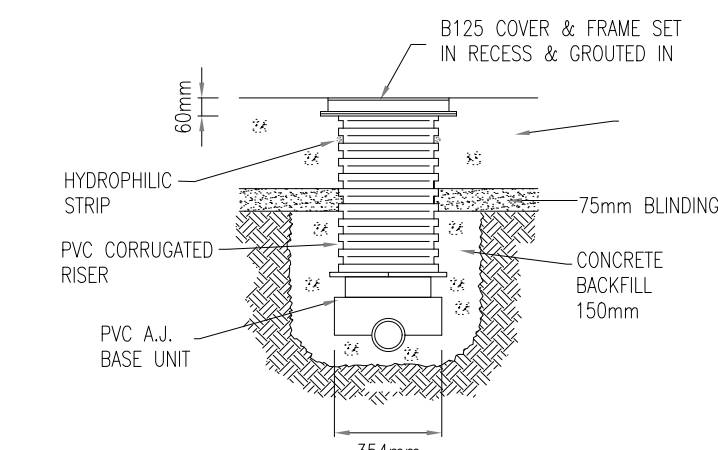


NOTES

- NO PART OF THIS DRAWING MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR STORED IN ANY RETRIEVAL SYSTEM OF ANY NATURE WITHOUT THE WRITTEN PERMISSION OF AKM DESIGN AS COPYRIGHT HOLDER, EXCEPT AS AGREED FOR USE ON THE PROJECT FOR WHICH THE DRAWING IS ORIGINALLY ISSUED.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS, ARCHITECTS AND SPECIALISTS DRAWINGS AND SPECIFICATION.
- ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
- DO NOT SCALE DIMENSIONS.
- THE CONTRACTOR SHALL CHECK ALL DIMENSIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. DISCREPANCIES SHALL BE REPORTED TO THIS OFFICE IN WRITING.
- ALL REINFORCED CONCRETE ON THIS DRAWING SHALL BE UN 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, RC MANHOLES, PETROL INTERCEPTOR SLABS) TO RECEIVE MC DUR 1680(SIMILAR APPROVED TAP MODIFIED EPOXY RESIN) TO ALL BURIED SURFACES, TO FINISH 100mm BELOW GROUND LEVEL.
- ALL SEWERS SHALL BE PRESSURE TESTED PRIOR TO BACKFILLING.
- TYPE 1 GRANULAR MATERIAL: BROKEN STONE OR GRAVEL TO PASS 10mm SIEVE AND BE RETAINED ON 5mm SIEVE.
- TYPE 2 GRANULAR MATERIAL: BROKEN STONE OR GRAVEL TO PASS 10mm-25mm SIEVE, ACCORDING TO PIPE SIZE, (SEE TABLE) AND BE RETAINED ON 5mm SIEVE.
- TYPE 3 SELECTED FILL: UNIFORM READILY COMPACTED MATERIAL FREE FROM TREE ROOTS, VEGETABLE MATTER, BUILDING DEBRIS, AND FROZEN SOIL AND EXCLUDING CLAY LUMPS RETAINED ON A 75mm SIEVE AND STONES RETAINED ON A 37.5mm SIEVE.
- FOUL SEWERS AND MANHOLES TO BE CONSTRUCTED TO IRISH WATER STANDARD DETAILS.
TYPE 2 GRANULAR MATERIAL:

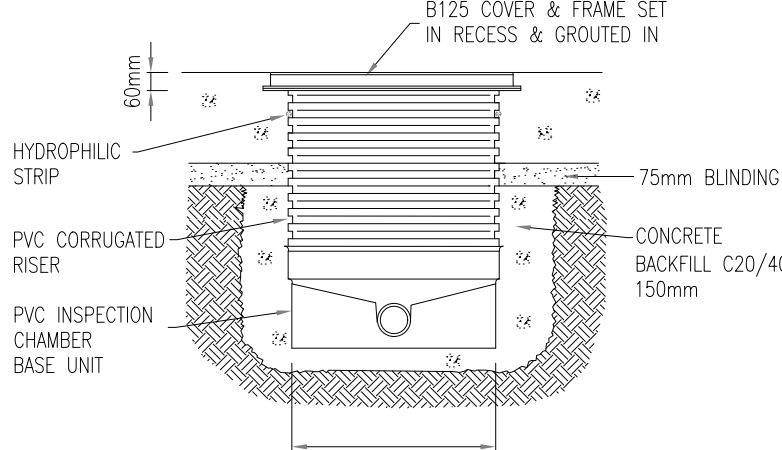
| PIPE SIZE | 100% PASSING |
|--------------|--------------|
| UP TO 225mm | 10mm SIEVE |
| 225 TO 450mm | 20mm SIEVE |
| ABOVE 450mm | 25mm SIEVE |
- WHEN ALLOWED BY LOCAL AUTHORITY OR COUNTY COUNCIL, PRECAST MANHOLES SHALL HAVE 150mm CONCRETE SURROUND UNLESS MANUFACTURER CAN SHOW, TO THE ENGINEERS SATISFACTION, THAT PERMANENTLY WATERPROOF JOINTS CAN BE ACHIEVED BY SOME OTHER METHOD.
- FOR 750mm Ø PIPES OR GREATER, USE A SAFETY CHAIN AND PROVIDE 25mm Ø GALVANIZED SOLID BAR HANDRAILS AT EDGES OF BENCHING.
- STEP RUNGS TO BE PROVIDED IN MANHOLES DEEPER THAN 1m. LADDER TO BE USED FOR MANHOLES DEEPER THAN 4.5m.
- IN MANHOLES WHOSE PIPE DIAMETER IS GREATER THAN 375, ONE BENCHING SHOULD BE AT LEAST 400 WIDE.
- ALL MANHOLE COVERS & GULLIES TO BE LOCKABLE.
- MANHOLE COVERS & FRAMES ARE TO BE IN ACCORDANCE WITH ISEN124:

| | |
|--|-------------------|
| - CARRIAGEWAYS | CLASS D400 |
| - FOOTPATHS & GRASSED AREAS | CLASS B125 PUBLIC |
| - AREAS INACCESSIBLE TO WHEELED VEHICLES | CLASS A15 |



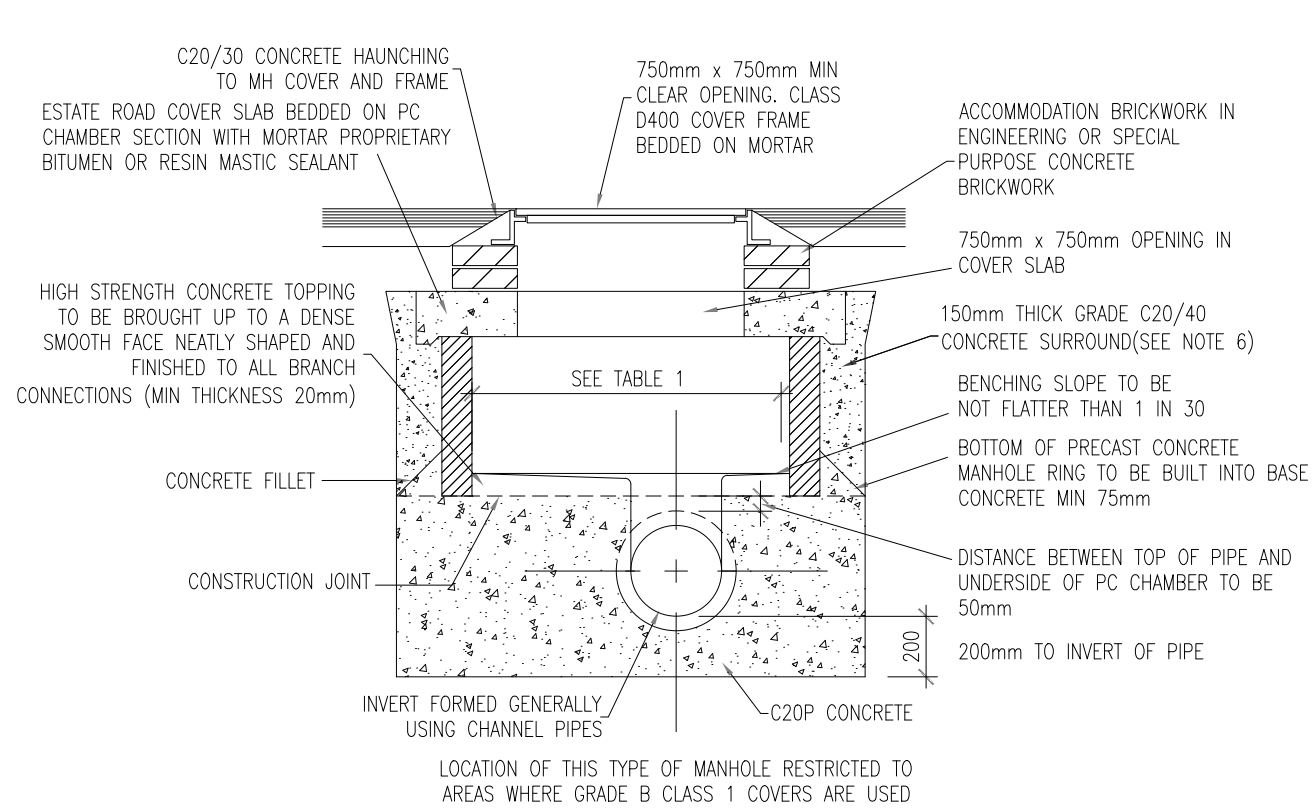
AJ DETAIL (450mm MAX DEPTH)

N.T.S



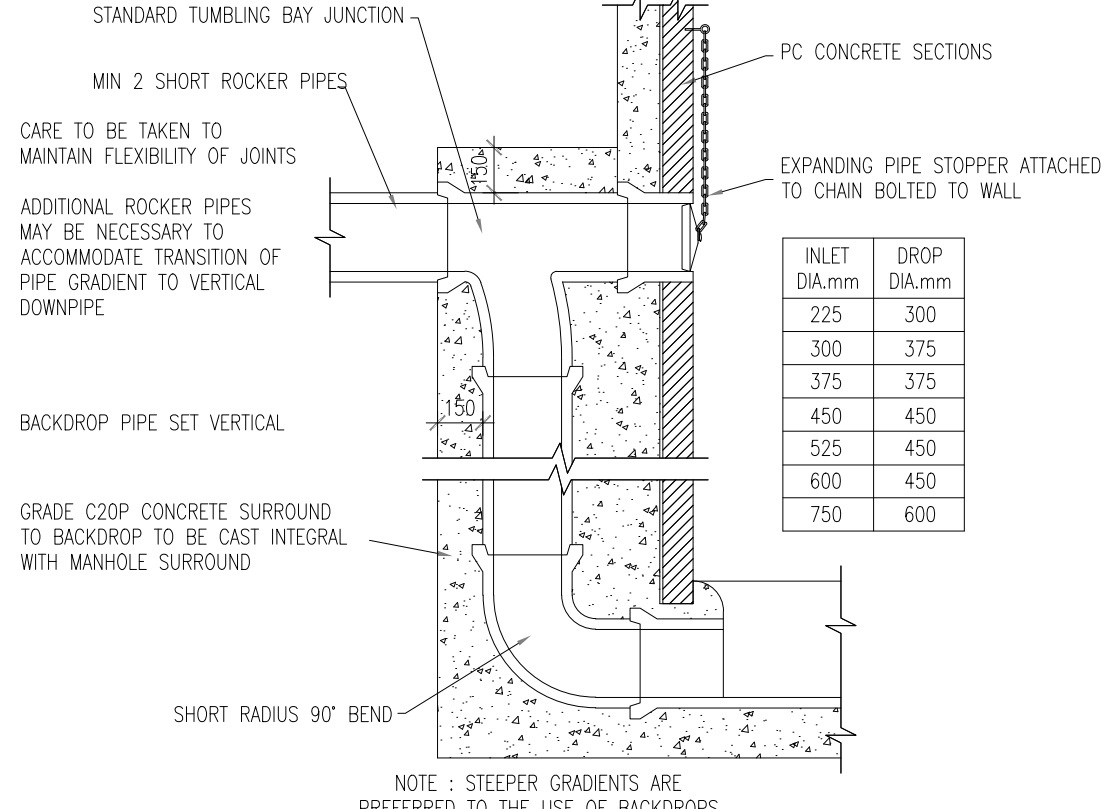
SW INSPECTION CHAMBER (1200mm MAX DEPTH)

N.T.S



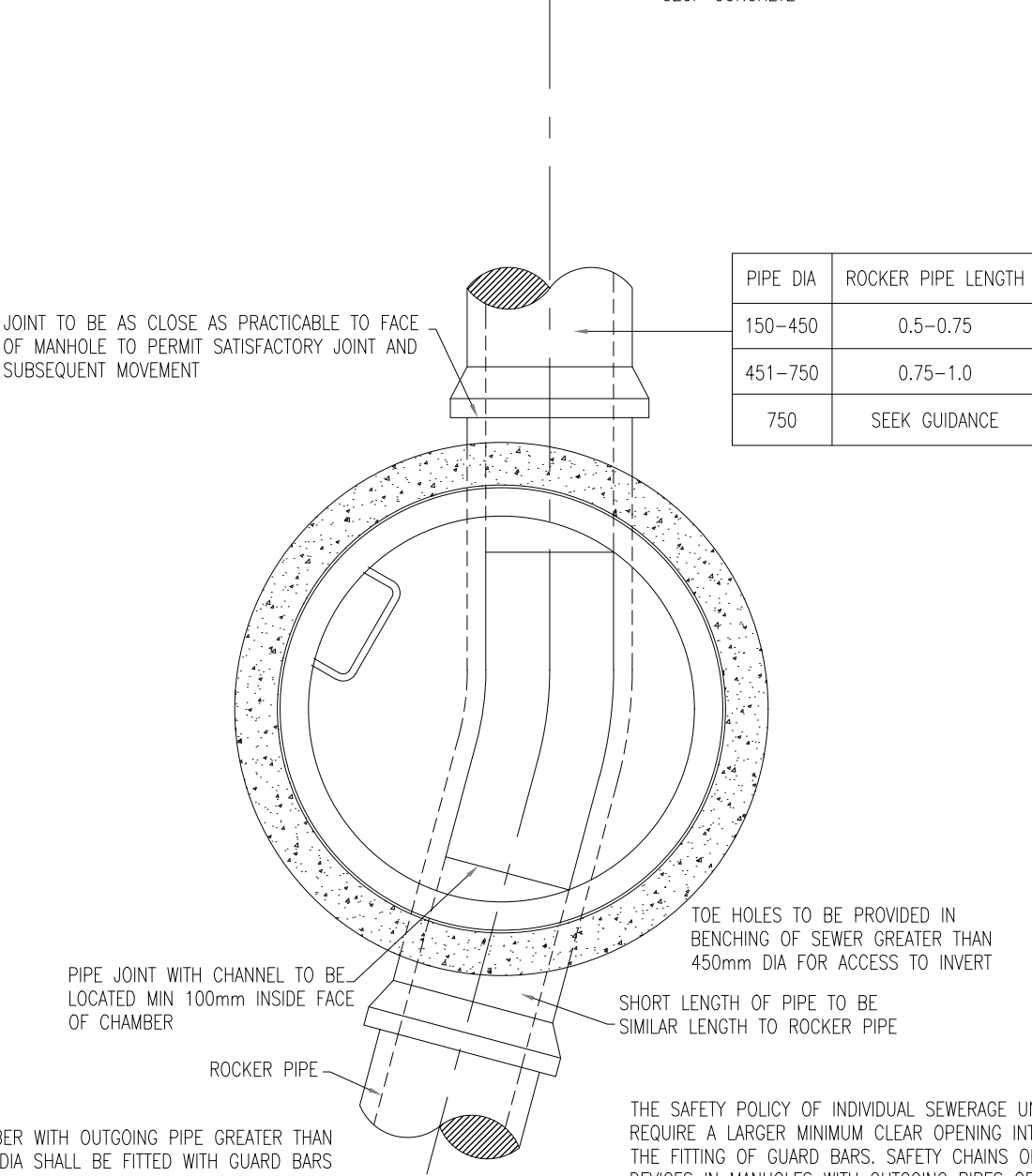
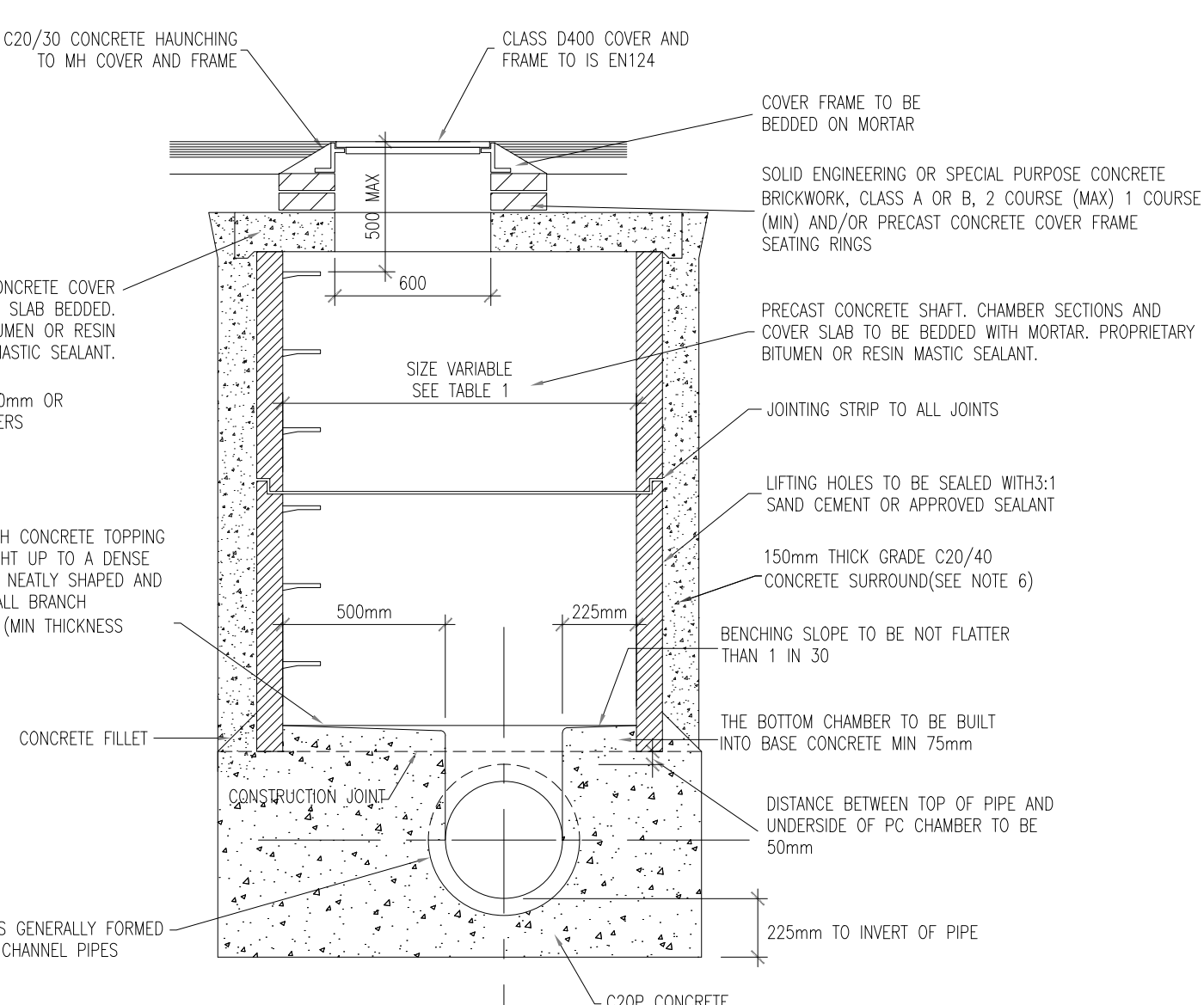
TYPICAL SW MANHOLE DETAIL (<1.0M)

N.T.S



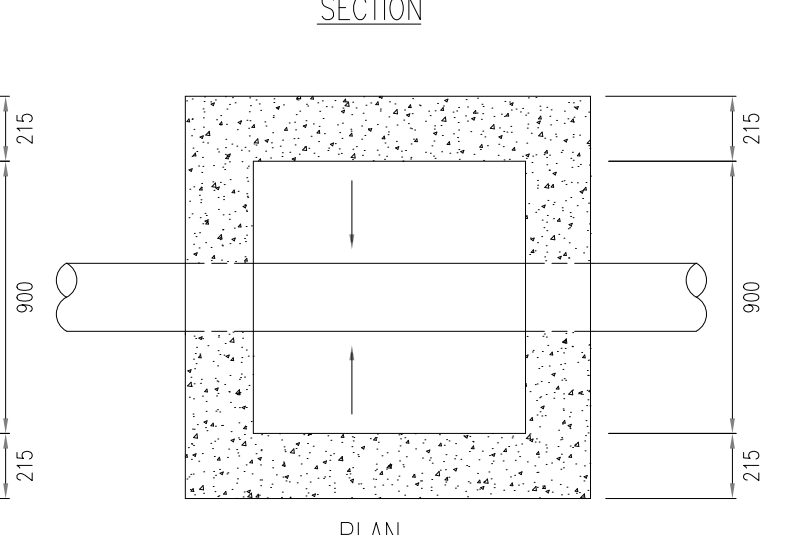
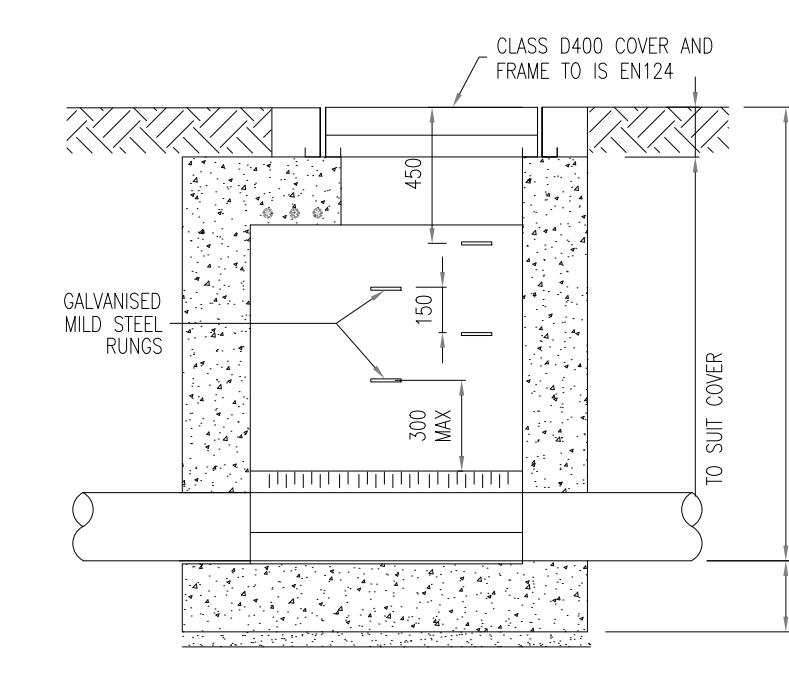
TYPICAL SW BACKDROP DETAIL

N.T.S



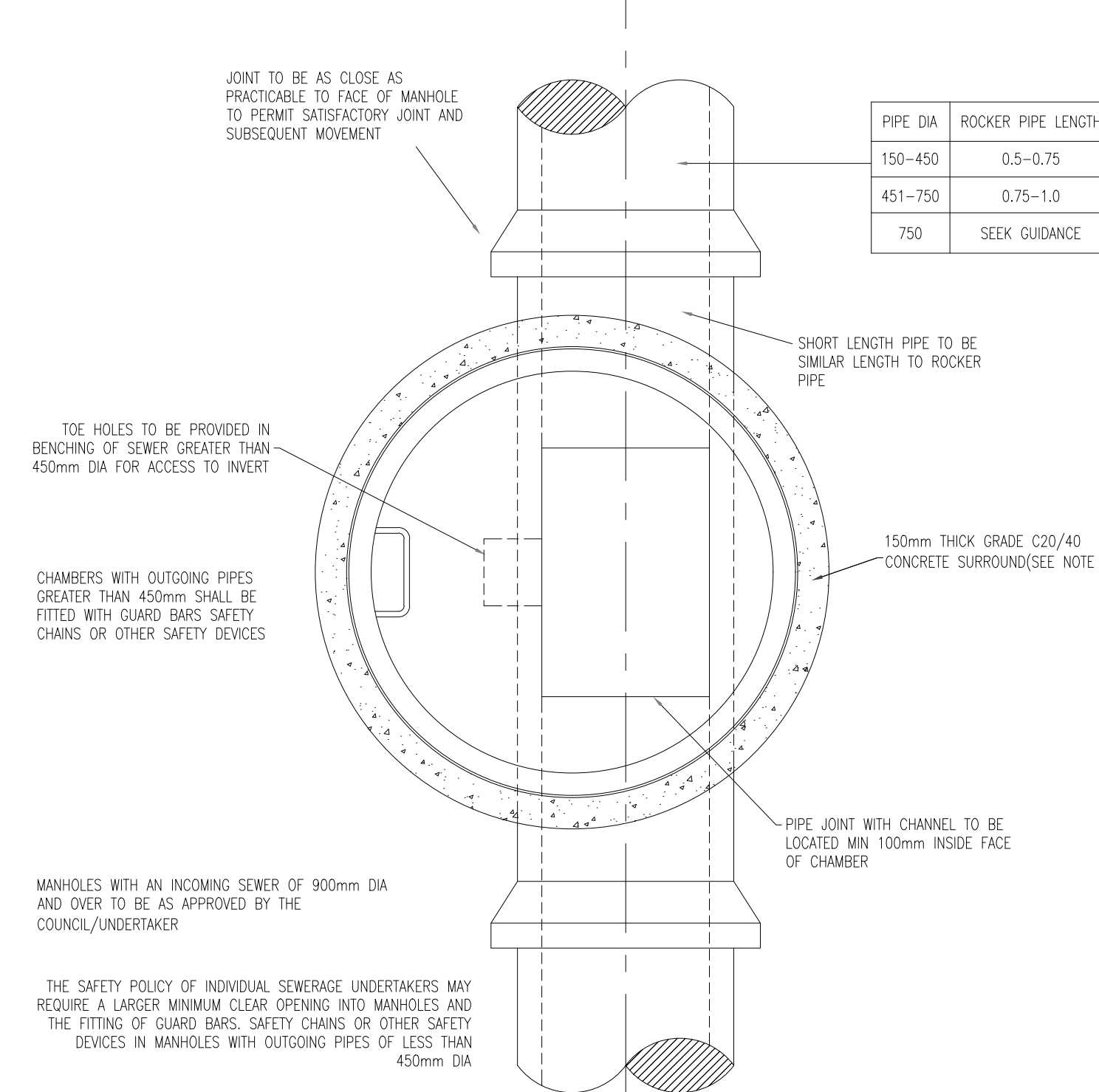
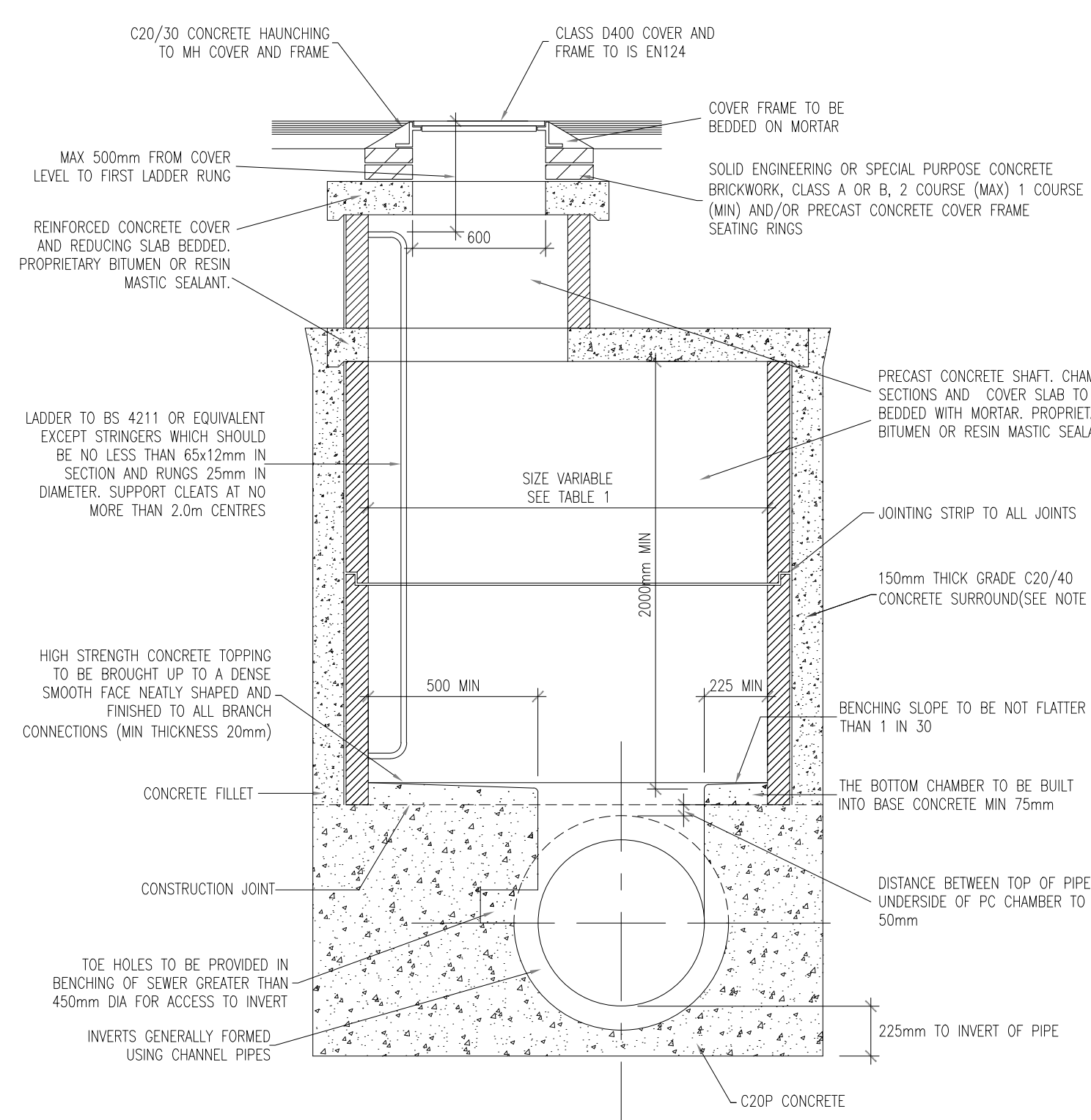
TYPICAL SW MANHOLE DETAIL (1.35-3M)

N.T.S



TYPICAL INSITU SHALLOW MANHOLE DETAIL

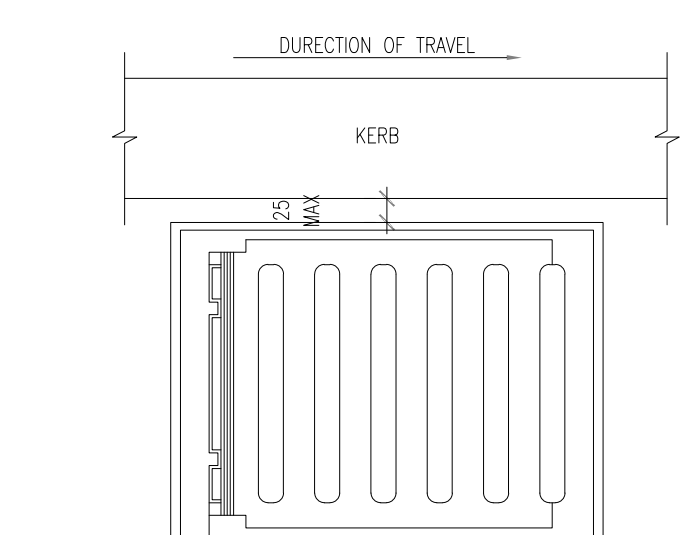
N.T.S



| 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 |

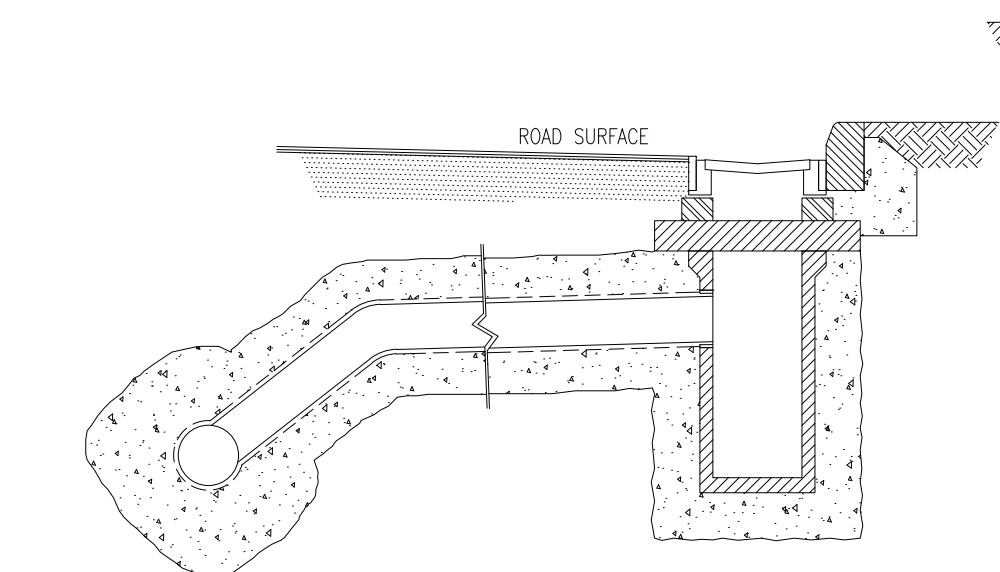
TYPICAL SW MANHOLE DETAIL (3-6M)

N.T.S

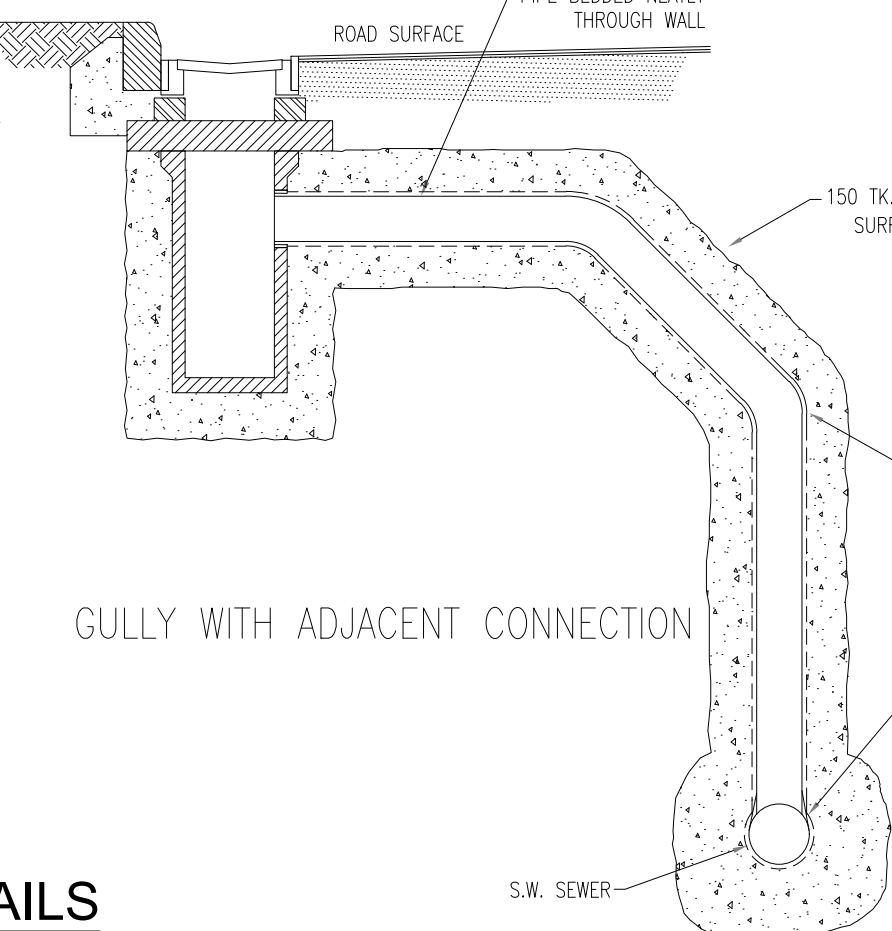


ROAD GULLY DETAILS SECTION

N.T.S



GULLY WITH CONNECTION ON OPPOSITE SIDE OF ROAD



GULLY WITH ADJACENT CONNECTION

ROAD GULLY DETAILS

N.T.S