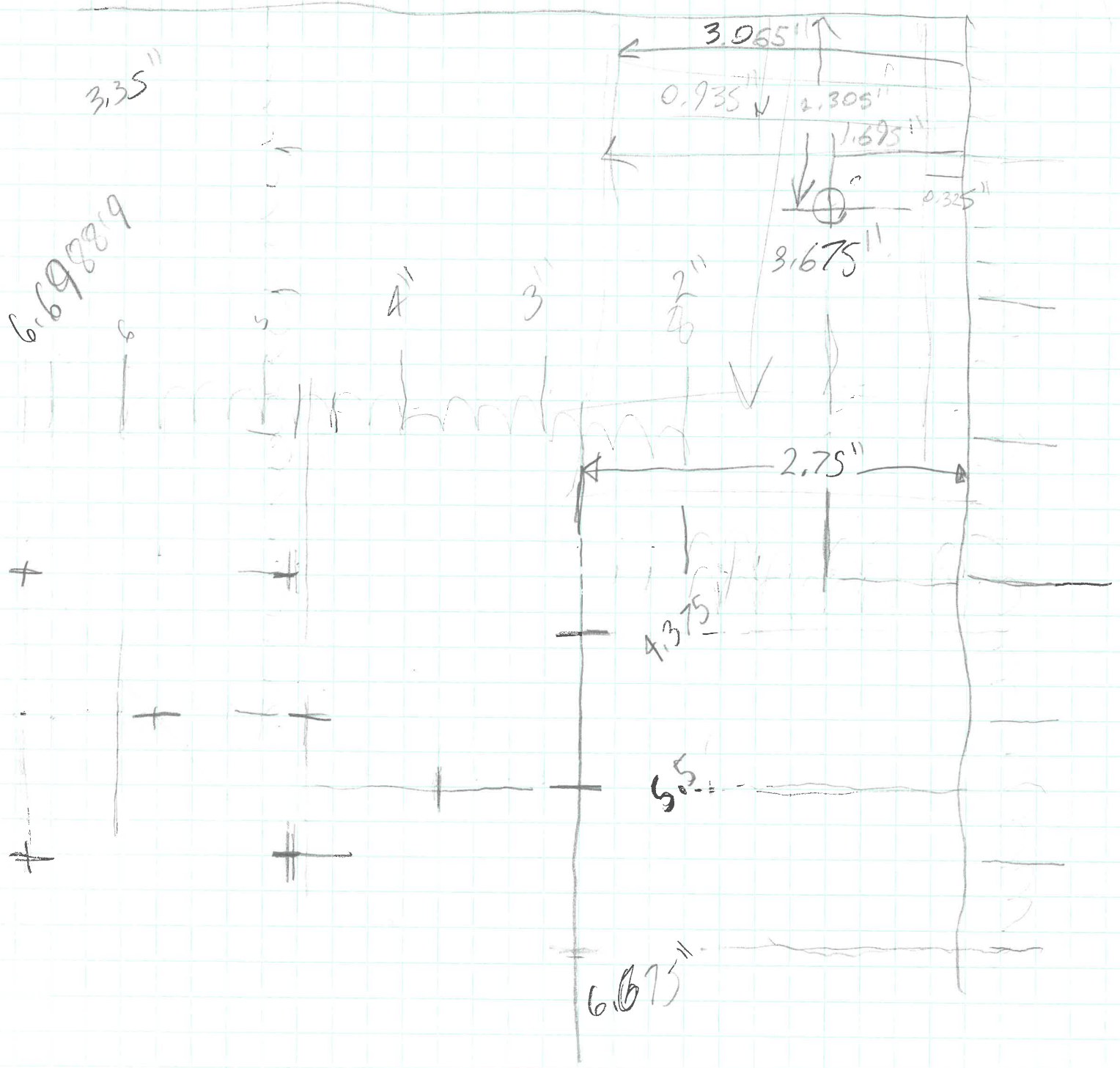




3.25"
14mm
0.551181 in
0.75
2.7551181
3.25"
1"
1"
1/4
1/4"
1/4
0.375"
2.625"
4 In
+4"
0.375
5.25"
14m
0.551181"
4.69889
0.375"
2.675"
1/2"


25A
+60V
3 blocks
+5V
1A?
+5
0
0
8 block
5 blocks
1 Ground
5 blocks
1 ground
16 Blocks
18 blocks
14 blocks
6 end stops
L
N
motor
Driver
M
20 blocks
18
X+
X-
Y+
Y-
Z+
Z-

45°
GT2 2mm
68 grooves
GT2
25 groove


3.065"
0.935"
2.305"
1.695"
0.325"
3.675"
3.35"
6.6988"
6
5
4"
3"
2"
2.75"
4.375"
5.5"
6.675"