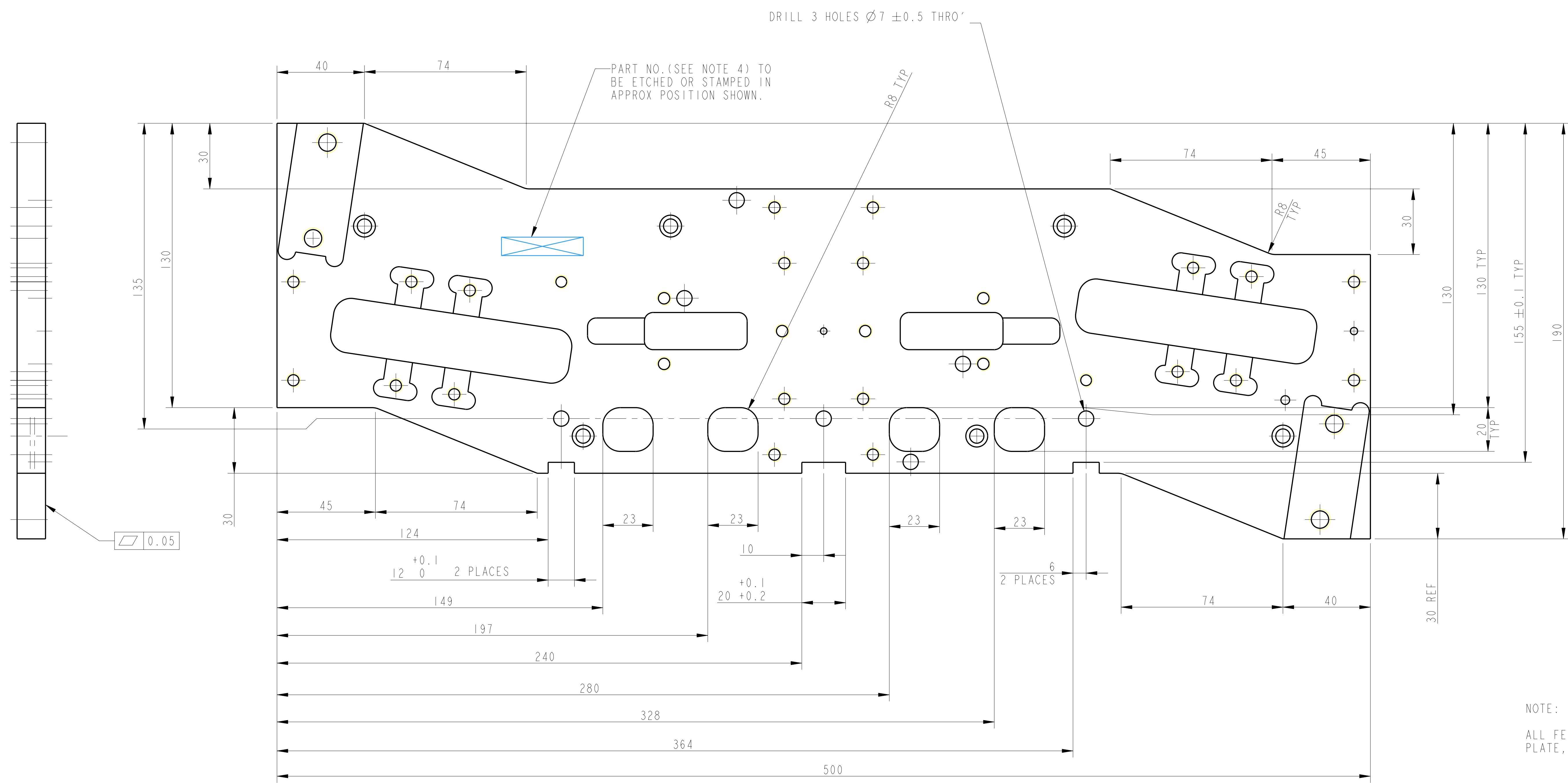
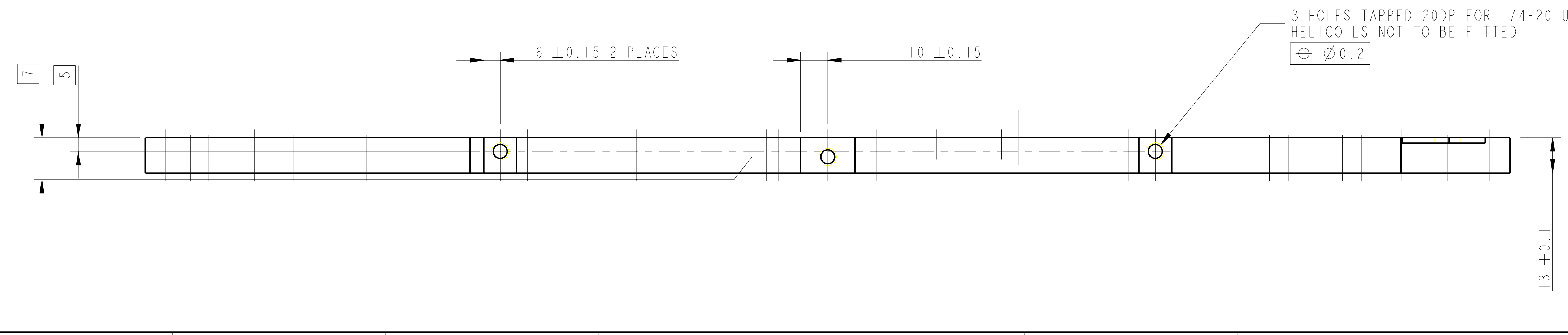


REV	DATE	DCN #	DRAWING TREE #
A	9/0CT/06	E060248	
B	7/0DEC/07	E060248-B	



NOTE:
ALL FEATURES ARE MACHINED THRO' THE PLATE, UNLESS OTHERWISE STATED



NOTES: (UNLESS OTHERWISE SPECIFIED)

- REMOVE ALL SHARP EDGES. R1.0Z MIN.
- DO NOT SCALE FROM DRAWING.
- ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE. SUCH AS CINCINNATI MILACRON'S CIMTECH 410 (STAINLESS STEEL).
- SCRIBE, ENGRAVE OR STAMP DRAWING PART NUMBER ON NOTED SURFACE OF PART AND A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST PART AND PROCEED CONSECUTIVELY. USE 07* HIGH CHARACTERS. EXAMPLE: 000100-001 - A VIBRATOR TOOL MAY BE USED.

DIMENSIONS ARE IN MM TOLERANCES:

$\varnothing .2$

$\pm 0.25^*$

MATERIAL: ST-STEEL

FINISH: CLEAN, GREASE FREE

\sqrt{Ra} (um) $Ra = 1.6$

NAME	DATE
DRAWN	J O'BELL 01/NOV/05
CHECKED	MB 15/MAR/10
APPROVED	JOD 15/MAR/10

SCALE: 1:1 PROJECTION:

CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
GLASGOW UNIVERSITY GEC ROF GROUP
RUTHERFORD APPLTON LABORATORIES

SYSTEM: aLIGO

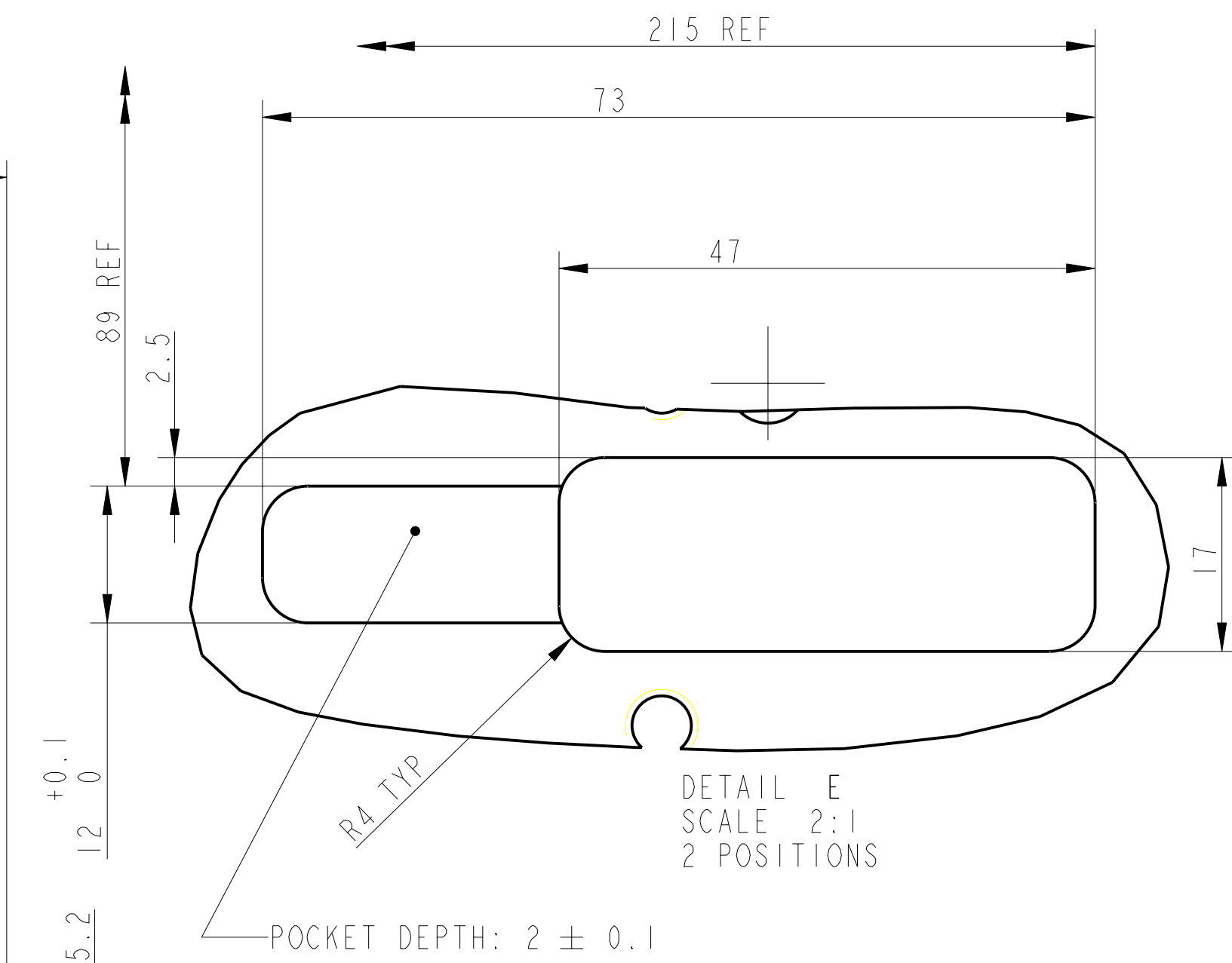
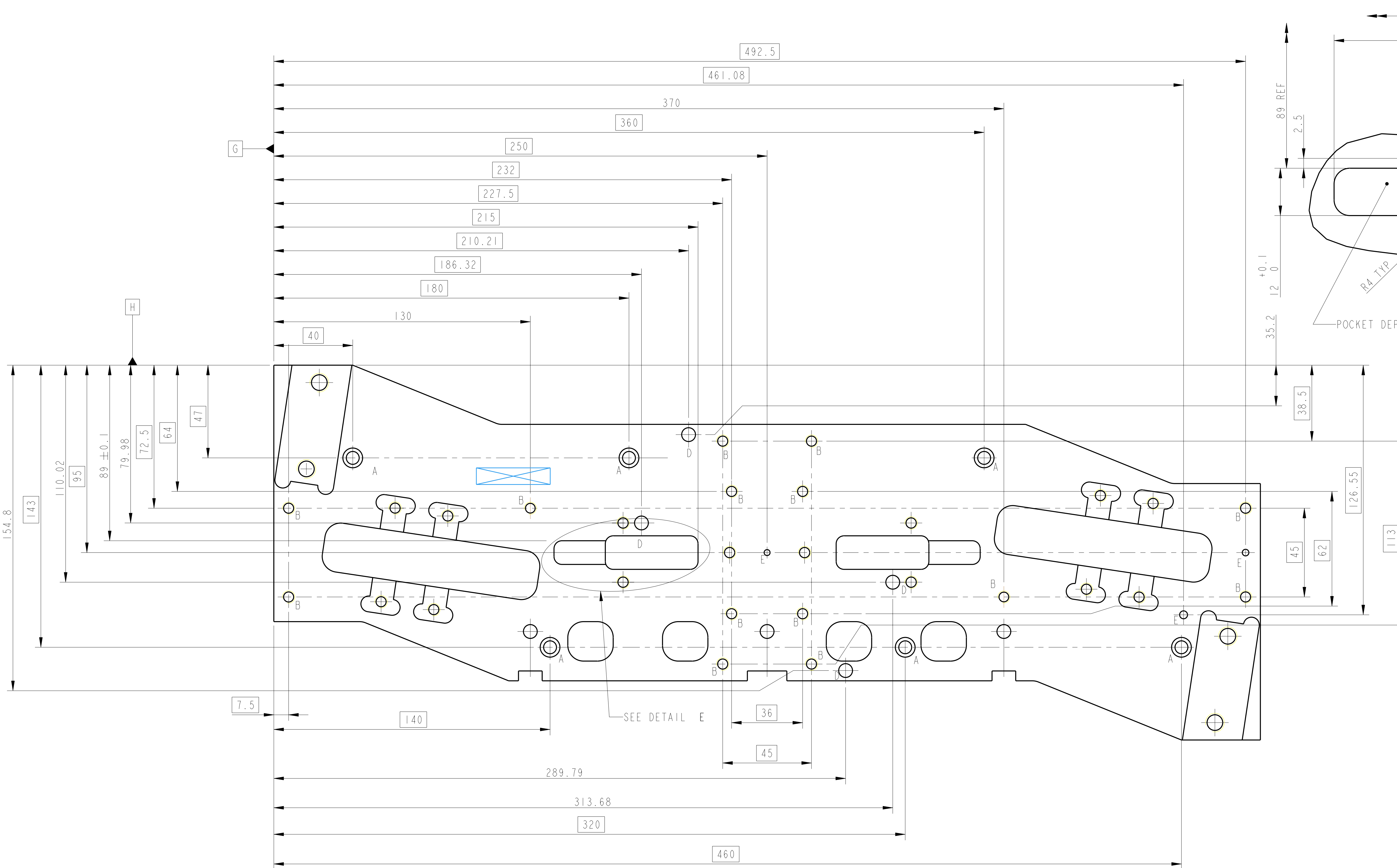
SUB-SYSTEM: SUS - QUAD

NEXT ASSY: TOP MASS QUAD

PART NAME: BASE PLATE

DRG. NO.: D060430

SHEET 1 OF 4



NOTE:

HOLES MARKED A: 6 HOLES, 1/4-20 UNC CLEARANCE HOLES (Ø6.5) AND C-BORED Ø10 X 7 DP

⊕ Ø0.2 | G | H

HOLES MARKED B: 14 HOLES, TAPPED THRO' FOR 1/4-20 UNC, TAP 0.005" OVERSIZE

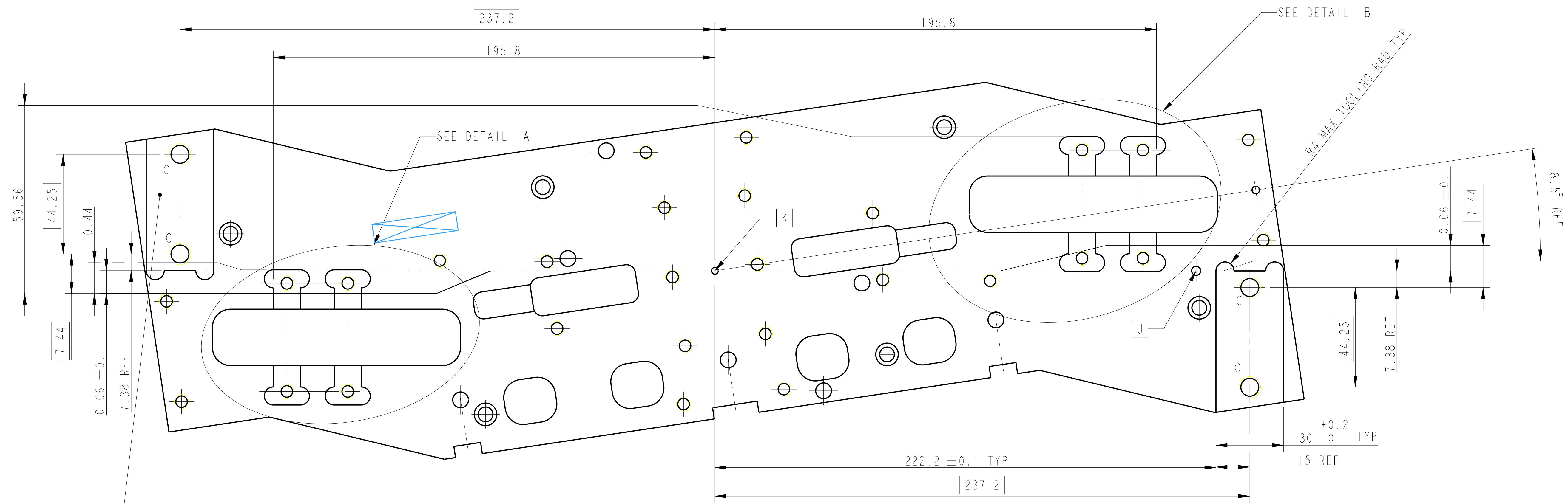
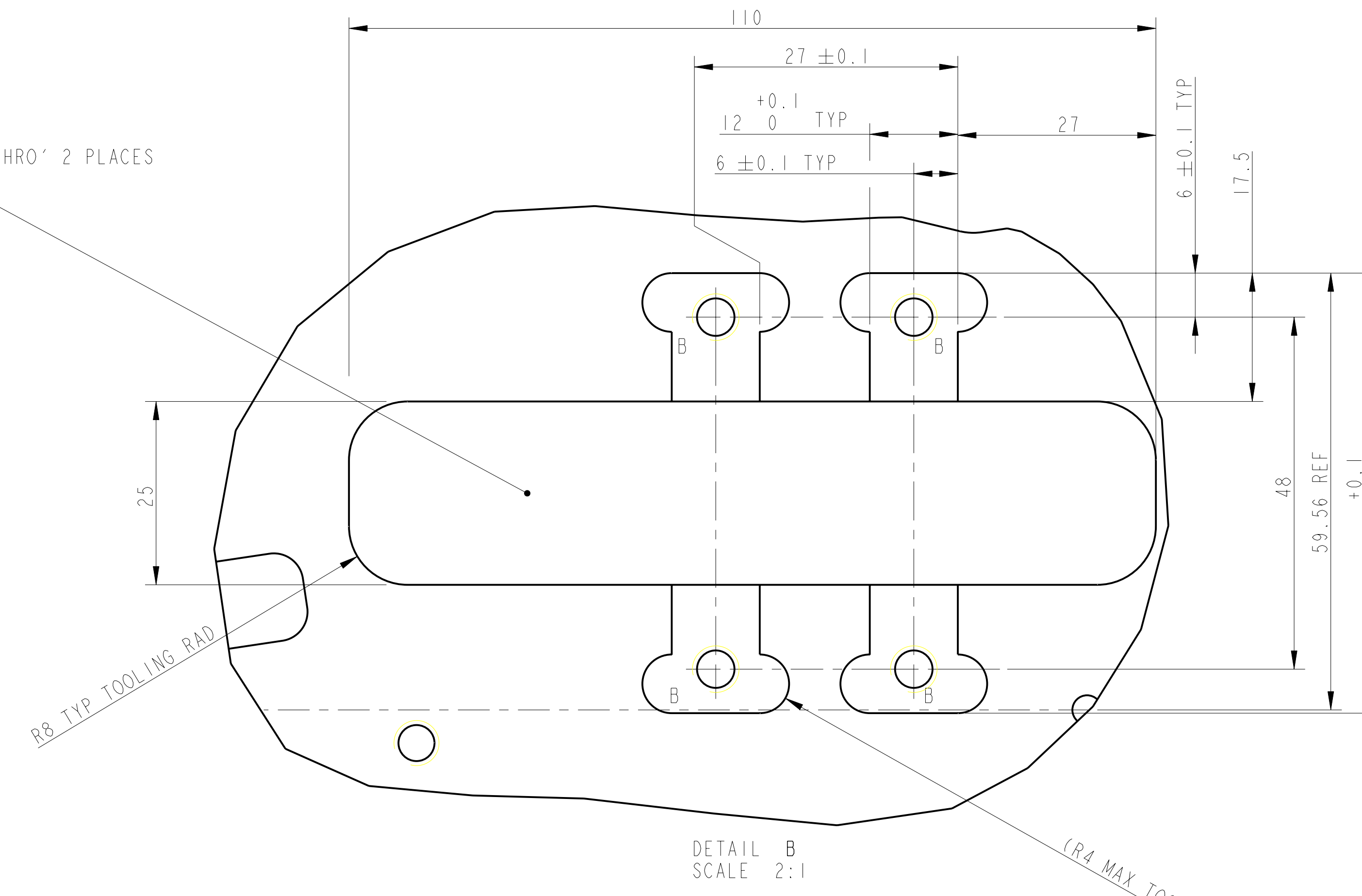
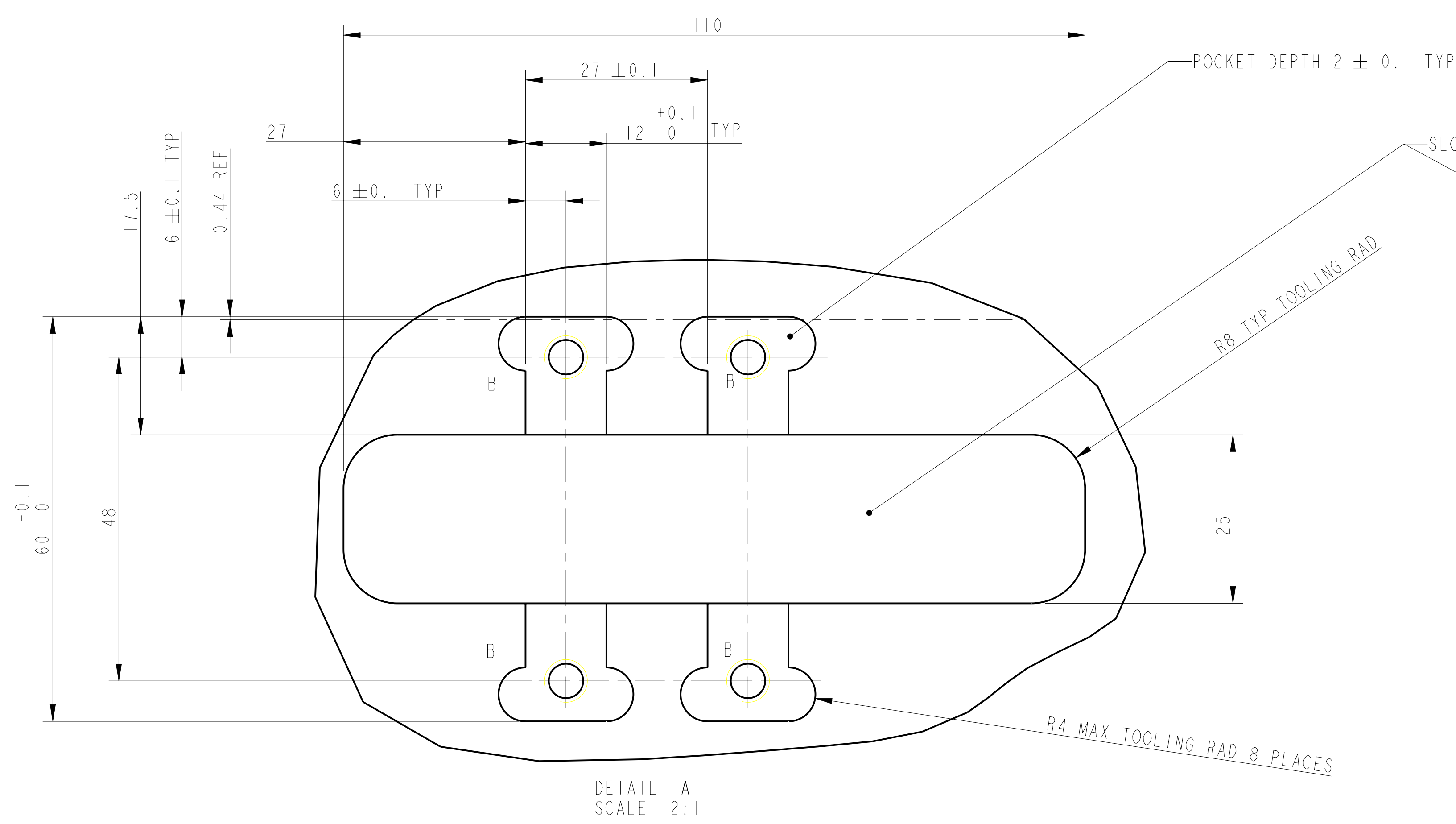
⊕ Ø0.2 | G | H

HOLES MARKED D: 4 HOLES Ø7 X 4.5 DP FLAT BOTTOM

⊕ Ø0.1 | G | H

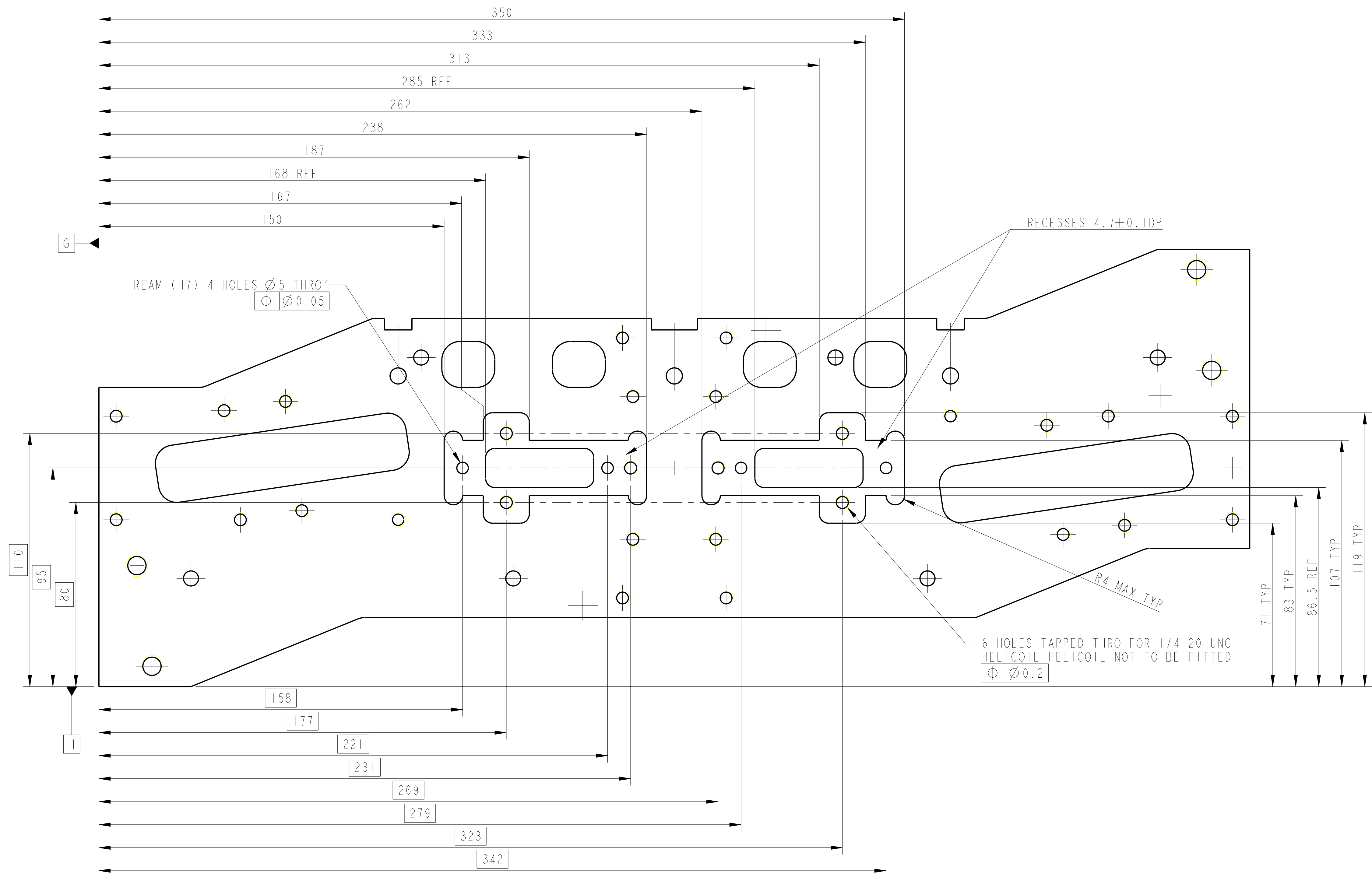
HOLES MARKED E: BORE 3 HOLES Ø4 X 3DP

NOTES: (UNLESS OTHERWISE SPECIFIED)		CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY RUTGERS UNIVERSITY RUTHERFORD APPLIION LABORATORIES	
1. REMOVE ALL SHARP EDGES. R.02 MIN.	2. DO NOT SCALE FROM DRAWING.	3. ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE. SUCH AS CINCINNATI MILACRON'S CIMTECH 410 (STAINLESS STEEL)	4. SCRIBE, ENGRAVE OR STAMP DRAWING PART NUMBER ON NOTED SURFACE OF PART AND A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST PART AND PROCEED CONSECUTIVELY. USE 07* HIGH CHARACTERS. EXAMPLE: D060430-001 - A VIBRATORY TOOL MAY BE USED.
DIMENSIONS ARE IN MM TOLERANCES:		Ø: ±0.25*	FINISH: CLEAN, GREASE FREE
MATERIAL: ST-STEEL		√(µm (1µin)) Ra: 1.6	NAME: DATE:
SYSTEM: aLIGO		DRAWN: J. O'BELL 01/NOV/05	DRG. NO.:
SUB-SYSTEM: SUS - QUAD		CHECKED: MB 15/MAR/10	APPROVED: JOD 15/MAR/10
NEXT ASSY: TOP MASS QUAD		SCALE: 1:1 PROJECTION: SHEET: 2 OF 4	
PART NAME: BASE PLATE		J	



NOTE:
 HOLES MARKED B: 8 HOLES, TAPPED FOR 1/4-20 UNC 0.005" OVERSIZE, TAP THRO
 HOLES MARKED C: 4 HOLES, TAPPED THRO' FOR 3/8-16 UNC HELICOIL, HELICOIL NOT TO BE FITTED
 ⌀0.15 [K] [J]

NOTES: (UNLESS OTHERWISE SPECIFIED)		DIMENSIONS ARE IN MM TOLERANCES:		CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY OP. ALGON UNIVERSITY GEO. ROSS GROUP RUTHERFORD APPLIATION LABORATORIES	
1. REMOVE ALL SHARP EDGES. R.02 MIN.	2. DO NOT SCALE FROM DRAWING.	3. ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE. SUCH AS CINCINNATI MILCORP'S CIMTECH 410 (STAINLESS STEEL).	4. SCRIBE, ENGRAVE OR STAMP DRAWING PART NUMBER ON NOTED SURFACE OF PART AND A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST PART AND PROCEED CONSECUTIVELY. USE 07* HIGH CHARACTERS. EXAMPLE: D060430-001 - A VIBRATOR TOOL MAY BE USED.	0.2 ±0.25 * 3/16	SYSTEM: aLIGO SUB-SYSTEM: SUS - QUAD NEXT ASSY: TOP MASS QUAD PART NAME: BASE PLATE
MATERIAL: ST-STEEL	FINISH: CLEAN, GREASE FREE Ra: 1.6	NAME: J. O'BELL	DATE: 01/NOV/05	SCALE: 1:1	PROJECTION: 1st Angle
CHECKED: MB	DATE: 15/MAR/10	APPROVED: JOD	DATE: 15/MAR/10	DRG. NO.: D060430	SHEET 3 OF 4



VIEW SHOWING FEATURES ON UNDERSIDE OF PLATE

NOTES: (UNLESS OTHERWISE SPECIFIED)

- REMOVE ALL SHARP EDGES. R.02 MIN.
- DO NOT SCALE FROM DRAWING.
- ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE. SUCH AS CINCINNATI MILACRON'S CIMTECH 410 (STAINLESS STEEL).
- SCORE, ENGRAVE OR STAMP DRAWING PART NUMBER ON NOTED SURFACE OF PART AND A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST PART AND PROCEED CONSECUTIVELY. USE 07* HIGH CHARACTERS. EXAMPLE: 000100-001 - A VIBRATOR TOOL MAY BE USED.

DIMENSIONS ARE IN mm (INCHES) TOLERANCES:

XX ±0.2 (11) ANGULAR ±0.25 °

MATERIAL: ST-STEEL

FINISH: CLEAN, GREASE FREE

√μm (1111) Ra = 1.6

NAME	DATE
DRAWN J. O'BELL	20/04/06
CHECKED MB	15/MAR/10
APPROVED JOD	15/MAR/10

SCALE: 1:11 PROJECTION:

CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY
 GLASGOW UNIVERSITY GEO GROUP
 RUTHERFORD APPLTON LABORATORIES

SYSTEM: aLIGO
 SUB-SYSTEM: SUS - QUAD
 NEXT ASSY: TOP MASS QUAD
 PART NAME: BASE PLATE

DRG. NO.: D060430
 SHEET: 4 OF 4