

MORTAR HAUNCHING TO MANHOLE COVER AND FRAME. FRAMES TO BE SET LEVEL, BEDDED AND HAUNCHED EXTERNALLY OVER THE BASE AND SIDES OF THE FRAME IN MORTAR, IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS

TYPE 1 PRECAST CONCRETE COVER FRAME SEATING RINGS

STAINLESS STEEL (GRADE 316S31 BS5970) OR POLPROYLENE ENCAPSULATED ALL TO BS1247 PARTS 1-2, DOUBLE STEP RUNGS (280mm MIN. WIDTH AT 250mm CENTRES MAX. MAX DISTANCE FROM COVER LEVEL TO FIRST STEP 675mm

LIFTING EYES IN CONCRETE RINGS TO BE PAINTED

GRANOLITHIC CONCRETE TOPPING TO BE BROUGHT UP TO A DENSE SMOOTH FACE NEATLY SHAPED AND FINISHED TO ALL BRANCH CONNECTIONS (MINIMUM THICKNESS 50mm)

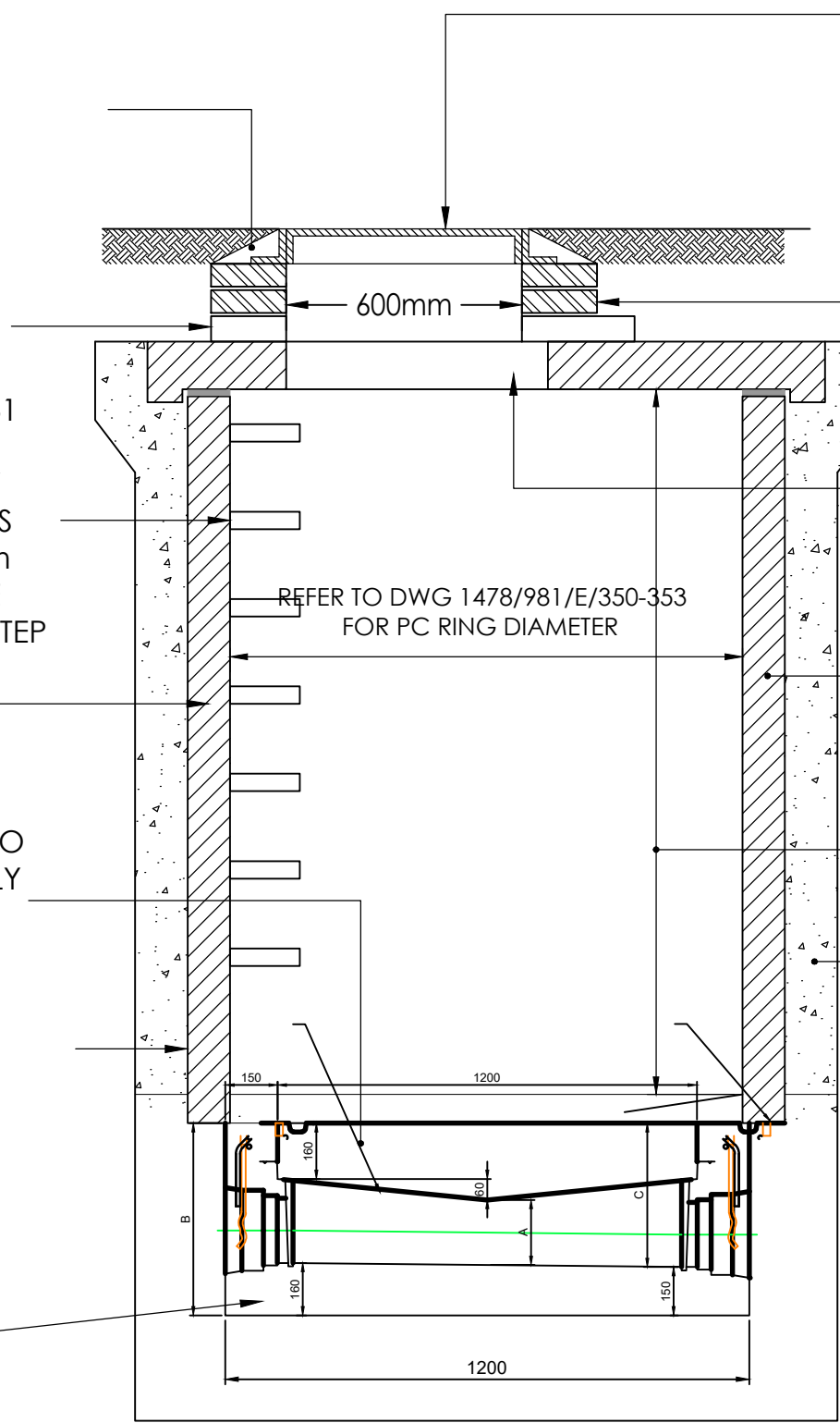
THE BOTTOM PRECAST CONCRETE MANHOLE RING TO BE BUILT INTO BASE CONCRETE MINIMUM 75mm

EASI-BASE TO BE PROVIDED. PRE-FABRICATED POLYPROPYLENE BASE WITH INTEGRAL BENCHING, CHANNELS AND CONNECTORS TO BE PROVIDED.

600mm x 600mm COVER AND FRAME TO BE BEDDED ON MORTAR MARKED "FW" FOR FOUL WATER OR "SW" FOR SURFACE WATER

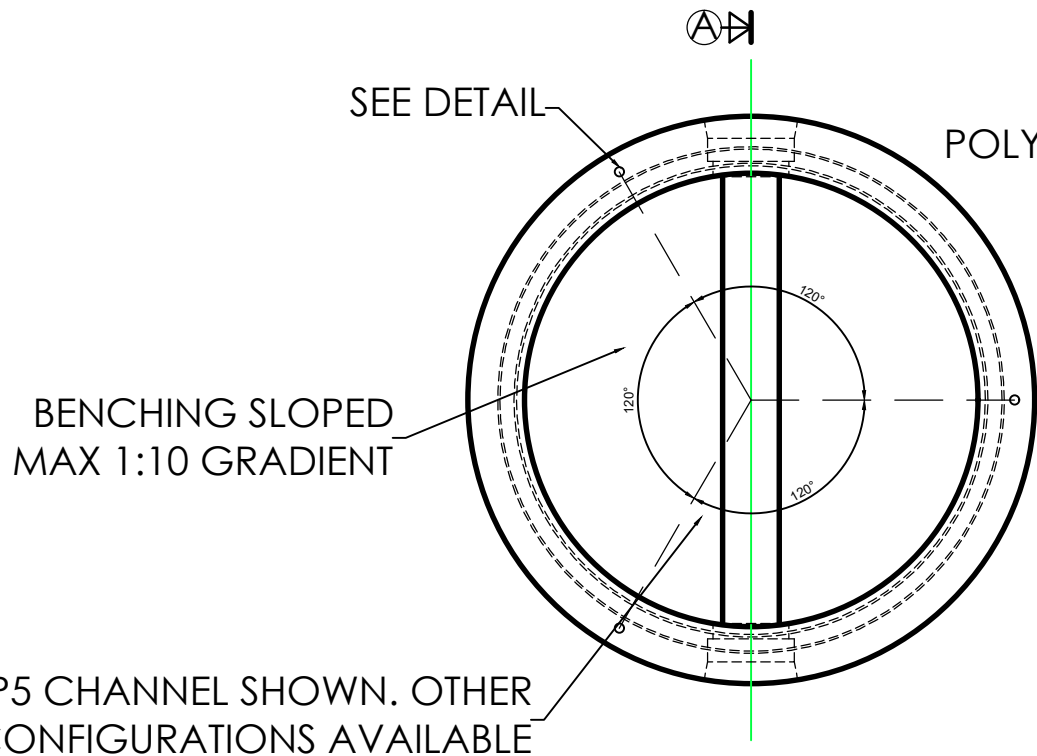
2-4 COURSES CLASS B ENGINEERING BRICKS OR TYPE 2 PRECAST CONCRETE COVER FRAME SEATING RINGS COVER SLAB OPENING TO BE 600mm x 750mm AND LOCATED DIRECTLY UNDER MANHOLE COVER PRECAST CONCRETE CHAMBER SECTIONS AND COVER SLAB TO BE BEDDED WITH MORTAR, PROPRIETARY BITUMEN OR RESIN MASTIC SEALANT CHAMBER HEIGHT (NOT LESS THAN 900mm)

150mm CONCRETE SURROUND



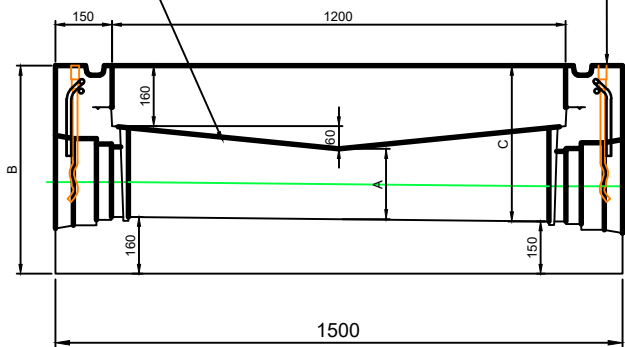
TYPE B MANHOLE

MAXIMUM DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 3.0m



PLAN VIEW (SCALE 1:20)

WAVY TAIL LIFTERS LOCATED AWAY FROM INLET / OUTLET LOCATIONS INTO THE CONCRETE



SECTION A - A (SCALE 1:20)

EASIBASE TYPE 1200 MANHOLE

1200 EASI BASE INFORMATION

SUITS PIPES UP TO DN300
WEIGHT = 2.5T
WALL THICKNESS = 150MM
PRICE (APPROX) = £370
LIFTERS = 3NR M24 LIFTING LOOPS

GENERAL NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE 1636/02 & 1636/03 SERIES DRAWINGS AND ALL OTHER CONSULTANTS DRAWINGS AS APPROPRIATE.
- ALL SETTING OUT COORDINATES AND LEVELS ARE BASED ON THE ORDNANCE SURVEY GPS DATUM AS INDICATED.
- ALL SETTING OUT DETAILS SHALL BE VERIFIED ON SITE WITH THE ENGINEER. THE ENGINEER MAY REQUIRE MINOR AMENDMENT TO THE SETTING OUT AND/OR LEVEL DETAILS TO ENSURE PROPER TIE IN TO THE EXISTING CARRIAGEWAY AND/OR FOOTWAYS.
- NO PRIVATE SURFACE WATER RUN OFF SHALL DISCHARGE ONTO THE PUBLIC HIGHWAY.
- PRIVATE DRAINAGE AND EXTERNAL WORKS SHALL COMPLY WITH PART H OF THE BUILDING REGULATIONS AND ALL ASSOCIATED BRITISH STANDARDS (BSEN WHERE APPLICABLE) AND NHBC GUIDELINES.
- ALL WORK WITHIN THE PUBLIC HIGHWAY WILL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATION OF NORFOLK COUNTY COUNCIL. NO WORK SHALL BE UNDERTAKEN WITHIN THE PUBLIC HIGHWAY UNTIL A LICENSE HAS BEEN ISSUED BY LINCOLNSHIRE COUNTY COUNCIL.
- ALL PROPOSED ADOPTABLE SEWERS (EXCLUDING HIGHWAY DRAINS) AND ALL WORKS TO THE EXISTING PUBLIC SEWERS SHALL BE CARRIED OUT STRICTLY IN ACCORDANCE WITH THE WATER AUTHORITIES ASSOCIATION SPECIFICATION "SEWERS FOR ADOPTION 6TH EDITION" AND THE REQUIREMENTS OF THE WATER AUTHORITY .
- ALL GULLIES, GULLY CONNECTIONS AND HIGHWAY DRAINS TO BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF LINCOLNSHIRE COUNTY COUNCIL HIGHWAY AUTHORITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATIONS OF ANY EXISTING STATUTORY UTILITIES. ALONG WITH ANY ADOPTABLE AND PRIVATE DRAINAGE THAT MAY BE AFFECTED BY THE PROPOSED WORKS. IDENTIFICATION SHOULD BE CARRIED OUT BY MEANS OF EITHER A CAT SCAN OR HAND DUG TRIAL HOLES. ANY DAMAGE TO EXISTING PLANT OR EQUIPMENT SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
- SITE CLEARANCE. EXISTING TREES, BUSHES AND SHRUBS SHALL ONLY BE REMOVED, INCLUDING GRUBBING UP OF ALL ROOTS, WITH THE PRIOR AGREEMENT OF THE ENGINEER. TRIMMING AND LOPPING OF EXISTING TREES SHALL ONLY BE CARRIED OUT BY AN EXPERIENCED TREE SURGEON AND APPROVED BY THE ENGINEER.
- PRIOR TO COMMENCEMENT OF WORKS PLEASE REFER TO THE PRE-TENDER & CONSTRUCTION PHASE HEALTH AND SAFETY PLANS FOR FURTHER INFORMATION.

CHANNEL DEPT (mm) A	EASI-BASE HEIGHT (mm) B	INVERT TO BASE TOP (mm) C
150	520	370
200	570	420
225	620	470
250	620	470
300	670	520

ROCKER PIPE LENGTH

NOMINAL PIPE DIAMETER (mm)	EFFECTIVE LENGTH
150 - 600	600
675 - 750	1000
825 AND GREATER	1250

SUITABLE FILL - THE SUITABLE FILL SHALL BE SUITABLE FOR THE LOCATION AND SHALL BE CAREFULLY COMPACTED TO PROVIDE A STABLE FILL WITHOUT DAMAGING THE PIPE. FILL UNDER CAR PARKING AREAS, SHARED DRIVES AND PRIVATE ROADS SHALL BE WELL COMPACTED GRADED GRANULAR MATERIAL. FILL UNDER ADOPTABLE ROADS MAY NEED TO BE TYPE 1 GRANULAR SUB-BASE MATERIAL - CHECK WITH HIGHWAY AUTHORITY IF APPROPRIATE.

GRANULAR MATERIAL - FOR RIGID PIPES THE GRANULAR MATERIAL SHOULD CONFORM TO BS EN: 1610 Annex B Table B.15 AND SHOULD BE SINGLE SIZE MATERIAL OR GRADED MATERIAL FROM 5mm UPTO A MAXIMUM SIZE OF 10mm FOR 100mm DIAMETER PIPES, 14mm FOR 150mm DIAMETER PIPES, 20mm FOR PIPES FROM 150mm TO 600mm DIAMETER AND 40mm FOR PIPES MORE THAN 600mm DIAMETER.

LIMITS OF COVER IN ANY WIDTH OF TRENCH

NOMINAL SIZE	LAI D IN FIELDS	LAI D IN LIGHT ROADS	LAI D IN MAIN ROADS
CLASS 120 CLAYWARE PIPES (CLASS B BEDDING)			
100mm	0.9m - 8.0+ m	1.2m - 8.0+ m	1.2m - 8.0m
150mm	0.9m - 8.0+ m	1.2m - 8.0+ m	1.2m - 8.0m
225mm	0.9m - 5.0m	1.2m - 5.0m	1.2m - 4.5m
400mm	0.9m - 4.5m	1.2m - 4.5m	1.2m - 4.0m
600mm	0.9m - 4.5m	1.2m - 4.5m	1.2m - 4.0m
CLASS M CONCRETE PIPES (CLASS S BEDDING)			
300mm	0.9m - 3.0m	1.2m - 3.0m	1.2m - 2.5m
450mm	0.9m - 3.5m	1.2m - 3.5m	1.2m - 2.5m
600mm	0.9m - 3.5m	1.2m - 3.5m	1.2m - 3.0m
THERMOPLASTIC PIPES (CLASS S BEDDING)			
100 - 300mm	0.9m - 7.0m	0.9 - 7.0m	0.9m - 7.0m

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A	20.06.19	DETAILS AMENDED		BC	JS
REV	DATE	AMENDMENT DETAILS		DRAWN	APPROVED

PROJECT PINFOLD LANE, WESTON LINCOLNSHIRE	DATE 31.05.19 SCALE(S)	DRAWING STATUS INFORMATION DESIGNED BC DRAWN BC	
DRAWING TITLE ADOPTABLE DRAINAGE STANDARD DETAILS SHEET 1 OF 2	AS SHOWN	CHECKED JPP APPROVED JS	
CLIENT BROADGATE HOMES LTD	DRAWING No 02/011	REVISION A	

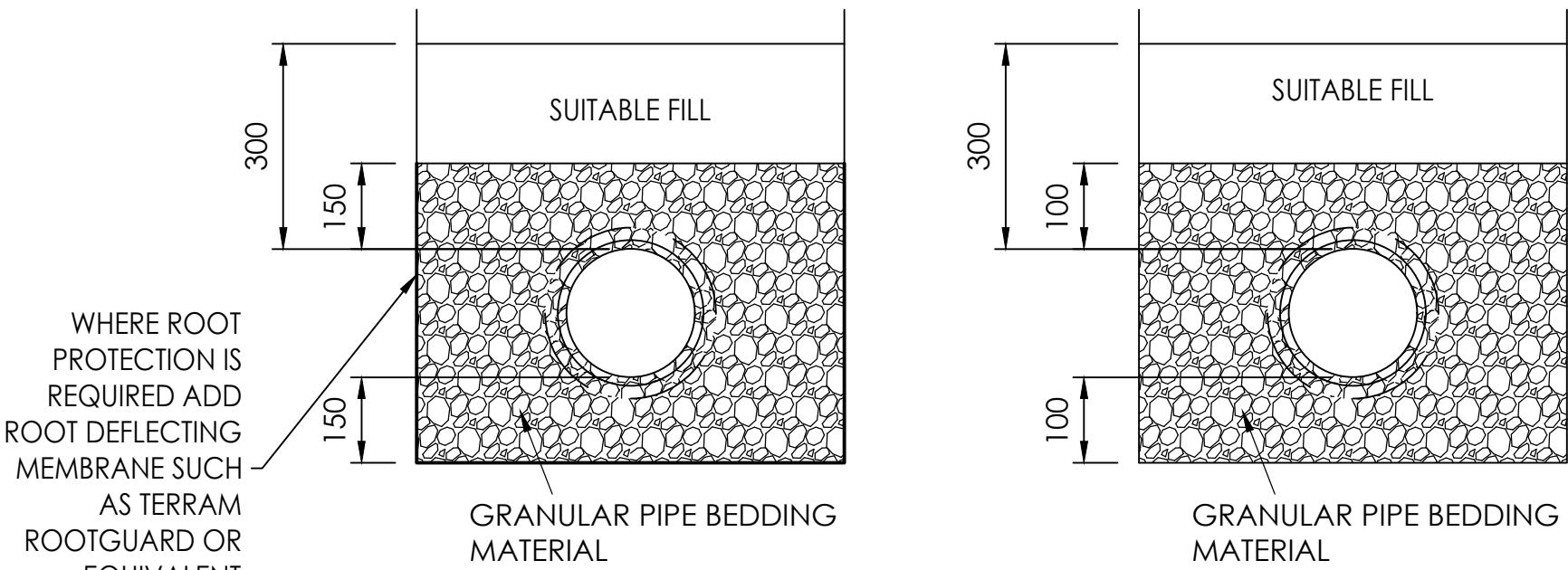
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FOR RIGID PIPES:

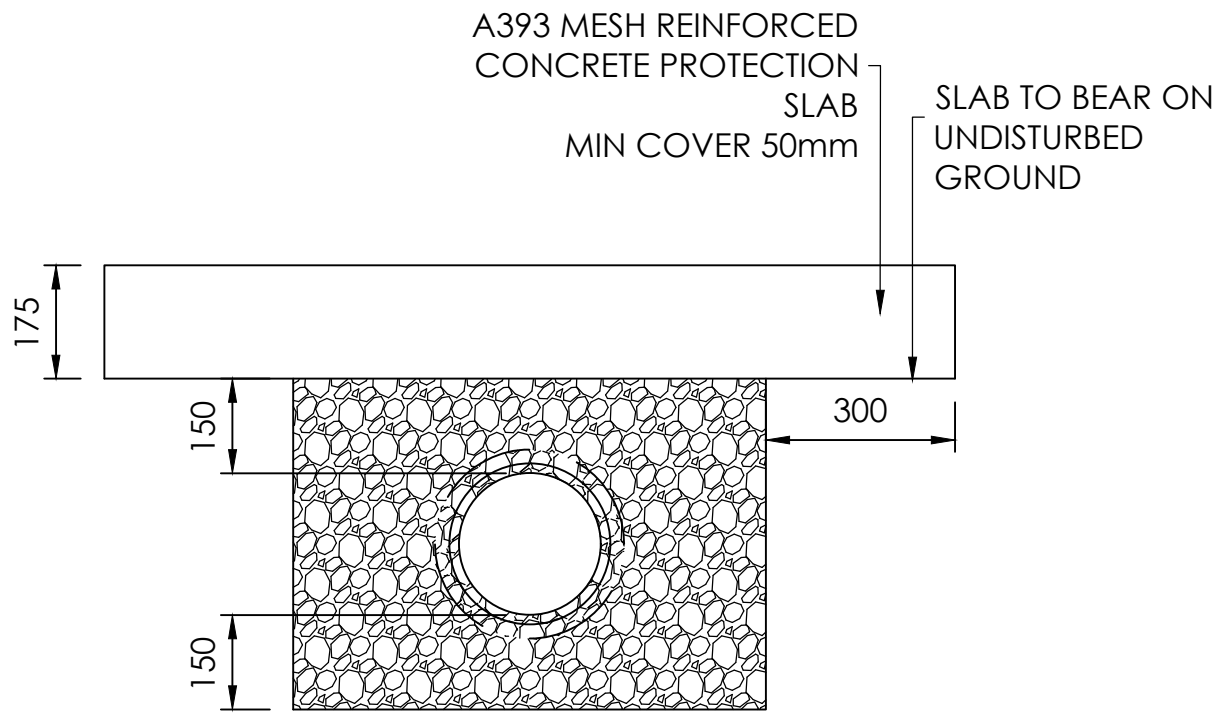
e.g.. CLAYWARE, CONCRETE

FOR FLEXIBLE PIPES:

e.g.. THERMOPLASTIC



TYPICAL PIPE BEDDING DETAILS



CONCRETE PIPE PROTECTION