

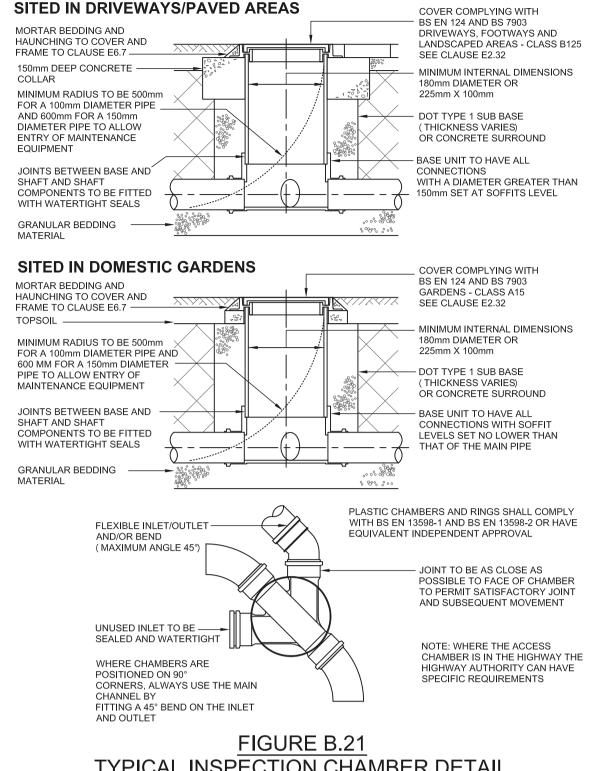
(FLEXIBLE MATERIAL DETAIL)

MAXIMUM DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE

IN AREAS SUBJECT TO VEHICLE LOADING 3 M, NON-ENTRY

NTS

## PLASTIC CHAMBERS AND RINGS SHALL COMPLY WITH BS EN 13598-1 AND BS EN 13598-2 OR HAVE EQUIVALENT INDEPENDENT APPROVAL SITED IN DOMESTIC DRIVEWAYS OR FOOTWAYS COVER COMPLYING WITH BS EN 124 AND BS 7903 DRIVEWAYS, FOOTWAYS AND MORTAR BEDDING AND LANDSCAPED AREAS - CLASS B125 HAUNCHING TO COVER AND FRAME SEE CLAUSE E2.32 TO CLAUSE E6.7 ACCESS OPENING RESTRICTED TO 350mm DIAMETER OR 150 MM DEEP CONCRETE COLLAR -300mm X 300mm IF DEPTH OF CHAMBER TO INVERT IS > 1m DURING CONSTRUCTION FLEXIBLE SEAL - MINIMUM INTERNAL DIMENSIONS 450mm DIAMETER OR 450mm X 450mm COVER COMPLYING WITH SITED IN DOMESTIC GARDENS BS EN 124 AND BS 7903 GARDENS - CLASS A15 MORTAR BEDDING AND SEE CLAUSE E2.32 HAUNCHING TO COVER AND FRAME TO CLAUSE E6.7 TEMPORARII Y CAP SHAFT DURING CONSTRUCTION ACCESS OPENING RESTRICTED TO 350mm DIAMETER OR 300mm X 300mm IF DEPTH OF CHAMBER TO INVERT IS > 1m FLEXIBLE SEAL -- MINIMUM INTERNAL DIMENSIONS 450mm DIAMETER OR 450mm X 450mm NOTE: WHERE THE ACCESS CHAMBER IS IN THE HIGHWAY THE HIGHWAY AUTHORITY CAN HAVE SPECIFIC REQUIREMENTS FIGURE B.17 ALTERNATIVE TOP DETAILS FOR LIGHT VEHICLE LOADING AND LANDSCAPED AREAS - TYPE 3



TYPICAL INSPECTION CHAMBER DETAIL TYPE 4 (FLEXIBLE MATERIAL DETAIL) MAXIMUM DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 2, NON-ENTRY

SURFACE OF GRATING TO BE

95mm WHERE BLOCK

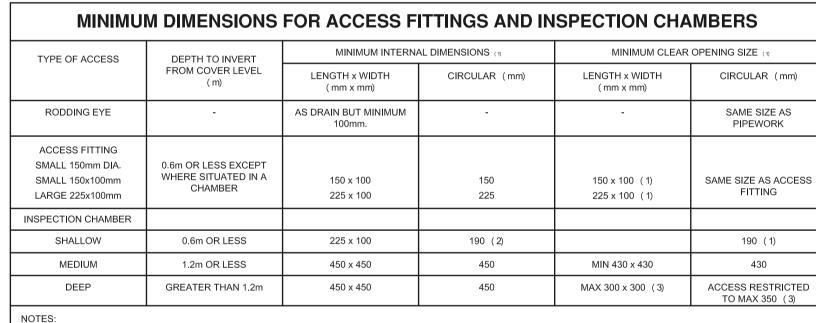
SHAFT COVER

SET 3mm BELOW ADJACENT

FINISHED LEVELS

LOCKABLE GRATING.

SEE TABLE FOR GRADE

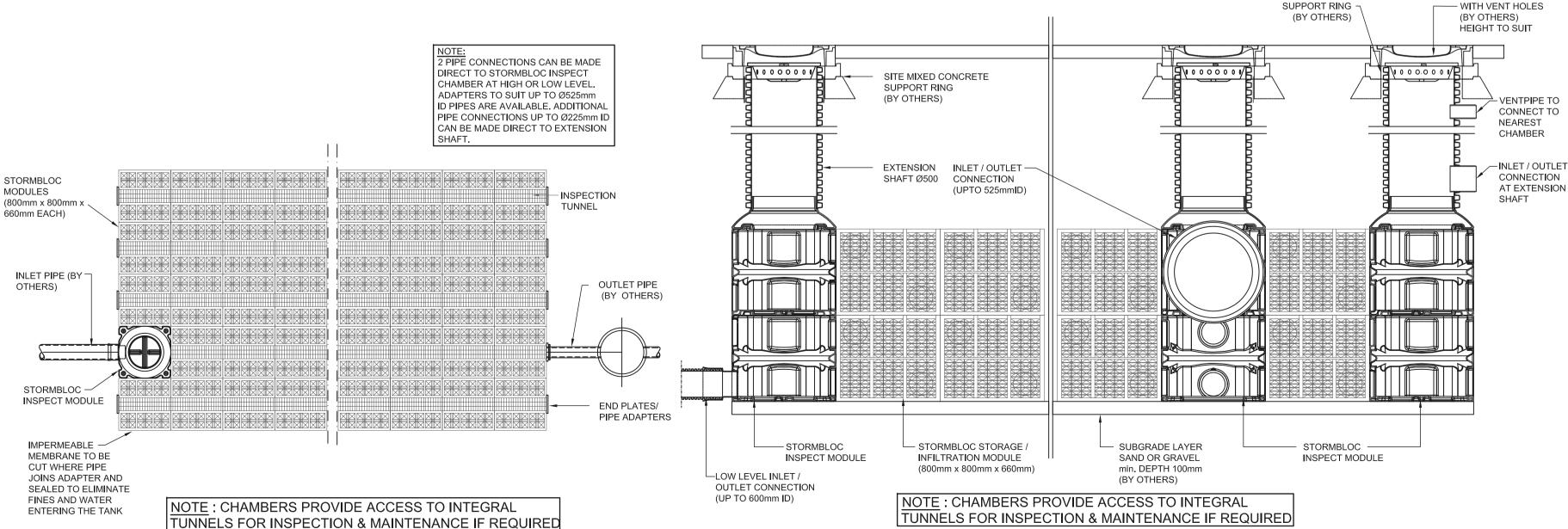


THE CLEAR OPENING MAY BE REDUCED BY 20mm IN ORDER TO PROVIDE PROPER SUPPORT FOR THE COVER AND FRAME. A LARGER CLEAR OPENING COVER MAY BE USED IN CONJUNCTION WITH A RESTRICTED ACCESS. THE SIZE IS RESTRICTED FOR HEALTH AND SAFETY

STORMBLOCK SURFACE WATER

ATTENUATION RESERVOIR - PLAN

PAVING IS USED CONCRETE BED AND SURROUND +-| | 200 TYPICAL SECTION THROUGH CHANNEL DRAIN **SCALE 1:25** SUPPORT RING -(BY OTHERS)



TWO LAYERS OF STORMBLOC ARE SHOWN - SINGLE OR MULTIPLE LAYERS CAN BE USED

TYPICAL SECTION THROUGH STORMBLOCK SURFACE WATER ATTENUATION RESERVOIR

MINIMUM DIMENSIONS FOR MANHOLES MINIMUM INTERNAL DIMENSIONS (1) MINIMUM CLEAR OPENING SIZE TYPE OF ACCESS SIZE OF LARGEST PIPE RECTANGULAR CIRCULAR DIAMETER RECTANGULAR CIRCULAR DIAMETER LENGTH x WIDTI ENGTH x WIDTH MANHOLE ESS THAN OR EQUAL 750 x 675 (2) N/A (3) 750 x 675 (7) ESS THAN 1.5m DEEP TO SOFFIT 1200 x 675 (2) 225 1200 x 675 300 1200 x 750 1200 HE LARGER OF 1800 o GREATER THAN 300 1800 x (DN+450) (DN+450) MANHOLE ESS THAN OR EQUAL 1200 x 1000 1200 TO 225 **GREATER THAN 1.5** DEEP TO SOFFIT 300 1200 x 1075 1200 1350 x 1225 1200 375-450 LARGER OF 1800 c GREATER THAN 450 1800 x (DN+77 ( DN+775) STEPS (5) 1050 x 800 1050 MANHOLE SHAFT ( 675 x 675 GREATER THAN 3.0m LADDER (5) 1200 x 800 1200 DEEP TO SOFFIT OF PIPE WINCH (6) 900 x 800 900

NOTES: (1) LARGER SIZES MAY BE REQUIRED FOR MANHOLES ON BENDS OR WHERE THERE ARE JUNCTIONS.

2) MAY BE REDUCED TO 600x600mm WHERE REQUIRED BY HIGHWAY LOADING CONSIDERATIONS, SUBJECT TO A SAFE SYSTEM OF WORK BEING SPECIFIED.

(3) NOT APPLICABLE DUE TO WORKING SPACE NEEDED. (4) MINIMUM HEIGHT OF CHAMBER IN SHAFTED MANHOLE 2m FROM BENCHING TO UNDERSIDE OF REDUCING SLAB.

(5) MINIMUM CLEAR SPACE BETWEEN LADDER OR STEPS AND THE OPPOSITE FACE OF THE SHAFT SHOULD BE

APPROXIMATELY 900mm. (6) WINCH ONLY - NO STEPS OR LADDERS, PERMANENT OR REMOVABLE.

7) THE MINIMUM SIZE OF ANY MANHOLE SERVING A SEWER (i.e. ANY DRAIN SERVING MORE THAN ONE PROPERTY) SHOULD BE 1200x750mm RECTANGULAR OR 1200mm DIAMETER.

TABLE SHOWING PRIVATE MANHOLE/INSPECTION CHAMBER COVER GRADES AND AREAS OF USE	
COVER GRADE TO BS EN: 124	LOCATION
D400	FOR USE IN INDUSTRIAL ROADS AND PARKING AREAS ACCESSIBLE TO ALL TYPES OF ROAD VEHICLES INCLUDING HGV'S.
C250*	FOR USE IN PRIVATE ROADS OR PARKING AREAS eg. CAR PARKS AND MINOR PRIVATE ROADS ACCESSIBLE TO REFUSE VEHICLES, FIRE APPLIANCES ETC WITH POSSIBLE OCCASIONAL HGV USE.
B125	FOR USE IN FOOTWAYS, PEDESTRIAN AREAS, DRIVEWAYS AND CAR PARKS ACCESSIBLE BY LIGHT VEHICLES ONLY.
A15	FOR USE IN AREAS WHICH CAN ONLY BE USED BY PEDESTRIANS AND PEDAL CYCLISTS
* D400 MAY BE USED IN LIEU OF C250 IF PREFERRED.	

## 5) INSPECTION CHAMBERS AND MANHOLES IN BUILDINGS TO HAVE MECHANICALLY FIXED AIRTIGHT COVERS UNLESS THE DRAIN ITSELF HAS WATERTIGHT ACCESS COVERS. 6) MANHOLES DEEPER THAN 1m TO HAVE GALVANISED STEEL STEP IRONS OR FIXED LADDERS. 7) ALL ABOVE GROUND DRAINAGE TO INCORPORATE RODDING ACCESS FACILITIES. 8) INSITU CONCRETE FOR USE IN GENERAL DRAINAGE WORKS. GRADE TO BS: 5328, USE AS FOLLOWS:

FOR APPROVAL

NOTES

CONTRACTORS MUST VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING ANY WORK ON SHOP DRAWINGS DO NOT SCALE FROM THIS DRAWING

RCD CONSULTANTS LTD COPYRIGHT

1) ALL BUILDING DRAINAGE TO BE INSTALLED AND TESTED IN

AND WASTE DISPOSAL APPROVED DOCUMENT H 2002 EDITION.

MANUFACTURED AND SUPPLIED IN ACCORDANCE WITH THE

3) THE CONTRACTOR SHALL, BEFORE COMMENCING THE

PROPER SETTING OUT OF THE WORKS AND FOR THE

ALIGNMENT OF ALL PARTS OF THE WORKS.

RELEVANT BRITISH STANDARDS, AND LAID AND BACKFILLED IN

WORKS, VERIFY ALL SITE AND SETTING OUT DIMENSIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TRUE AND

CORRECTNESS OF THE POSITION, LEVELS, DIMENSIONS, AND

4) SMALL LIGHTWEIGHT ACCESS COVERS SHOULD BE SECURED

GEN 3 or ST4

GEN1 or ST2

FND 2

FND 3

FND 4A

FND 4B

21.03.15 RAC

CHKD

DATE

(FOR EXAMPLE WITH SCREWS) TO DETER UNAUTHORISED

ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND THE

2) ALL COMPONENTS AND MATERIALS ARE TO BE

RELEVANT BRITISH STANDARDS.

**CLASS 1 SULFATE CONDITIONS** 

ADOPTABLE STANDARD WORKS

AND AREAS SUBJECT TO HEAVY

LOADING

AREAS SUBJECT TO LIGHT

LOADING eq. HOUSING AND

PRIVATE DRIVES, SMALL CAR

CLASS 2

CLASS 3

FOR BURIED CONCRETE EXPOSED TO OTHER SULFATE CONDITIONS:

ACCESS.

COMPLIANCE WITH THE BUILDING REGULATIONS 2000 DRAINAGE

RCD CONSULTANTS LTD 23 HASTINGS ROAD ROAD, MAIDSTONE, KENT, ME15 7SH MOBILE: 07702 052 137

EMAIL: ray@rcd-uk.com

CLIENT

A FOR APPROVAL

REV | AMENDMENT

RELIANT BUILDING CONTRACTORS LTD

PROPOSED RESIDENTIAL DEVELOPMENT KINGS ROAD SPALDING

DRAWING TITLE

DRAINAGE

DRAWING NUMBER

CONSTRUCTION DETAILS SHEET 2 OF 3



CHECKED AS SHOWN RAC MGC MAR 2015

1151-1004-CIV-50

REVISION

CLASS 4A CLASS 4B