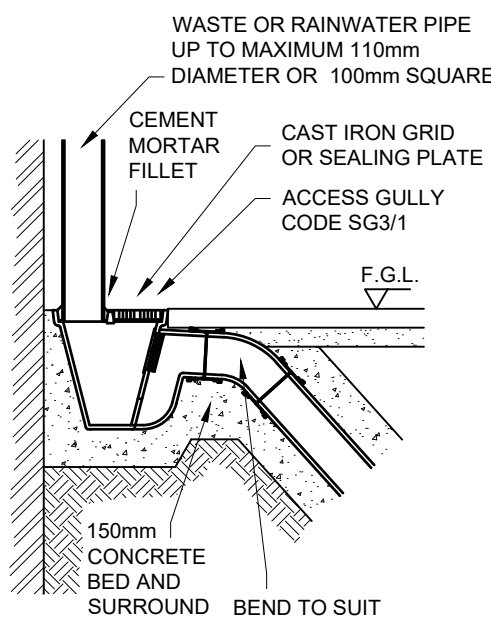
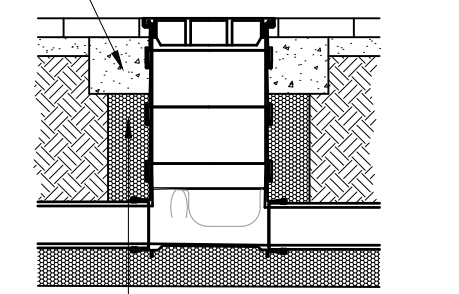


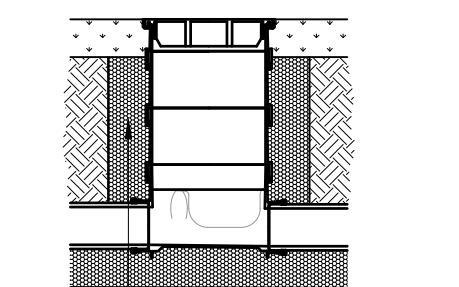


ACCESS GULLY CONNECTION
SCALE - 1:20

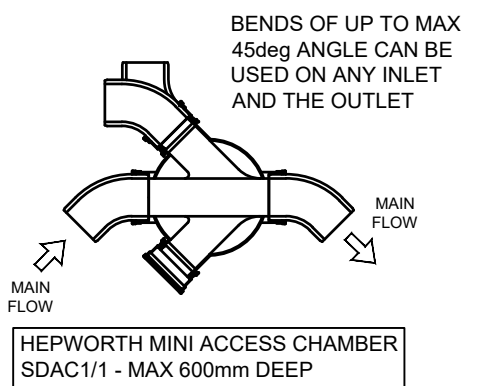
150mm x 150mm DEEP INSITU CONCRETE PLINTH TO SUPPORT FINISH (SEE NOTE 1)



MINI ACCESS CHAMBER
(PAVED AREAS)
SCALE - 1:20



MINI ACCESS CHAMBER
(SOFT LANDSCAPED AREAS)
SCALE - 1:20

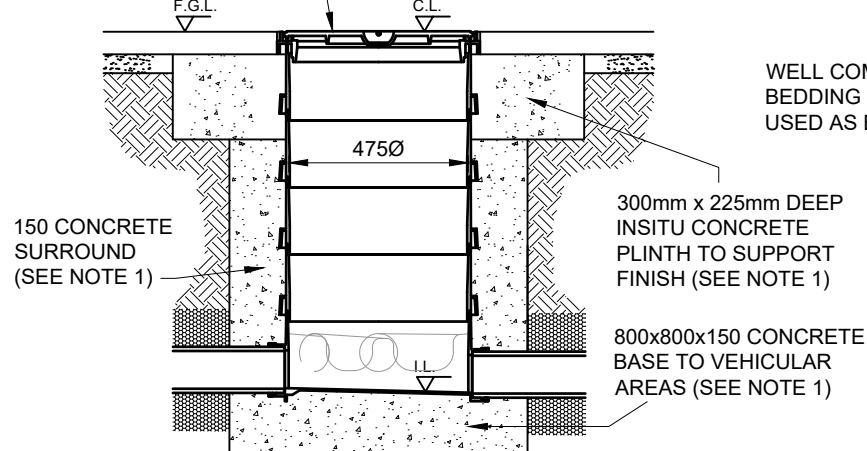


WHERE CHAMBERS ARE FITTED ON 90° CORNERS ALWAYS USE THE MAIN CHANNEL BY FITTING A 45deg BEND ON INLET & OUTLET.

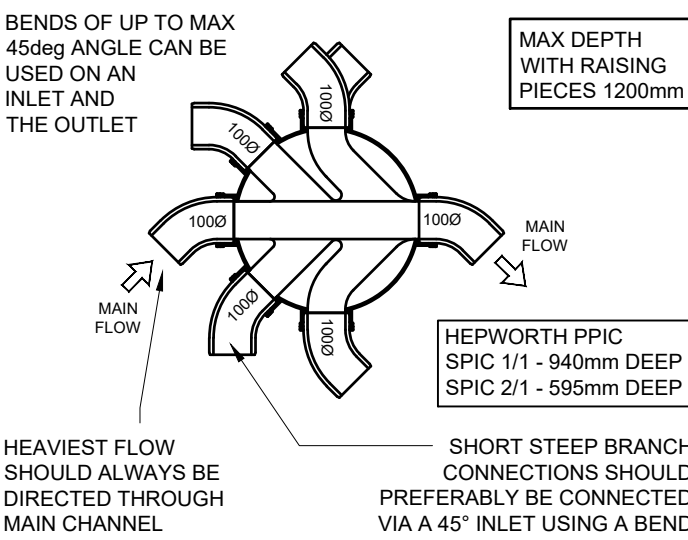
PLAN ON MINI ACCESS CHAMBER
SCALE - 1:20

POLYPROPYLENE INSPECTION CHAMBER
LOCATED IN 'SHARED ACCESS' AREAS
(ACCESSABLE TO BIN WAGONS ETC)
SCALE - 1:20

ROUND DUCTILE IRON COVER AND FRAME TO BS EN 124 FOOTPATHS & PAVED AREAS & CAR PARKING - CLASS B125



POLYPROPYLENE INSPECTION CHAMBER
LOCATED IN PRIVATE DRIVEWAY AREAS
(ACCESSABLE TO DOMESTIC VEHICLES)
SCALE - 1:20

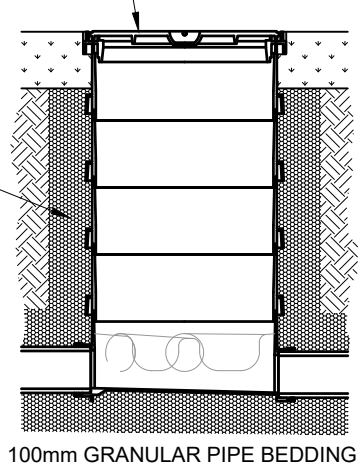


WHERE CHAMBERS ARE FITTED ON 90° CORNERS ALWAYS USE THE MAIN CHANNEL BY FITTING A 45deg BEND ON INLET & OUTLET.

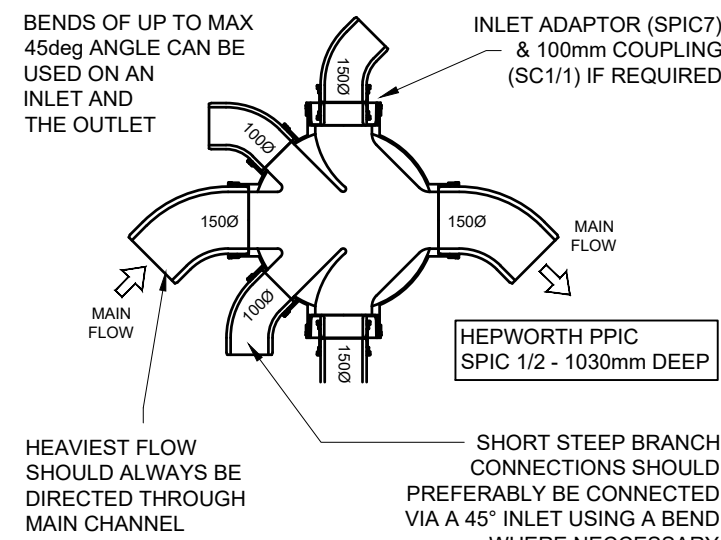
PLAN ON PREFORMED BENCHING TO
POLYPROPYLENE INSPECTION CHAMBER
SCALE - 1:20

POLYPROPYLENE INSPECTION CHAMBER
LOCATED IN HARD LANDSCAPED AREAS
(NOT ACCESSABLE TO WHEELED VEHICLES)
SCALE - 1:20

ROUND DUCTILE IRON COVER AND FRAME SECURED WITH CLIPS PROVIDED.



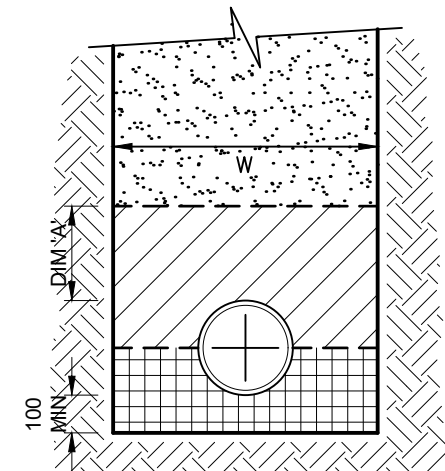
POLYPROPYLENE INSPECTION CHAMBER
LOCATED IN SOFT LANDSCAPED AREAS
SCALE - 1:20



WHERE CHAMBERS ARE FITTED ON 90° CORNERS ALWAYS USE THE MAIN CHANNEL BY FITTING A 45deg BEND ON INLET & OUTLET.

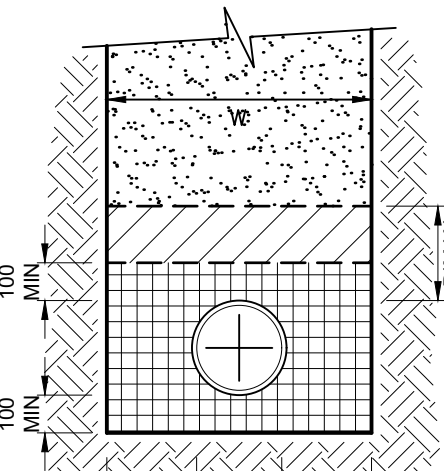
PLAN ON PREFORMED BENCHING TO
POLYPROPYLENE INSPECTION CHAMBER
SCALE - 1:20

CLASS 'B' HALF DEPTH GRANULAR SURROUND
a) LAY AND COMPACT TO A THICKNESS NOT LESS THAN 100mm OVER FULL WIDTH OF TRENCH. WHERE TRENCH BOTTOM IS UNEVEN DUE TO HARD SPOTS INCREASE DEPTH BY 100mm. LAY PIPES DIGGING SLIGHTLY INTO BED AND RESTING UNIFORMLY. ADJUST TO LINE AND GRADIENT.
b) LAY & COMPACT GRANULAR MATERIAL UNIFORMLY TO HALFWAY UP EACH SIDE OF PIPE.
c) BACKFILL WITH SELECTED CUSHION OF 'SELECTED FILL'. COMPACT BY HAND IN 100mm LAYERS TO 150mm (250mm FOR ADOPOTABLE SEWERS) ABOVE CROWN OF PIPE.



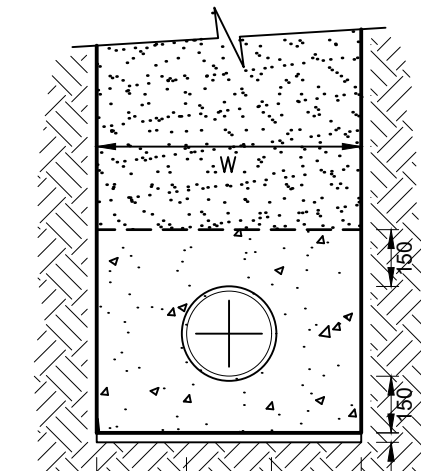
CLASS 'B' HALF DEPTH
GRANULAR SUPPORT FOR
VITRIFIED CLAY PIPEWORK
COVER > 1200mm in ROADS/PARKING
COVER > 600mm in SOFT LANDSCAPING
SCALE - 1:20

CLASS 'S' GRANULAR SURROUND
a) LAY AND COMPACT TO A THICKNESS NOT LESS THAN 100mm OVER FULL WIDTH OF TRENCH. WHERE TRENCH BOTTOM IS UNEVEN DUE TO HARD SPOTS INCREASE DEPTH BY 100mm. LAY PIPES DIGGING SLIGHTLY INTO BED AND RESTING UNIFORMLY. ADJUST TO LINE AND GRADIENT.
b) LAY & COMPACT GRANULAR MATERIAL UNIFORMLY TO 100mm ABOVE CROWN OF PIPE. SIDEFILL MATERIAL TO BE PLACED EVENLY ON BOTH SIDES OF PIPE TAKING CARE TO WORK THE MATERIAL UNDER THE LOWER QUADRANT OF THE PIPE (ENSURING THE PIPE IS NOT LIFTED). BOTH SIDES OF THE TRENCH SHOULD BE FILLED SIMULTANEOUSLY TO AVOID HORIZONTAL MOVEMENT OF THE PIPE.
c) BACKFILL WITH SELECTED CUSHION OF 'SELECTED FILL'. COMPACT BY HAND IN 100mm LAYERS TO 150mm (250mm FOR ADOPOTABLE SEWERS) ABOVE CROWN OF PIPE.



CLASS 'S' GRANULAR SURROUND
FOR PVC STRUCTURED PIPES
COVER > 1200mm in ROADS/PARKING
COVER > 600mm in SOFT LANDSCAPING
SCALE - 1:20

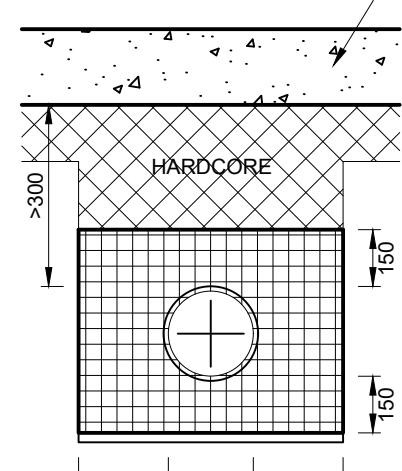
CLASS 'Z' CONCRETE SURROUND
a) FOR CONCRETE MIX SEE NOTE 2
b) LAY CONCRETE BLINDING, 25mm THICK OVER FULL WIDTH OF TRENCH & ALLOW TO SET.
c) LAY PIPES ON BLINDING ON FOLDING WEDGES OF COMPRESSIBLE BOARD TO GIVE MIN 150mm CLEARANCE UNDER THE PIPE.
d) FORM VERTICAL CONSTRUCTION JOINTS IN SURROUND AT FACE OF FLEXIBLE PIPE JOINTS AT MAX 5m c/c USING 18mm THICK COMPRESSIBLE BOARD PRECUT TO PROFILE OF PIPE. FILL ANY GAP BETWEEN SPIGOT AND SOCKET WITH RESILIENT MATERIAL TO PREVENT ENTRY OF CONCRETE.
e) AFTER INITIAL TESTING, PLACE AND COMPACT MORE CONCRETE FOR FULL WIDTH OF TRENCH TO ENCASE PIPE TO 150mm ABOVE CROWN.



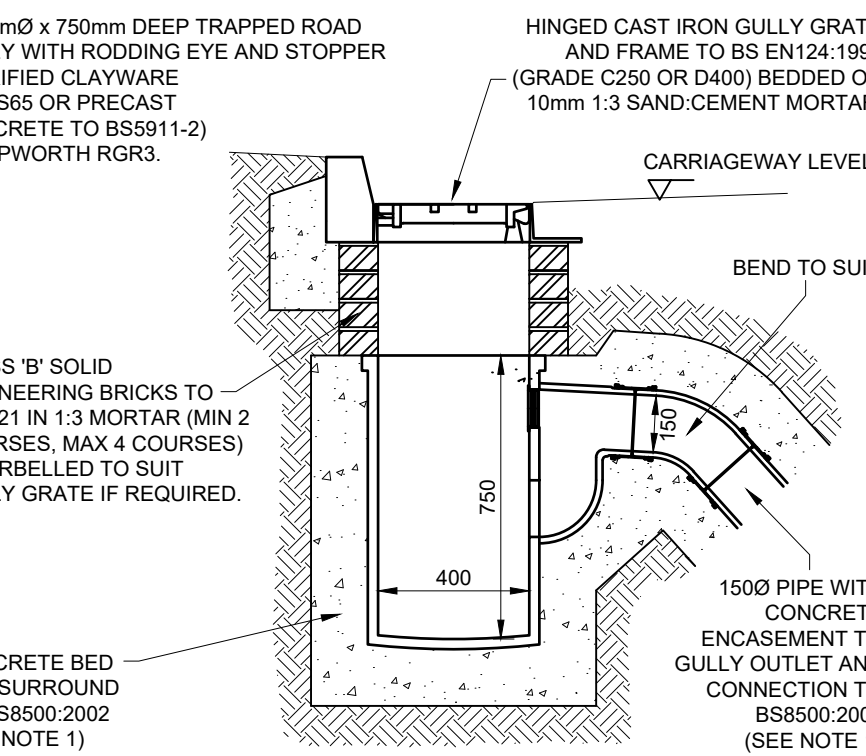
CLASS 'Z' CONCRETE
SURROUND
COVER > 1200mm in ROADS/PARKING
COVER > 600mm in SOFT LANDSCAPING
SCALE - 1:20

PIPE DIA.	WIDTH
150	600
225	700
300	750
375	1050
400	1100
450	1150
525	1200
600	1350
675	1450
750	1500
900	1900

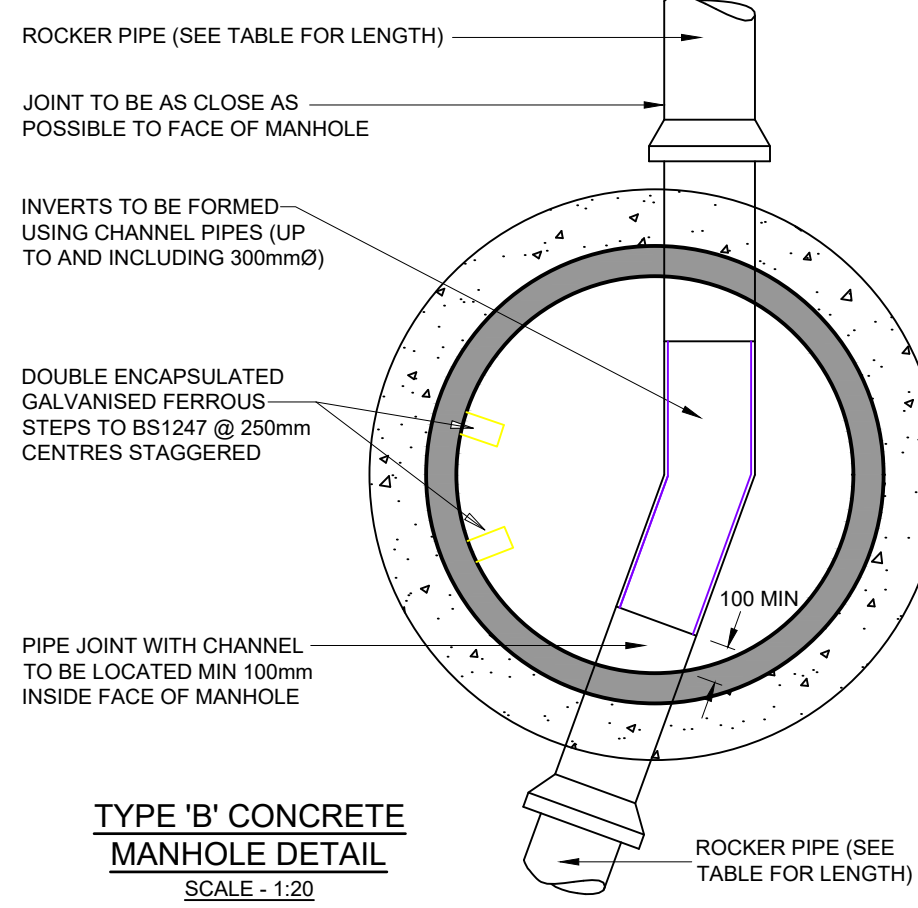
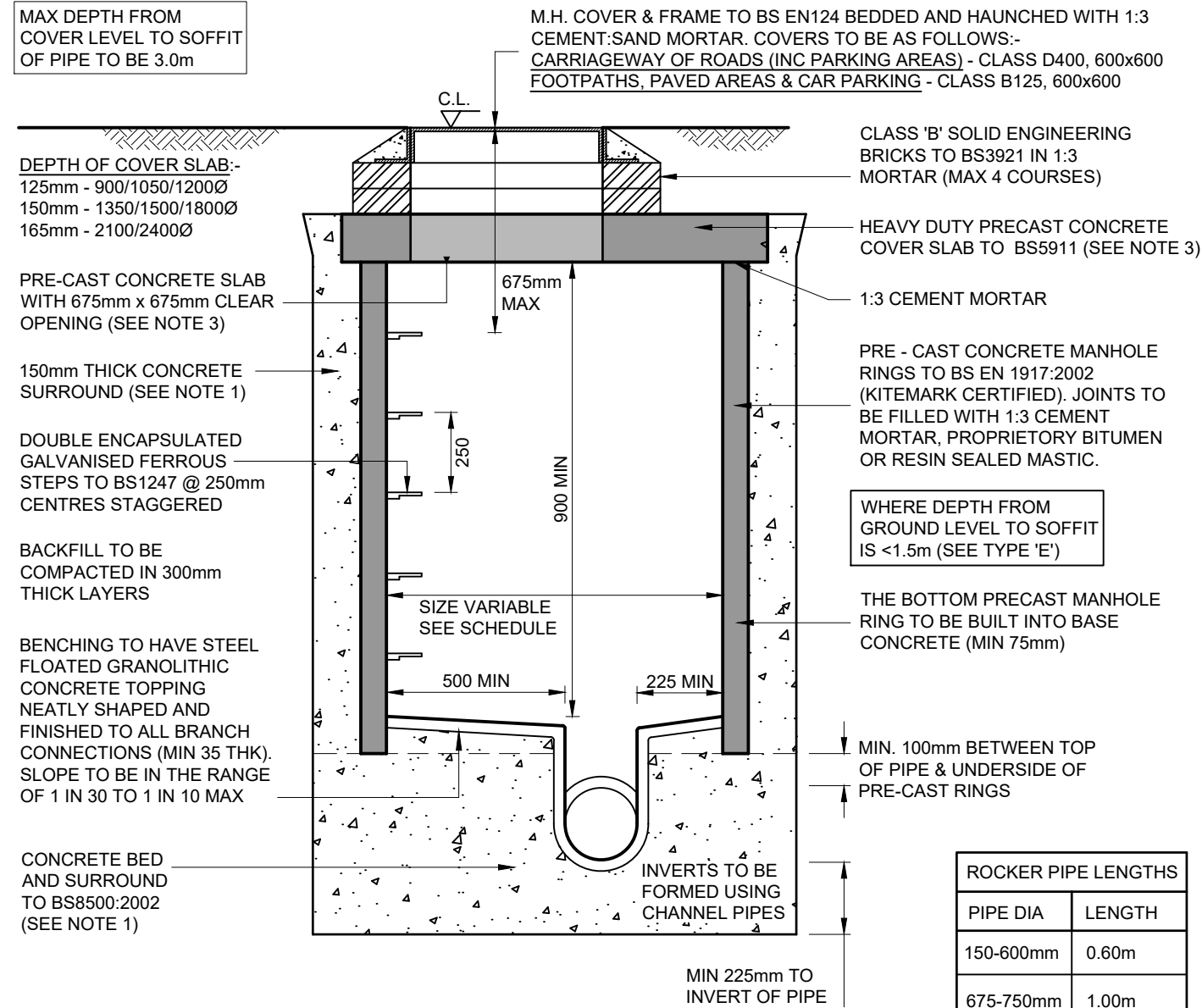
DIM 'A'
MIN 250 (ADOPOTABLE)
MIN 150 (GENERALY)



PIPE BEDDING DETAIL
BELOW SLAB
(WHERE MORE THAN 300mm COVER)
SCALE - 1:20



TYPICAL ROAD GULLY DETAIL
SCALE - 1:20



TYPE 'B' CONCRETE
MANHOLE DETAIL
SCALE - 1:20

NOTE 1
CONCRETE BASE SLABS AND SURROUNDS TO BE GEN 3 CONCRETE TO BS8500:2002 TO SATISFY DESIGN CHEMICAL CLASS 'DC-1' AS SPECIFIED IN BRE SPECIAL DIGEST 1:2005 AND TABLE A7 OF BS8500-1:2002.

NOTE 2
A FLEXIBLE JOINT SHALL BE PROVIDED AS CLOSE AS IS FEASIBLE TO THE OUTSIDE FACE OF ANY STRUCTURE INTO WHICH A PIPE IS BUILT. COMPATIBLE WITH THE SATISFACTORY COMPLETION & SUBSEQUENT MOVEMENT OF THE JOINT. THE LENGTH OF THE ROCKER PIPE AWAY FROM THE STRUCTURE SHALL BE 600mm (FOR PIPES OF NOMINAL DIAMETER 150-600mm).

NOTE 3
COVER SLABS MUST CARRY THE BSI KITEMARK (OR MAY BE REJECTED BY THE INSPECTOR). WHERE THE CLEAR OPENING OF THE KITE MARKED PRODUCT IS DIFFERENT TO THAT OF THE COVER AND FRAME A LOAD BEARING SLAB SHOULD BE FITTED ABOVE THE COVER SLAB TO BRING THE SIZE DOWN TO 600mm X 600mm. PLEASE REFER TO CONCRETE PIPES SYSTEMS ASSOCIATION (CPSA) TECHNICAL BULLETIN ISSUED AUTUMN 2004 FOR KITEMARKED COVER SLAB OPENING SIZES.

PIPE DIA.	LENGTH
150-600mm	0.60m
675-750mm	1.00m
825 & over	1.25m

GENERAL FILL MATERIALS
TRENCHES SHALL BE BACKFILLED WITH MATERIAL EXCAVATED FROM WITHIN THE SITE OR IMPORTED ON TO THE SITE WHICH MEETS THE REQUIREMENTS OF A CLASS 1, 2 OR 3 GENERAL FILL MATERIAL COMPLYING WITH OF THE 'SPECIFICATION FOR HIGHWAY WORK, SERIES 601, TABLE 6/1'. MECHANICAL COMPACTION OF MAIN BACKFILL MATERIAL SHOULD NOT BE COMMENCED UNTIL THEIR IS A TOTAL COVER DEPTH OF 300MM ABOVE THE CROWN OF PIPE.

SELECTED FILL (FILL SELECTED FROM EXCAVATED MATERIAL)
SELECTED FILL FROM EXCAVATED MATERIAL SHOULD BE READILY COMPACTABLE BY HAND AND FREE FROM TIMBER, FROZEN MATERIAL, VEGETABLE MATTER AND FOREIGN MATTER AND EXCLUDE HARD LUMPS OF CLAY RETAINED ON A 100mm SIEVE AND STONES RETAINED ON A 40mm SIEVE.

GRANULAR PIPE BEDDING
PRIVATE PIPEWORK
FOR PIPE SIZE DN100 & DN150, GRANULAR SUPPORT TO COMPLY WITH THE REQUIREMENTS OF A MATERIAL OF DESIGNATION TYPE 4/10 TO BS EN 12620:2002 (i.e. 10mm SINGLE SIZED). FOR PIPE SIZE DN225 & DN300, GRANULAR SUPPORT TO COMPLY WITH THE REQUIREMENTS OF A MATERIAL OF DESIGNATION TYPE 4/20 TO BS EN 12620:2002 (i.e. 20mm SINGLE SIZED). THE MATERIAL SHOULD HAVE A PARTICLE SIZE THAT IS PREDOMINANTLY WITHIN THE RANGE OF 5 TO 20mm).

ADOPTED PIPEWORK
BEDDING AND SIDEFILL MATERIAL TO CONFORM TO THE REQUIREMENTS OF WATER INDUSTRY SPECIFICATION (WIS) 4-06-02 - 'SPECIFICATION FOR BEDDING AND SIDEFILL MATERIALS INCLUDING RECYCLED AGGREGATES FOR BURIED PIPELINES' (FEBRUARY 1994, INCORPORATING NOVEMBER 2008 AMMENDMENTS).

PIPE SIZE / STRENGTH CLASS / BEDDING
FOR EACH PIPE SIZE THE STRENGTH CLASS AND BEDDING/SIDEFILL (DEPENDANT ON COVER PROVIDED AND DESIGNATION OF SURFACING ie ROADS/PARKING, SOFT LANDSCAPING) SHOULD BE AS FOLLOWS -

CLAY PIPEWORK
VITRIFIED CLAY DRAINAGE GOODS TO BE HEPWORTH SUPERSLEVE OR SIMILAR APPROVED TO BS EN 295-1 (KITEMARKED).

SIZE:	DN 100	DN150	DN225	DN300
STRENGTH:	FN 40	FN 40	FN 45	FN 72
BEDDING:	CLASS 'B'	CLASS 'B'	CLASS 'B'	CLASS 'B'

PVC-U PIPEWORK
PVC-U DRAINAGE GOODS TO BE HEPWORTH PLASTIDRAIN (110 to 1600), HEPWORTH SEWERDRAIN (200 to 8300) OR SIMILAR APPROVED TO BS 4660:2000 AND BS EN 1401-1:1998.

SIZE:	DN 110	DN160	DN225	DN300
BEDDING:	CLASS 'B'	CLASS 'B'	CLASS 'B'	CLASS 'B'

1.0 GENERAL

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S, ENGINEER'S & SPECIALIST'S DRAWINGS & SPECIFICATIONS.
- WORK TO BE CARRIED OUT IN ACCORDANCE WITH CURRENT GOOD PRACTICE, BUILDING REGULATIONS AND SUBSEQUENT AMENDMENTS, THE PROJECT SPECIFICATION, RELEVANT BRITISH STANDARDS AND CODES OF PRACTICE. MATERIALS AND COMPONENTS TO BE SUITABLE FOR THEIR INTENDED USE.

REV.	DATE	DRN.	DESCRIPTION
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PURPOSE OF ISSUE
PRELIMINARY

CLIENT
DUNDEE GROUP

PROJECT
**YEW TREE LANE
WYTHENSHAW
MANCHESTER**

TITLE
TYPICAL DRAINAGE DETAILS

JOB No.	DRAWING No.	REVISION
C19603	/ 108	~
DRAWN	CHECKED	@ SHEET SIZE
TW	JSD	1:20 u.n.o A1
DATE	DATE	DATE
OCT '2019		

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