

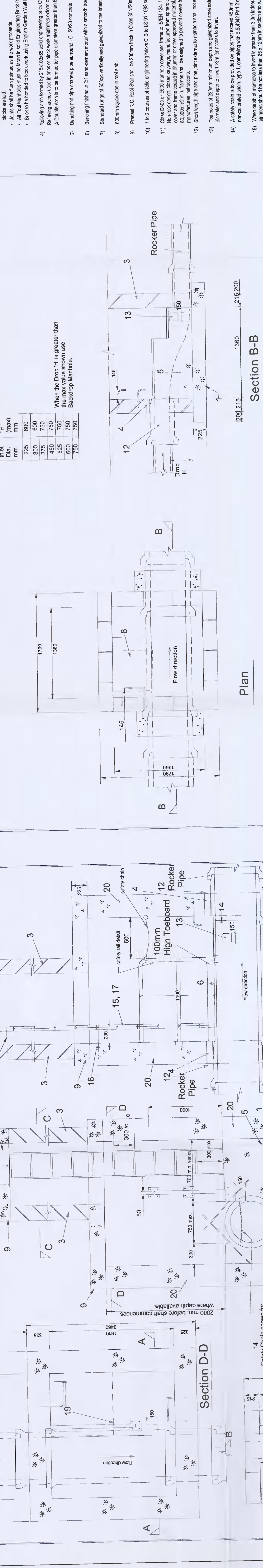
Drawing Notes:

- 225mm thick C 20/25mm Mass Concrete Foundations.
- Performed in concrete channel class. The pipeline, where practicable, be laid through the manhole and the crown cut to full diameter. Provided flexible joints are situated on site no further than 100mm from the inner face of manhole wall.
- Manhole construction:
 - For Surface Water Manholes high strength blocks to BS10 (to BS10 Part 1:1987 or BS 10/20mm ratio concrete).
 - Blocks are laid with applied to the work conditions.
 - All manhole walls shall be constructed with concrete (min. class A or B), or masonry concrete for 1 metre above Backdrop Level.
 - Blocks to be bonded to brickwork using English Garden Wall Bond.
- Reinforcing steel formed by 215. Cold-chamber cast engineering brick Class A or B, or steel mesh.
 - Reinforcing steel shall be placed in accordance with BS 8000 (BS 8000:1998).
 - A Double Arch to be formed for pipe diameters greater than 600mm.
- Bracing and pipe external pipe surface: C 20/25 concrete.
- Bracing of finished 215 cold-chamber cast engineering brick shall be provided in the latest version of BS 8000. Note: Steps have are 100% acceptable.
- Standard range of 215 cold-chamber cast engineering brick shall be provided in the latest version of BS 8000.
- 600mm square size in roof side.
- Precast R.C. Roof Slab shall be 200mm thick in Class C20/25 concrete, with 40mm cover to steel.
- 1:2 concrete of cold engineering brick C18 to BS 1980 set in 1:3 cement and mortar.
- Class C20/25 concrete cover and back to BS 1980 (200mm deep form for roof and 100mm deep for footings and girths areas). Non-work design, cold-chamber cast engineering brick (min. class A or B), or masonry concrete for 1 metre above Backdrop Level. Reinforcing steel shall be placed in accordance with BS 8000 (BS 8000:1998).
- 215 cold-chamber cast engineering brick shall be provided in the latest version of BS 8000. Note: Steps have are 100% acceptable.
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- When slope of manhole to invert is greater than 3.0m ladder shall be used instead of angle to BS 4111 or equivalent. For slopes of manhole to invert less than 3.0m in section and angle 25mm in diameter. For slopes of manhole to invert less than 3.0m in section and angle 25mm in diameter. For slopes of manhole to invert less than 3.0m in section and angle 25mm in diameter.
- Locking strokes should be adequately supported from the manhole wall at intervals of not more than 2.0m. Strangers should be bolted to facilitate removal.
- All floors, ramps, handrails, safety chains etc shall be hot dip galvanized to BS 729 or equivalent.
- Pipe should be cut flat with the inside surface of the manhole wall so that the channel extends the full length of the manhole (except for precast manholes).
- Reinforcement to take to Engineer's details.
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- For manholes 2.0m depth to invert use 300x300mm masonry concrete. Reinforcing mesh ref. A391 @ 8.19m to be fixed at mid point of wall. Additional reinforcement to be supplied over pipe crown.
- For pre cast manholes, Chamber walls and cover slab to be constructed to BS EN 1917 and BS 6920:2004.
- Manhole openings to be situated furthest from the nearest Cartway. Manhole cover access to be positioned to allow viewing of adjoining traffic.
- For sealing and setting of Chamber Aps, the top of the pre cast cover shall be bottom top to be sealed with cement mortar. For additional joints to be sealed with approved polyurethane foam.
- Pre cast Manholes to be surrounded with a minimum of 100mm thick Class C20/25 concrete.

Greater Dublin Regional Code of Practice for Drainage Works
 STANDARD MANHOLE DETAILS
 TYPE: RAMP
 Date: JAN 2000
 Author: JPM
 Checked: JPM
 Approved: JPM
 Scale: NOT TO SCALE
 Drawing No: 12/02

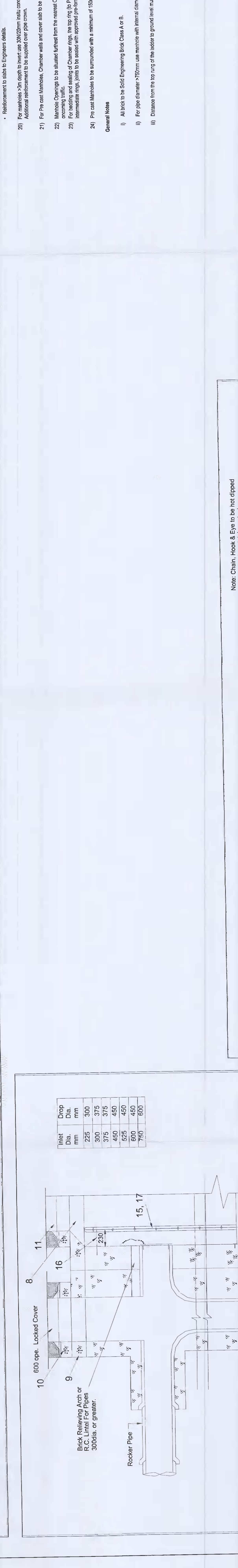
When the Drop H is greater than the max value shown in the Backdrop Manhole table.

Block Dia. (mm)	H _{max} (mm)
225	600
300	600
375	750
450	750
525	750
600	750
750	750

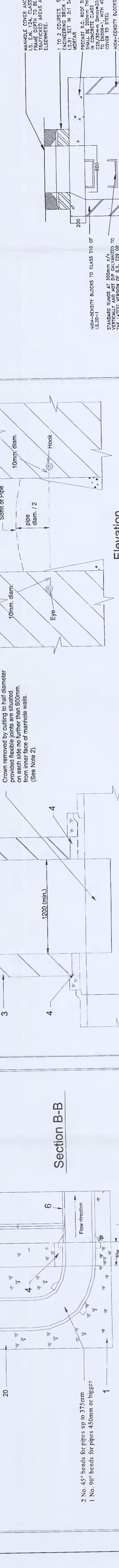


Section B-B
 290.215
 1360
 215.200

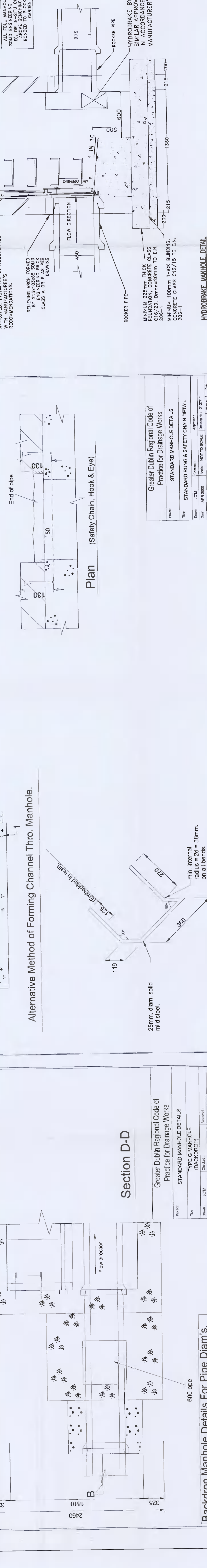
Ramp Manhole Details For Pipe Diam's. 150, 225, 300, 375, 450, 525, 600, 750mm
 Drop < 750mm



Plan (Safety Chain, Hook & Eye)
 Elevation



Alternative Method of Forming Channel Thro. Manhole.
 Standard Rung (from Steps Not Permitted)



Section C-C
 Manhole Details For Pipe Diam's. 525, 600, 675 & 750mm
 Depth to Invert 3m to 6m.

Section D-D
 Backdrop Manhole Details For Pipe Diam's. 225, 300, 375, 450, 525, 600, 750mm
 Drop > 750mm.