

- NOTES:
- ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH NRA SPECIFICATION FOR ROAD WORKS U.N.O.
 - ALL REINFORCED CONCRETE ON THIS DRAWING SHALL BE U.N.O.: 35N20 COVER = 50mm MIN.
 - SURFACE FINISHES FOR CONCRETE:
 - CLASS F1 FOR ALL CONCRETE 100mm OR MORE BELOW GROUND LEVEL.
 - CLASS F3 FOR ALL EXPOSED CONCRETE ABOVE 100mm BELOW GROUND LEVEL.
 - ALL EXPOSED CORNERS ON CONCRETE SHALL BE CHAMFERED WITH 25mm x 25mm CHAMFERS.
 - ALL STRUCTURAL CONCRETE (HEADWALLS, PC MANHOLES, PETROL INTERCEPTOR SLABS) TO RECEIVE MC DUR 1680 (OR SIMILAR APPROVED TAR MODIFIED EPOXY RESIN) TO ALL BURIED SURFACES, TO FINISH 100mm BELOW GROUND LEVEL.
 - ALL SEWERS SHALL BE PRESSURE TESTED PRIOR TO BACKFILLING.
 - RIGID PIPES SHALL MEAN CAST OR SPUN IRON, CONCRETE, ASBESTOS CEMENT OR CLAY.
 - CLASS D400 MANHOLE COVER FRAMES TO BE 150mm DEEP IN ROADS AND 100mm DEEP IN FOOTPATHS AND GREEN AREAS.
 - ALL AGGREGATES PROPOSED FOR USE ON THIS SCHEME SHALL MEET FULLY THE REQUIREMENTS OF THE NRA SPECIFICATION FOR ROAD WORKS AND IN ADDITION THE REQUIREMENTS STATED IN STANDARD RECOMMENDATION S.R. 21:2014 GUIDANCE ON THE USE OF I.S. EN 12422:2002 +A1:2007-AGGREGATES FOR UNBOUND AND HYDRAULICALLY BOUND MATERIALS FOR USE IN CIVIL ENGINEERING WORK AND ROAD CONSTRUCTION.
 - ALL FOUL SEWERS, MANHOLES, AND CONNECTIONS TO BE CONSTRUCTED IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE AND STANDARD DETAILS.
 - ALL SURFACE WATER SEWERS, MANHOLES, AND CONNECTIONS TO BE CONSTRUCTED IN ACCORDANCE WITH THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS.

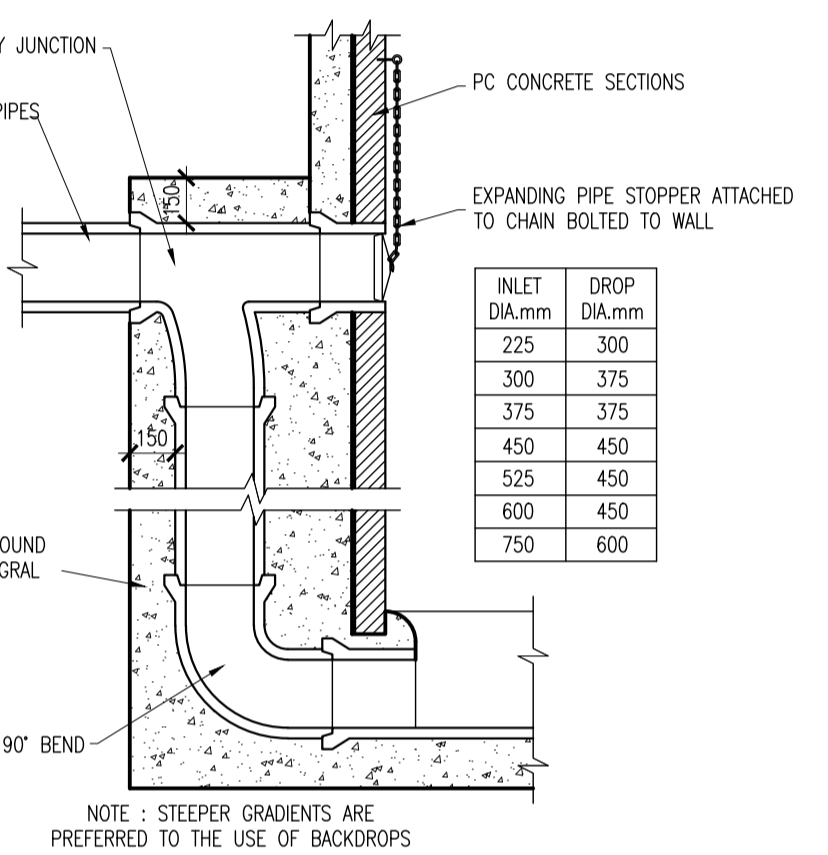
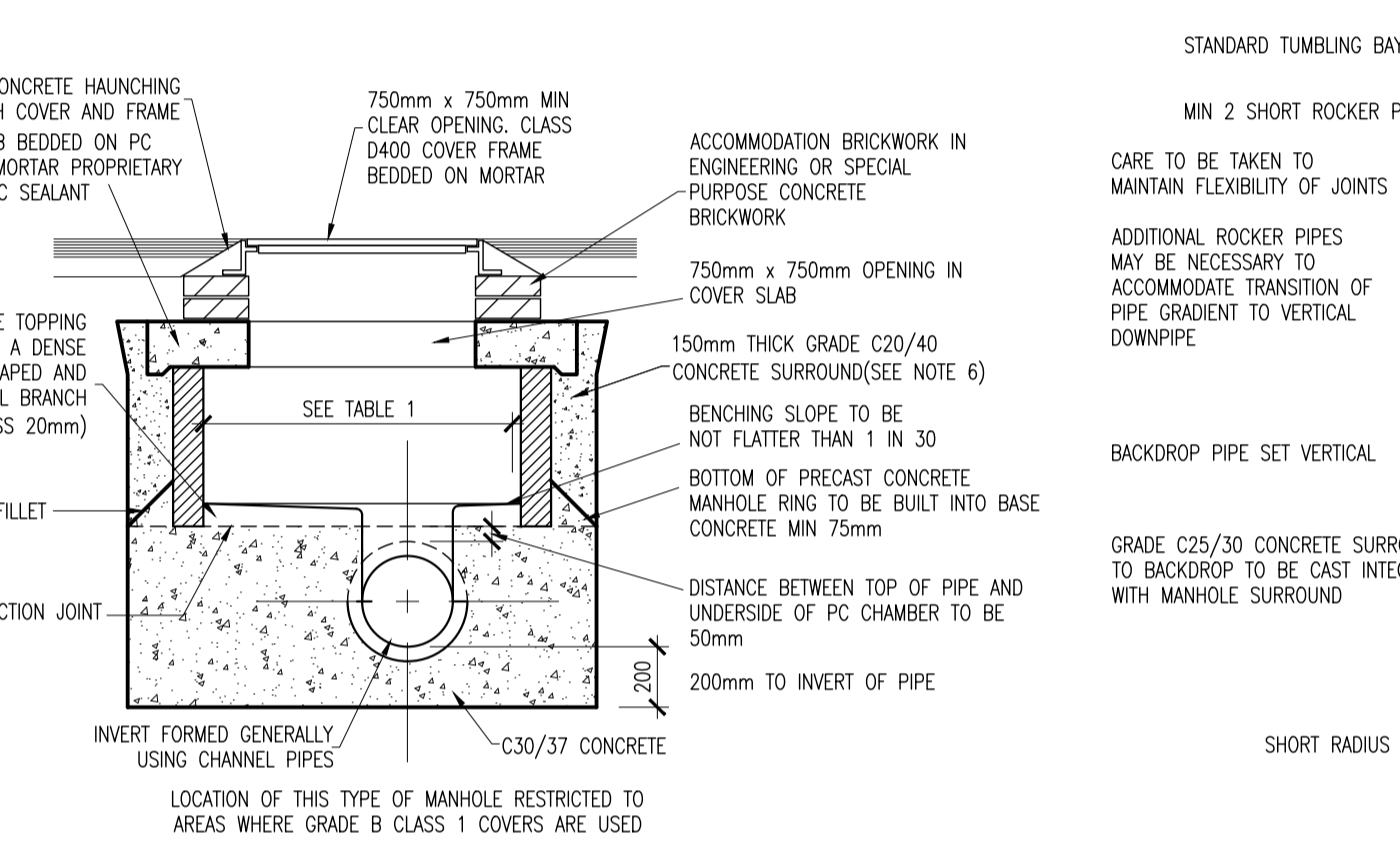
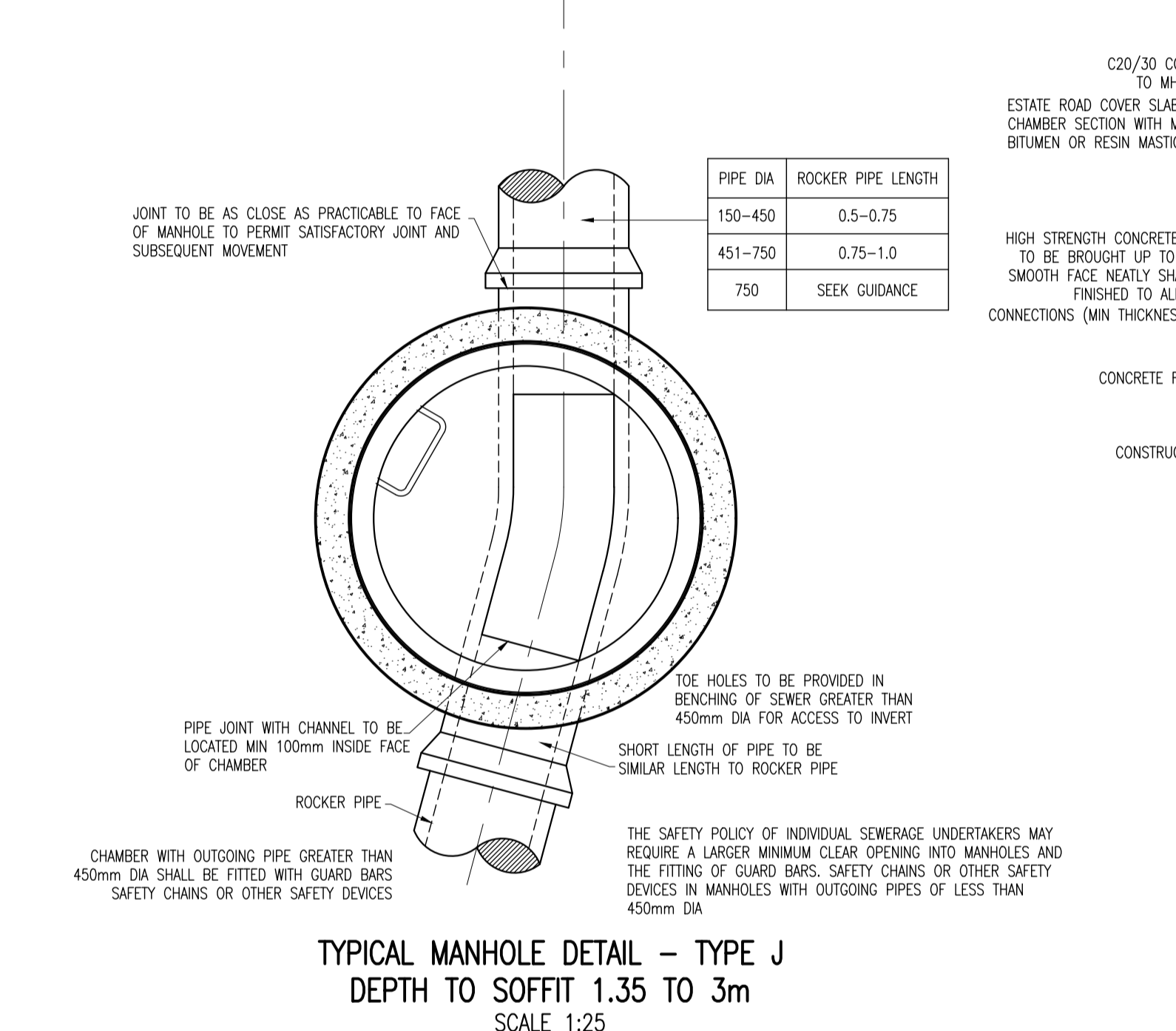
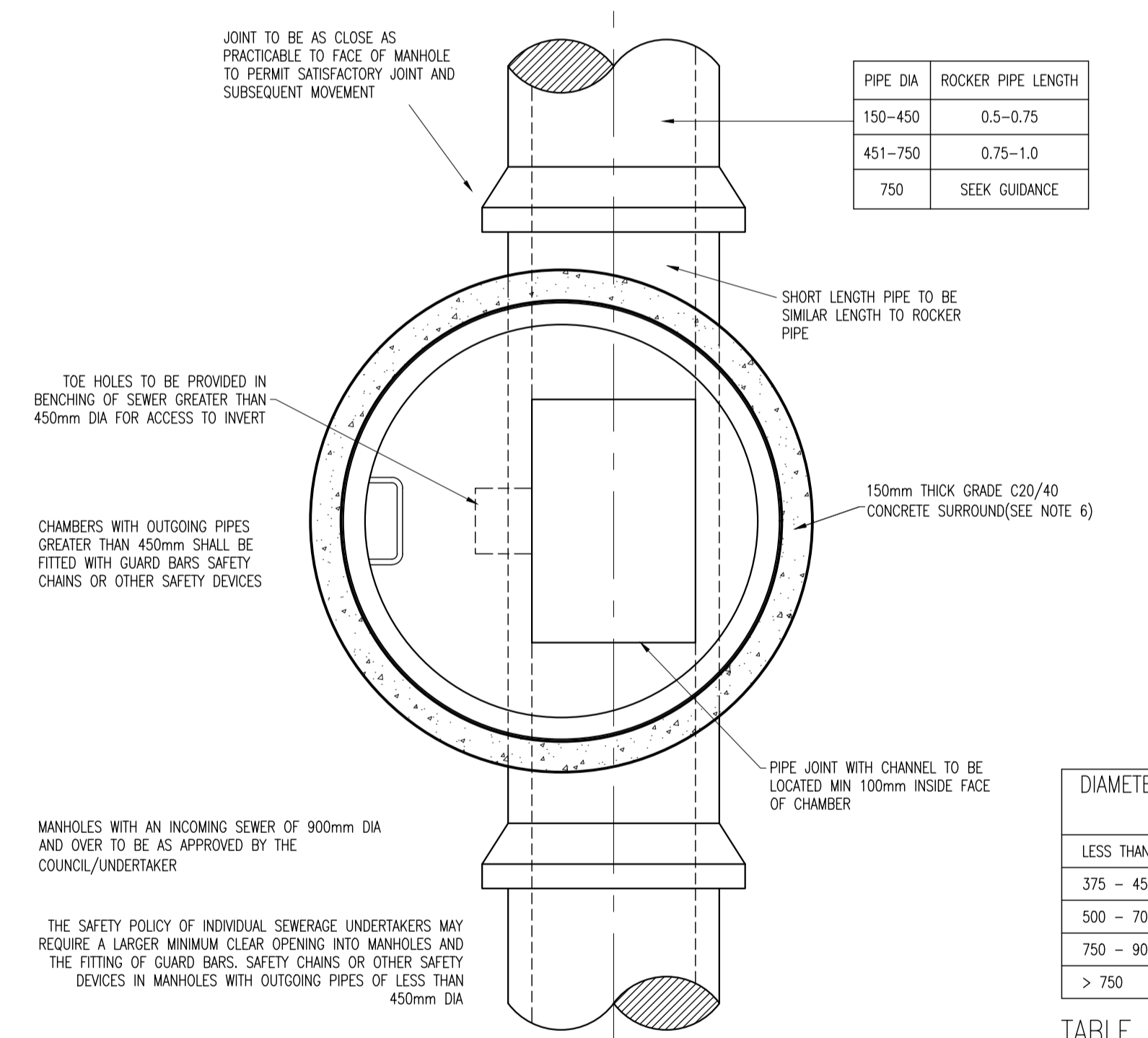
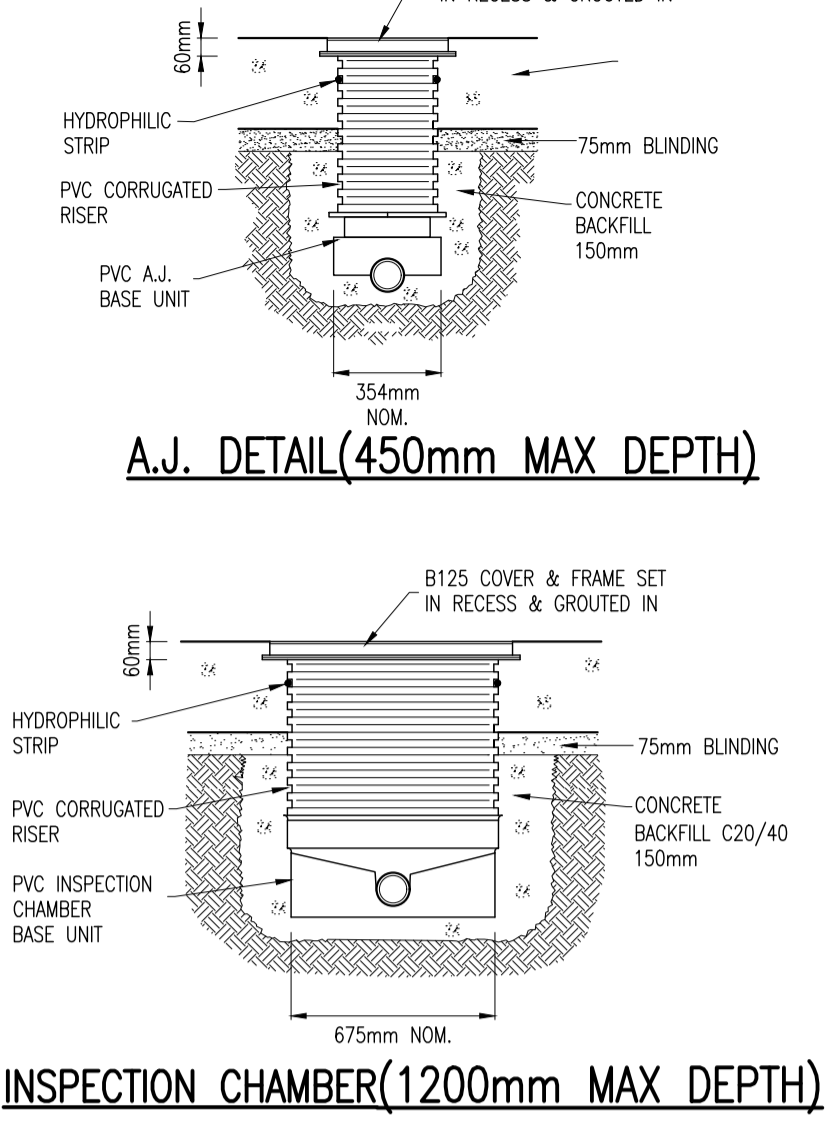
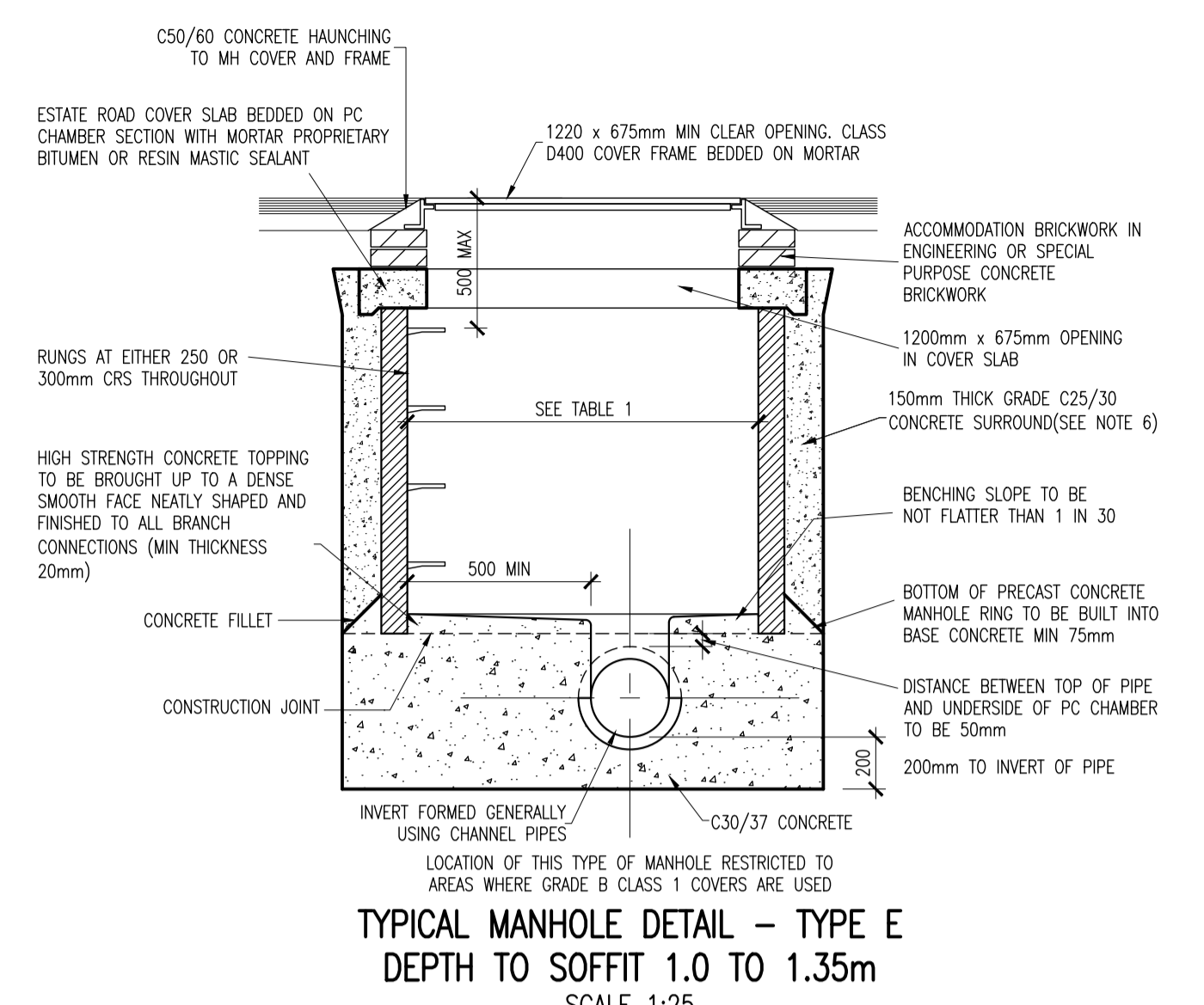
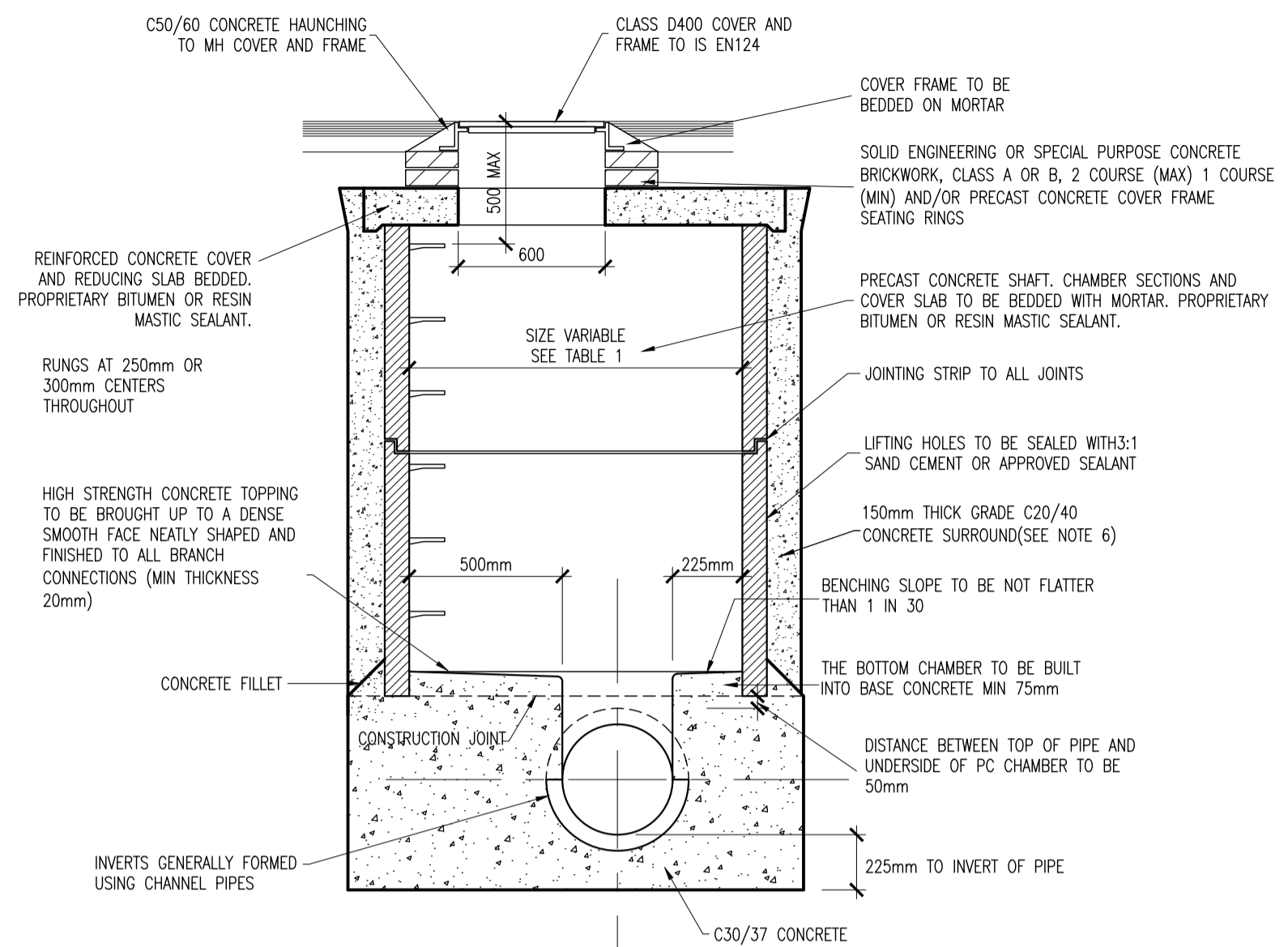
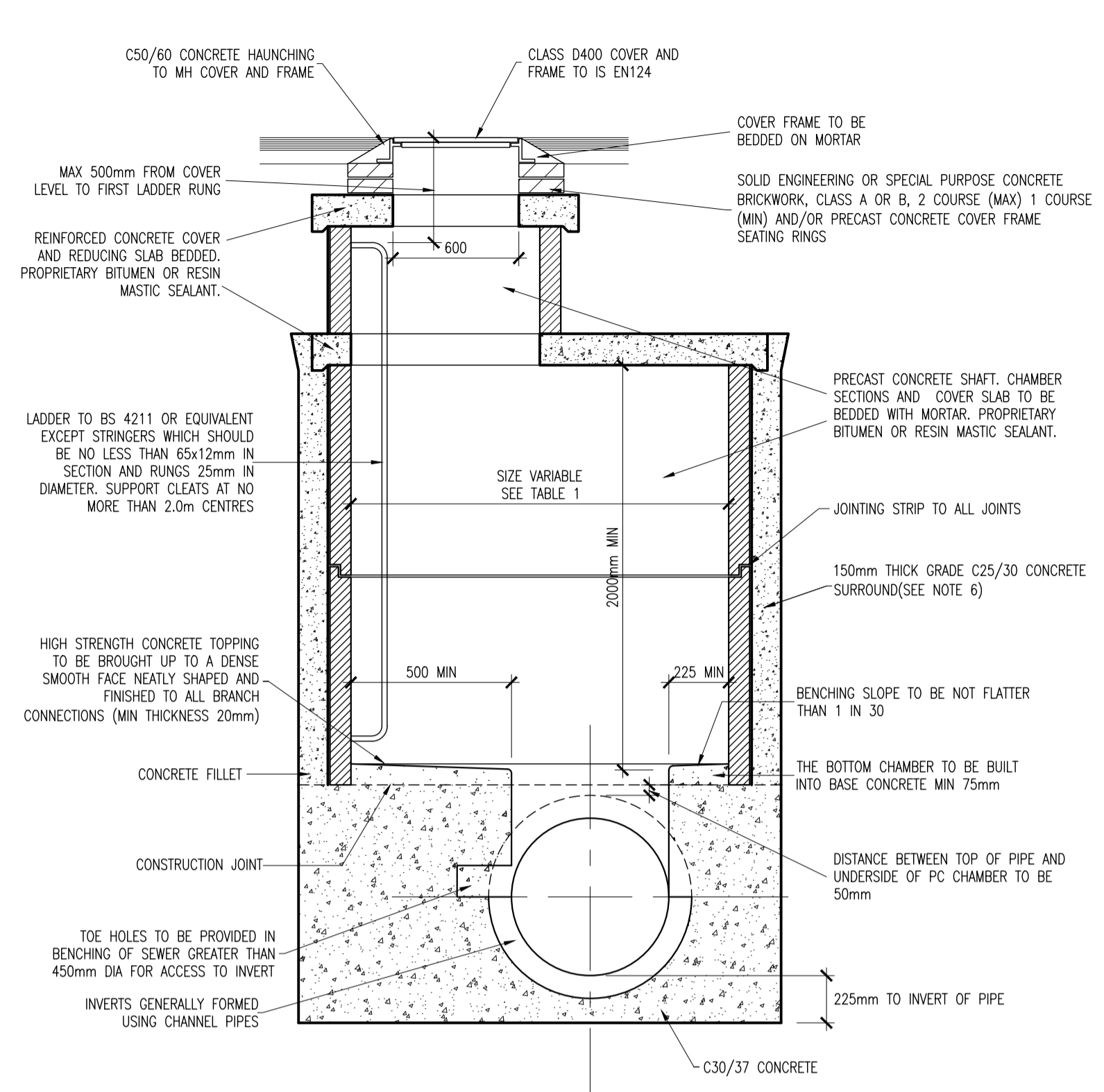
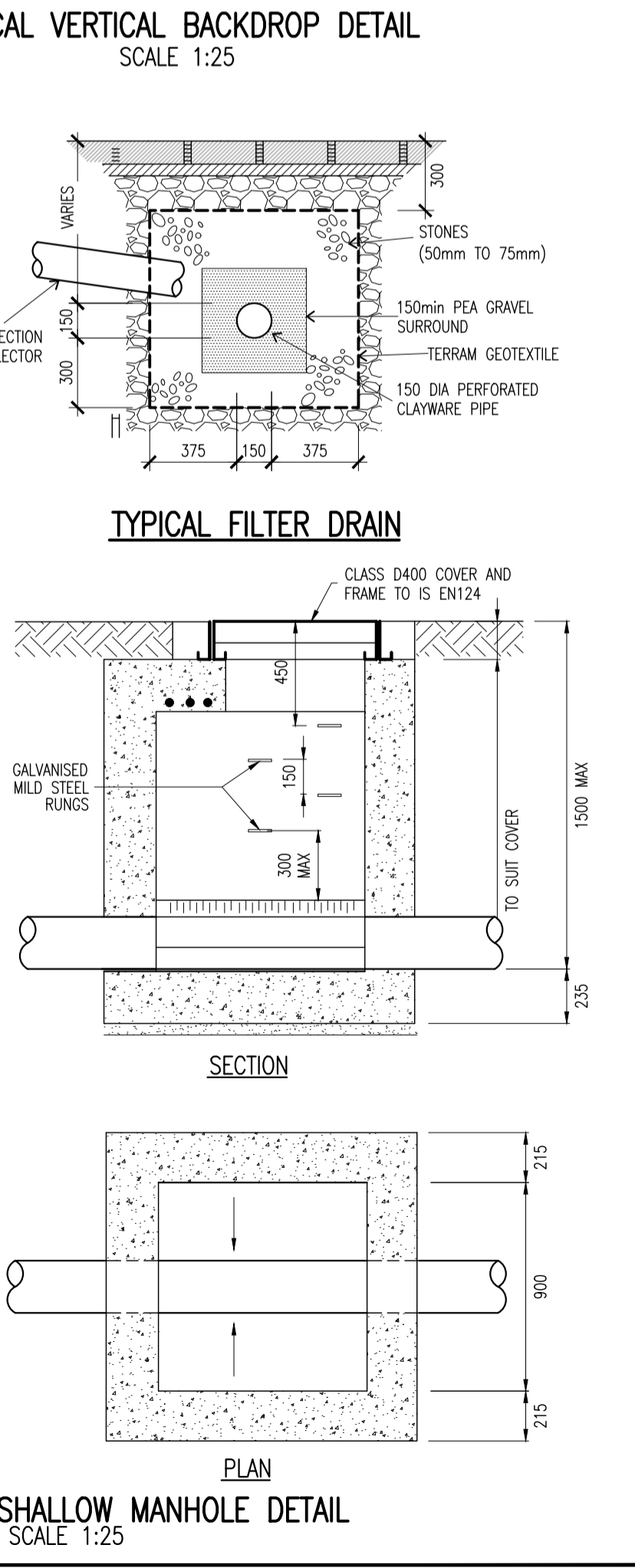
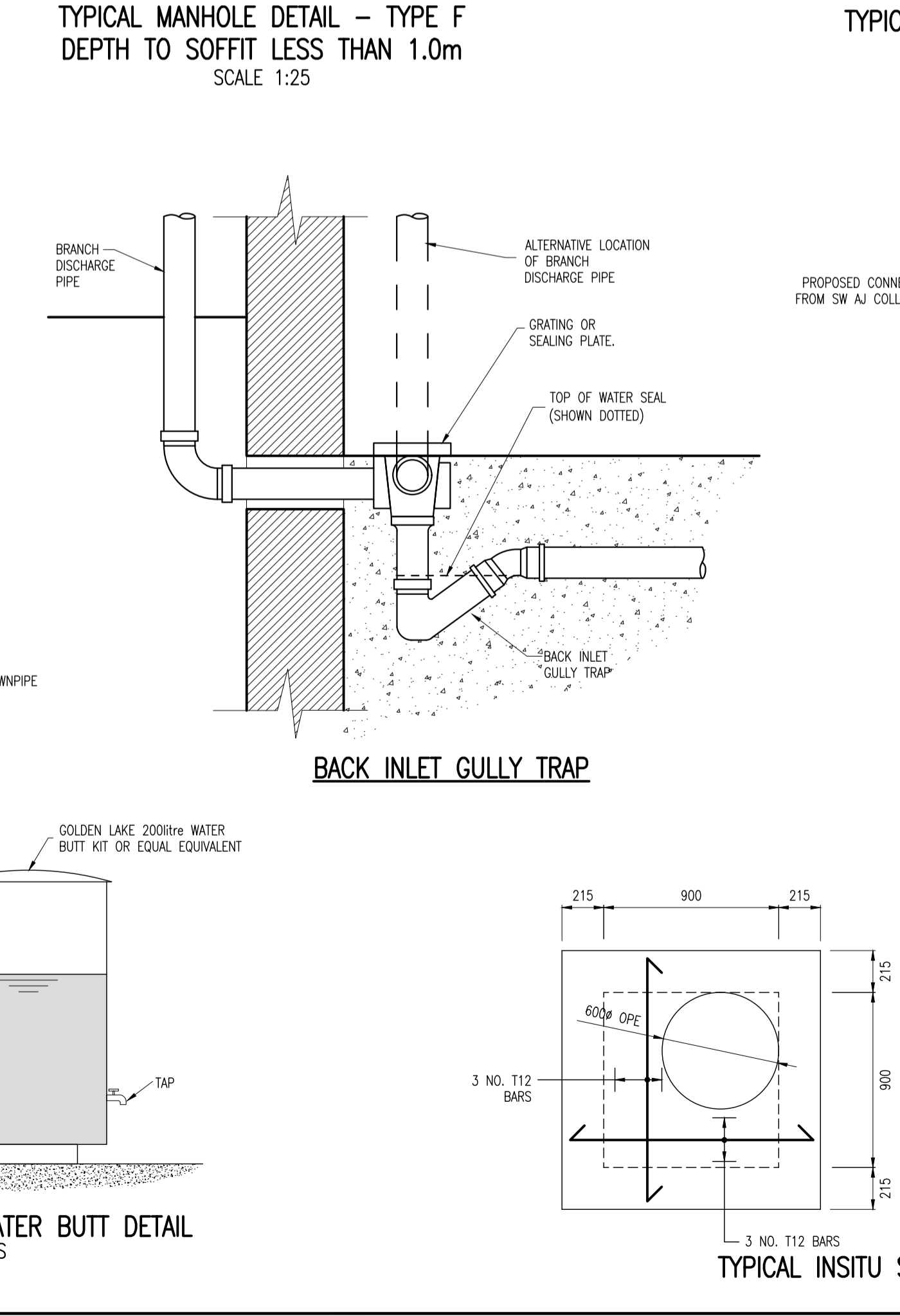
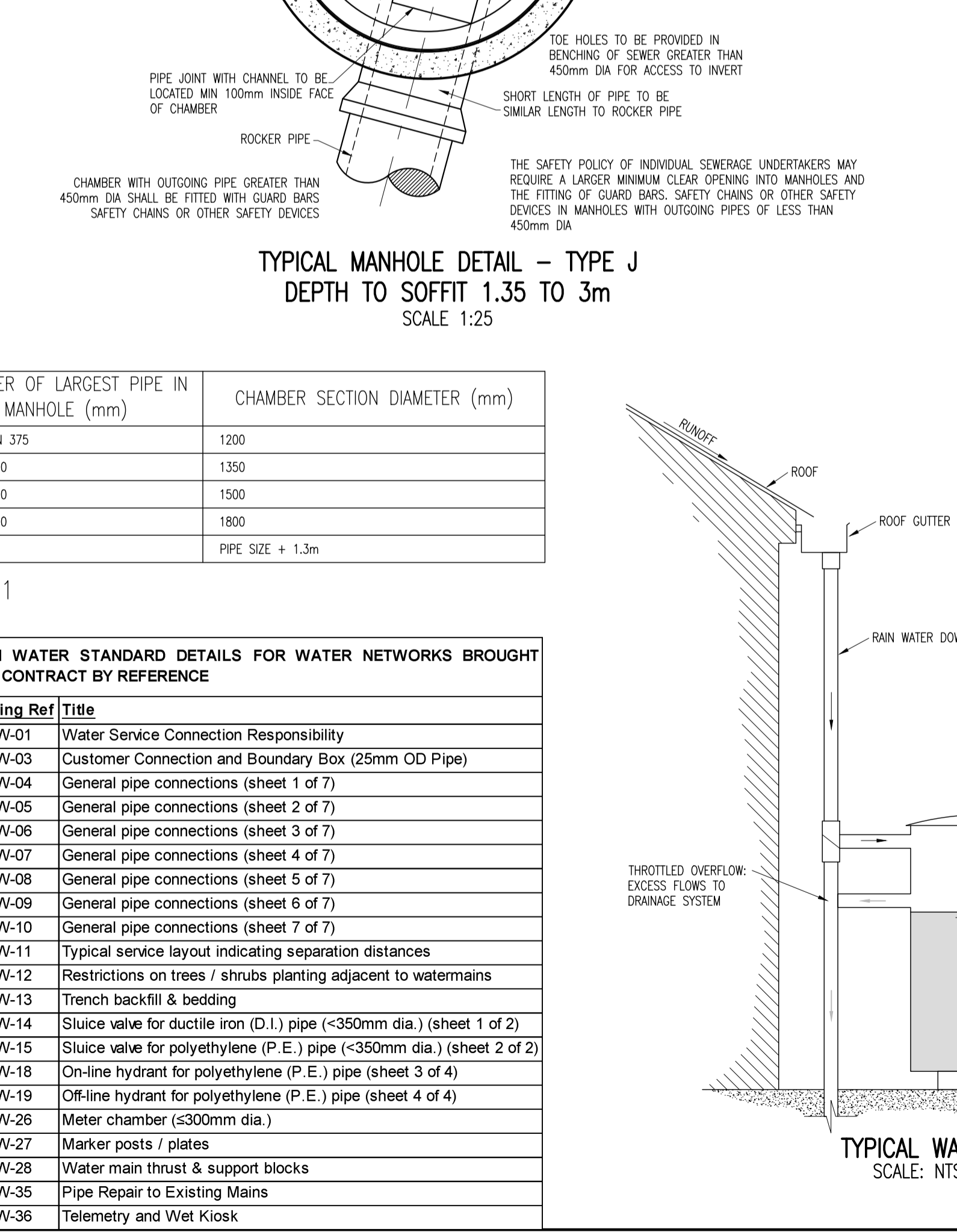


TABLE 1

| DIAMETER OF LARGEST PIPE IN MANHOLE (mm) | CHAMBER SECTION DIAMETER (mm) |
|--|-------------------------------|
| LESS THAN 375 | 1200 |
| 375 - 450 | 1350 |
| 500 - 700 | 1500 |
| 750 - 900 | 1800 |
| > 750 | PIPE SIZE + 1.3m |

IRISH WATER STANDARD DETAILS FOR WATER NETWORKS BROUGHT INTO CONTRACT BY REFERENCE

| Drawing Ref | Title |
|-------------|--|
| STD-W-01 | Water Service Connection Responsibility |
| STD-W-03 | Customer Connection and Boundary Box (25mm OD Pipe) |
| STD-W-04 | General pipe connections (sheet 1 of 7) |
| STD-W-05 | General pipe connections (sheet 2 of 7) |
| STD-W-06 | General pipe connections (sheet 3 of 7) |
| STD-W-07 | General pipe connections (sheet 4 of 7) |
| STD-W-08 | General pipe connections (sheet 5 of 7) |
| STD-W-09 | General pipe connections (sheet 6 of 7) |
| STD-W-10 | General pipe connections (sheet 7 of 7) |
| STD-W-11 | Typical service layout indicating separation distances |
| STD-W-12 | Restrictions on trees / shrubs planting adjacent to watermains |
| STD-W-13 | Trench backfill & bedding |
| STD-W-14 | Sluice valve for ductile iron (D.I.) pipe (<350mm dia.) (sheet 1 of 2) |
| STD-W-15 | Sluice valve for polyethylene (P.E.) pipe (<350mm dia.) (sheet 2 of 2) |
| STD-W-18 | On-line hydrant for polyethylene (P.E.) pipe (sheet 3 of 4) |
| STD-W-19 | Off-line hydrant for polyethylene (P.E.) pipe (sheet 4 of 4) |
| STD-W-26 | Meter chamber (≤300mm dia.) |
| STD-W-27 | Marker posts / plates |
| STD-W-28 | Water main thrust & support blocks |
| STD-W-35 | Pipe Repair to Existing Mains |
| STD-W-36 | Telemetry and Wet Kiosk |



| REV | DATE | DESCRIPTION | BY | CHKD |
|-----------------|----------|-------------|-----|------|
| PLANNING | | | | |
| DESIGNED | NGC | PREPARED | PJC | |
| DATE | SEP 2019 | CHECKED | DJR | |

DBFL Dublin Office: Ormrod House, Upper Ormrod Quay, Dublin 7, Ireland. PHONE: +353 1 400 4000 FAX: +353 1 400 4050

WATERFORD OFFICE: Unit 2, The Chandlery, 1-2 O'Connell Street, Waterford, Ireland. PHONE: +353 51 308 500 FAX: +353 51 844 913

DBFL Consulting Engineers email: info@dbfl.ie site: www.dbfl.ie

PROJECT
LANDS AT NEWCASTLE, SOUTH DUBLIN

DRG. TITLE
TYPICAL SW DRAINAGE DETAILS SHEET 1

ARCHITECT
MOLA

SCALE: AS SHOWN @A1 FILE REF: 170024-3015
DRG. NO. 170024-3015