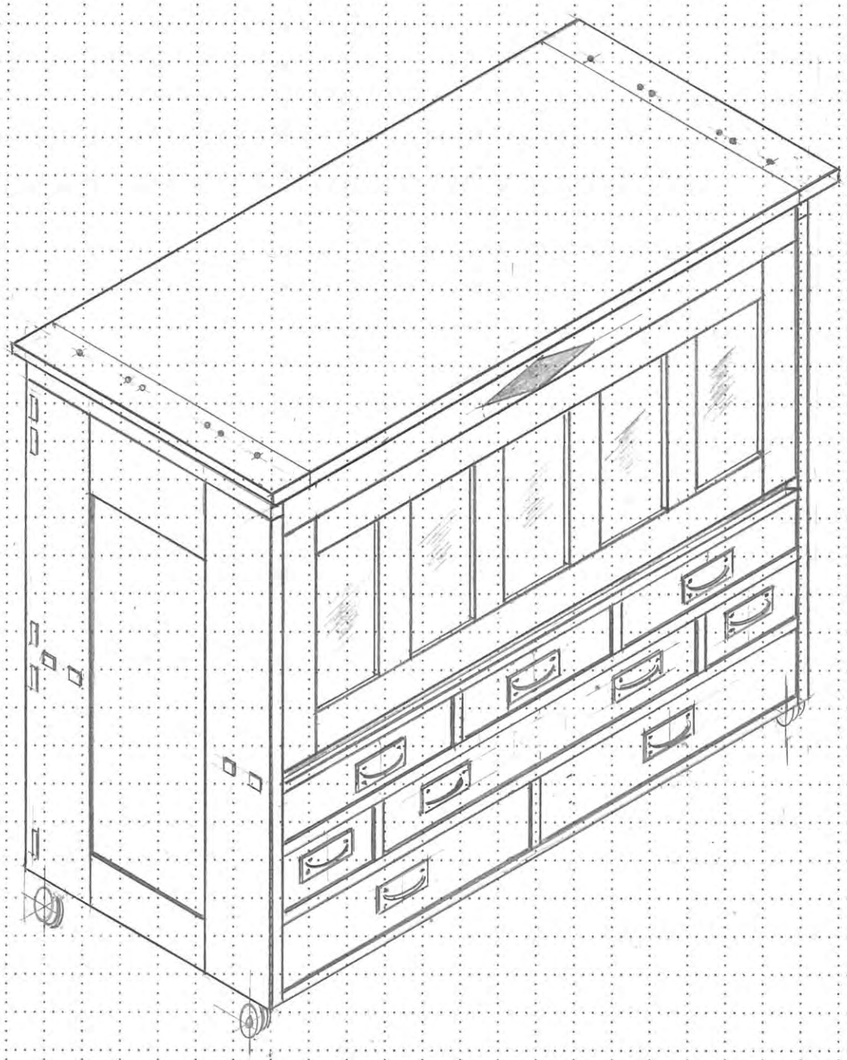
From the workbench of:

Date:



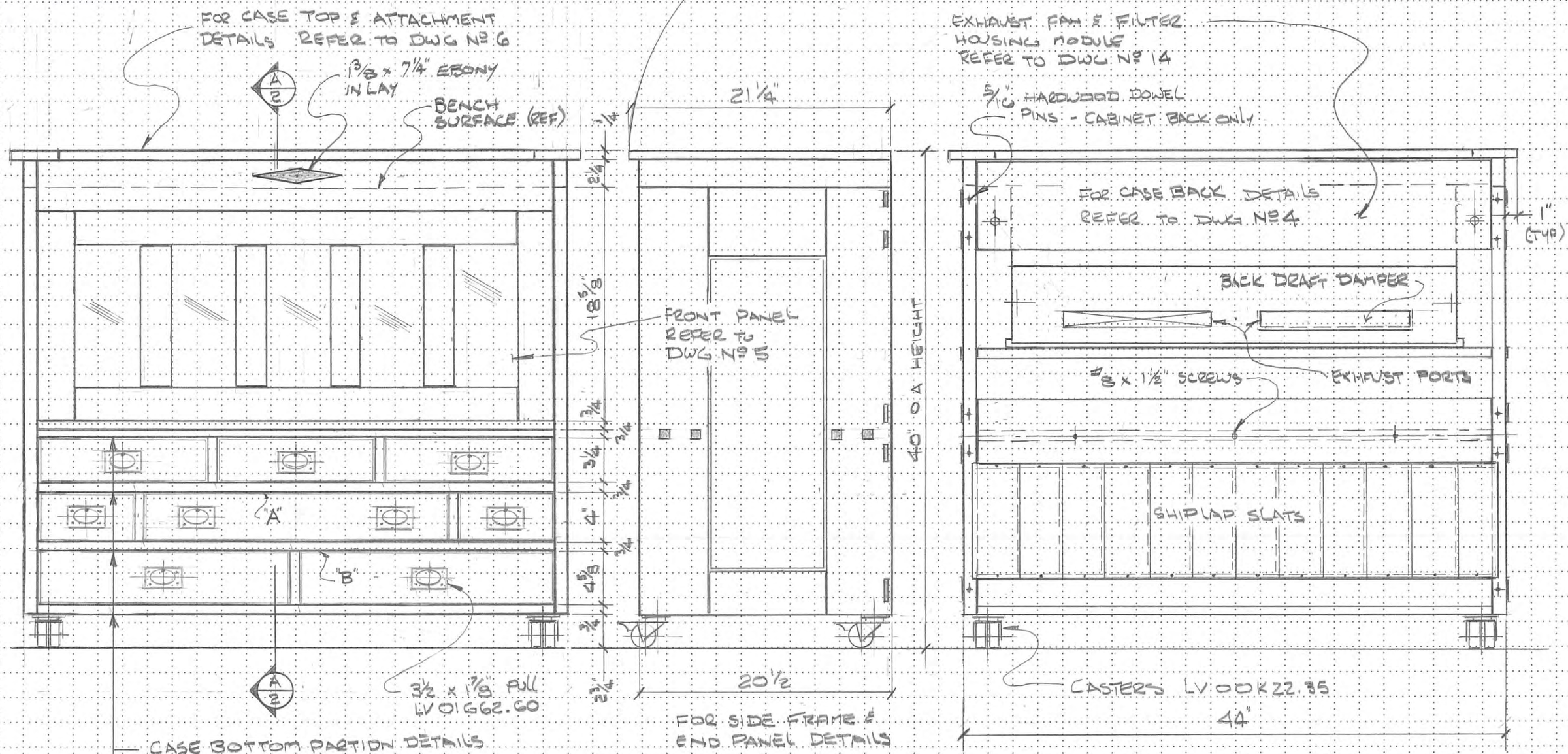
CONDO HOBBY BENCH

DRAWING LIST

COVER SHEET AS BUILT
MARCH 2019

From the workbench of:

Date:



CONDO HOBBY BENCH
BENCH CASE ELEVATIONS
SCALE ⅛" = 1"
FEB 2019

AS BUILT

DWG Nº 1

From the workbench of:

Date:

3/8" x 8" x 24" CONVENIENCE SHELF (FOLDABLE)

8"

AIR INLET GRILL

ELECTRICAL BOX

EXHAUST/FILTER HOUSING MODULE. REFER TO DWG Nº 14

TANGENTIAL BLOWER

EXHAUST PORT

LIFT ASSEMBLY

BAGLISTER EQUALIZER REFER TO DWG Nº 11

SHIPLAP BACK

TWIN WHEEL CASTERS LV 004.22.35

20½"

FILTER

GASKET

PIVOT

½ LIFT CONTROL NUT

DRAWER STOP

DRAWER GUIDE

A 1 SECTION

LED STRIP LIGHTING

REFER TO DWG Nº 6 FOR CASE TOP & ATTACHMENT DETAILS

1½" THK. MAPLE SLAB PIVOTING WORK BENCH REF DWG Nº 15

PIPE VISE & SUPPORT REFER TO DWG 15

3"

ALTERNATE BENCH POSITION

CHAMFER

30" DESK HEIGHT

37" BENCH HEIGHT

DESK OUTLINE

40" O.A. HEIGHT

3" 1/4 3" 1/4 3¼" 3" 1/4 4" 3" 1/4 4⅝" 3" 1/4 3¼" 2⅜"

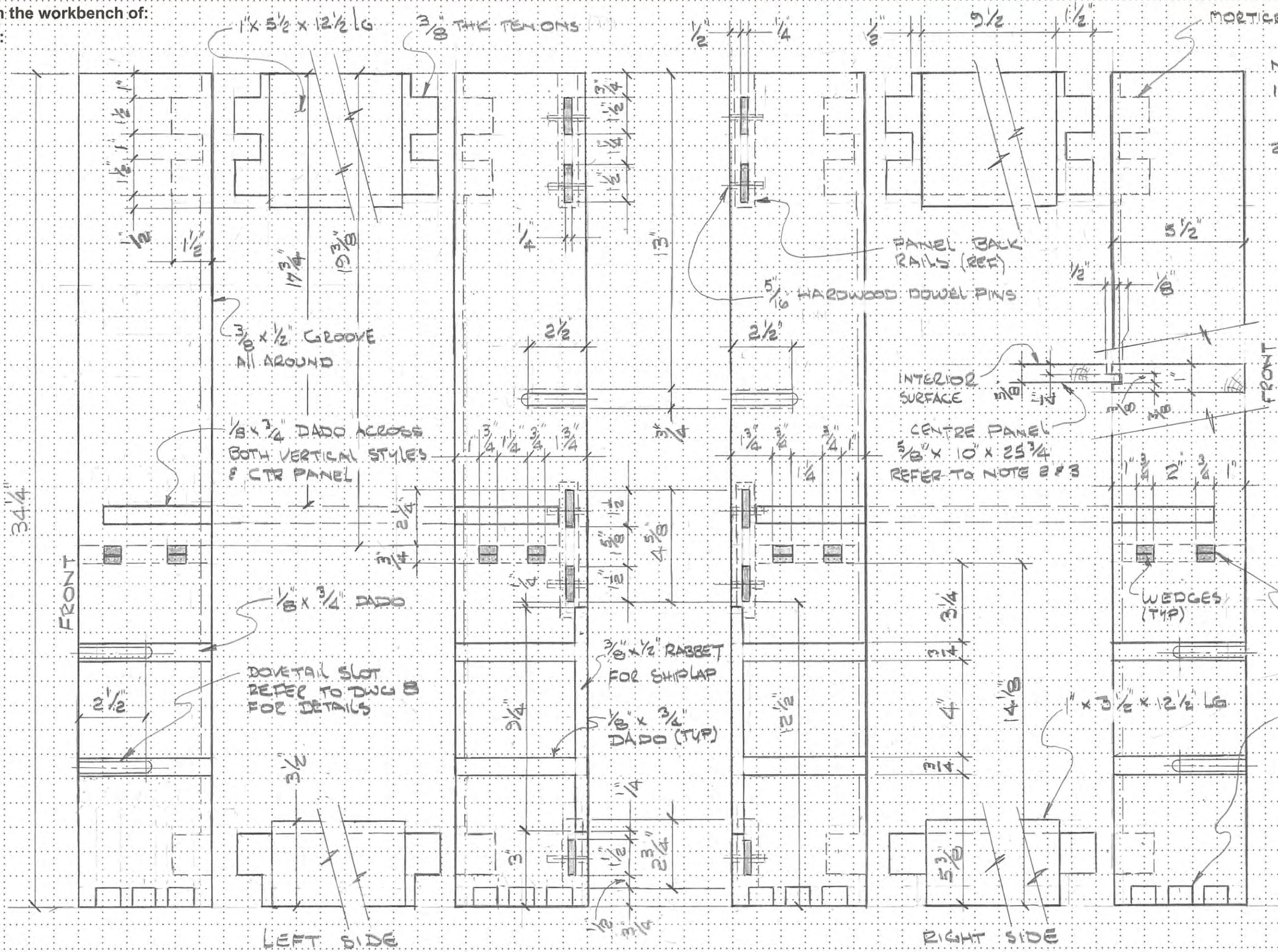
CONDO HOBBY BENCH
GEN. CROSS-SECTION
SCALE: ¼" = 1"
FEB 2019

AS BUILT

DWG Nº 2

From the workbench of:

Date:



NOTES:

1) WOOD SPECIES - QTR SAWN WHITE OAK.
2) TO ACCOMODATE WOOD MOVEMENT THRU MOISTURE CONTENT (MC) VARIATIONS ACROSS SEASONS USE LEE VALLEY WOOD MOVEMENT GUIDE LV 50K24.01
3) CALCULATION:
   - MOVEMENT VALUE 0.0018
   - BOARD WIDTH 10"
   - MC FLUCTUATION 6%
   - ADD 25% SAFETY MARGIN
   ∴ MOVEMENT =
   0.0018 x 10" x 6 (+25%)
   = 0.1350 (⅛")
4) GLUE - LEE VALLEY'S CABINET MAKERS GLUE LV 2002 GE (IE TO 20MIN OPEN TIME)

CONDO HOBBY BENCH
SIDE FRAME & END PANEL DETAILS
SCALE ½" = 1"
FEB 2019 AS BUILT
DWG Nº 3

From the workbench of:

Date:

NOTE:
- BACK COMPONENTS WOOD SPECIES - FLAT SAWN WHITE OAK
- SHIPLAP WOOD MOVEMENT

$$\frac{.0029 \times 43'' \times 6 \quad (+25\%)}{14 \text{ SPACES}} = 0.0668''$$

∴ PROVIDE 1/16" GAP BETWEEN SLATS

CABINET END PANEL (REF)

1/4" (TYP)

3/8 x 1/2" RABBET

1/16" GAP (TYP)

BACK SHIPLAP SLATS - RANDOM "YELLOW POPLAR"

#6 SCREWS

3/8 x 1/2" RABBET

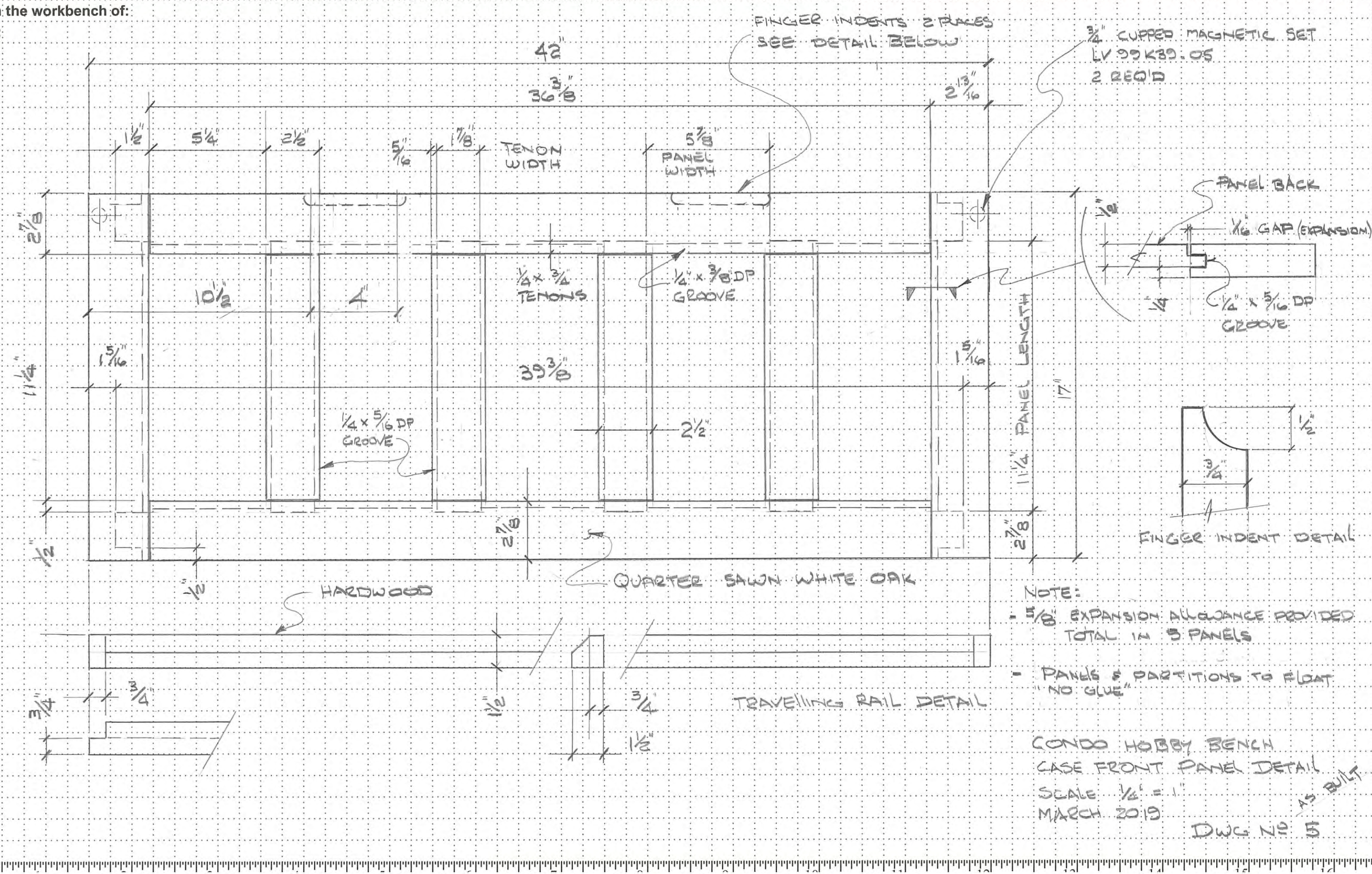
CONDO HOBBY BENCH
BENCH CASE BACK DETAILS
SCALE 1/4" = 1"
FEB 2019

As Built

DWG Nº 4

From the workbench of:

Date:



NOTE:

- 5/8" EXPANSION ALLOWANCE PROVIDED TOTAL IN 5 PANELS
- PANELS & PARTITIONS TO FLOAT "NO GLUE"

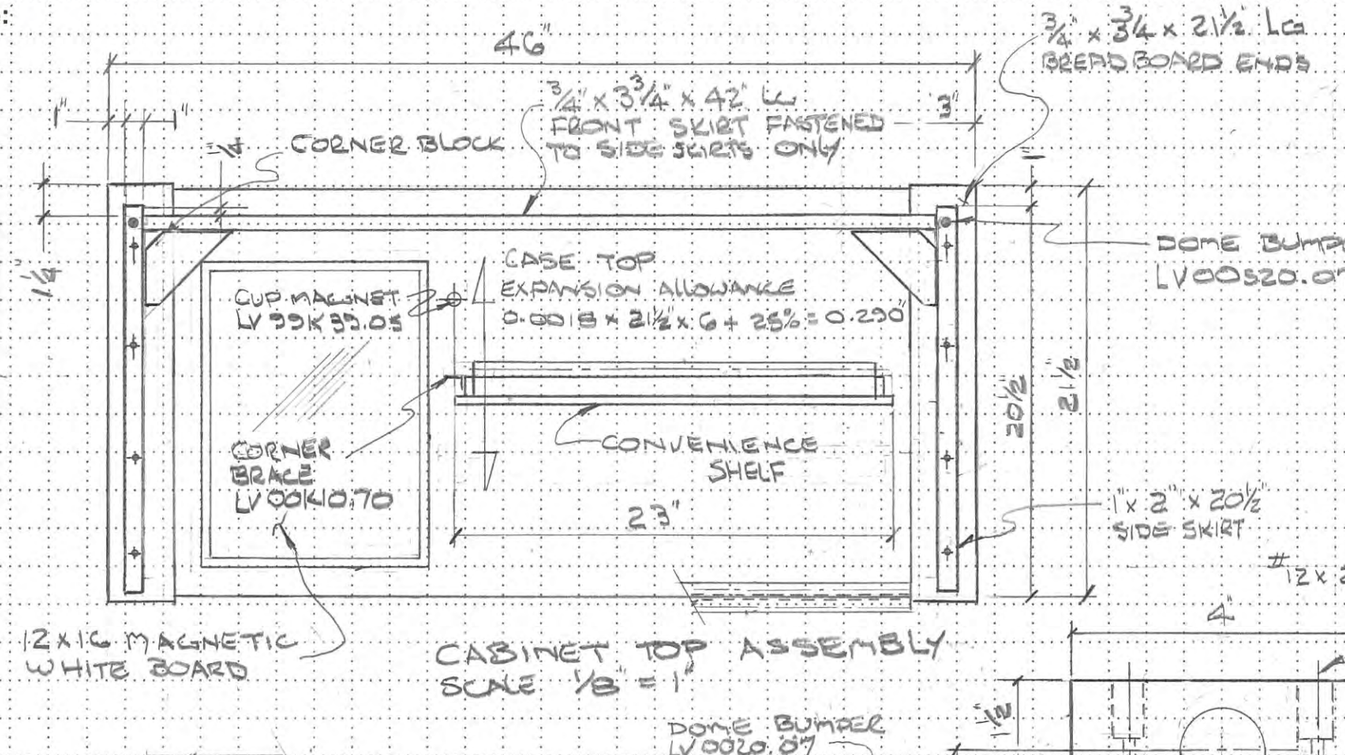
CONDO HOBBY BENCH
CASE FRONT PANEL DETAIL
SCALE 1/4" = 1"
MARCH 2019

AS BUILT

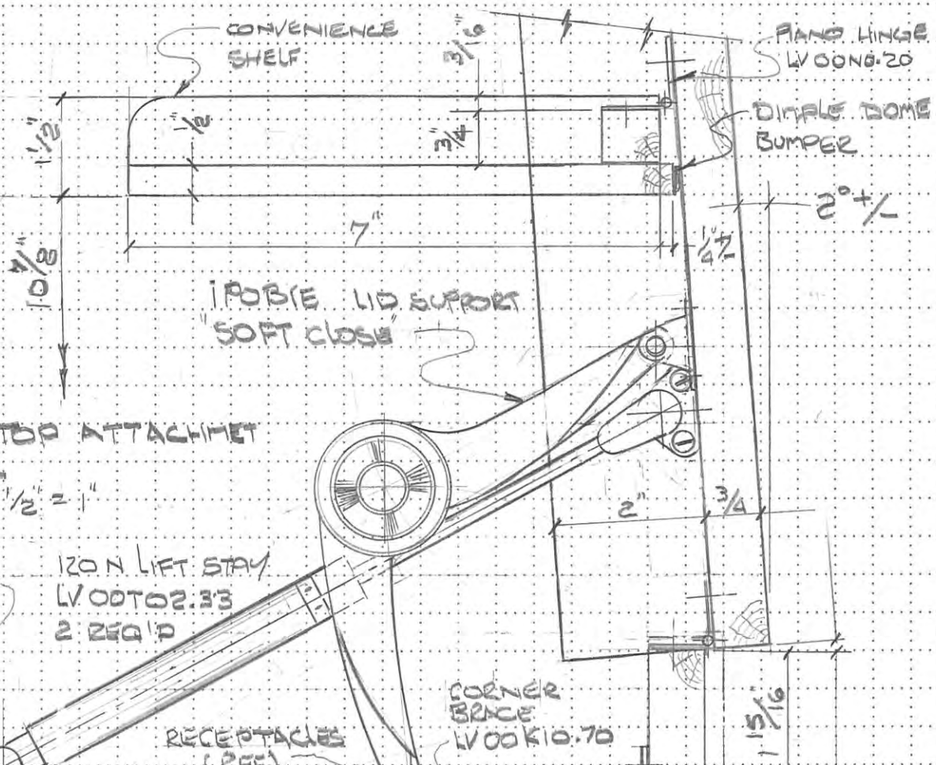
DWG Nº 5

From the workbench of:

Date:

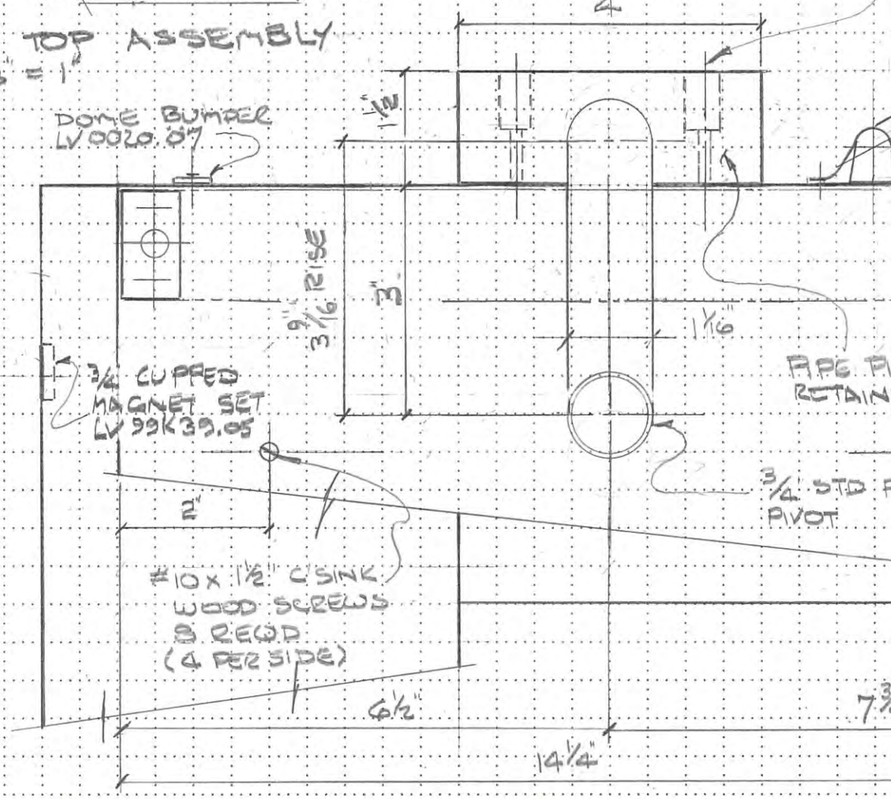


CABINET TOP ASSEMBLY
SCALE ⅛" = 1"



CASE TOP ATTACHMET
DETAIL
SCALE ½" = 1"

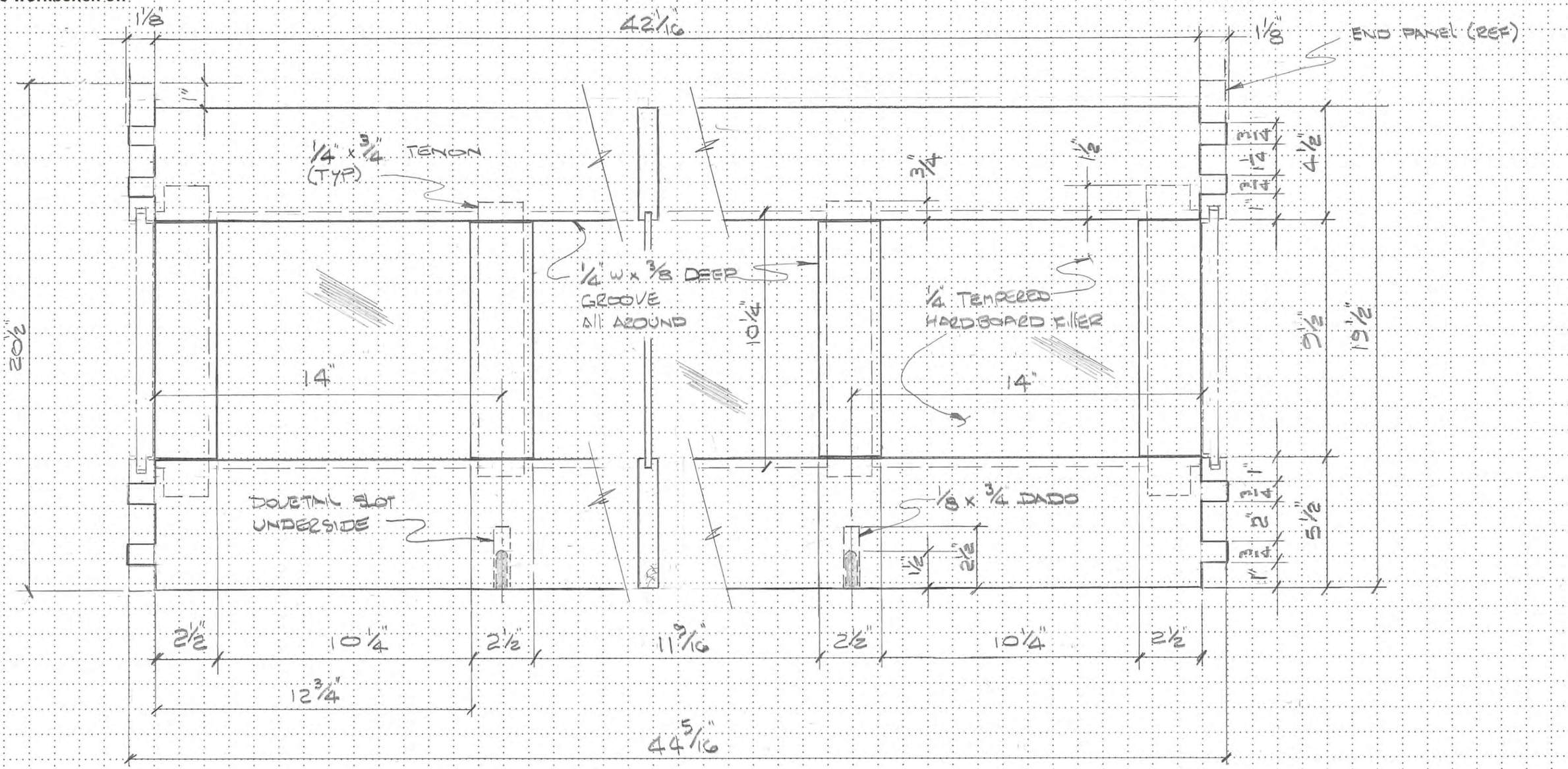
CONVENIENCE SHELF DETAIL
SCALE: ⅜" = 1"



CONDO HOBBY BENCH
CASE TOP & ATTACHMENT DETAILS
MAR 2019
SCALE: AS NOTED As built
DWG Nº 6

From the workbench of:

Date:



- REFER TO DWG Nº 8 FOR ADDITIONAL DETAILS
- MATERIAL - FLAT SAWN WHITE OAK

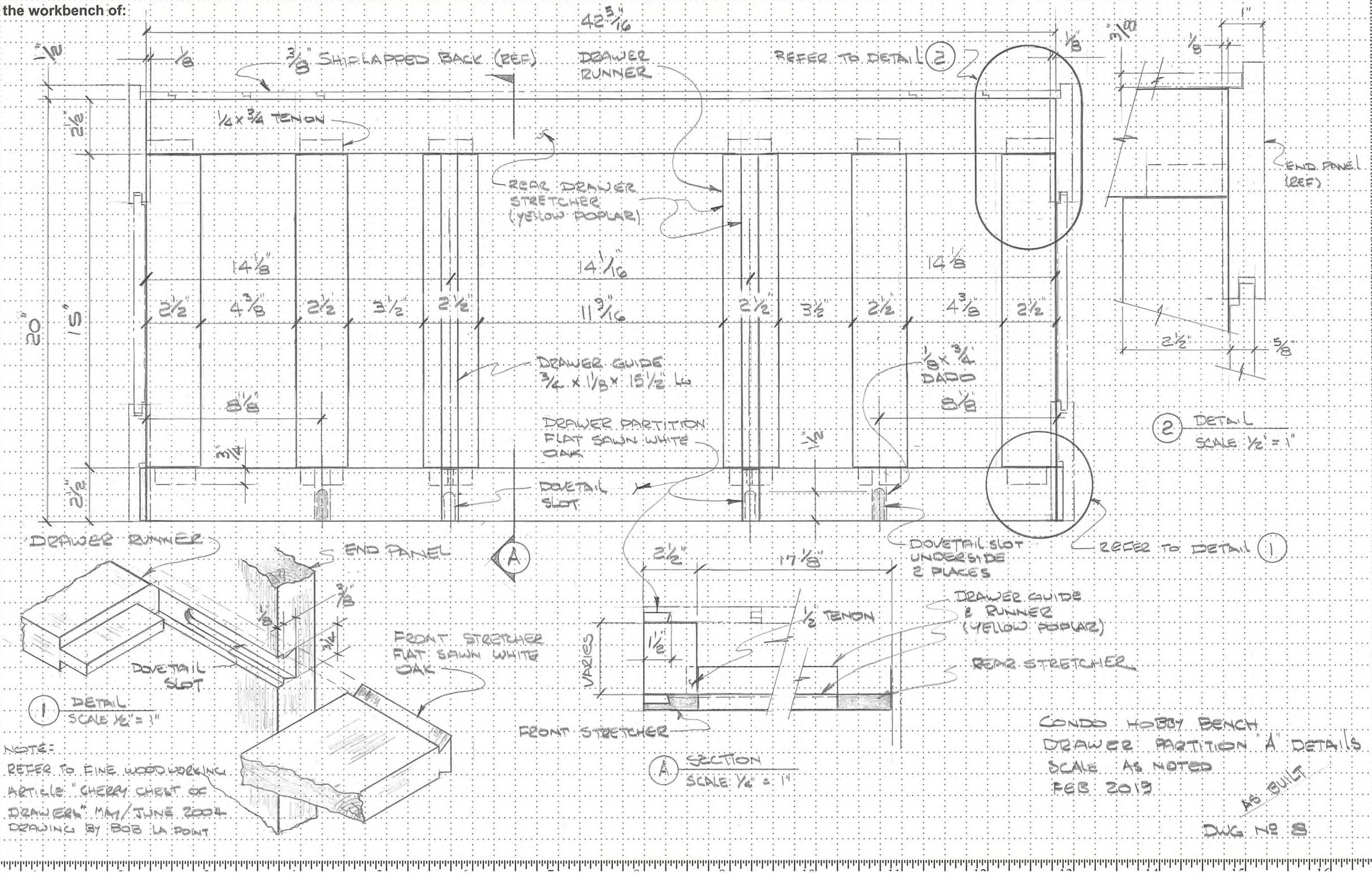
CONDO HOBBY BENCH
TOP DRAWER PARTITION DETAILS
SCALE ½" = 1"
FEB 2019

AS BUILT

DWG Nº 7

From the workbench of:

Date:



NOTE:
REFER TO FINE WOODWORKING ARTICLE "CHERRY CHEST OF DRAWERS" MAY/JUNE 2004 DRAWING BY BOB LA POINT

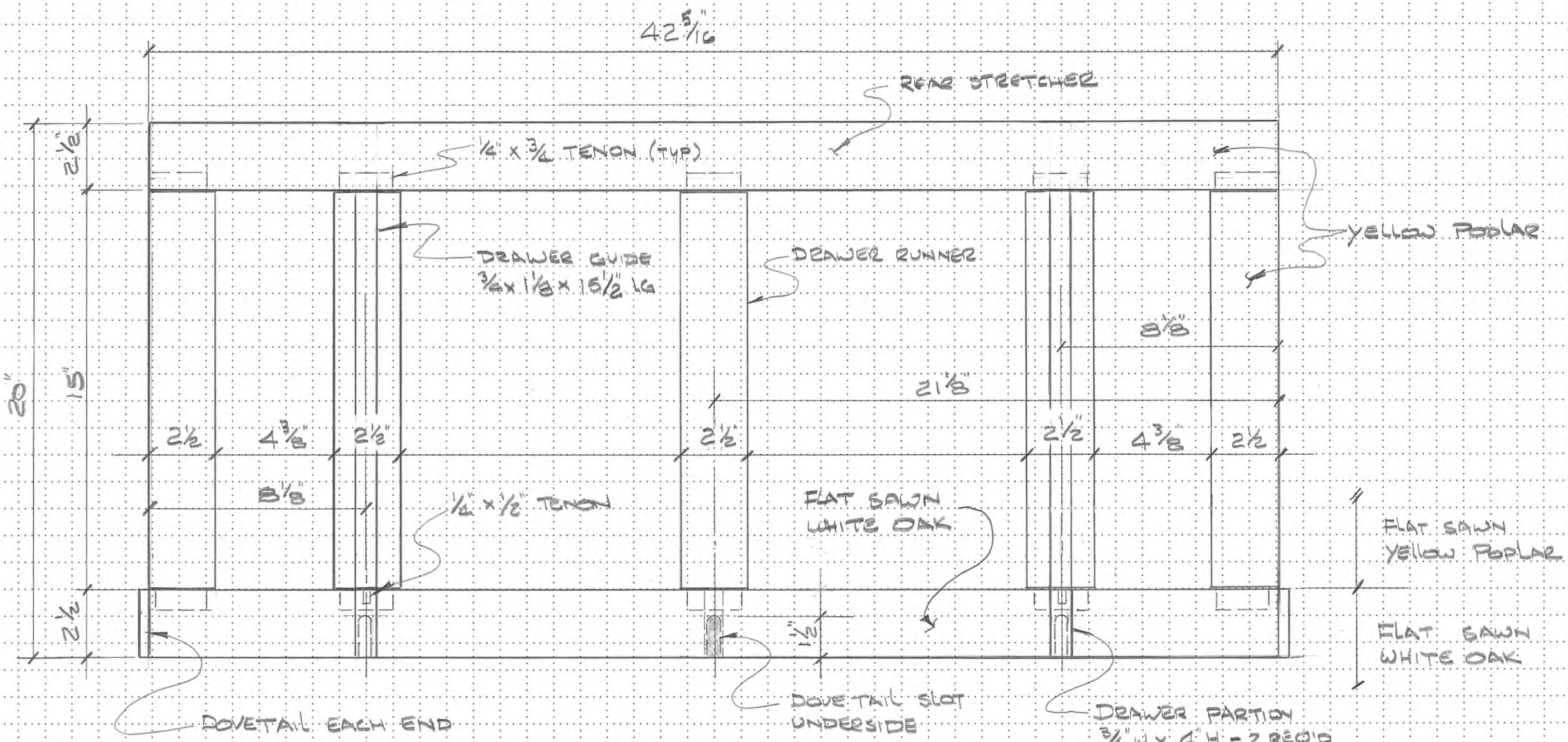
CONDO HOBBY BENCH
DRAWER PARTITION "A" DETAILS
SCALE AS NOTED
FEB 2019

AS BUILT

DWG Nº 8

From the workbench of:

Date:



NOTE:
REFER TO DWG Nº 8 FOR ADDIONAL DETAILS

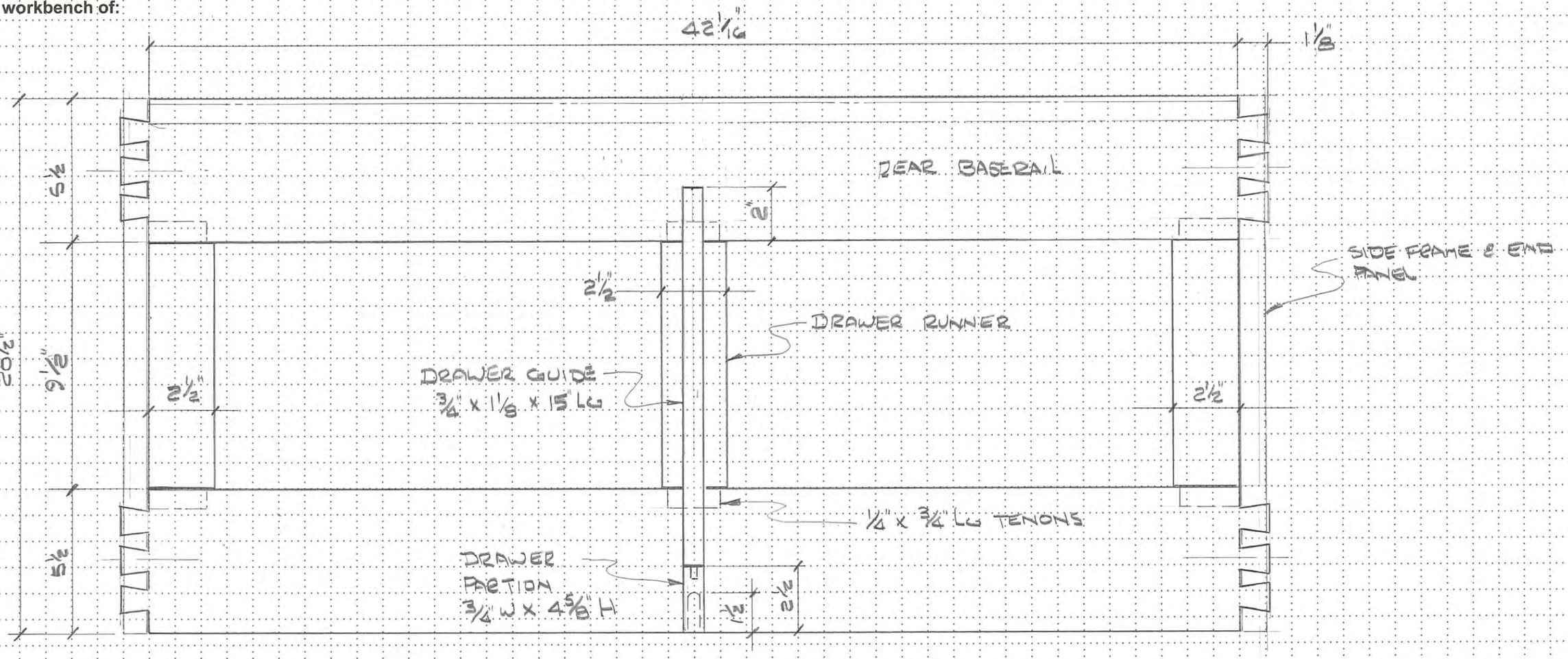
CONDO HOBBY BENCH
DRAWER PARTITION "B" DETAILS
DETAILS
SCALE: 1/8" = 1"
FEB 2019

AS BUILT

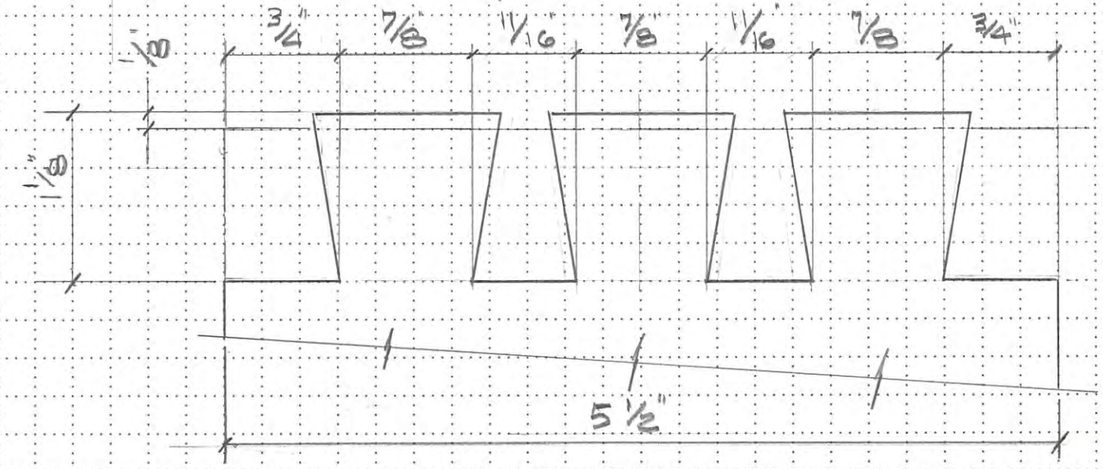
DWG Nº 9

From the workbench of:

Date:



- PARTITION BASE MATERIAL: FLAT SAWN WHITE OAK
- REFER TO DWG Nº 8 FOR ADDITIONAL DETAILS



THROUGH DOVETAILS
TAIL LAYOUT
(FULL SIZE)

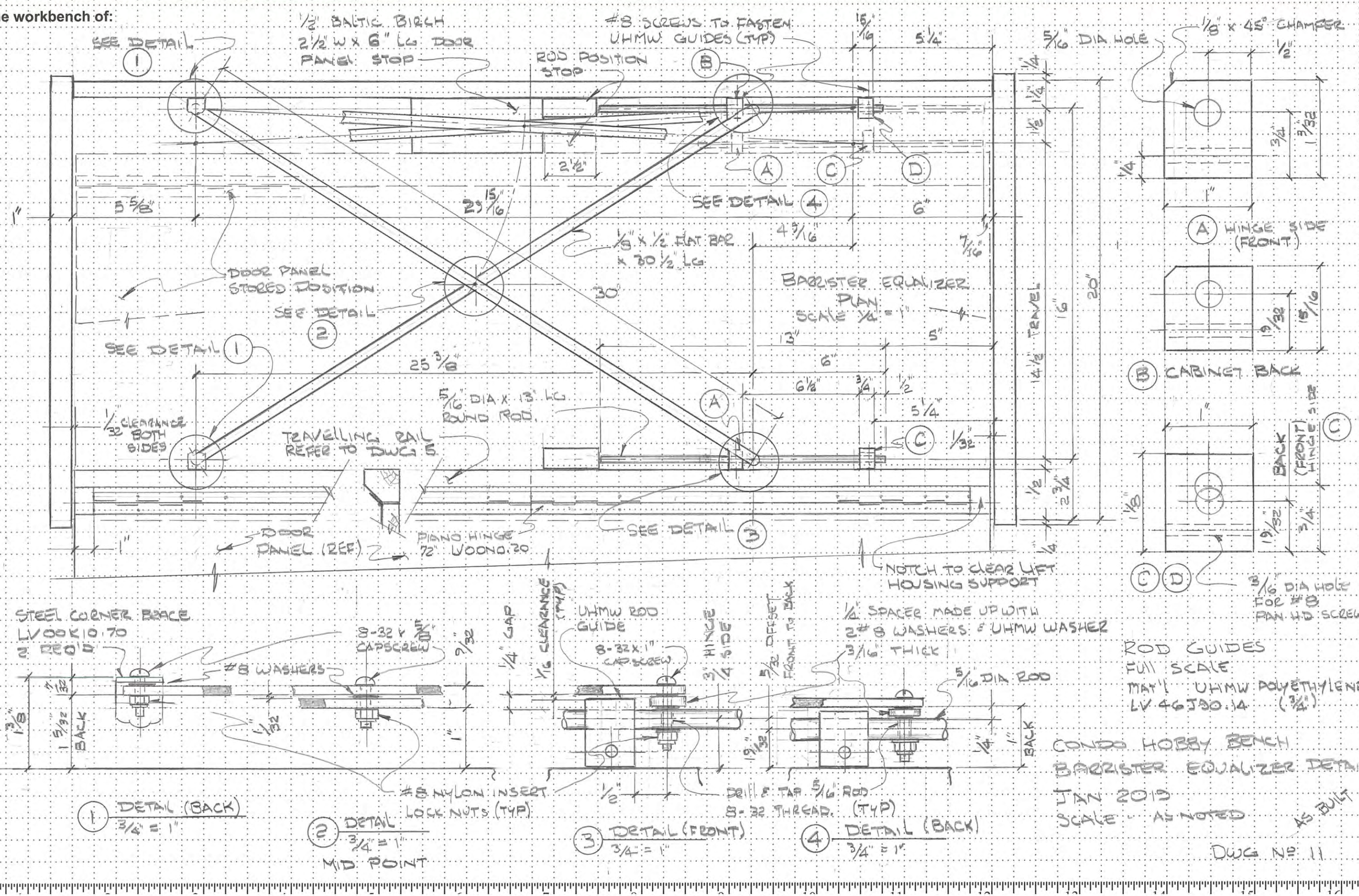
CONDO HOBBY BENCH
CASE BOTTOM DETAILS
SCALE 1/4" = 1" U.N.O.
FEB 2019

AS BUILT

DWG Nº 10

From the workbench of:

Date:



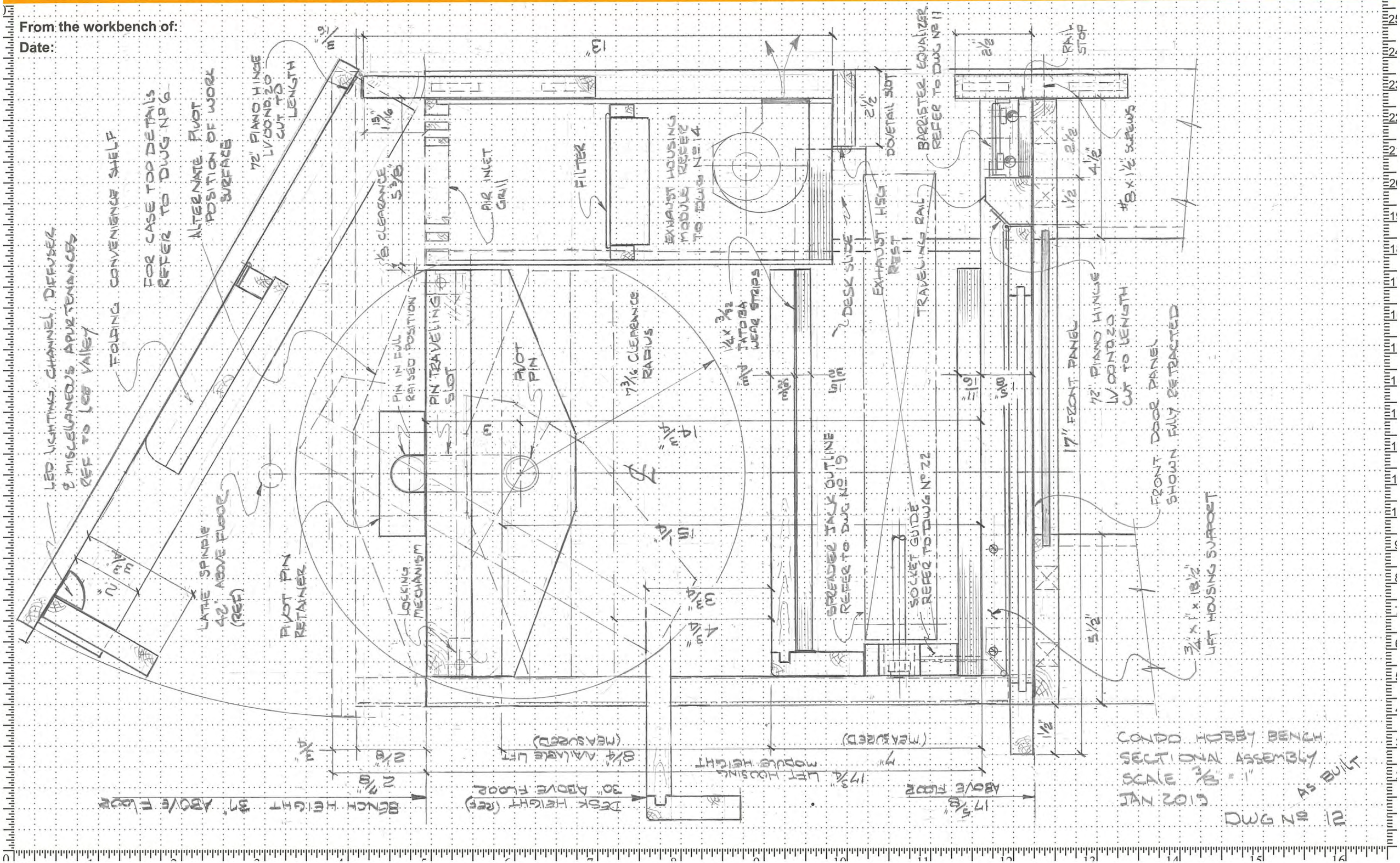
ROD GUIDES
FULL SCALE
MAT'L UHMW POLYETHYLENE
LV 46J30.14 (3/4")

CONDO HOBBY BENCH
BARRISTER EQUALIZER DETAIL
JAN 2019
SCALE - AS NOTED AS BUILT

DWG NO 11

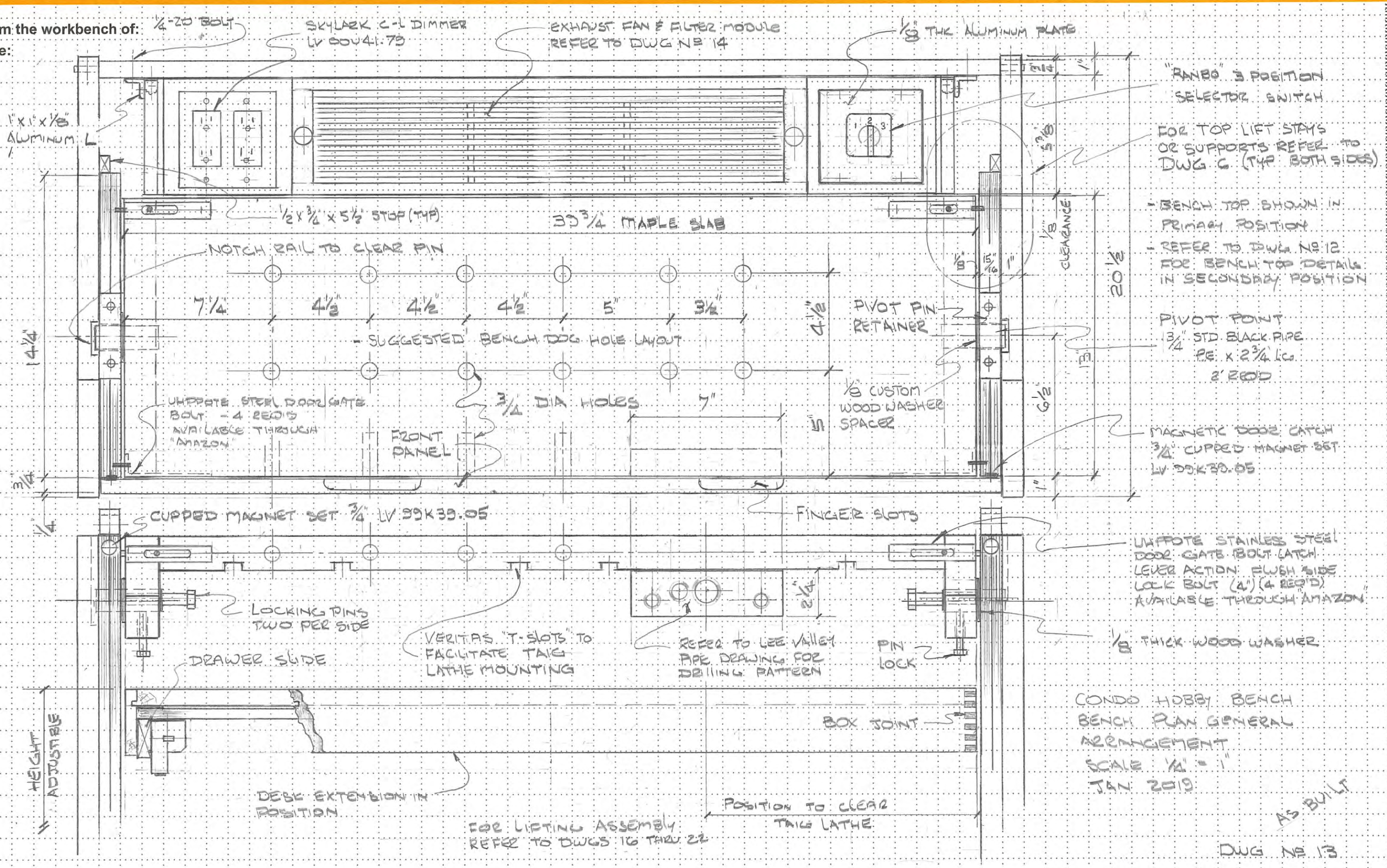
From the workbench of:

Date:



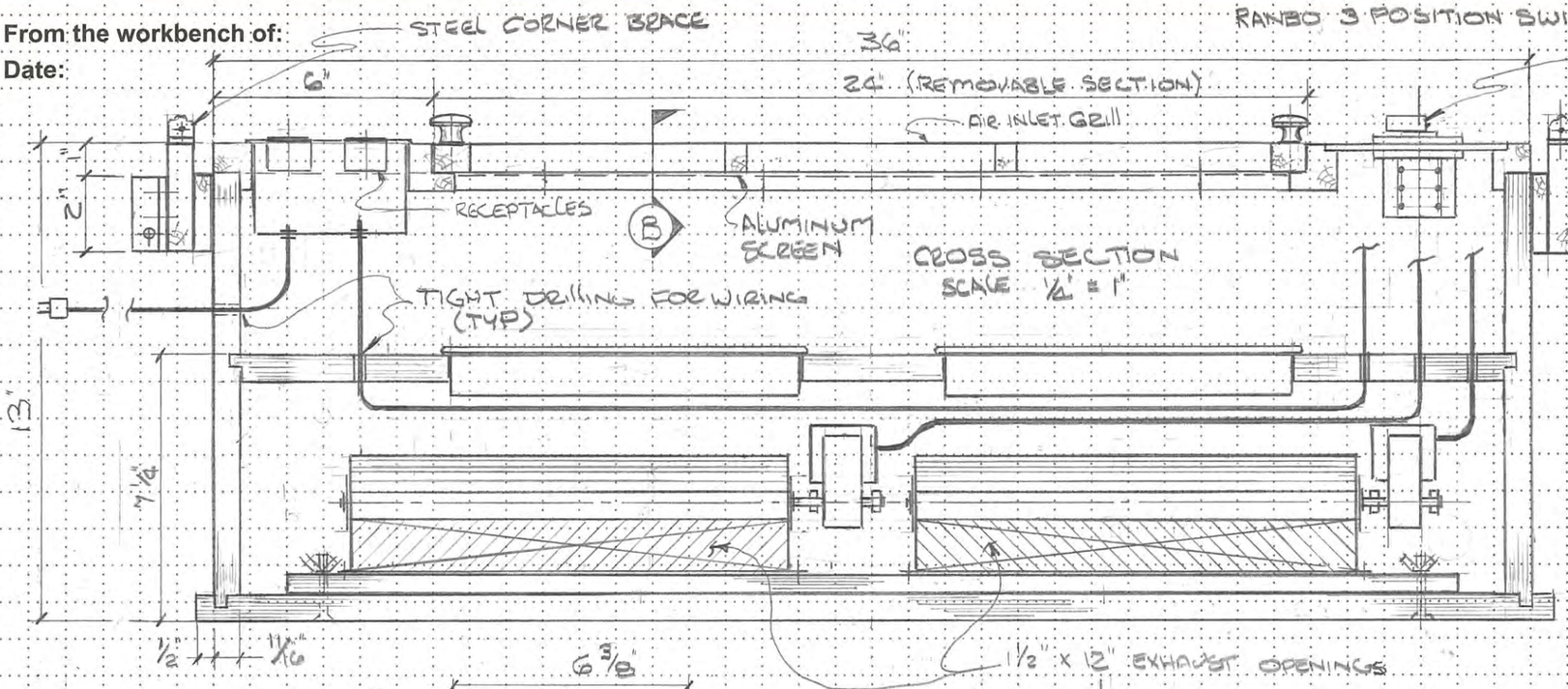
From the workbench of:

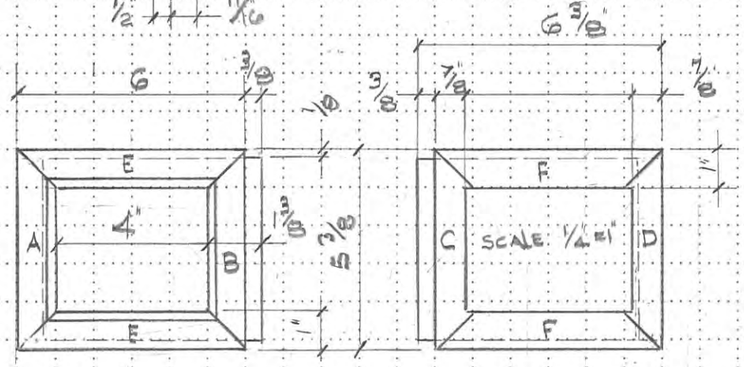
Date:



From the workbench of:

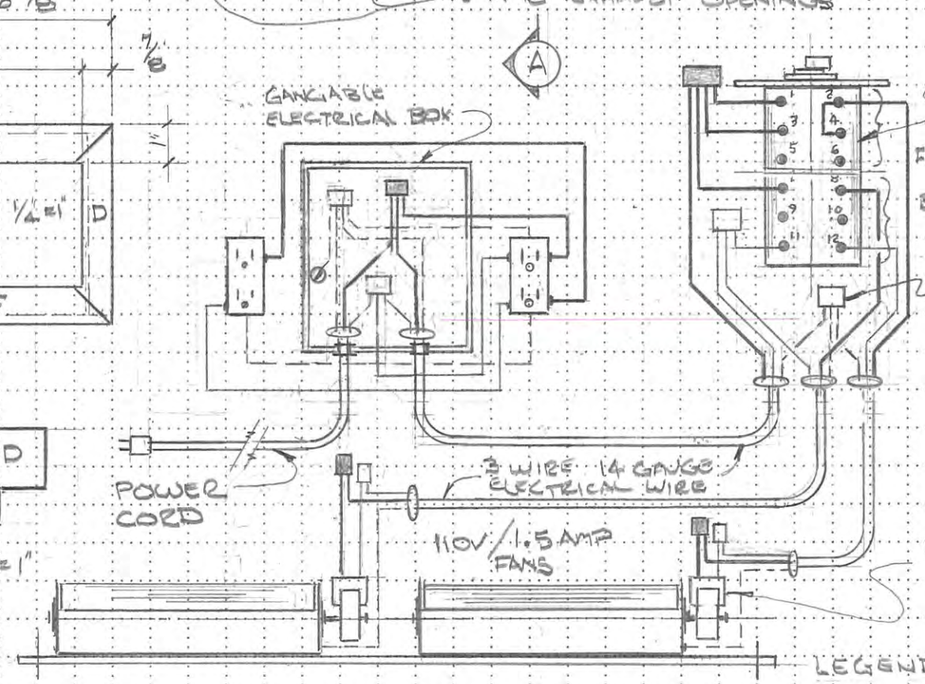
Date:



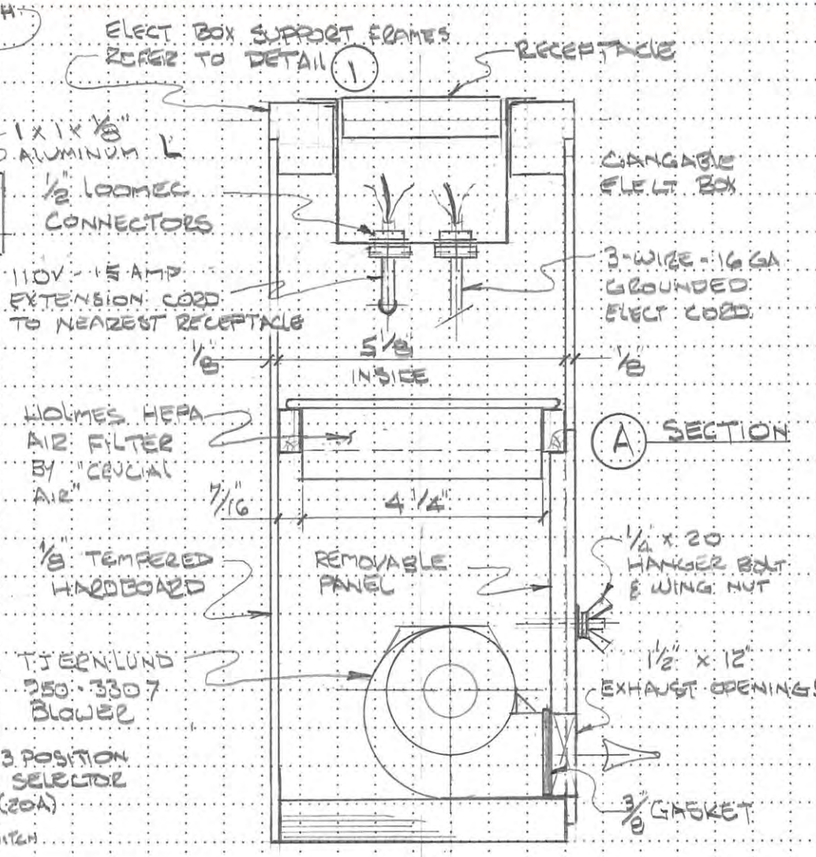


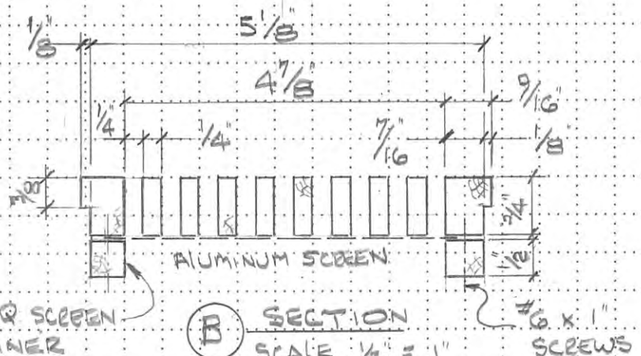
1 DETAIL

ELECTRICAL SUPPORT FRAMES



PICTORIAL WIRING DIAGRAM





CONDO HOBBY BENCH

EXHAUST FAN & FILTER HOUSING MODULE

SCALE - AS NOTED

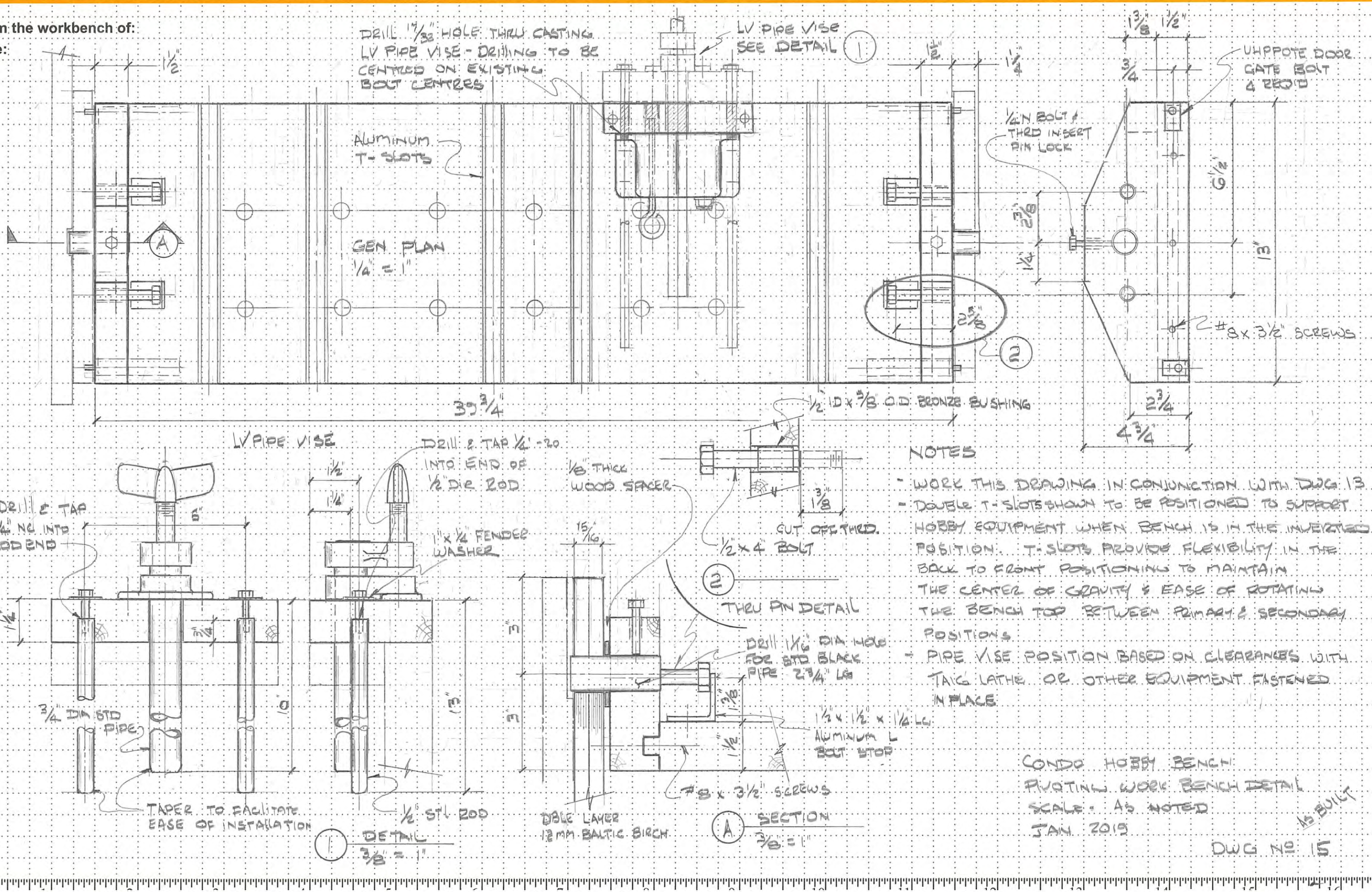
JAN 2019

AS BUILT

DWG Nº 14

From the workbench of:

Date:



NOTES

- WORK THIS DRAWING IN CONJUNCTION WITH DWG 13
- DOUBLE T-SLOTS SHOWN TO BE POSITIONED TO SUPPORT HOBBY EQUIPMENT WHEN BENCH IS IN THE INVERTED POSITION. T-SLOTS PROVIDE FLEXIBILITY IN THE BACK TO FRONT POSITIONING TO MAINTAIN THE CENTER OF GRAVITY & EASE OF ROTATING THE BENCH TOP BETWEEN PRIMARY & SECONDARY POSITIONS
- PIPE VISE POSITION BASED ON CLEARANCES WITH TAIG LATHE OR OTHER EQUIPMENT FASTENED IN PLACE

CONDO HOBBY BENCH
PIVOTING WORK BENCH DETAIL
SCALE: AS NOTED
JAN 2019

½ BUILT

DWG Nº 15

From the workbench of:

Date:

2 LAYERS OF 12mm BALTIC BIRCH PLYWOOD (15/32")

NO GLUE DESK SIDES SLOT & SCREW EXPANSION PROTECTION

GLUE LINE

200-POUND SLIDE LV 02K32.16

DIMPLE DOME BUMPER LV 00520.07

B 17

A 17

20"

SLIDING SURFACE

DESK EXTENSION

3/4" MAPLE DESK

3/32" THICK JATOBA WEAR STRIPS

12mm (15/32") BALTIC BIRCH PLATEN

SCISSOR LIFT GUIDE 18" LG

9"

FOR SCISSOR LIFT DETAILS REFER TO DWGS 17 & 18

SYMETRICAL ABOUT ℄

NOTES

- SCISSOR LIFT MODULE FASTENED TO WORKBENCH FRAME WITH #8 SCREWS - 4 PER SIDE
- FOR CRITICAL DIMENSIONS REFER TO GEOMETRY DWGS 23, 24 & 25

DRIVEN ARM

FOLLOWER ARM

PIN TRAVEL

1/8" CLEARANCE

15 1/4" FULL LIFT

3 3/4" LIFT TO DESK POSITION

DRIVEN ARM STABILIZER/BRACE 3/4" x 5 1/2"

4 7/16" TRAVEL

#8 SCREWS (TYP)

OFFSET HINGE LV 02H13.33

SPREADER JACK ASSEMBLY REFER TO DWG Nº 19

COLLAPSED

DESK POSITION STOP 18mm BALTIC BIRCH BASE

SPREADER JACK TRAVEL GUIDE

END PANEL SUPPORT

DIMPLE DOME BUMPER

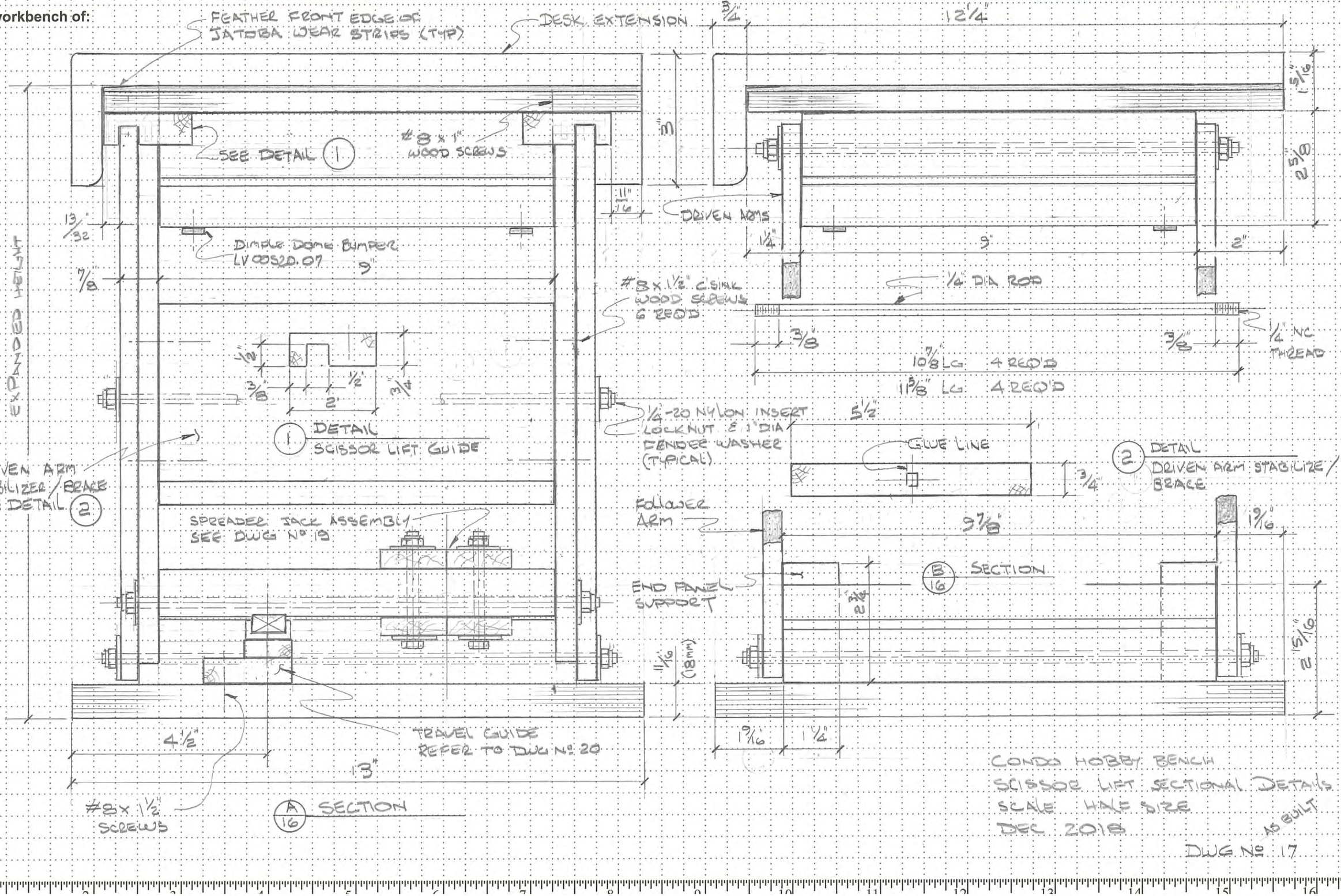
CONDO HOBBY BENCH
SCISSOR LIFT ASSEMBLY
1/2" = 1"
SEPT 2020
REVISED

AS BUILT

DWG Nº 16

From the workbench of:

Date:



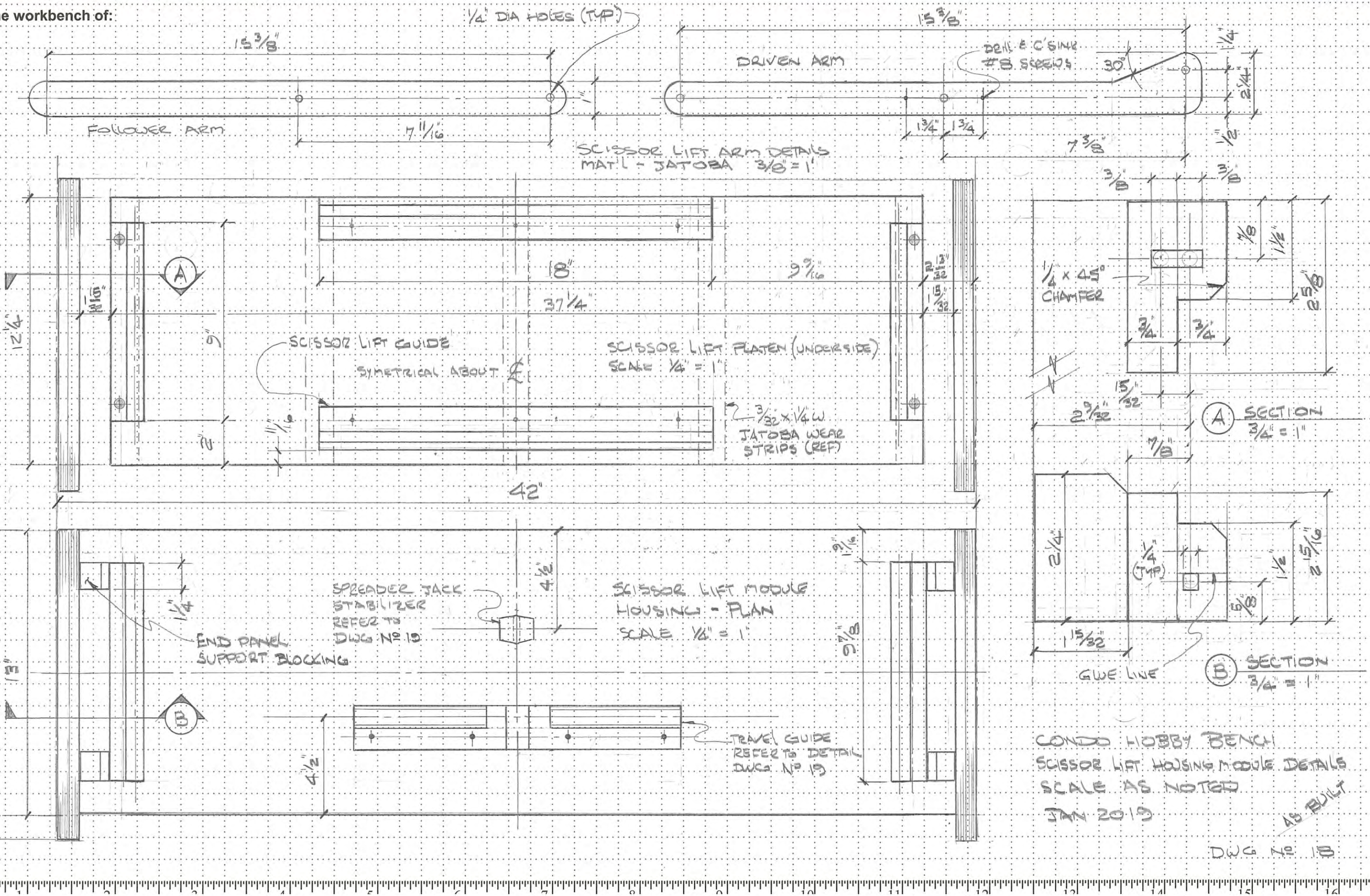
CONDO HOBBY BENCH
SCISSOR LIFT SECTIONAL DETAILS
SCALE HALF SIZE
DEC 2016

AS BUILT

DWG No. 17

From the workbench of:

Date:



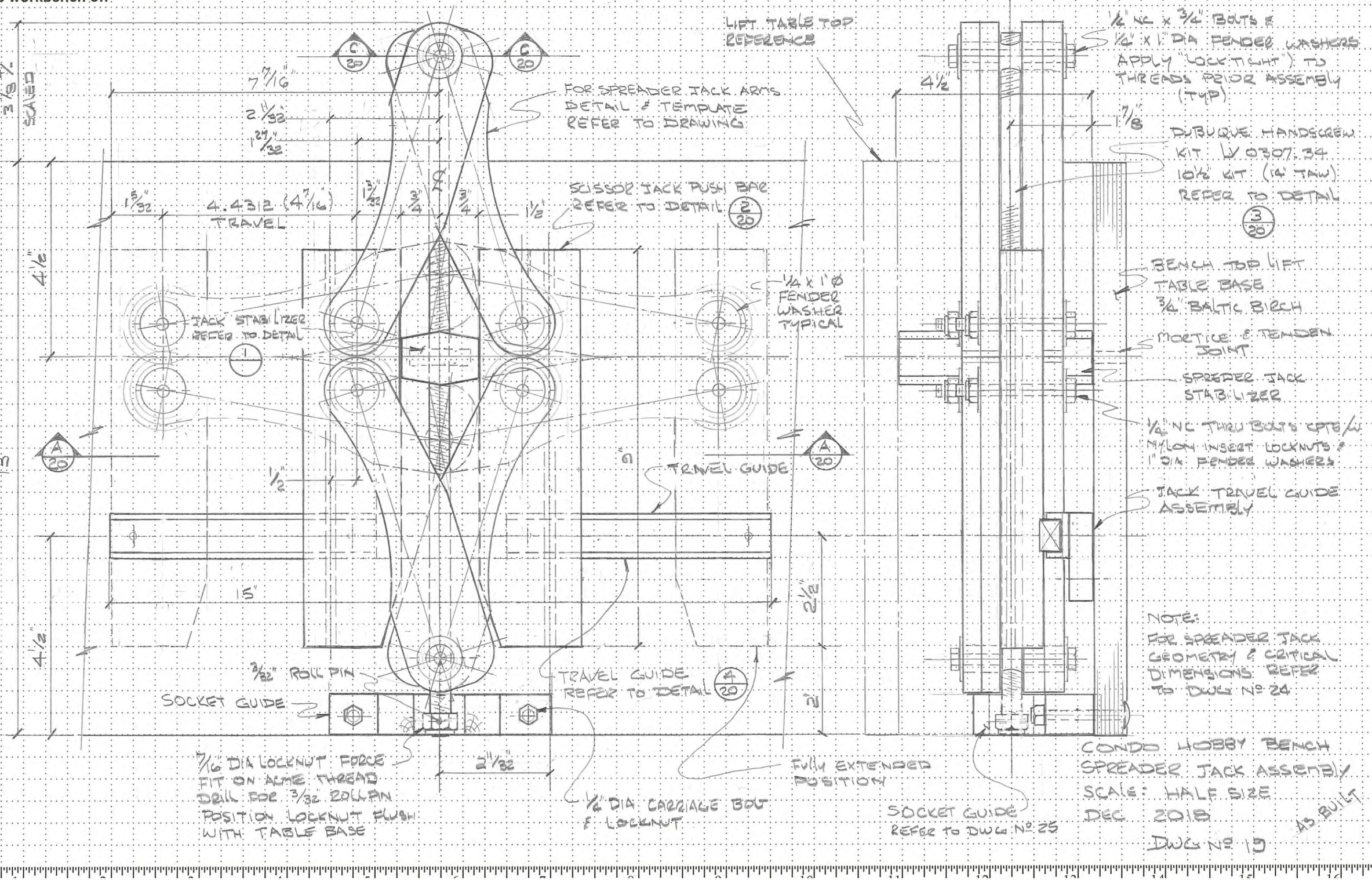
CONDO HOBBY BENCH
SCISSOR LIFT HOUSING MODULE DETAILS
SCALE AS NOTED
JAN 2019

AS BUILT

DWG No. 18

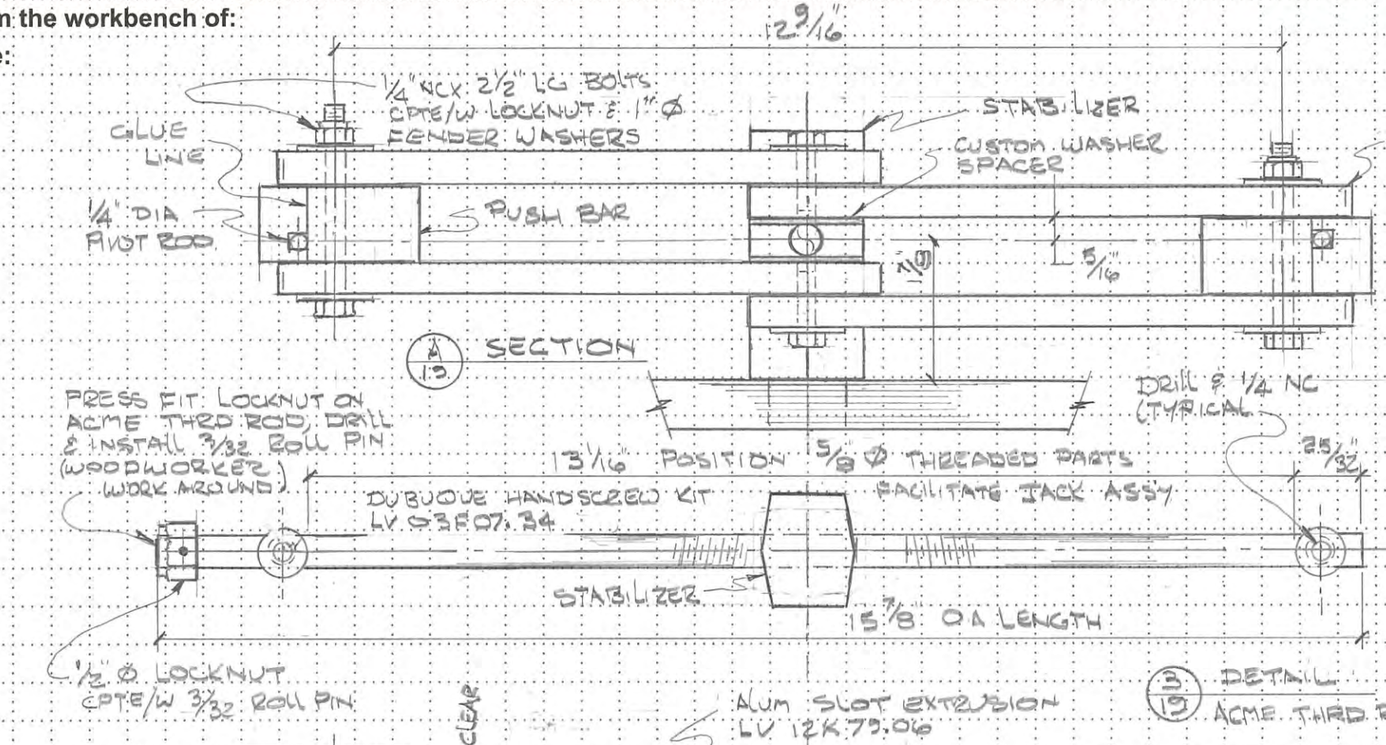
From the workbench of:

Date:



From the workbench of:

Date:



SPREADER JACK DETAILS

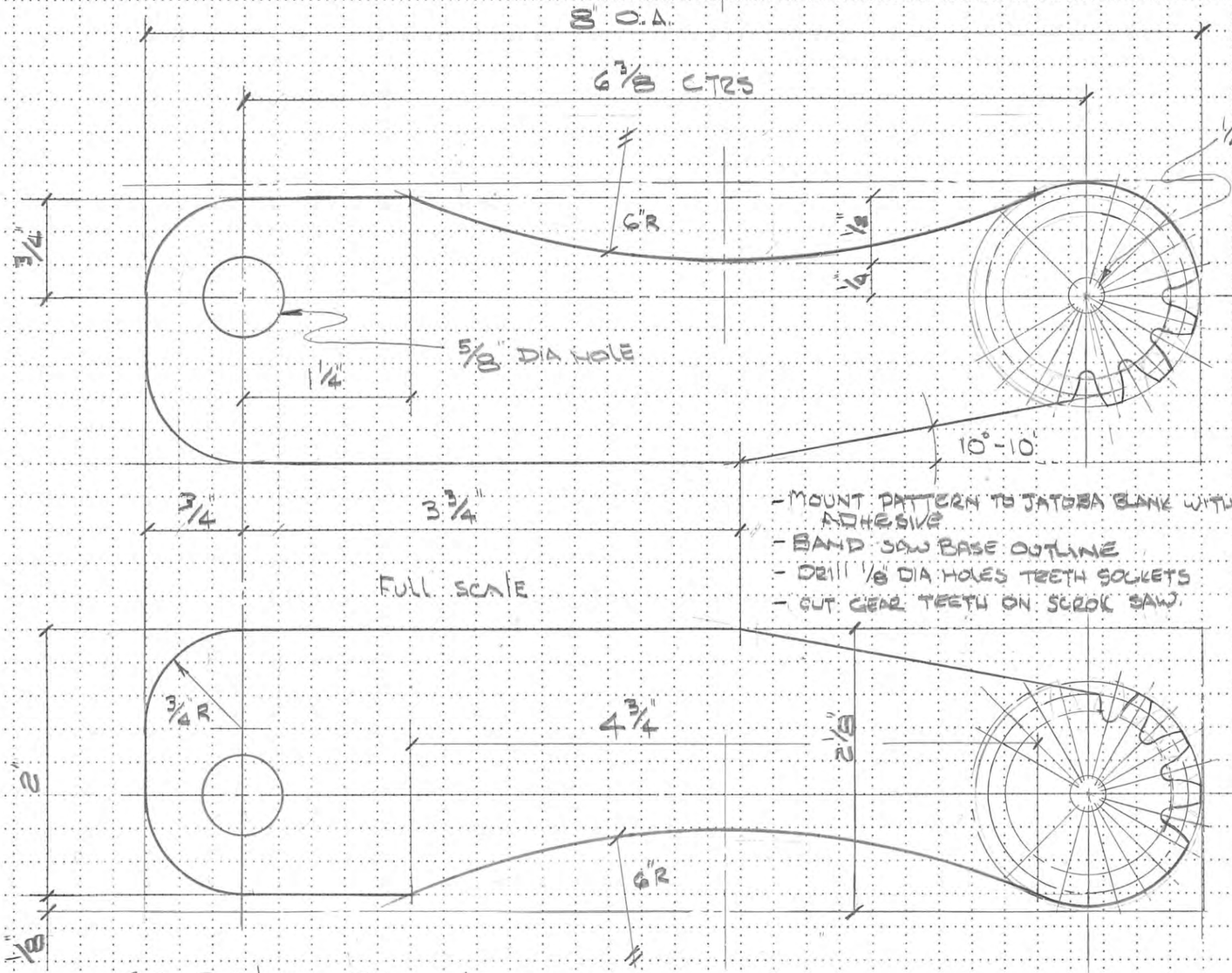
SCALE - HALF SIZE UNO

DEC 2018

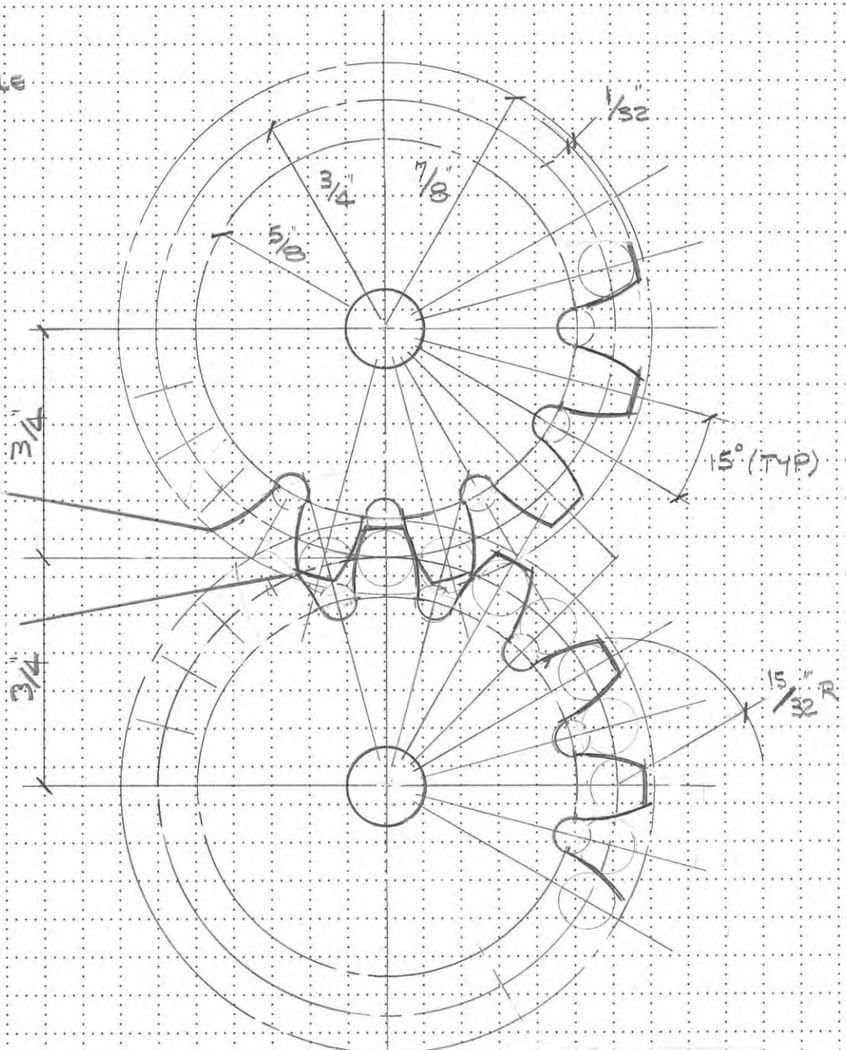
DWG Nº 20 AS BUILT

From the workbench of:

Date:



- MOUNT PATTERN TO JATOBA BLANK WITH SPRAY ADHESIVE
- BAND SAW BASE OUTLINE
- DRILL 1/8 DIA HOLES TEETH SOCKETS
- CUT GEAR TEETH ON SCROLL SAW.



GENERAL NOTES

- SELECTED HARDWOOD FOR SPREADER JACK COMPONENTS. "JATOBA" (BRAZILIAN CHERRY) DUE TO INTERLOCKING GRAIN DENSITY & HARDNESS.
- TEST FIT & FILE GEARS TO ENSURE SMOOTH OPERATION.
- COAT GEARS, HOLES & WEAR SURFACES WITH CHANDACYLATE
- APPLY NATURAL WAX FINISH

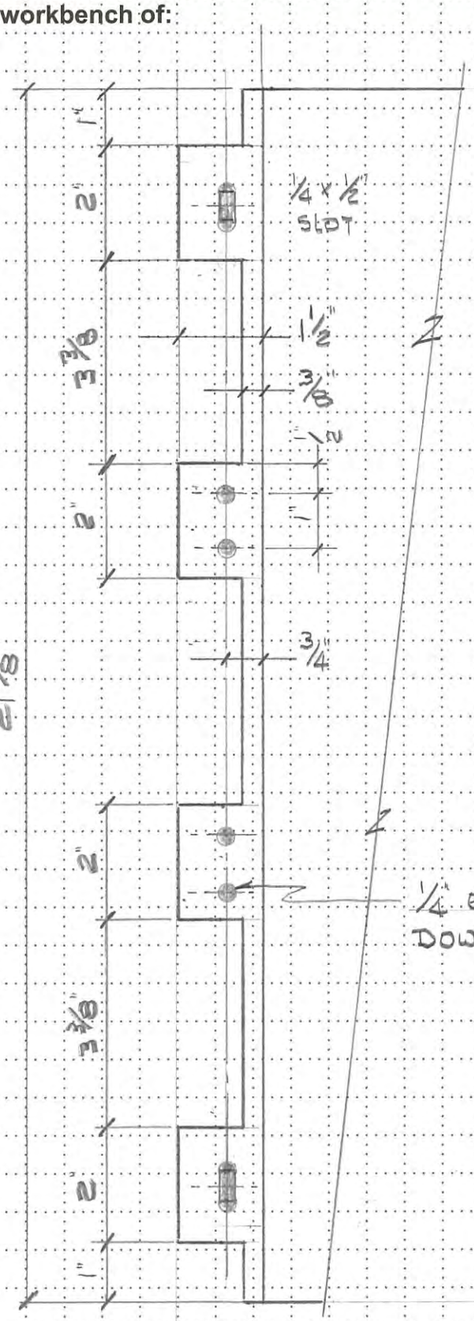
CONDO HOBBY BENCH
SPREADER JACK ARM TEMPLATES
SCALE AS NOTED
DEC 2018

AS BUILT

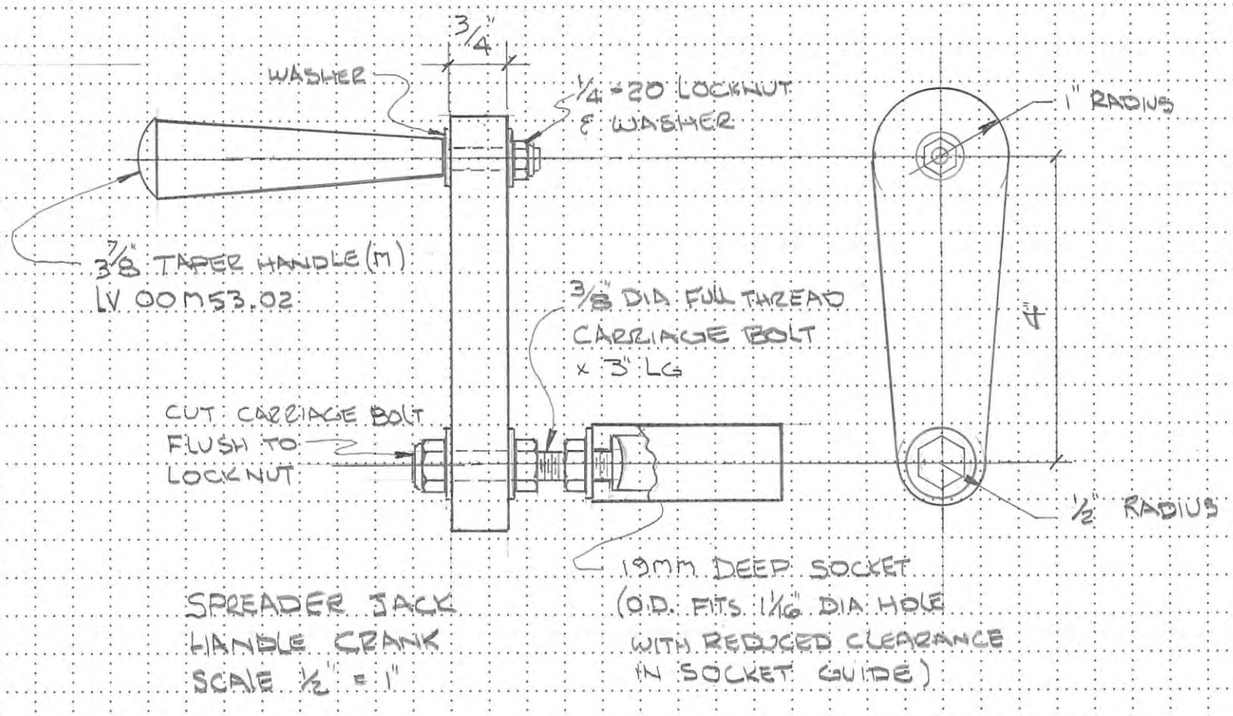
DWG Nº 21

From the workbench of:

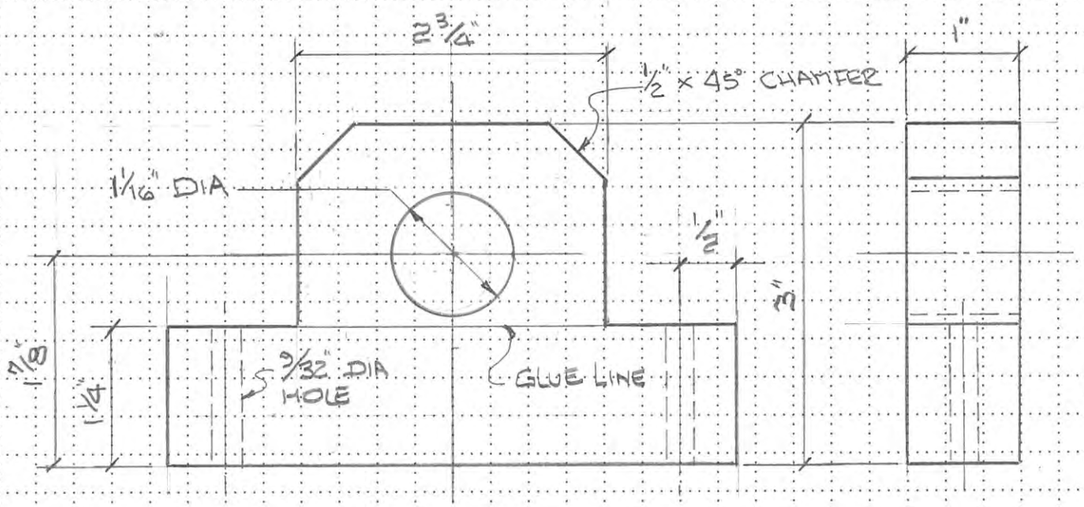
Date:



BREAD BOARD END DETAIL
SCALE 3/8" = 1"



SPREADER JACK HANDLE CRANK
SCALE 1/2" = 1"



SPREADER JACK SOCKET GUIDE
SCALE 3/4" = 1"

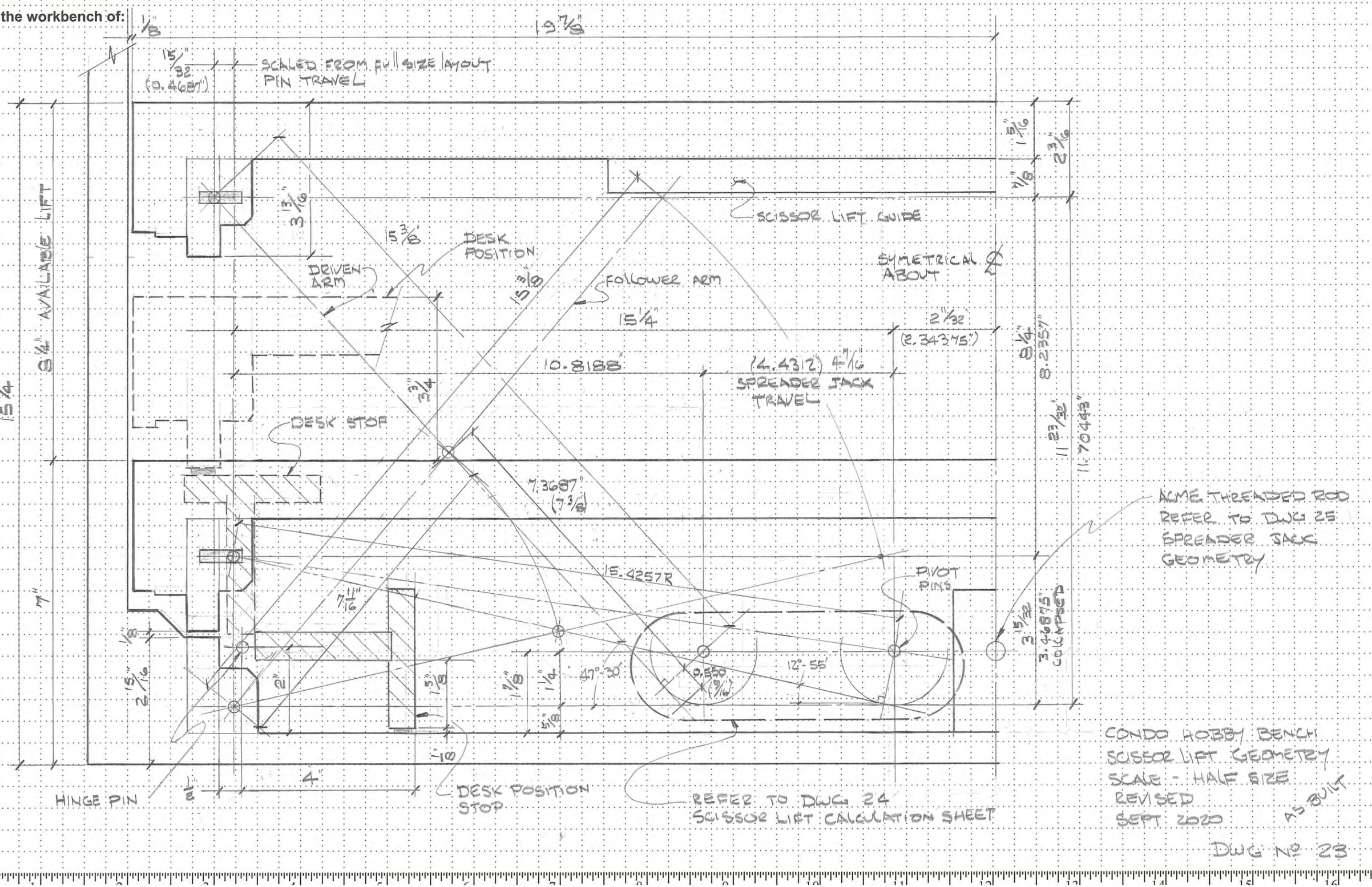
CONDO HOBBY BENCH
MISCELLANEOUS DETAILS
SCALE AS NOTED
SEPT 2020

DWG Nº 22

AS BUILT

From the workbench of:

Date:

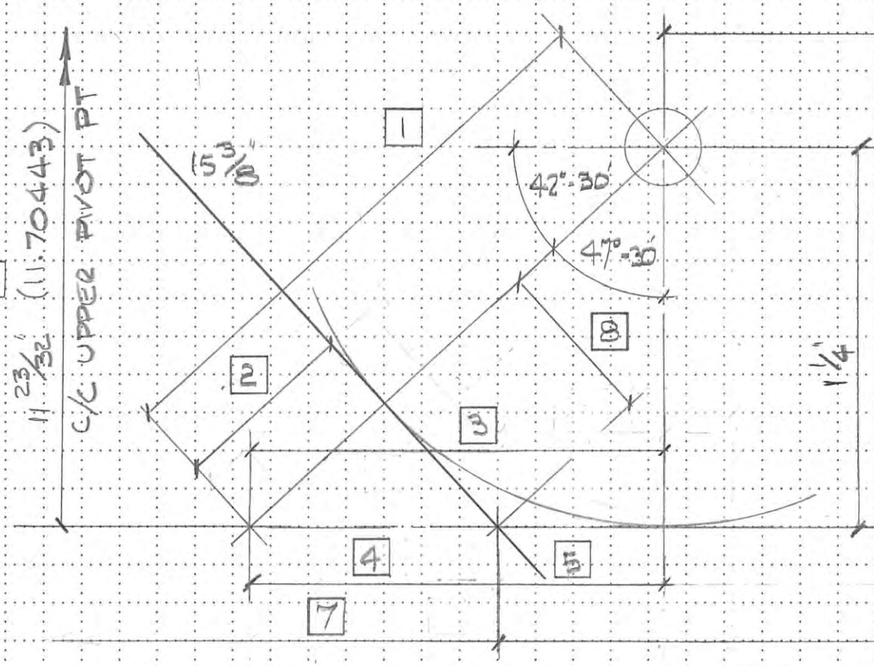


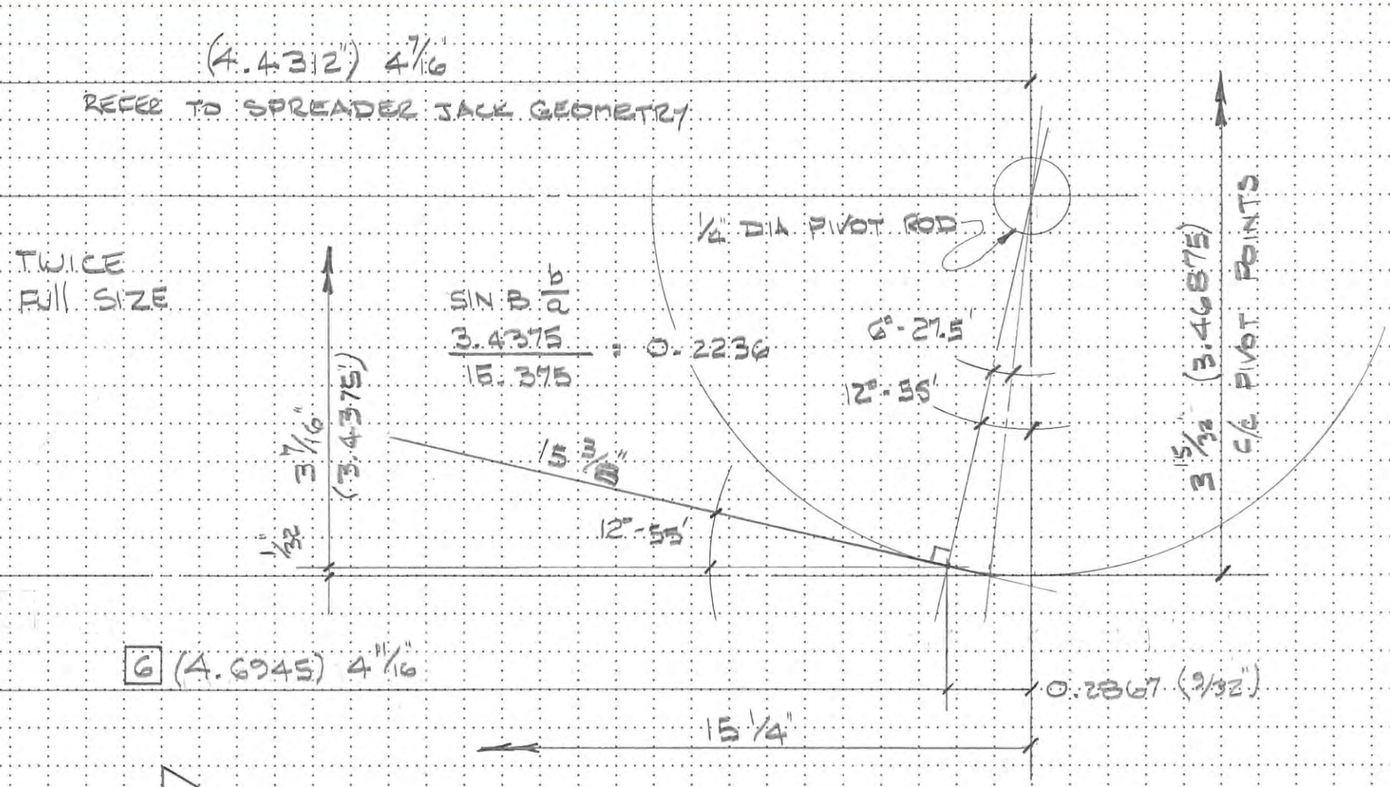
CONDO HOBBY BENCH
SCISSOR LIFT GEOMETRY
SCALE - HALF SIZE
REVISED
SEPT 2020 AS BUILT

DWG Nº 23

From the workbench of:

Date:





1 $\left(a = \frac{b}{\sin B}\right) \frac{1\frac{1}{4}}{0.67559} = (1.8502)\ 1\frac{27}{32}"$

2 $1.8502 - 1.25 = (0.6002)\ \frac{19}{32}"$

3 $(c = b \times \cot B)\ 1.25 \times 1.0913 = (1.3641)\ 1\frac{3}{8}"$

4 $\left(a = \frac{c}{\cos B}\right) \frac{0.6002}{0.73728} = (0.8141")\ \frac{13}{16}"$

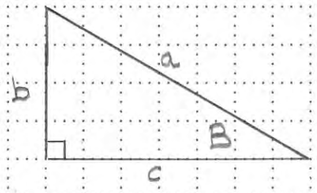
5 $1.3641 - 0.8141 = (0.550")\ \frac{9}{16}"$

6 $4.4312 - 0.2867 + 0.550 = (4.6945")\ 4\frac{11}{16}"$

7 $15.25 + 0.4687 - 4.6945 - 0.2867 = 10.7375"\ (10\frac{3}{4}")$

8 $\sqrt{0.8142^2 - 0.6002^2} = (0.550")\ \frac{9}{16}"$

9 $\sqrt{(15.375 + 0.550)^2 - 10.7375^2} = 11.7606\ 11\frac{3}{4}"$



∠ B	42°-30'
SIN	0.67559
COS	0.73728
TAN	0.91633
COT	1.0913

TRIG KEY

NOTE

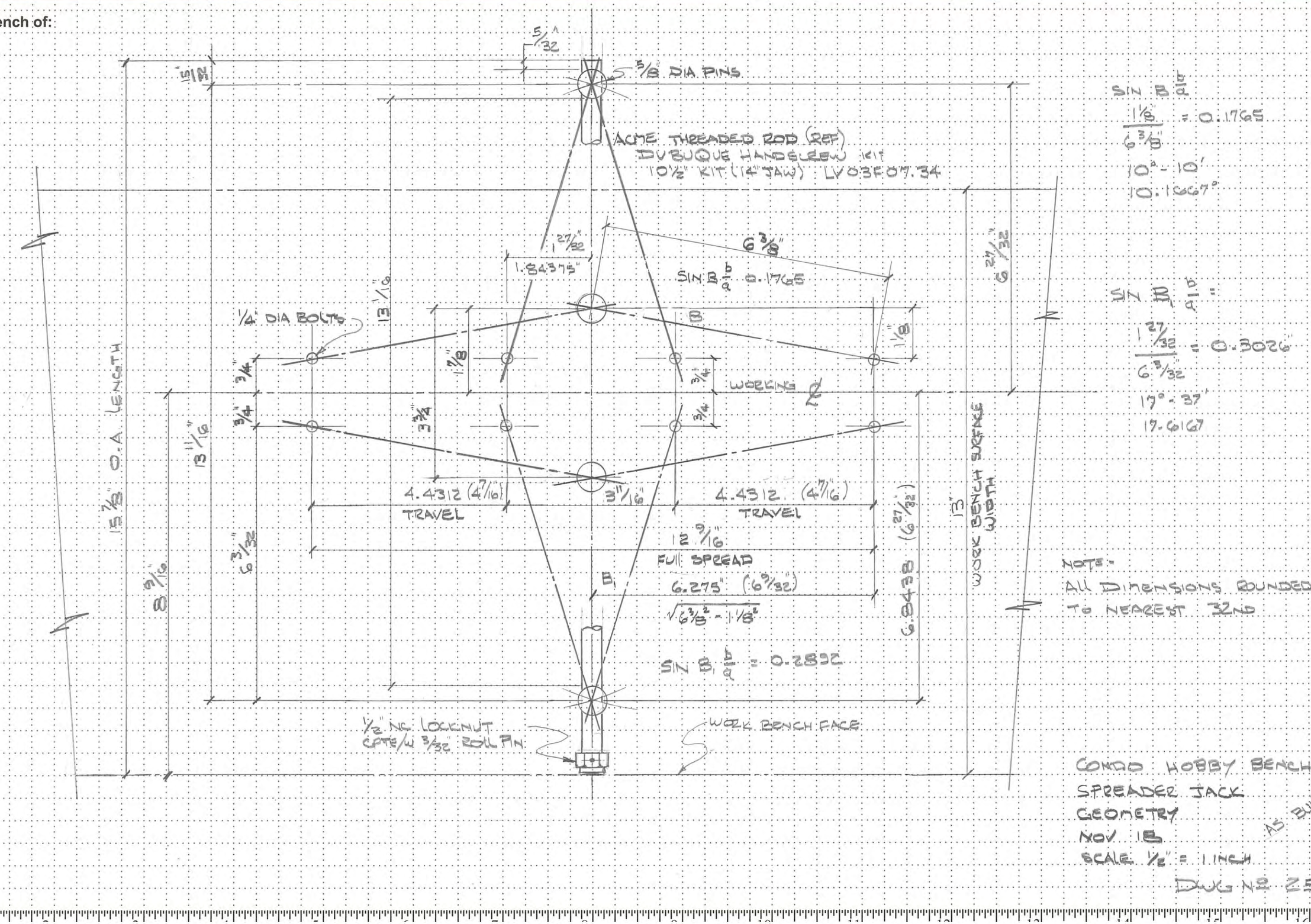
- THIS DRAWING TO BE WORKED IN CONJUNCTION WITH DRAWINGS 23 & 25
- MINOR CALCULATION DISCREPANCIES ARE DUE TO "ROUNDING"
- DIMENSIONS ROUNDED TO NEAREST 1/32"

CONDO HOBBY BENCH
SCISSOR LIFT POSITION
CALCULATION SHEET
REVISED SEPT 2020 AS BUILT

DWG Nº 24

From the workbench of:

Date:



SIN B 1st

1 1/8" / 6 3/8" = 0.1765

10° - 10'

10.1667°

SIN B 2nd

1 27/32" / 6 3/32" = 0.3026

17° - 37'

17.6167

NOTE:
ALL DIMENSIONS ROUNDED TO NEAREST 32ND

GOOD HOBBY BENCH
SPREADER JACK
GEOMETRY
NOV 18
SCALE ½" = 1 INCH
AS BUILT
DWG NO. 25