All pages included should be printed out on 8.5 x 11 US letter paper. Each component template is drawn to scale and can be cut out and glued to their respective thickness of material or used as a reference for measurements. Make sure the ruler at the bottom left of each sheet is 2 inches in length. Alternatively, take a screen-shot and enlarge the plans using a computer program until the ruler is the correct length, then trace the parts needed onto a sheet of paper taped over your computer's screen.

For academic study purposes only
Frame & trigger group templates

Frame side plates X2

Trigger guard

Hammer: 5mm hole

Compression spring
3/4" long, 10mm wide, 2mm thick wire

Grip insert
(Weld in place)

Trigger: 3mm hole

Barrel lug
6mm holes

Secure with appropriate dia 1" long pins or nuts & bolts

Frame side plates: 1/4" (4mm to 6mm thick) mild steel plate
Hammer, trigger, grip insert and barrel lug: 1/4" (6mm) thick mild steel plate
Trigger guard: 2mm thick, 8mm wide, 4.5" long mild steel strip

2 inches
Print on 8.5x11 US letter paper
Breech assembly

1" dia mild steel round bar, 15mm long

Drill with a 2mm bit through front. Bore out rear with a 4.2mm, 12mm deep.

Drill a hole from above until entering firing pin channel. Add threads with a 4mm hand tap.

Side

Front

Firing pin
(4mm dia silver steel bar)

Spin in a drill press and use a hand file to turn down front portion in dia.

2mm

5mm

6mm

7mm

18mm

Assembled:

A small dia compression spring taken from a pen is modified by shortening it to 3 or 4 coils and is positioned in front of the firing pin.

Thread a 10mm long m4 bolt down until firing pin is made freely captive via its slot. Apply loctite to bolt to retain in position.
Insert a piece of 1/4” (6mm) plate between side plates to ensure correct inner dimensions remain while welding frame components together.

File down top of trigger guard to 1/4” to allow insertion between plates.
Barrel

1” outside diameter, 3/4” inner diameter seamless steel tube, 20” long. Can be sleeved with a section of 1” inner diameter steel tube for maximum thickness.

Bevel inner wall using a dremel to accommodate rim

File shallow extraction cut into lower wall

Weld or braze an M6 nut to bottom of barrel

Drill a 2.5mm hole and tap for an M3 button head bolt to serve as a sight bead
Barrel lug and latch

Weld lug onto barrel before drilling through corresponding holes in frame to ensure tight fit and alignment.

Remove this portion

Latch

Tap a modified 1" long m6 bolt into a length of 3mm steel plate. Weld at front. Apply thread locker to ensure firmness in both closed and open position.

File a 7mm wide slot in middle
Forearm

1" or 1.5" thick hardwood
7.5" long

Front profile:

Drill a hole 130mm from front to accept an M6 bolt
Stock

1.5” thick hardwood
14.5” long
Carve out a 14mm wide, 3 1/4" deep slot through middle to accommodate rear of frame

Drill through using a long 8mm drill bit

Stock is retained via a 3" long M8 bolt screwed into a nut welded into frame insert
Frame modifications to accept an M16 / AR15 pistol grip

- Frame plates x2
- Spring channel cover x2
  - Secure in place with two 24mm long pins
- Grip insert
- Reduce thickness of rear portion to 9.5mm using an angle grinder
- Weld an M6 nut in place and secure grip with an M6 bolt

Print on 8.5x11 US letter paper
Non-firing dummy replica mocked up in 'inner city gun buyback' configuration.