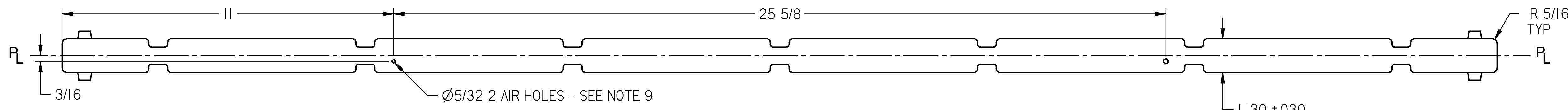
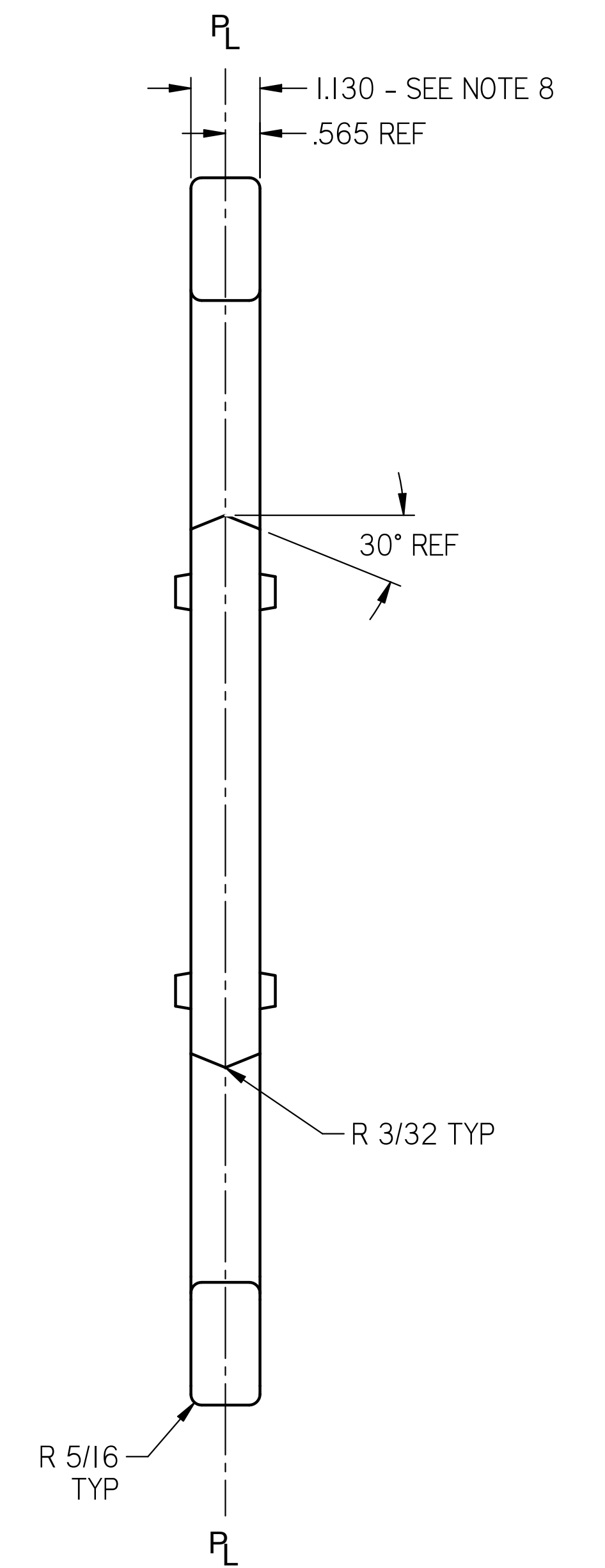
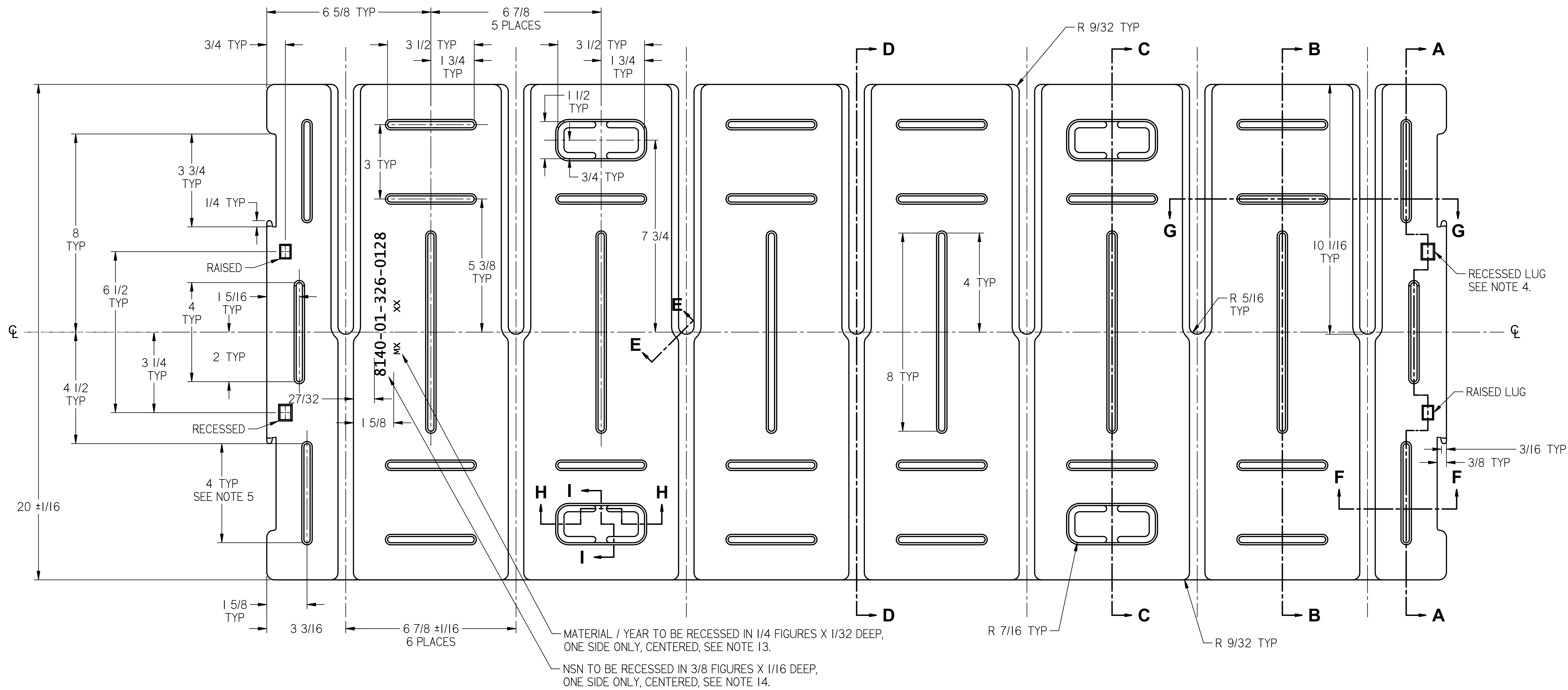
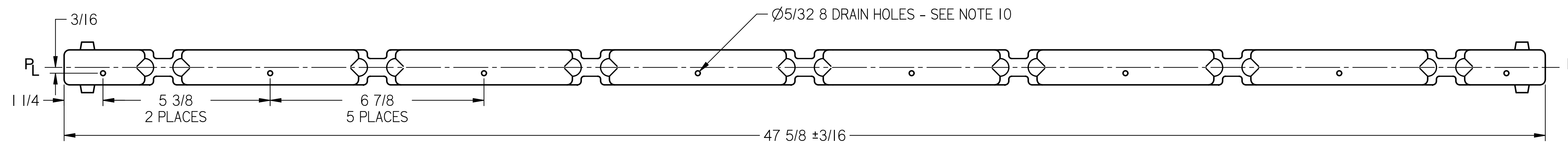


REVISION		ENGINEER	APPROVED	DATE
LTR	DESCRIPTION	BY	DATE	
XA	ADDED NSN NO; MAT'L / YEAR; CONTRACT NO. REQ'D, NOTE 14	SPRAGUE	MICHELS	90-11-02
-	PRODUCT BASELINE ERR M0A2190 91-02-05	SPRAGUE	MICHELS	91-02-27
A	ECP R22K3009 - NOR 001 / 22-09-12	Q. TRAN	FIEFFER	24-05-01

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.



NOTES:

- MIL-R-48664 (AR) APPLIES.
- HIDDEN LINES OMITTED FOR CLARITY.
- PART IS SYMMETRICAL WITH EXCEPTION OF STACKING LUGS: SEE DETAIL J-J.
- LOCATION OF STACKING LUG TOLERANCE IS ±1/8 INCH BUT MUST MEET CRITERIA OF NOTE 8, SHEET 3 OF 3. DIVIDERS SHALL STACK IN ANY FLAT ORIENTATION.
- LENGTH OF WELD CONE TOLERANCE IS ±1/8 INCH.
- THE DIMENSION USED BY THE MOLD DESIGNER AS THE THICKNESS OF THE PLASTIC AT THE BOTTOM OF WELD CONES SHALL INSURE COMPLIANCE WITH PARA 3.2.2, MIL-R-48664 (AR).
- RADII NOT DIMENSIONED ON THIS DRAWING SHALL BE CONSISTENT WITH GOOD DESIGN PRACTICE TO ENSURE PLASTIC FLOW WHEN FORMING TO MINIMIZE STRESS CRACKING. COMPOUND CURVATURES SHALL BLEND INTO RADII GIVEN.
- CRITICAL WIDTH DIMENSION IS ADJACENT TO BOTH SIDES OF THE CLOSED SLOT FROM CLOSED EDGE TO CENTER LINE OF THE DIVIDER.
- THE MOLD DESIGNER MAY PLACE AIR HOLES WHEREVER NECESSARY FOR PROPER MOLDING BUT THOSE LOCATIONS SHALL NOT INTERFERE WITH LOCATIONS OF THE WELD CONE.
- A COMBINATION OF AIR HOLES AND DRAIN HOLES ARE TO INSURE DRAINAGE FROM ANY POCKET WITHIN THE INTERIOR CAVITY WHEN THE DIVIDER IS POSITIONED ON EITHER TOP OR BOTTOM EDGE.
- WALL THICKNESS IS A NOMINAL 1/8 INCH. THE MINIMUM WALL THICKNESS SHALL NOT BE LESS THAN 0.090 INCHES EXCEPT AS DEVIATED FROM UNDER NOTE 4, SHEET 3 OF 3. THE MAXIMUM WALL THICKNESS IS NOT SPECIFIED BUT WILL NOT NORMALLY EXCEED .190 INCHES WHEN MEASURED AT LOCATIONS SPECIFIED ON SHEET 3 OF 3. TO OBTAIN WALL THICKNESS WITHIN THESE LIMITS, IT MAY BE NECESSARY TO SHAPE THE INTERIOR DIE OF THE EXTRUSION HEAD TO CAUSE THE FORMED PLASTIC PARISON TO BE A FEW THOUSANDTHS OF AN INCH THICKER AT THE EXTREMITIES OF THE DIVIDER TOP AND BOTTOM EDGES AS WELL AS ADJUSTMENTS OF PLASTIC FLOW FROM TOP TO BOTTOM OF THE PARISON.
- MOLD CLOSURE PINCH-OFF DESIGN SHALL INSURE PARTING LINE WELD STRENGTH EQUAL TO OR GREATER THAN THE STRENGTH OF THE WALL THICKNESS.
- THE MATERIAL USED AND THE YEAR THE DIVIDER WAS MOLDED (LAST 2 DIGITS) SHALL BE RECESSED INTO THE DIVIDER. SEE DRAWING AC200000408, SHEET 1, NOTE 3, TO THE YEAR POSITION FOR PURPOSES OF QUALITY CONTROL LOT DESIGNATION. IF MONTH AND DAY ARE ADDED, A TEMPORARY MEANS OF RECESSING THESE FIGURES SHALL BE USED NOT TO EXCEED 1/32 IN DEPTH.
- THE CONTRACT NUMBER SHALL BE RECESSED IN 1/4 FIGURES X 1/32 DEPTH AT THE SAME LOCATION AS THE NSN BUT ON THE OPPOSITE SIDE OF THE DIVIDER, CENTERED.
- SEE DRAWING AC200000598; SHEETS 2 OF 3 AND 3 OF 3, FOR UNITIZATION AND MARKING REQUIREMENTS IF THE CONTRACT IS FOR SHIPMENT OF INDIVIDUAL DIVIDERS.

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REVISION STATUS OF SHEETS	
SHEET	REVISION
1 OF 3	A
2 OF 3	A
3 OF 3	A

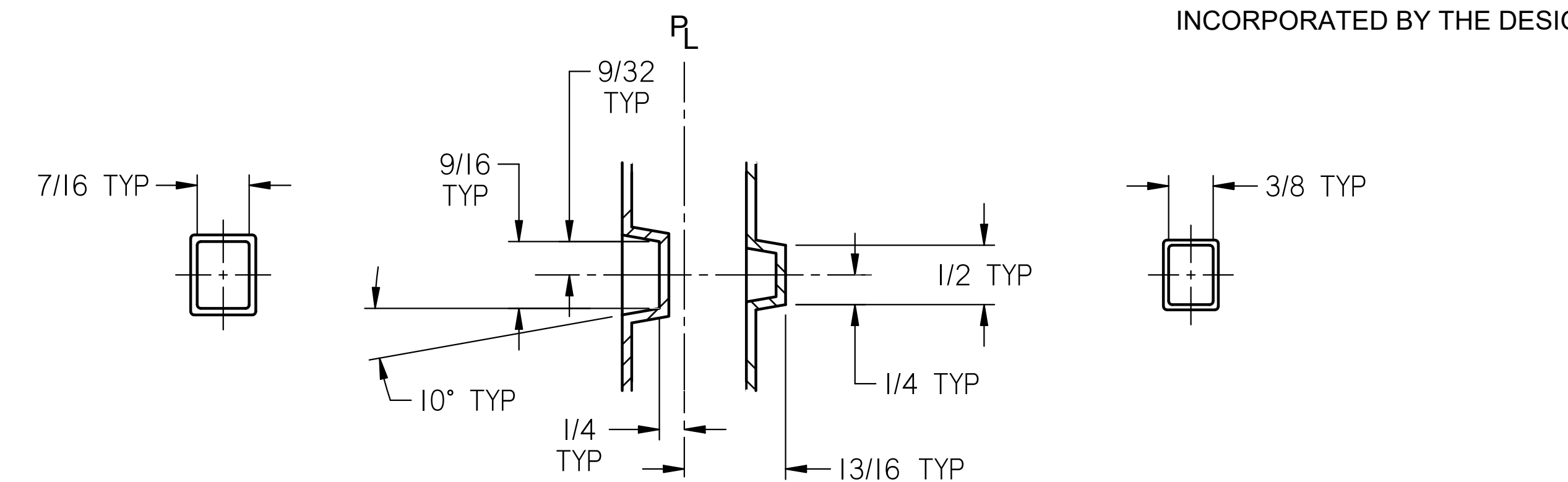
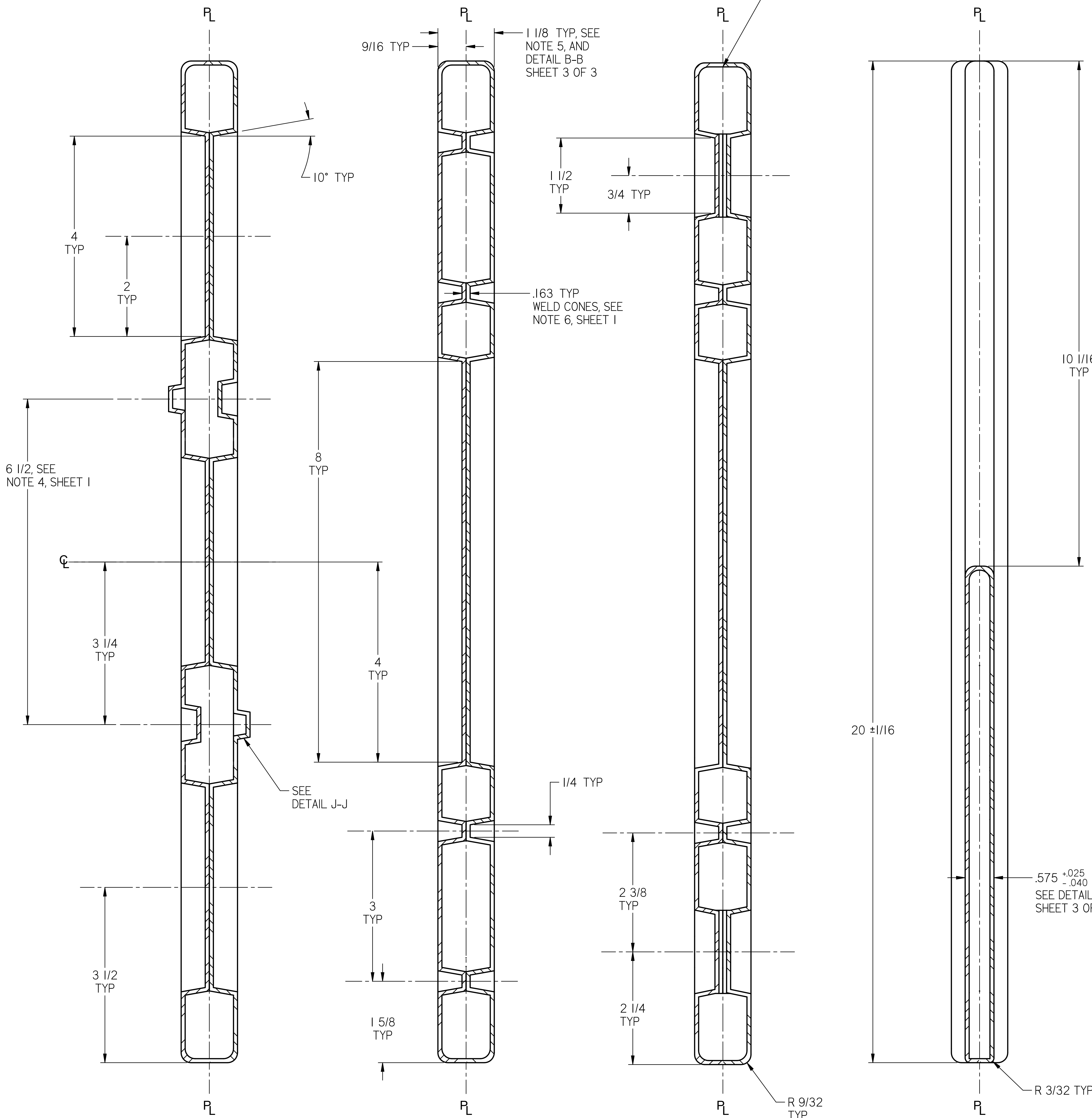
PART NO. AC200000591

UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES		DATE 88-10-01	DESIGN ACTIVITY U.S. ARMY COMBINED ARMS SUPPORT COMMAND DEFENSE AMMUNITION CENTER (DAC) MCALLESTER, OKLAHOMA 74501-9053
TOLERANCES	DATE 88-10-01	CHECKER SPRAGUE	PROJ. ENGR. SPRAGUE
xx .xxx ±.01 ±.005 FRACTIONS 125 ±1/64	DATE 88-10-01	CHECKER T. J. MICHELS	PROJ. ENGR. T. J. MICHELS
REMOVE ALL BURRS AND SHARP EDGES D/D R OR CHAMFER MAX.	DATE 88-10-01	CHECKER WILLIAM F. ERNST	PROJ. ENGR. WILLIAM F. ERNST
MATERIAL SEE DRAWING AC200000408	DATE 88-10-01	CHECKER JOHN L. BYRD, JR.	PROJ. ENGR. JOHN L. BYRD, JR.
APPROVED BY ORDER OF COMMANDING GENERAL U.S. ARMY MATERIAL COMMAND	DATE 88-10-01	CHECKER JOHN L. BYRD, JR.	PROJ. ENGR. JOHN L. BYRD, JR.
SIZE F	CASE 28620	DRAWING NO. AC200000591	REV A
SCALE 1/2	UNIT WT	SHEET 1 OF 3	

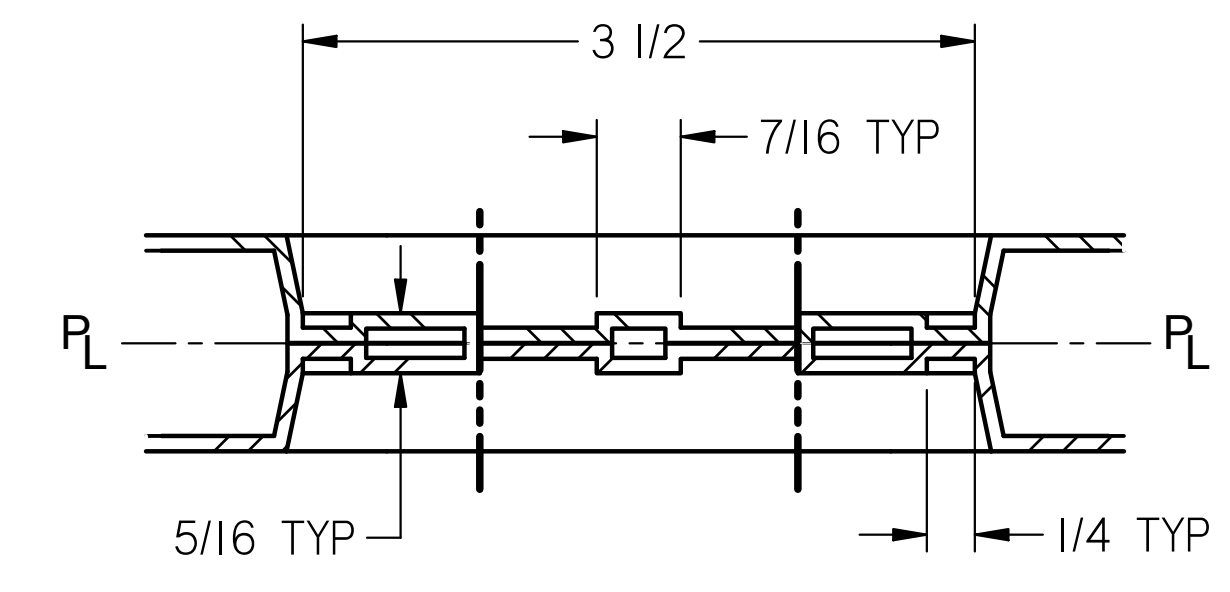
REVISION		ENGINEER	APPROVED	
LTR	DESCRIPTION	BY	DATE	
-	PRODUCT BASELINE ERR M0A2190 91-02-05	SPRAGUE	MICHELS	91-02-27
A	ECP R22K3009-NOR 001 / 22-09-12	Q. TRAN	FIEFFER	24-05-01

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

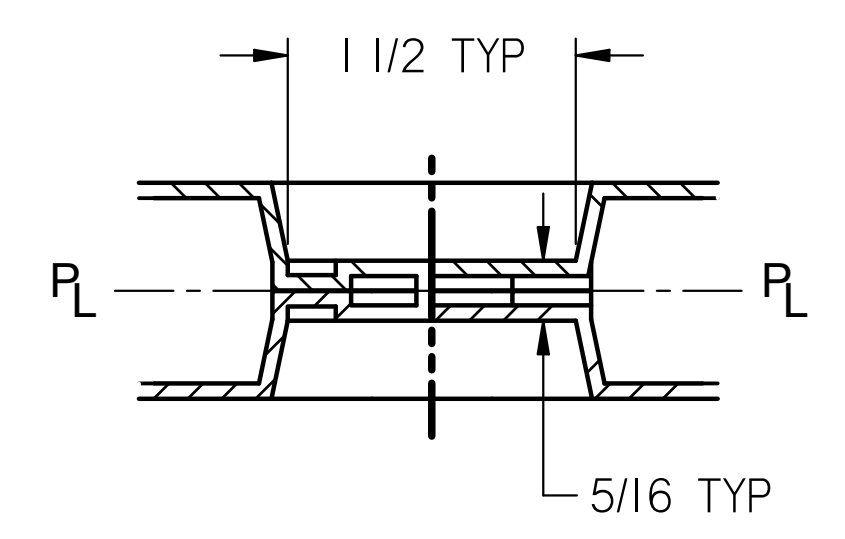
SEE NOTE 12, SHEET 1.
THE CROSS SECTION SHOWN AT
THE PARTING LINE IS SCHEMATIC.



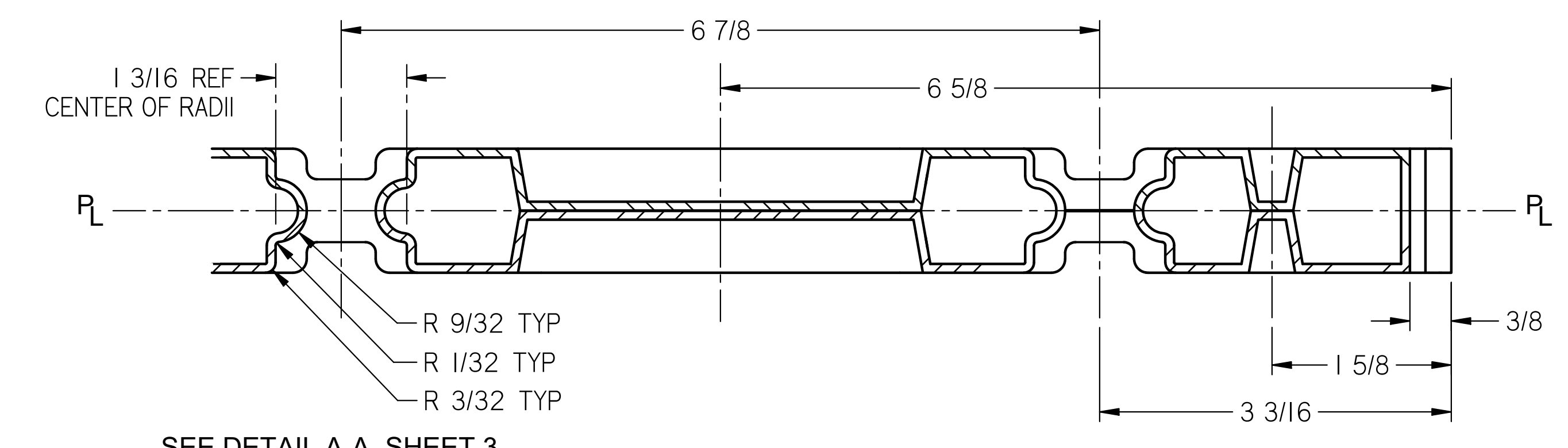
DETAIL J-J



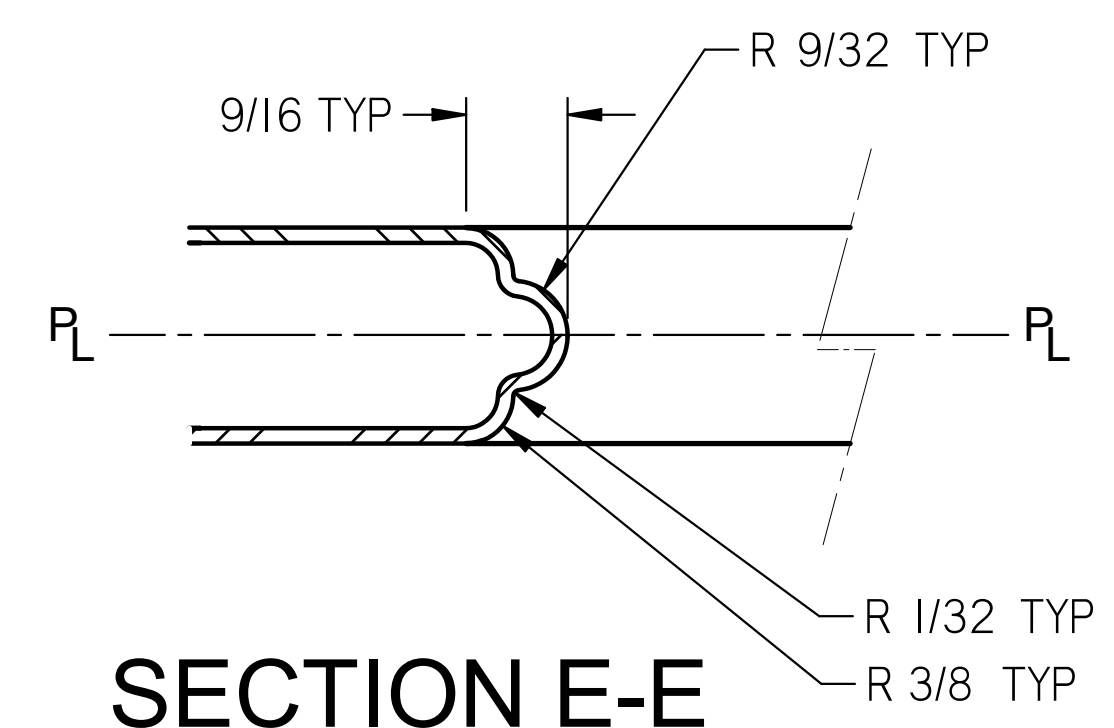
SECTION H-H
(HAND GRIP)



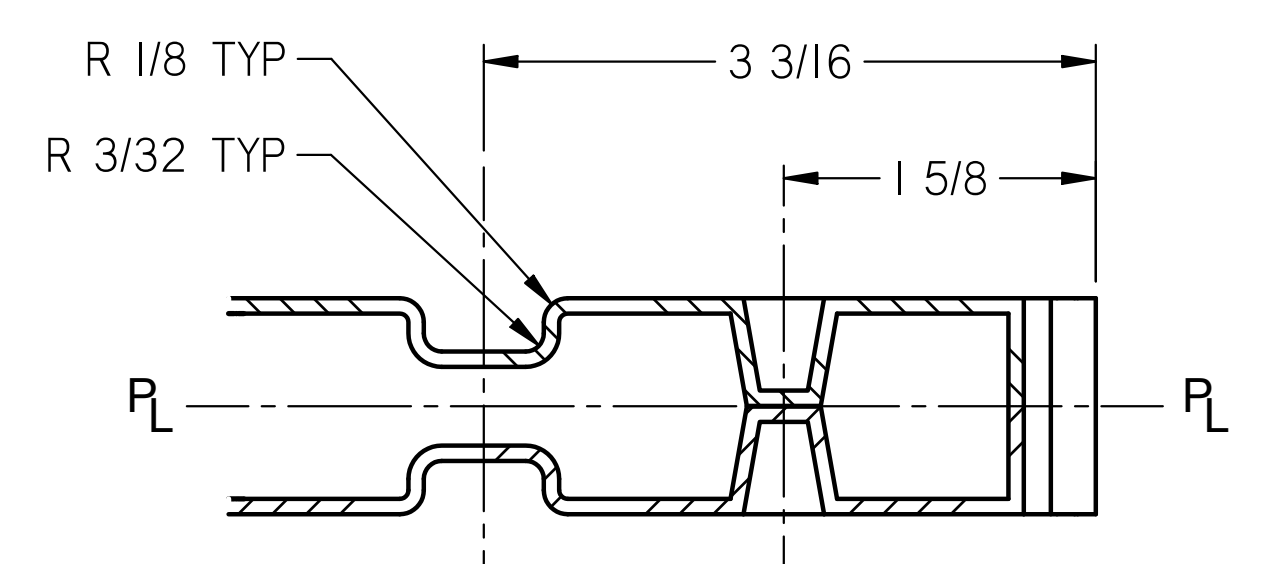
SECTION I-I
(HAND GRIP)



SECTION G-G



SECTION E-E
(45° AT SLOT)



SECTION F-F

SECTION A-A

SECTION B-B

SECTION C-C

SECTION D-D

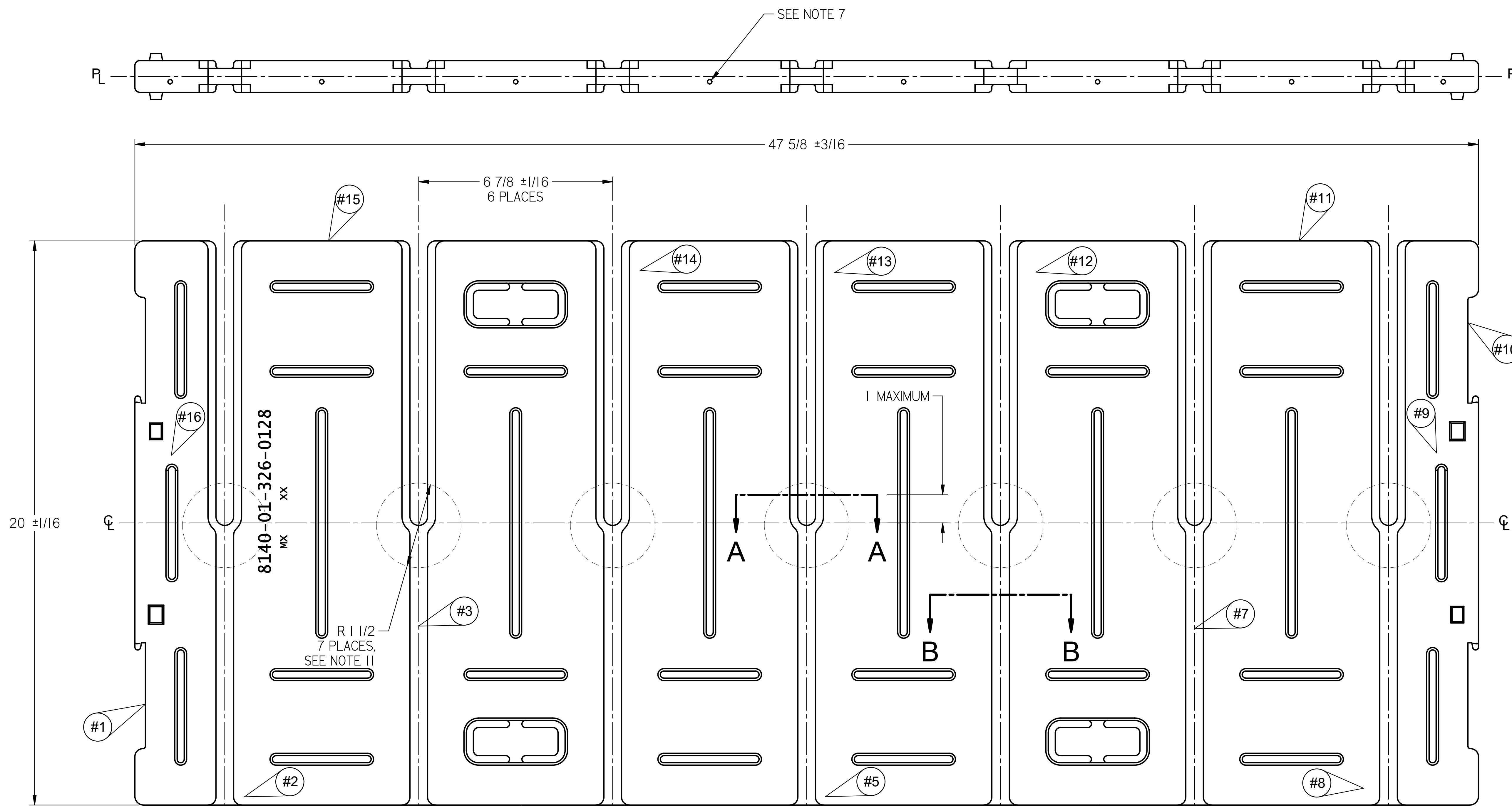
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SECTION VIEWS

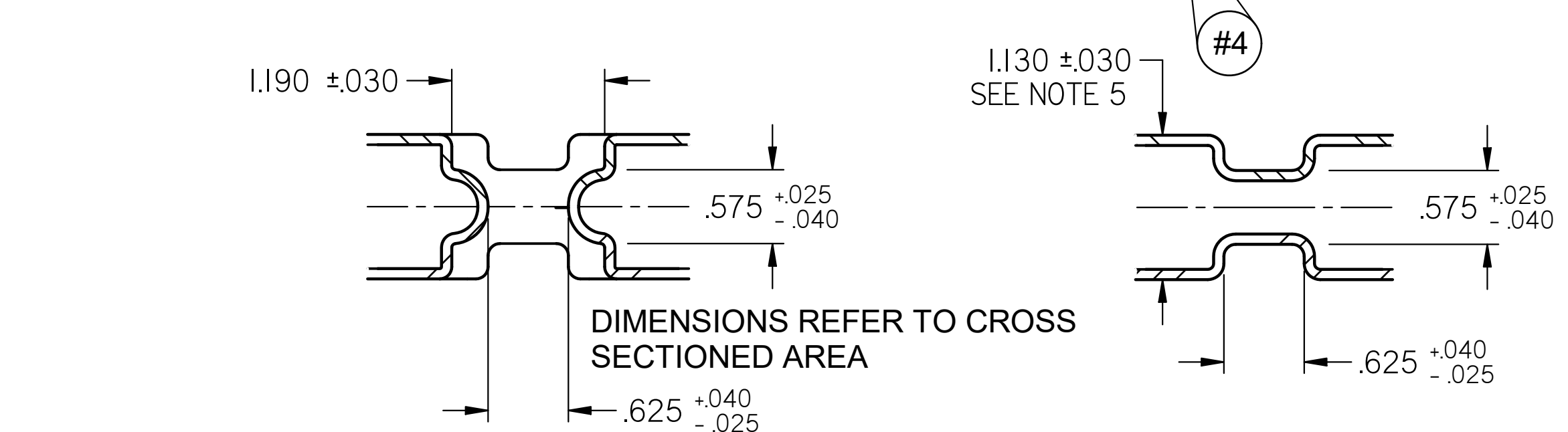
DATE	88-11-09	DESIGN ACTIVITY	U.S. ARMY COMBINED ARMS SUPPORT COMMAND DEFENSE AMMUNITION CENTER (DAC) MCALESTER, OKLAHOMA 74501-9053	
DFTS/NR	JMS	CHECKER	SPRAGUE	
SUBMITTED	T. J. MICHELS CHIEF, TRANSPORTATION ENG. DIV.		DIVIDER, AMMUNITION, LOOSE ROUND RESTRAINT SYSTEM (LRRS), 120MM MORTAR RDS IN FIBER TUBES	
APPROVED BY	WILLIAM F. ERNST ASSOCIATE DIRECTOR FOR ENGINEERING DIRECTORATE U.S. ARMY MATERIALS COMMAND		SIZE	SCALE
	JOHN L. BYRD, JR.	DEFENSE AMMUNITION CENTER	F	FULL
			28620	AC200000591
				A
				2 OF 3

REVISION		ENGINEER	BY	APPROVED	DATE
LTR	DESCRIPTION				
XA	NOTE 10: CONTRACT #, MAT'L	SPRAGUE	MICHELS		90-10-26
XB	WALL THICKNESS DEV NOTE 4B	SPRAGUE	MICHELS		90-11-02
-	PRODUCT BASELINE ERR M0A2190 91-02-05	SPRAGUE	MICHELS		91-02-27
A	ECP R22K3009-NOR 001 / 22-09-12	Q. TRAN	FIEFFER		24-05-01

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.



- INDICATES A WALL THICKNESS MEASUREMENT LOCATION, SEE NOTE 4.
- THE TEST SAMPLE SHALL BE LAID ON A TEST SURFACE WHICH IS FLAT WITHIN 1/32 INCH AND MEASURES 45 X 24 INCHES. (THESE DIMENSIONS WERE SELECTED SO THAT STACKING LUGS POINTING DOWN WILL OVERHANG THE TEST SURFACE). THE SAMPLE SHALL BE CHECKED FOR FLATNESS USING A 24 INCH LONG STRAIGHT EDGE AND FOUND TO BE FLAT WITHIN 1/8 INCH. AFTER CHECKING FLATNESS, DIVIDERS WILL BE STACKED IN GROUPS OF 4 IN ALTERNATING DIRECTIONS OF OPEN SLOTS. THE OVERALL HEIGHT OF THE STACK SHALL NOT EXCEED 4-3/4 INCHES EXCLUDING STACKING LUGS. THE VERTICAL SIDES OF THE STACK SHALL ALIGN WITHIN +/- 1/8 INCH.
 - THE DIVIDERS SHALL BE REGULAR, RELATIVELY SMOOTH AND FREE FROM WRINKLES AND ROUGH SPOTS TO THE EXTENT THAT MINOR IRREGULARITIES SHALL NOT INTERFERE WITH SUCCESSFUL TESTING UNDER DRAWING AC200000599 (SEE NOTE 12). CRITICAL AREAS ARE WITHIN AND ADJACENT TO THE ASSEMBLY SLOTS. THE DIVIDERS SHALL BE FREE FROM CRACKS, PINHOLES AND ANY OTHER DEFECTS THAT MIGHT AFFECT SERVICEABILITY AND DURABILITY, ALSO SEE NOTE 11. PARTING LINE FLASHING SHALL NOT EXCEED 1/16 INCH HEIGHT ON EXTERNAL PERIMETER. FLASHING IN THE OPEN SLOTS SHALL BE REMOVED UNIFORMLY TO MEET NOTE 3. CLEAN UP SHALL INCLUDE BREAKING OF SHARP CORNERS. ALL DIVIDERS SHALL BE FREE OF CHIPS, DIRT, GREASE, AND FOREIGN MATERIAL.
 - CHECK FOR CLARITY OF NSN 8140-01-326-0128 AND MATERIAL DESIGNATOR/ YEAR. SEE NOTE 3, DRAWING AC200000408, SHEET 1 OF 4 FOR MATERIAL DESIGNATOR CODE. CHECK CLARITY OF CONTRACT NUMBER ON OPPOSITE SIDE OF DIVIDER FROM NSN.
 - THERE SHALL BE NO FOLD LINES WITHIN THE SEVEN 1-1/2 INCH RADIUS CIRCLES ON EITHER SIDE OF THE DIVIDER AT THE JUNCTION OF THE OPEN AND CLOSED SLOTS WHICH DESIGNATE CRITICAL AREAS ON THIS DRAWING. ADDITIONALLY: (A) NO FOLD LINES AT OTHER LOCATIONS SHALL EXCEED 3 INCHES IN LENGTH AND A MAXIMUM OF ONE PER SECTION PER SIDE, (B) THERE SHALL BE NO FOLD LINES THAT EXTEND FROM SECTION TO SECTION THROUGH THE CLOSED SLOT AREA.
 - PERFORM THE EASE OF ASSEMBLY AND DISASSEMBLY TEST IN ACCORDANCE WITH DRAWING AC200000599. IN CONDUCTING THIS TEST, EACH DIVIDER COMPRISING THE TEST SAMPLE SHALL BE USED AT LEAST ONCE. IF THE TEST SAMPLE IS LESS THAN 1/4, ADD SAMPLES FROM THE PRESENT LOT TO MAKE UP A COMPLETE RACK.
 - REFER TO MIL-R-48664 (AR), PARA 4.3.4, FOR ADDITIONAL QUALITY CONTROL PROCEDURES RELATED TO FIRST ARTICLE INSPECTION ONLY.



(NOTE 3 CONTINUED)

SMALL DIMENSION (.600), THE MINIMUM OF THE LARGE DIMENSION (1.160) AND THE MAXIMUM OF THE THICKNESS (.600). THE CLOSED SLOT GO-GAGE WILL INCORPORATE THE PROFILE OF THE CLOSED SLOT, THE MAXIMUM OF THE SLOT THICKNESS (.600), THE MINIMUM OF THE WIDTH (.600) AND THE MAXIMUM OF THE DIVIDER THICKNESS (1.160).

NOTES:

- THIS DRAWING IS TO COORDINATE THE QUALITY CONTROL REQUIREMENTS OF MIL-R-48664 (AR) AND ALL OTHER DRAWINGS WHICH ARE INCLUDED IN THE TECH DATA PACKAGE. IN THE EVENT THERE IS A CONFLICT BETWEEN THIS DRAWING AND THE TOTAL TECH DATA PACKAGE, THE TOTAL TECH DATA PACKAGE SHALL TAKE PRECEDENCE.
- A CERTIFICATION OF CONFORMANCE OF MATERIAL USED IS REQUIRED AS SPECIFIED IN MIL-R-48664 (AR) AND DRAWING AC200000408.
- DIMENSIONS SHOWN ON THIS DRAWING SHALL BE MEASURED AND FOUND TO BE WITHIN TOLERANCE. DIMENSIONS SHOWN ON DETAIL A-A SHALL BE MEASURED WITHIN ONE INCH OF THE JUNCTION OF THE OPEN AND CLOSED SLOTS. FLASHING ON THE OPEN SLOT PARTING LINE SHALL BE REMOVED UNIFORMLY TO MEET DIMENSIONAL CRITERIA AND NOTE 12. DUE TO THE NATURE OF THE DESIGN AND THE FLEXIBILITY OF PLASTIC, MEASUREMENTS OF THE SLOTS WHICH ARE FOUND OUT OF TOLERANCE IN THE DIRECTION INDICATED IN TABLE I SHALL BE ACCEPTABLE IF FOUND TO PASS A "MINIMAL FORCE" GO-GAGE. IF THE CONTRACTOR ELECTS TO UTILIZE THESE GAGES HE WILL DEVELOP A MINIMAL FORCE STANDARD WHICH CAN BE DEMONSTRATED TO BE CONSISTENT WITH THE EASE OF DISASSEMBLY TESTS (SEE NOTE 12). THE OPEN SLOT GO-GAGE SHALL INCORPORATE THE PROFILE OF THE OPEN SLOT, THE MINIMUM OF THE

- WALL THICKNESS:
 - WALL THICKNESS SHALL BE MEASURED AT THE "TEE" LOCATIONS BY ULTRASONIC TEST METHODS (MIL-HDBK-728/6 APPLIES).
 - WALL THICKNESS SHALL BE FOUND TO EXCEED 0.090 INCHES AT ALL DESIGNATED LOCATIONS EXCEPT 2 DEVIATIONS PER DIVIDER ARE ALLOWED. THE 2 DEVIATIONS, IF USED, SHALL BE FOUND TO EXCEED 0.080 INCHES; OTHERWISE THE DIVIDER IS REJECTED.
 - TESTING OF THE SEVERAL DIVIDERS SHALL BE PERFORMED USING ALTERNATING SIDE, I.E., THE FIRST, THIRD, FIFTH, ETC., WITH NSN SIDE UP; THE SECOND, FOURTH, SIXTH, ETC., WITH NSN SIDE DOWN.
 - THE "TEES" ARE NUMBERED IN SERIES FOR UNIFORMITY OF DATA COLLECTION.
 - TEES NUMBERED 1, 4, 6, 10, 11, AND 15 ARE LOCATED ON THE EDGES OF THE DIVIDER HALF WAY BETWEEN THE NEAR RADIUS AND THE PARTING LINE SEAM. THESE LOCATIONS ALTERNATE EACH SIDE OF THE PARTING LINE SEAM AS THE SIDES ALTERNATE (SEE C ABOVE).
- OVERALL THICKNESS OF THE DIVIDER IS CRITICAL ON BOTH SIDES OF THE SLOTS FROM THE CLOSED EDGE TO THE DIVIDER CENTER LINE.
- THE COLOR OF THE DIVIDER SHALL BE OLIVE DRAB MATCHING ANY OF THE FOLLOWING COLORS OF SAE AMS-STD-595 -34052, -34079, -34086, -34087, -34096, OR -34102.
- DRAINAGE WILL BE PROVIDED FOR ANY MOISTURE ACCUMULATED WITHIN THE DIVIDER INTERIOR WHEN THE DIVIDERS ARE ASSEMBLED ON EITHER EDGE. THERE ARE TWO HOLES IN THE CLOSED EDGE AND EIGHT HOLES IN THE OPEN EDGE. CHECK FOR DRILL THROUGH.

MEASUREMENT	DIMENSION	
	LESS THAN	MORE THAN
SMALL WIDTH OPEN SLOT	.600	
LARGE WIDTH OPEN SLOT	1.160	
THICKNESS OPEN SLOT		.600
WIDTH CLOSED SLOT	.600	
THICKNESS CLOSED SLOT		.600
THICKNESS OF DIVIDER NEXT TO CLOSED SLOT		1.160

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QUALITY CONTROL DRAWING

DATE	88-11-08	DESIGN ACTIVITY	U.S. ARMY
DTF/BN	JMS	CHECKER	SPRAGUE
PROJ. ENGR.	SPRAGUE	COMBINED ARMS SUPPORT COMMAND DEFENSE AMMUNITION CENTER (DAC) MCALESTER, OKLAHOMA 74501-9053	
SUBMITTED	T. J. MICHELS	DIVIDER, AMMUNITION, LOOSE ROUND RESTRAINT SYSTEM (LRRS), 120MM MORTAR RDS IN FIBER TUBES	
APPROVED BY	WILLIAM F. ERNST	SIZE	F 28620
ASSOCIATE DIRECTOR FOR ENGINEERING DIRECTORATE		DRAWING NO.	AC200000591
APPROVED BY	JOHN L. BYRD, JR.	SCALE	NONE
ASSOCIATE DIRECTOR OF COMMANDING GENERAL, U.S. ARMY MATERIAL COMMAND		UNIT WT	
		SHEET	3 OF 3