

NOTE THAT PC CONCRETE RINGS ARE TO BE KITEMARKED, MINIMUM WALL THICKNESS TO BE 125MM

lifting eyes in concrete rings to be pointed

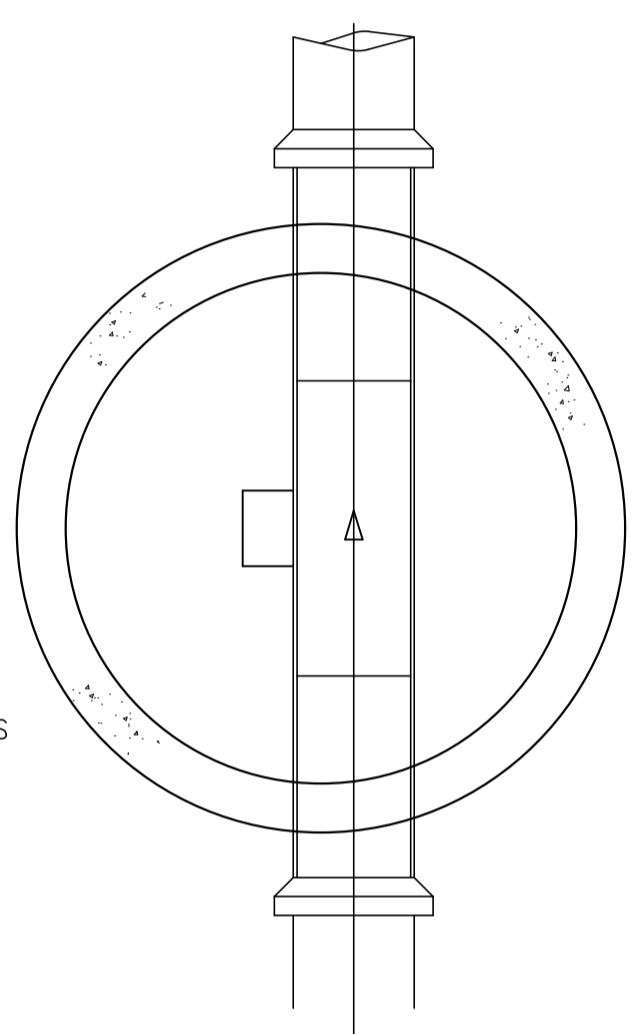
high strength concrete topping to be brought up to a dense smooth face neatly shaped and finished to all branch connections min 40mm thick

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Joint to be as close as possible to face of manhole to permit satisfactory joint and subsequent movement

Minimum width of benching to be 500mm from the face of the step rung

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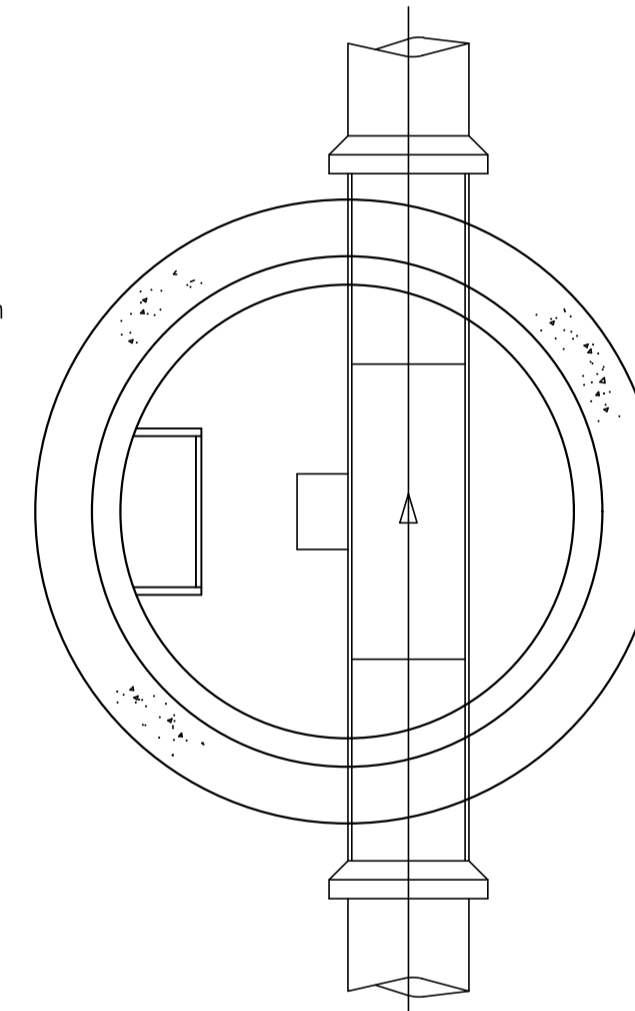
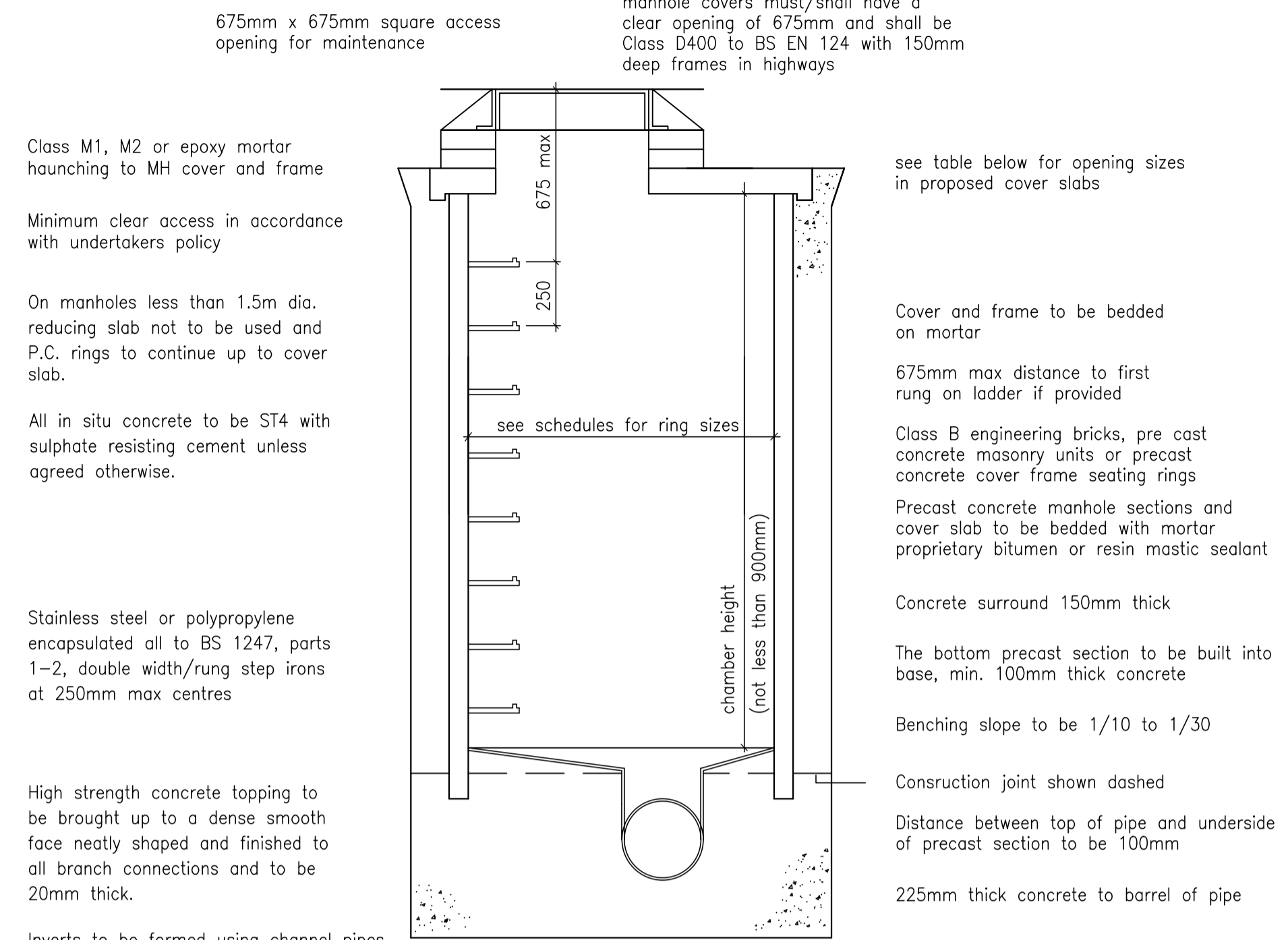


Typical manhole Type C

SPECIFIC TO MANHOLES WHERE DEPTH TO CROWN IS <1.5M APPROX

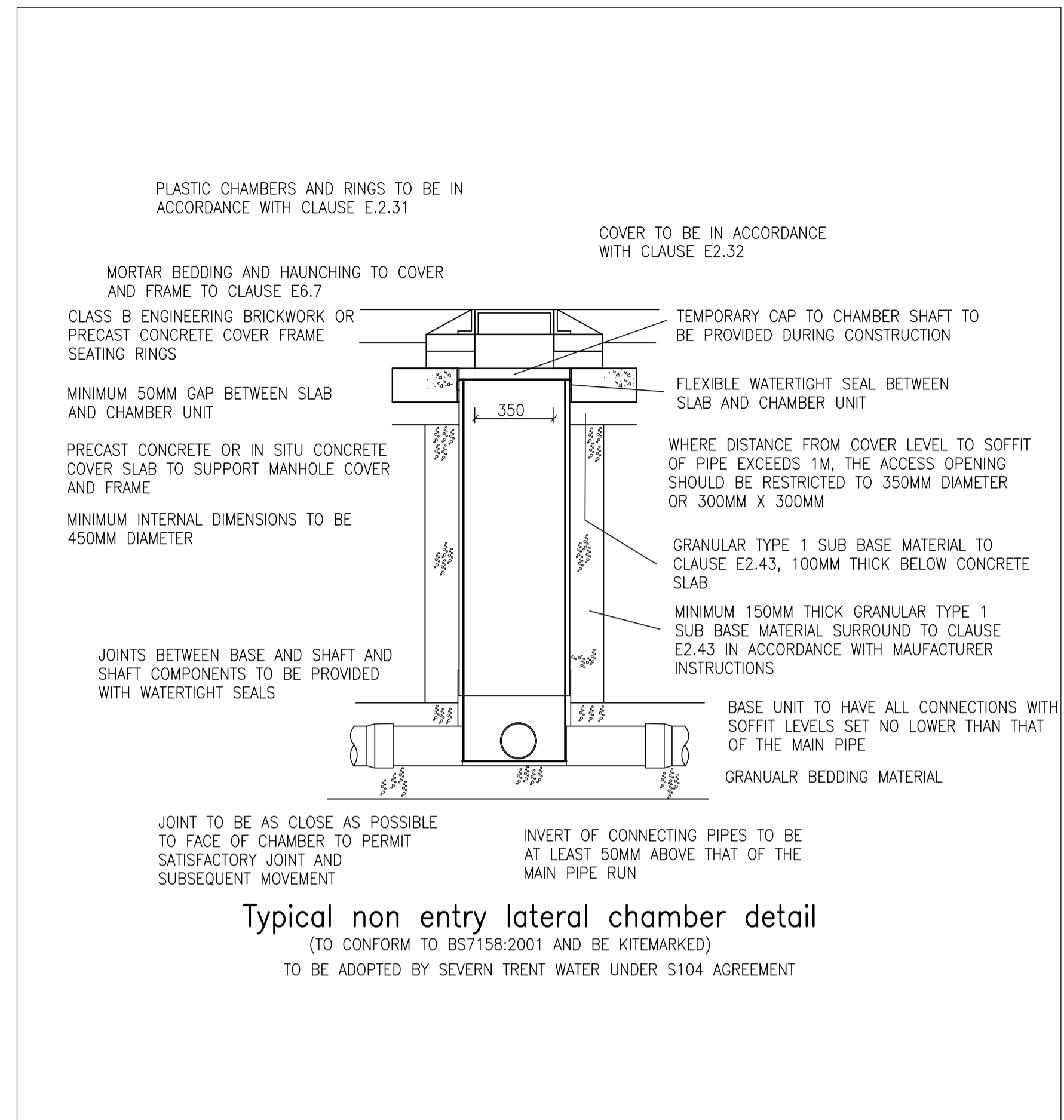
NOTE THAT ALL COVER SLABS ARE TO BE KITEMARKED AND TO COMPLY WITH THE REQUIREMENTS OF THE RELEVANT BRITISH STANDARD AND THE CONCRETE PIPE ASSOCIATION TECHNICAL BULLETIN ISSUED SEPTEMBER 2004

ALL WORKS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF DESIGN AND CONSTRUCTION GUIDANCE OR THAT IS FORCE AT TIME OF WORKS BEING UNDERTAKEN



Typical manhole Type B

Maximum depth from GL to pipe soffit 3m



For 150 dia clay crushing strength from tables, 40KN/m suitable for depth > 6m with Class S bedding

For 225 dia clay crushing strength from tables, 45KN/m suitable for depth > 6m with Class S bedding

For 300 dia Class 120, Pipe crushing load = 36 KN/m
Total design load for max depth to crown of 2.0m, main road conditions = 38.0 KN/m
Bedding Factor, Fm = total design load/pipeline crushing load = 38.0/36 = 1.05, CLASS S SUITABLE

For 375 dia Class 120, Pipe crushing load = 45 KN/m
Total design load for max depth to crown of 2.4m, main road conditions = 52.6 KN/m
Bedding Factor, Fm = total design load/pipeline crushing load = (52.6/45) x 1.5 = 1.75, CLASS S SUITABLE

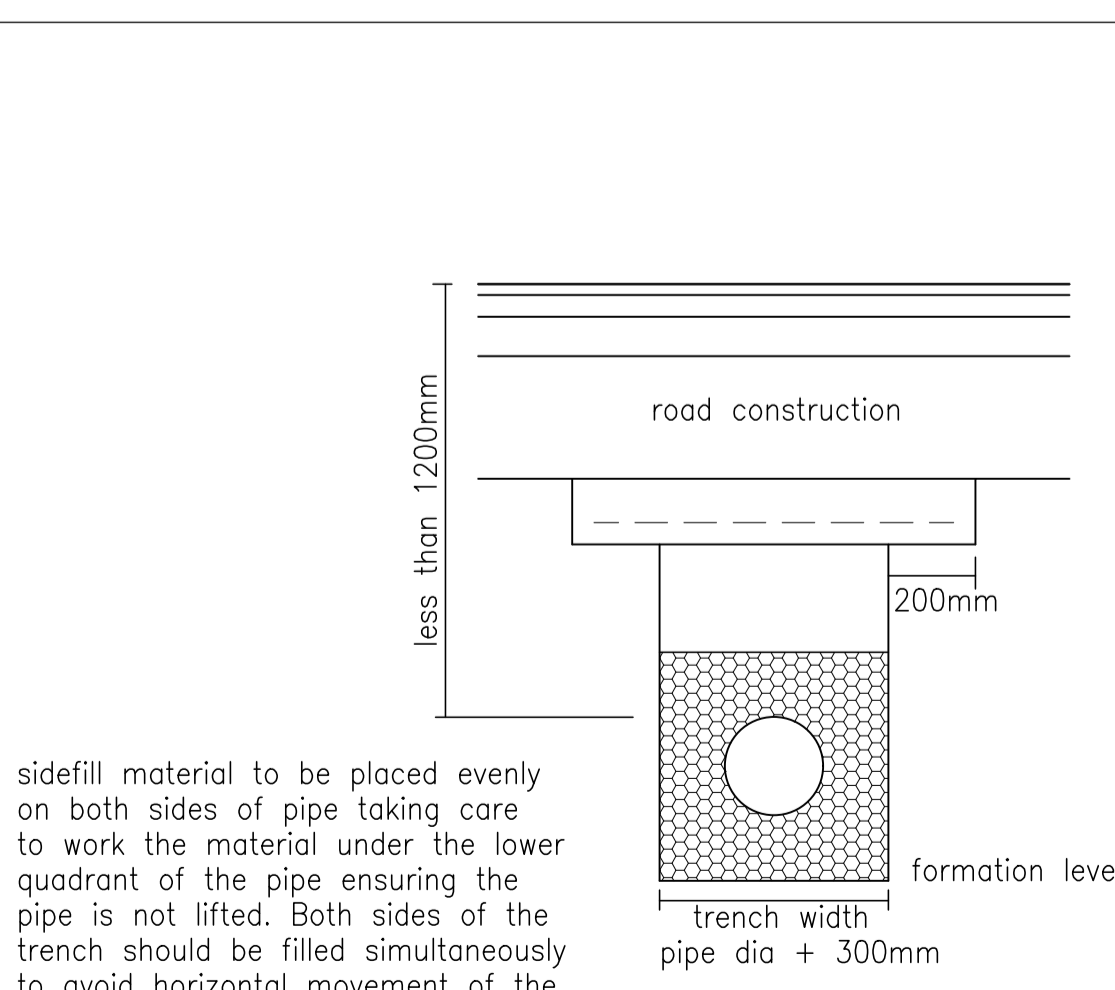
For 900 dia Class 120, Pipe crushing load = 108 KN/m
Total design load for max depth to crown of 3.0m, main road conditions = 128 KN/m
Bedding Factor, Fm = total design load/pipeline crushing load = (128/108) x 1.5 = 1.78, CLASS S SUITABLE

For 1200 dia Class 120, Pipe crushing load = 144 KN/m
Total design load for max depth to crown of 3.0m, main road conditions = 163 KN/m
Bedding Factor, Fm = total design load/pipeline crushing load = (163/144) x 1.7 = 1.70, CLASS S SUITABLE

For 1500 dia Class 120, Pipe crushing load = 180 KN/m
Total design load for max depth to crown of 3.0m, main road conditions = 196 KN/m
Bedding Factor, Fm = total design load/pipeline crushing load = (196/180) x 1.5 = 1.63, CLASS S SUITABLE

NOTE THAT MANHOLE COVER SLABS TO COMPLY WITH BS5911 PART 3/ BE EN 1917:2002 AND BE KITEMARKED

NOTE THAT IN THE ABSENCE OF COMPLIANCE TO BS5911/KITEMARKING, STRUCTURAL CALCULATIONS AND ACCOMPANYING DETAILED SHOULD BE PROVIDED



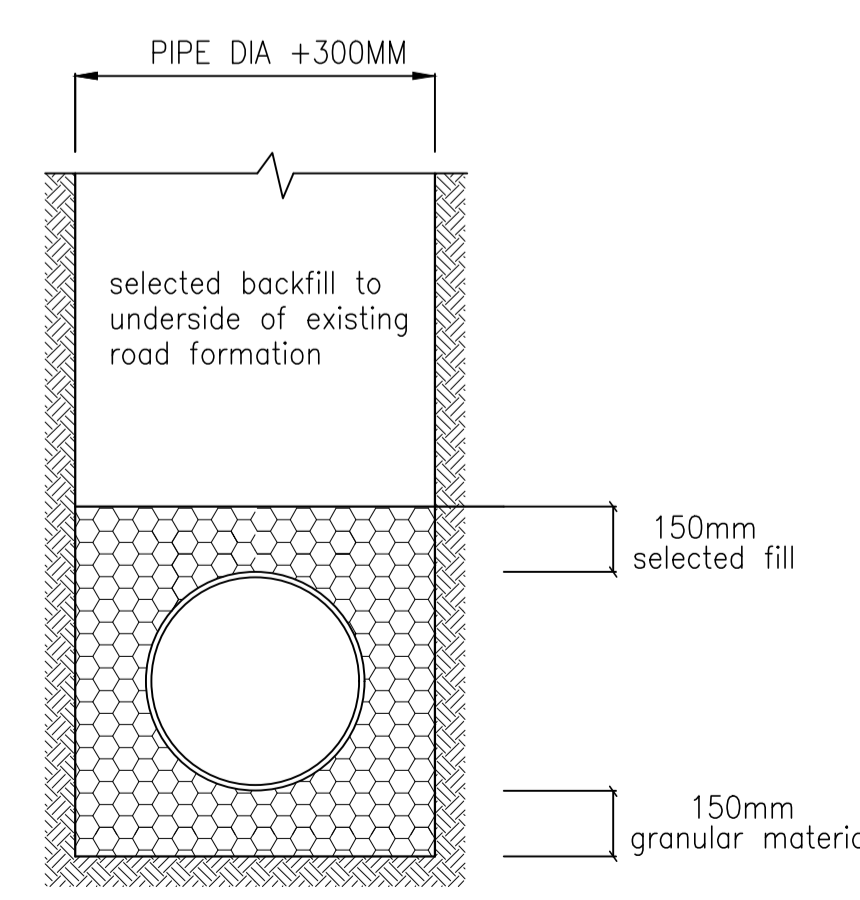
Concrete slab protection Typical detail

150mm C20 concrete slab reinforced with A393 mesh reinforcement

note slab to be placed minimum 100mm above crown of pipe

mechanical compaction of main backfill material not to be commenced until a min 300mm of material has been placed above the pipe crown

bed and surround material to be single sized or graded gravel to WIS 4-08-02 table A2



Class S Bedding Typical detail

1. All work to be in accordance with the current Building Regulations 2. Only written dimensions to be used 3. Discrepancies and abnormalities to be reported 4. If in doubt ask

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Client:
Harron Homes

Site: **Retford**
Phase 3

Title:
Manhole Construction :
Type B & C.

Date: **Jan 21** Scales: **1/20, 1/10** Drawing No.: **M21/1006/1009**