

**GENERAL NOTES**

THESE PLANS ARE OUR ANSWER TO THE CALL FOR A LOW-COST TUBING BENDER DESIGNED SPECIFICALLY FOR CHEAP TO BUILD, LOW-COST PARTS, CHEAP MATERIALS, CHEAP TO BUY, LOW-COST WELDERS, MORE THAN YOU BOUGHT UNITS.

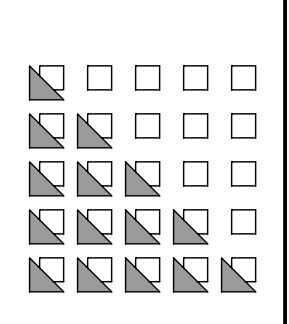
NO MATTER HOW CHEAP YOU WANT TO GO ON BUILDING A TUBING BENDER THE REAL COST IS IN THE DIES OR FORMERS AND UNLESS YOU HAVE A PRETTY BIG LATH IN THE GARAGE YOU'RE GOING TO HAVE TO BITE THE BULLET AND BUY A SET OF DIES.

IT IS PRETTY NEAR IMPOSSIBLE TO SAVE ANY SERIOUS MONEY TRYING TO COME UP WITH SOME WAY TO BUILD CHEAP DIES. IT'S JUST A FACT OF LIFE AND YOU HAD BETTER GET USED TO IT IF YOU'RE SERIOUS ABOUT BUILDING SOME QUALITY FRAMES.

ONCE YOU HAVE THE DIE SET ALMOST ANYBODY CAN BUILD THE BENDER FRAME AND CONTROL ARM WHICH IS THE LOW-COST PART OF THE ASSEMBLY. THESE PLANS SHOULD BE HELPFUL AS A START. THE BENDER DON'T NEED TO BE FANCY AND IN FACT THE BENDER CAN USUALLY BE MADE FROM SCRAP USING POINT WHERE SOME THING LOOKS COMPLETELY DO A LITTLE IMPROVISATION TO WORK AROUND THE PROBLEM.

THIS BENDER IS DESIGNED TO USE DIES HAVING A 4.5" CENTERLINE RADIUS AS MADE BY JD-SQUARED. SIMILAR DIES ARE ALSO AVAILABLE FROM OTHER SOURCES BUT WE HAVE NOT CHECKED THEM OUT. IF YOU WANT TO BUY A BENDER FROM ANY OTHER SOURCE YOU MAY HAVE TO MAKE ADJUSTMENTS IN SOME OF THE PIN HOLES IN THE ARMS.

FOR BEST RESULTS DRILL ALL HOLES THAT COINCIDE IN EACH PLATE AT ONE TIME BY STACKING THE PLATES. THE 'CLEARANCE' NOTICES SHOWN IN THE PLATES MAY BE MADE BY GRINDING THE EDGES OF THE PLATES TO THE STYLE OF THE PIVOT PINS YOU PURCHASE. IN THE INITIAL STAGE OF THE BENDER IS ASSEMBLED WITH THE DIES AND PINS IN PLACE BEFORE GRINDING THESE INDENTATIONS.

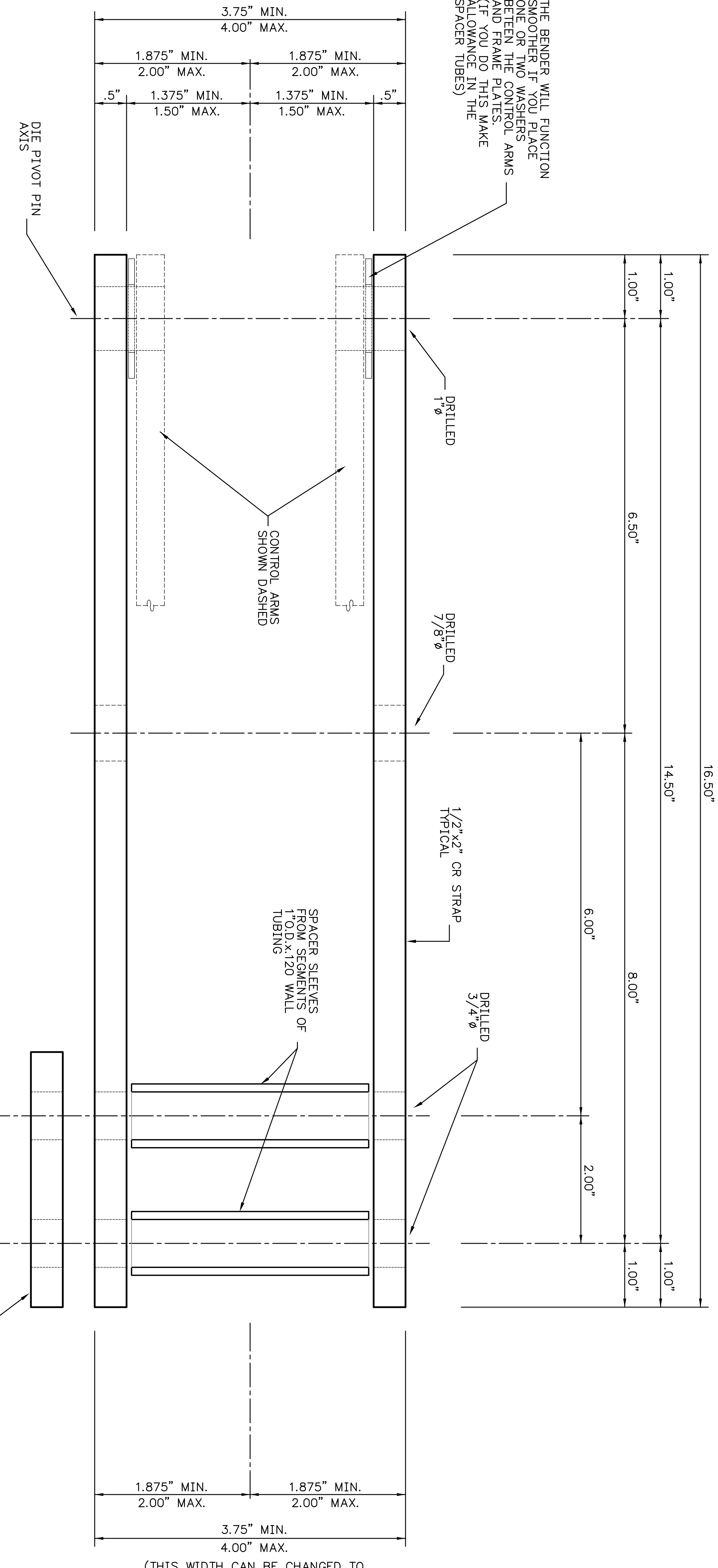


**GARY W. WEISHAUP**

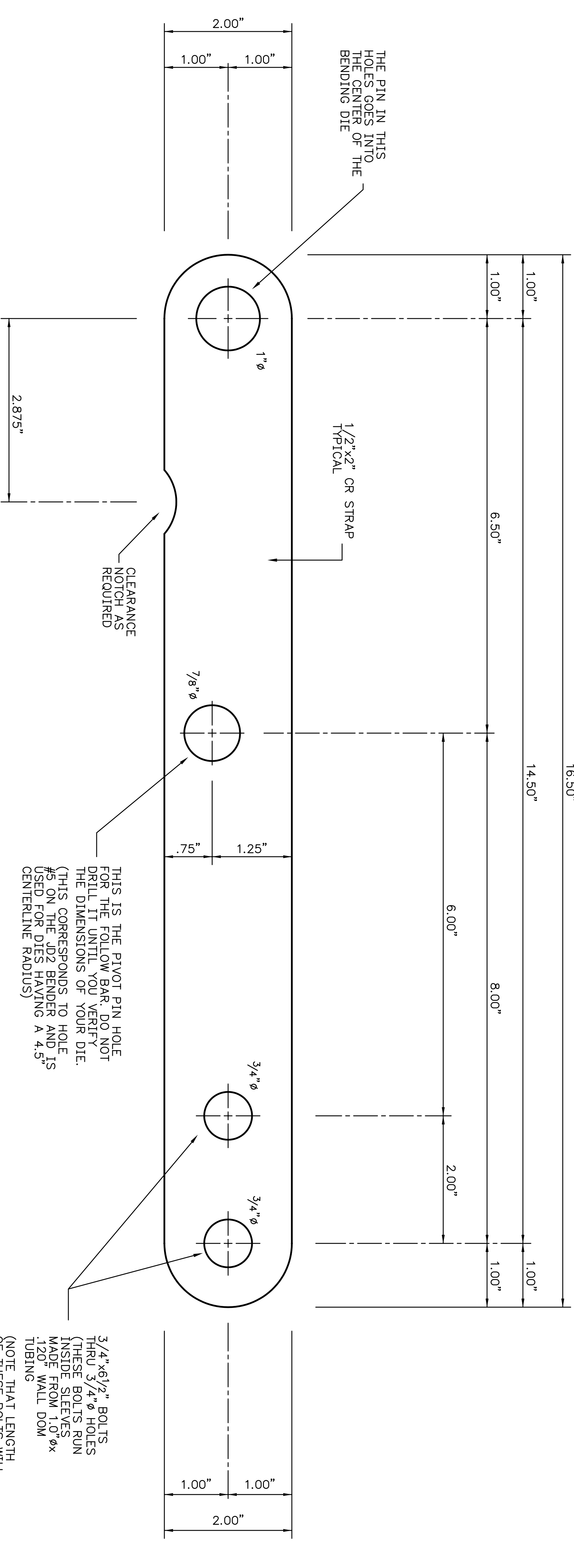
PERFORMANCE ENGINEERING  
CHASSIS FABRICATION  
FLOW MACHINE WORKS  
RESTORATIONS

1480 RIVER PARK BLVD  
BIRMINGHAM, AL 35209  
Ph: 707-252-3427  
Fax: 707-252-3427  
Email: gweishaupt@att.net

Revision	Date
• INITIAL LAYOUT	12-7-04
• GENERAL REVISION	7-20-06



**BENDER FRAME PLATES  
SIDE VIEW**



**BENDER FRAME PLATES  
TOP VIEW**

2"x1/2" C.R. STEEL  
2 OF EACH REQUIRED

3/4"x6 1/2" BOLTS  
(THESE BOLTS RUN  
INSIDE SLEEVES  
MADE FROM 1.0"x  
1.20" WALL DOM  
TUBING  
(NOTE THAT LENGTH  
OF THESE BOLTS WILL  
VARY DEPENDING UPON  
BENDER)

CLEARANCE  
NOTICES  
REQUIRED

1/2"x1/2" CR STRAP  
TYPICAL

THE PIN IN THIS  
HOLES GOES INTO  
THE CENTER OF THE  
BENDING DIE

CONTROL ARMS  
SHOWN DASHED

SPACER SLEEVES  
FROM SEGMENTS OF  
T.O.D. x 1.20 WALL  
TUBING

1/2"x1/2"x1/4" SPACER  
PLATE IS REQUIRED  
FOR MOUNTING

**Project Title**  
**CHOPPERS  
BUILDERS  
HANDBOOK**

**BUDGET  
TUBING  
BENDER**

Drawn By	GMW
Date	7-20-06
Checked By	HJC
Scale	7-24-06
Proj. No.	1" = 1"
Part No.	-
Sheet Description	TUBE BENDER FRAME DIMENSIONS