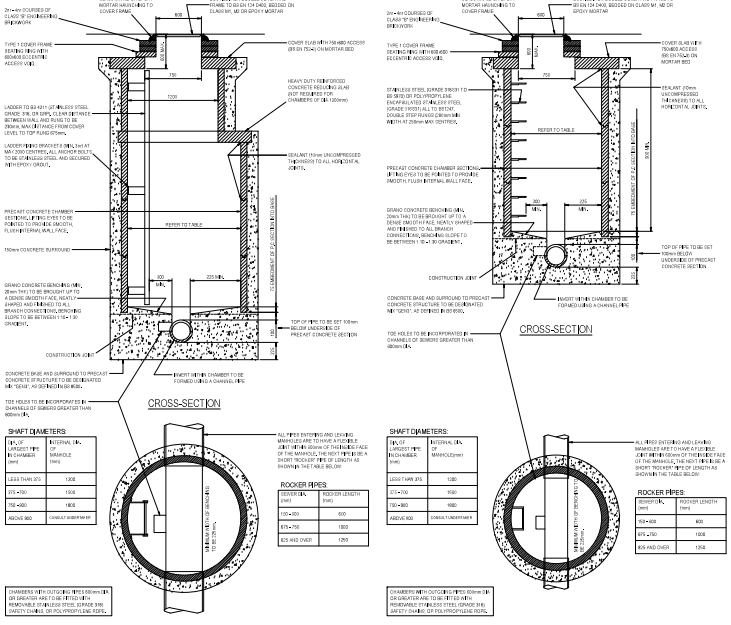

CLASS M1, M2 OR EPOXY MORTAR MANHOLE TO COVER FRAME
DUCTILE IRON DOUBLE COVER AND FRAME TO BS EN 124, BEDDED ON CLASS M1, M2 OR EPOXY MORTAR
TYPE 1 COVER FRAME (EXISTING TYPE) WITH 600MM DIA CONCENTRIC ACCESS VOID.
COVER SLAB WITH 788MM DIA ACCESS (BS EN 124) CONCENTRIC WITH 600MM DIA ACCESS VOID.
HEAVY DUTY REINFORCED CONCRETE REDUCING SLAB (NOT RECOMMENDED FOR CHAMBERS OF DIA 1200MM)
SEALANT 10mm UNCOMPRESSED THICKNESS TO ALL HORIZONTAL JOINTS.
LADDER TO BS 4211, GRP UNLESS STEEL, GRADE 316, DIN 5PPL, CLEAR DISTANCE BETWEEN RAILS AND RUNG TO BE 290mm, MAXIMUM DEPTH FROM COVER LEVEL TO TOP RUNG 375mm.
LADDER FIXING BRACKETS (ONLY) SHALL BE MAX 1200 CENTRES, ALL ANCHOR BOLTS TO BE STAINLESS STEEL AND SECURED WITH EPOXY GROUT.
PRECAST CONCRETE CHAMBER SECTIONS, LETTING EYES TO BE POINTED TO PROVIDE SMOOTH, FLUSH INTERNAL WALL FACE.
REFER TO TABLE
150mm CONCRETE SURROUND
GRANO CONCRETE BENCHING MIN. 20mm THICK TO BE BROUGHT UP TO A DENSE SMOOTH FACE, NEATLY SHAPED AND FINISHED TO ALL BRANCH CONNECTIONS, BENCHING SLOPE TO BE BETWEEN 1:10 – 1:30 GRADIENT.
CONSTRUCTION JOINT
CONCRETE BASE AND SURROUND TO PRECAST CONCRETE STRUCTURE TO BE DESIGNATED MIX "GEN4", AS DETAILED IN BS 8500.
TOP OF PIPE TO BE SET 100mm BELOW UNDERSIDE OF PRECAST CONCRETE SECTION
INVERT WITHIN CHAMBER TO BE FORMED USING A CHANNEL PIPE
CROSS-SECTION
SHAFT DIAMETERS:
DN OF LARGEST PIPE IN CHAMBER (mm)
INTERNAL DIA. OF MANHOLE (mm)
LESS THAN 375 1200
375 – 700 1500
750 – 800 1800
ABOVE 800 CONSULT ENGINEER
ROCKER PIPES
SEWER DIA. (mm)
ROCKER LENGTH (mm)
150 – 300 600
375 – 700 1000
825 AND OVER 1250
ALL PIPES ENTERING AND LEAVING MANHOLES ARE TO HAVE A FLEXIBLE JOINT WITHIN 600mm OF THE FACE OF THE MANHOLE, THE NEXT PIPE TO BE A SHORT "ROCKER" PIPE OF LENGTH AS SHOWN IN THE TABLE BELOW.
CHAMBERS WITH OUTGOING PIPES 600mm DIA OR GREATER AND TO BE FITTED WITH A REMOVABLE STAINLESS STEEL SURFACE 316S GRATED CHANNEL OR POLYPROPYLENE PEPS.
PLAN VIEW
TYPICAL PRECAST CONCRETE MANHOLE - TYPE A
(DEPTH TO INVERT 1m – 6m)
CLASS M1, M2 OR EPOXY MORTAR MANHOLE TO COVER FRAME
DUCTILE IRON DOUBLE COVER AND FRAME TO BE ON CHAIRS, BEDDED ON CLASS M1, M2 OR EPOXY MORTAR
TYPE 1 COVER FRAME (EXISTING TYPE) WITH 600MM ECCENTRIC ACCESS VOID.
COVER SLAB WITH TRIMBLE ACCESS (BS EN 124) ON MORTAR BED
STAINLESS STEEL SURFACE 316S/316 TO BS 5837 OR POLYPROPYLENE GRATED CHANNEL OR PEPS TO BE BROUGHT UP TO BE FLUSH WITH FINISHED GROUND LEVEL, GRADE 316S/316 ALL TO BE AT THE SAME DIAMETER AND WIDTH AT 200mm MAX CENTRES.
REFER TO TABLE
PRECAST CONCRETE CHAMBER SECTIONS, LETTING EYES TO BE POINTED TO PROVIDE SMOOTH, FLUSH INTERNAL WALL FACE.
GRANO CONCRETE BENCHING MIN. 20mm THICK TO BE BROUGHT UP TO A DENSE SMOOTH FACE, NEATLY SHAPED AND FINISHED TO ALL BRANCH CONNECTIONS, BENCHING SLOPE TO BE BETWEEN 1:10 – 1:30 GRADIENT.
CONSTRUCTION JOINT
CONCRETE BASE AND SURROUND TO PRECAST CONCRETE STRUCTURE TO BE DESIGNATED MIX "GEN4", AS DETAILED IN BS 8500.
TOP OF PIPE TO BE SET 100mm BELOW UNDERSIDE OF PRECAST CONCRETE SECTION
INVERT WITHIN CHAMBER TO BE FORMED USING A CHANNEL PIPE
TOP HOLES TO BE INCORPORATED BY CHAMBERS OF SIBBERD GREATER THAN 600mm DIA.
CROSS-SECTION
SHAFT DIAMETERS:
DN OF LARGEST PIPE IN CHAMBER (mm)
INTERNAL DIA. OF MANHOLE (mm)
LESS THAN 375 1200
375 – 700 1500
750 – 800 1800
ABOVE 800 CONSULT ENGINEER
ROCKER PIPES:
SEWER DIA. (mm)
ROCKER LENGTH (mm)
150 – 300 600
375 – 750 1000
825 AND OVER 1250
ALL PIPES ENTERING AND LEAVING MANHOLES ARE TO HAVE A FLEXIBLE JOINT WITHIN 600mm OF THE FACE OF THE MANHOLE, THE NEXT PIPE IS BE A SHORT "ROCKER" PIPE OF LENGTH AS SHOWN IN THE TABLE BELOW.
CHAMBERS WITH OUTGOING PIPES 600mm DIA OR GREATER ARE TO BE FITTED WITH A REMOVABLE STAINLESS STEEL SURFACE 316S/316 GRATED CHANNEL OR POLYPROPYLENE PEPS.
PLAN VIEW
TYPICAL PRECAST CONCRETE MANHOLE - TYPE B
(DEPTH TO INVERT 1.2m TO 6m)
CLASS M1, M2 OR EPOXY MORTAR MANHOLE TO COVER FRAME
DUCTILE IRON DOUBLE COVER AND FRAME TO BE ON CHAIRS, BEDDED ON CLASS M1, M2 OR EPOXY MORTAR
COVER SLAB ON MORTAR BED (WITHIN BS EN124)
SEALANT 10mm UNCOMPRESSED THICKNESS TO ALL HORIZONTAL JOINTS.
TOP OF PIPE TO BE SET 100mm BELOW UNDERSIDE OF PRECAST CONCRETE SECTION
GRANO CONCRETE BENCHING MIN. 20mm THICK TO BE BROUGHT UP TO A DENSE SMOOTH FACE, NEATLY SHAPED AND FINISHED TO ALL BRANCH CONNECTIONS, BENCHING SLOPE TO BE BETWEEN 1:10 – 1:30 GRADIENT.
CONSTRUCTION JOINT
CONCRETE BASE AND 150mm SURROUND TO PRECAST CONCRETE STRUCTURE TO BE DESIGNATED MIX "GEN4", AS DETAILED IN BS 8500.
INVERT WITHIN CHAMBER TO BE FORMED USING A CHANNEL PIPE
TYPICAL PRECAST CONCRETE MANHOLE - TYPE E
(DEPTH TO SOFFIT LESS THAN 1.2m, MAX. SEWER DIA. 375mm)
CLASS M1, M2 OR EPOXY MORTAR MANHOLE TO COVER FRAME
DUCTILE IRON COVER AND FRAME TO BE ON CHAIRS, BEDDED ON CLASS M1, M2 OR EPOXY MORTAR
CLASS B ENGINEERING BRICKWORK, 215 THK CROSS-BONDED (ENGINEERING MORTAR DESIGNATION (iii))
RY4 ALLOYS STEEL (GRADE 316S11 TO BE 60% OR POLYPROPYLENE ENCAPSULATED STEPIRONS (GRD2, GRADE 316S11) ALL TO BE AT DOUBLE STEP RUNGS (280mm APART MAX. 250mm MAX. BENT RISE).
CONCRETE BASE – DESIGNATED MIX "GEN4", AS DETAILED IN BS 8500.
215 CLASS B ENGINEERING BRICKWORK
GRANO CONCRETE BENCHING MIN. 20mm THICK TO BE BROUGHT UP TO A DENSE SMOOTH FACE, NEATLY CHAMFERED AND FINISHED TO ALL BRANCH CONNECTIONS, BENCHING SLOPE TO BE BETWEEN 1:10 – 1:30 GRADIENT.
225 TO INVERT.
MANHOLE TYPE C - LONGT SECTION
MANHOLE TYPE C - TRANSVERSE SECTION
CROWN OF INCOMING PIPE NOT TO BE LOWER THAN THE CROWN OF THE OUTGOING PIPE
FALL ON CHANNEL TO SUIT DIFFERENCE IN INVERT LEVELS OF INCOMING AND OUTGOING PIPES.
INLET AND OUTLET PIPES OF DISSIMILAR DIAMETER
INTERNAL DIMENSIONS OF CHAMBER TO BE MINIMUM 1040 (RD) (AS CLEAR OPENING IN FRAME), BUT CHAMBER WITH BENCHING FOR PIPES LARGER THAN 225MM TO PROVIDE 225mm DEPTH OF BENCHING EACH SIDE, (RW) WORK TO BE CORBELLED DOWN TO SUIT COVER.
ALL PIPES UP TO AND INCLUDING 600MM DIAMETER TO BE CUT FLUSH WITH INSIDE FACE OF THE MANHOLE, JOINTING WITH A 600MM LONG ROCKER PIPE.
NOTE: MANHOLE TYPE "C" AND "D" MAY BE CONSTRUCTED IN PRECAST CONCRETE RECTANGULAR MANHOLE RING (e.g. TO 1800MM CONCRETE SURROUND DESIGNATED MIX GEN4).
TYPICAL BRICK MANHOLE - TYPE C
INLET AND OUTLET PIPES OF SIMILAR DIAMETER
LONGITUDINAL SECTIONS THROUGH CHANNELS IN MANHOLES
CLASS M1, M2 OR EPOXY MORTAR MANHOLE TO COVER FRAME
DUCTILE IRON COVER AND FRAME TO BE ON CHAIRS, BEDDED ON CLASS M1, M2 OR EPOXY MORTAR
BRICKWORK TO BE CORBELLED (MAY 28mm PER COURSE) TO SUIT COVER
CLASS B ENGINEERING BRICKWORK, 215 THK CROSS-BONDED (ENGLISH BOND) IN MORTAR DESIGNATION (iii)
CONCRETE BASE DESIGNATED MIX "GEN4", AS DETAILED IN BS 8500.
LONGITUDINAL SECTION
TRANSVERSE SECTION
TYPICAL BRICK MANHOLE - TYPE D
(DEPTH TO SOFFIT LESS THAN 1.2M)
MAX. TRENCH WIDTH AS 4650
CLASS B
CLASS A
BACKFILL TO BE COMPACTED
CLASS O BEDDING uPVC PIPES ONLY
CLASS O BEDDING uPVC PIPES (ALTERNATIVE)
MAX TRENCH WIDTH AS SPECIFIED
SELECTED AGG/SOIL (FREE OF DEBRIS) TO BE COMPACTED IN LAYERS NOT EXCEEDING 150mm (REF CLAUSE 6.2.9 OF SHW)
TRENCH TO HAVE VERTICAL SIDES UNLESS OTHERWISE STATED.
150 CONCRETE BED AND SURROUND (GEN1) ALLOWING FOR FLEXIBLE JOINTS AT COLLAR POSITIONS (MIN. 12mm KERAFIX DIAMOND).
CLASS Z BEDDING SECTIONAL DETAIL
CONCRETE BED AND SURROUND ALLOWING FOR FLEXIBLE JOINTS AT COLLAR POSITIONS (MIN. 12mm KERAFIX DIAMOND).
CLASS Z BEDDING PLAN DETAIL
MAX TRENCH WIDTH AS SPECIFIED
MEDIUM 150mm BED AND SURROUND TYPE A, B OR C GRANULAR MATERIAL CAREFULLY COMPACTED.
CLASS S BEDDING SECTIONAL DETAIL
MATERIAL DESCRIPTION SPEC REF. INSTALLATION
MATERIAL A ANGULAR GRADE OF DNET TO BS EN 933, MAINLY 8 TABLE 10 100 150 10D-12D-40D Cast Iron 20mm Steel
MATERIAL B SELECTED FILL MPV, DIET 40 MM, FREE FROM SLAY LUMPS > 100mm, TIMBER, FROZEN MATERIAL, VEGETABLE MATTER ALL N/A
MATERIAL C SELECTED AS SUG MATERIAL ALL N/A
MATERIAL D SELECTED FILL MPV, DIET 20mm, FREE FROM CLAY LUMPS > 150mm, TIMBER, FROZEN MATERIAL, VEGETABLE MATTER ALL N/A
NEW POND DEPTH 90mm OD CENTRIFUGAL PUMPED RISING MAIN
MAX. TRENCH WIDTH PIPE OD +600
150mm TOPSOIL FOR GRASSED AREAS
300mm TOPSOIL FOR LANDSCAPED AREAS
HARD LANDSCAPING AREAS TO MATCH EXISTING
MATERIAL A
MATERIAL A
MACHINE CUT TRENCH BOTTOM
PUMPED RISING MAIN TRENCH DETAILS
(CLASS D BEDDING FOR uPVC PIPES)
SEWER DIA. mm
DROPSHAFT DIA. mm
225 225
300 225
375 300
450 375
525 450
600 450
675 525
750 600
825 600
MAY AND/OR CLEARANCE COVER SLAB TO CROWN OF ROD/DRG EYE & INLET, INVERT TO BENCHING AS SHOWN FOR RAMPED BACKDROP DETAIL
LEVER LOCKING LIFT OPPER ATTACHED TO MAN WALL WITH CHAIN & STAPLE CODE E1
SOCKET ADAPTOR OUT TO SUIT CODE AA F
RPS CUT TO SUIT
HALF CHANNEL
CURVED SQUARE TUMBLING BAY JUNCTION
REST BEND CODE SGBR1
ROCKER PIPE (600 LG)
VERTICAL BACKDROP TO BE USED WHERE DIFFERENCE BETWEEN PIPE AND MANHOLE INVERT LEVELS IS GREATER THAN 2.0%.
RAMPED BACKDROP IS PREFERRED TO THE VERTICAL BACKDROP.
EXTERNAL VERTICAL BACKDROP
TUMBLING BAY TO BE A 45 DEGREE OR 90 DEGREE OBLIQUE JUNCTION
CONNECTION TO BACKDROP MADE WITH 600mm LONG ROCKER PIPE
SPLASH GUARD /CUTOPPER
INVERT OF ROD/DRG EYE TO BE MIN. 450mm ABOVE TOP OF BENCHING
MIN. 150 CONCRETE BED AND SURROUND (DESIGNATED MIX GEN1)
45 DEGREE SHORT BEND
EXTERNAL RAMPED BACKDROP
DISCHARGE MANHOLE FW04
(SEE MANHOLE TYPE D.E)
675
7.2K
BELLMOUTH WITH BAFFLE
4.20K
TO OD RISING MAIN PIPE
900
675
CONTROL VALVE EXACT LOCATION TO BE AGREED
NEW MH2 FOUL PUMPING STATION (EXISTING MH2 TO BE DEMOLISHED) WITH SUBMERSIBLE PUMP CHAMBER DIA 2.4M (AS) MAX. FLOW RATE 31.6l/s
1 x 32K (800 OD OUT)
1 x 20K (500 IN)
1 x 24K (450 CHOS DEPTH)
NEW MH2/FW04 RISING MAIN DISCHARGE MANHOLE C1 = 3.21 1 x 2.2K (90 OD PIPE IN) 1 x 20K (BELL MOUTH)
NEW 90mm OD MDPE SDR11 CONTINUOUS PUMPED RISING MAIN BETWEEN PUMPING STATION MH2 AND DISCHARGE MANHOLE FW04, MINIMUM DEPTH OF COVER TO CROWN OF PIPE 900mm (AND IN FOUL SEWABLE GRADING AND SURROUND WITH SUITABLE GRANULAR MATERIAL COMPACTED TO MATCH EXISTING). MINIMUM PIPE BEND RADIUS AT CHANGE IN DIRECTION = 5D TANGENTS OF THE PIPE.
PUMP CHAMBER TO BE PLACED ON BOTH 2A + 2B + 1/2BA THK. REINFORCED CONCRETE BASE SURGE SLAB WITH 1 LAYER ABOVE MESH TOP & DETAIL 75mm COVER.
PUMP CHAMBER TO BE SURROUNDED WITH MASS CONCRETE MIN. 0.5m THK. IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS TOPPED WITH 300mm THK. CONCRETE COVER SLAB WITH LAYER ARMOUR AT MID DEPTH
INDICATIVE SECTION THROUGH PUMPED FOUL MAIN
SCALE 1:50
SQUARE RECESSED COVER AND FRAME (E.G. DEN 'M' MATCH WITH SYMPH MAT 600pc) (E.G. HEPWORTH CODE SPH 08)
225mm DEEP CONCRETE PLINTH TO SUPPORT FRAME
SQUARE ARTHRIT COVER AND FRAME (E.G. HEPWORTH CODE SPH 08)
CONCRETE SLAB
GRASS VERGES/LANDSCAPED AREAS WITH GRASS ROUND COVER
GRASS IN CONCRETE FLOOR SLAB
ROUND DUCTILE IRON COVER AND FRAME SECURED WITH CLIPS SUPPLIED (E.G. HEPWORTH CODE SPH 06)
ROUND DUCTILE IRON COVER AND FRAME SECURED WITH CLIPS SUPPLIED (E.G. HEPWORTH CODE SPH 06)
225mm DEEP CONCRETE PLINTH TO SUPPORT FRAME
POLYPROPYLENE INSPECTION CHAMBER (E.G. HEPWORTH CODE IP110 CT, 340mm DEEP IP110 CB 540mm DEEP IP110 C 740mm DEEP MAX 1000mm DEEP)
150 CONCRETE SURROUND FOR PROTECTION
100 DEEP GRANULAR FILL OR CONCRETE IF CONCRETE PLACE CHAMBER INSPECTION PIPE E CONCRETE IN MIX
NOTE: UNIVERSAL PRODUCT ADAPTOR TO PIPE NOT INCLUDED
GRASS VERGES/LANDSCAPED AREAS WITH PLANTING ROUND COVER
GRASS IN CONCRETE FLOOR SLAB
TYPICAL POLYPROPYLENE INSPECTION CHAMBER DETAILS
BENDS OF UPTO MAY 45° WHERE CAN BE USED ON ANY INLET AND OUTLET
MIN. ACCESS CHAMBER CODE IC2421 H
WHERE CHAMBERS ARE POSITIONED ON 90° CORNERS ALWAYS USE THE MAIN CHANNEL BY FITTING 45° BEND CODE 035.0 ON INLET AND OUTLET
PIPE 100mm INLET CODE 0P101.4 960mm DEEP CODE 0P100 1050mm DEEP
WHERE CHAMBERS ARE POSITIONED ON 90° CORNERS ALWAYS USE THE MAIN CHANNEL BY FITTING 45° BEND CODE 035.0 ON INLET AND OUTLET
INLET ADAPTOR CODE GR01
BENDS OF UPTO MAX 45° WHERE CAN BE USED ON INLET
100mm COUPLING PIPE 100mm INLET CODE 035.01
BENDS OF UPTO MAX 45° WHERE CAN BE USED ON INLET
WHERE CHAMBERS ARE POSITIONED ON 90° CORNERS ALWAYS USE THE MAIN CHANNEL BY FITTING 45° BEND CODE 035.0 ON INLET AND OUTLET
ADJUSTABLE SEMI-CIRCULAR CHANNEL MANHOLE BASE
SHORT STUB OF MAIN CONNECTIONS SHOULD PREFERABLY BE CONNECTED VIA A 45° INLET USING A BEND WHERE NECESSARY
Max 1000 INLET OR Max 150 OUTLET PIPES BLANK OFF ALL INLETS NOT REQUIRED
MINI ACCESS CHAMBER/ PPIC INSTALLATION DETAIL
2 No. ROCKER PIPES
PLAN
1 No. ROCKER PIPES
190mm CONCRETE SURROUND DESIGNATED CONCRETE GEN 3
ROCKER PIPE
ROCKER PIPE
CLEARANCE LESS THAN 300mm
SECTION
TYPICAL PIPE CROSSOVER DETAIL - CLEARANCE LESS THAN 300mm
SOIL PIPE
SOIL PIPE ADAPTOR (E.G. HEPWORTH CODE SNA)
PRECAST LINTEL COUPLING WITH 150mm OF STRUCTURE (E.G. HEPWORTH CODE SD1/H)
SHORT LENGTH OF PIPE CUT TO SUIT
REST BEND (E.G. HEPWORTH CODE SGBR1)
MAX 600mm LONG "ROCKER" PIPE
WASTE OR RAINWATER PIPE (USE WITH SVP)
ALTERNATIVE USE OF ABOVE EXTERNAL ADAPTOR SECTION WITH INTERNAL FLUSH WITH 40 BOSS (WASTE PIPES ONLY)
ADAPTORS (E.G. HEPWORTH CODE WASTE PIPE ADAPTOR 32mm – CODE UA 40mm – CODE UA1 50mm – CODE UA2 80mm – CODE UA3 BMP ADAPTOR 82mm – CODE UA6 110mm – CODE UA4)
ADAPTORS (E.G. HEPWORTH CODES 32 NB 1mm – 110 NB 2mm)
PRECAST LINTEL COUPLING WITH 150mm OF STRUCTURE (E.G. HEPWORTH CODE SD1/H)
SHORT LENGTH OF PIPE CUT TO SUIT
BEND (E.G. HEPWORTH CODE SGBR1)
MAX 600mm LONG "ROCKER" PIPE
SOIL & VENT PIPE / STUB STACK / W.C. CONNECTION DETAIL
SOIL OR WASTE ADAPTOR
SUSPENDED CONCRETE FLOOR SLAB
UP TO 180 mm TELESCOPIC MOVEMENT WHERE HOUSE ECO PROTECTED (REST PIPE TO HALF SOCKET DEPTH)
TELESCOPIC REST BEND (E.G. HEPWORTH CODE SBRT1)
SHORT LENGTH OF PIPE LAID TO STEEP GRADIENT IF EMPTYING ACCEPTABLE FALLS AFTER SETTLEMENT HAS OCCURRED.
INTERNAL WASTE PIPE CONNECTION DETAIL
TELESCOPIC REST BEND CONNECTION DETAIL
WASTE OR RAINWATER PIPE UP TO MAXIMUM 1000 OR 150mm SQUARE
CEMENT MORTAR FILLET
CAST IRON GRID ON SEALING PLATE
ACCESS GULLEY (E.G. HEPWORTH CODE SG3/H)
BEND TO SUIT
CONCRETE BED
CONTRACTOR TO ALLOW FOR COST OF PROPRIETARY PARKING PEG AT EACH GULLEY TO ALLOW FOR DEPTH TO BE INCREASED BY UP TO 300mm) TO SUIT REQUIREMENTS OF EXTERNAL PAVEMENT FINISH.
ACCESS GULLEY WITH SOIL OR RWP CONNECTION DETAIL
Notes
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DRAINAGE BEDDING NOTES
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.
2. NO DEVIATION FROM THE DETAILS SHOWN ON THIS DRAWING SHALL BE ALLOWED UNLESS PRIOR WRITTEN CONSENT HAS BEEN OBTAINED.
3. ALL PIPES WITH MORE THAN 600mm (FROM COVER SHALL HAVE:
CLAY PIPES – CLASS D BEDDING AND SURROUND
PLASTIC PIPES – CLASS S BEDDING AND SURROUND
4. ALL PIPES WITH LESS THAN 600mm (FROM COVER SHALL BE GIVEN CLASS Z CONCRETE SURROUND.
5. ALL PIPES LOCATED UNDER SUSPENDED REINFORCED CONCRETE FLOOR SLABS WITH LESS THAN 300mm (FROM COVER SHALL BE GIVEN CLASS Y CONCRETE SURROUND.
6. ALL PIPES LOCATED UNDER SUSPENDED FLOORS SHALL BE GIVEN CLASS Z CONCRETE SURROUND.
7. BEDDING MATERIALS SHALL COMPLY WITH BS EN 752 AND COMPLY WITH ONE OF THE FOLLOWING:
A) NOMINAL (SINGLE SIZED) AGGREGATE TO TABLE 6.5 OF BS EN 1610 AS FOLLOWS:
DN 100 10mm
DN 150 TO DN 600 10mm, 14mm or 20mm
GREATER THAN DN 600 14mm, 20mm or 40mm
B) GRADED AGGREGATE TO TABLE 6.5 OF BS EN 1610 AS FOLLOWS:
ALL PIPE SIZES GRADED 14mm to 5mm or 20mm to 5mm
GREATER THAN DN 300 GRADED 40mm to 5mm
8. WET TYPE 1 AND GRANULAR MATERIAL TYPE SC1 ARE AS MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS VOLUME 1 SPECIFICATION FOR HIGHWAY WORKS PUBLISHED BY THE HIGHWAYS AGENCY.
9. IN WATERLOGGED GROUND AND WHERE LAYING TAKES PLACE BELOW STANDING WATER LEVEL A CONCRETE SURROUND SHALL BE USED. DEWATERING SHALL BE USED WHERE PRACTICABLE AND WHERE APPROPRIATE.
10. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE APPROPRIATE CURRENT EDITION OF STANDARD AND BUILDING REGULATIONS AND TO THE SATISFACTION OF THE LOCAL AUTHORITY BUILDING INSPECTOR. ALL DRAINAGE WORKS AND MATERIALS SHALL COMPLY WITH THE WATER AUTHORITY'S REQUIREMENTS AND CURRENT BYELAWS.
11. CONSTRUCTION AND TESTING OF DRAINS TO BE IN ACCORDANCE WITH BS EN 1610: 1998.
12. ALL MATERIALS WHICH CONTRIBUTE TO COMPOSITE CLASS B ENGINEERING BRICKWORK SHALL HAVE ENGINEERING BRICKWORK (EB) DESIGNATION (iii) UNLESS OTHERWISE STATED.
13. ALL PRECAST MANHOLES TO BE PROVIDED WITH A 150mm (NOTE) CONCRETE SURROUND (OR GREATER IF REQUIRED BY THE MANUFACTURER) WITH A MINIMUM THICKNESS EQUAL TO THE GROUND CONDITIONS.
14. ALL MANHOLES TO BE WATERTIGHT.
15. ALL STEPIRONS/LADDER MUST BE CONSTRUCTED IN STAINLESS STEEL TO BS EN 13101.
16. TRENCHES AND PIPE BEDDING SHALL COMPLY WITH THE FOLLOWING PROVISIONS UNLESS EXCEPT WHERE NOTED OTHERWISE:
CLASS B BED AND HAUNCHING UP TO AND INCLUDING 300mm DN – TO BE HIGH STRENGTH (GEN1) CRUSHING STRENGTH 40 N/mm². ABOVE 300mm DN TO BE GEN 1 – HEPWORTH SUPERSEDE OR APPROVED EQUIVALENT – UNLESS NOTED OTHERWISE.
PLASTIC PIPES AND DUCTILE –
SURFACE WATER – POLYPROPYLENE EN 752 – 400mm DN, POLYPROPYLENE 300 – 900mm DN, POLYPROPYLENE 900 – 1800mm DN, TO BS EN 1401.
FOUL WATER – POLYPROPYLENE 150 – 300mm DN, TO BS EN 1401.
Kier Highways
Sparkling Academy
Drawing Title
Drainage Details
Scale 1:20/1:50
Original Size A0
CDM Stage Stage 3
Date of Original 15/05/2021
Author MWP
Checked AS
Approved MD
Drawing Number 32004-DBS-XX-XX-DR-C-0002
Status S4
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Project | Originator | Volume | Level | Type | Role | Number