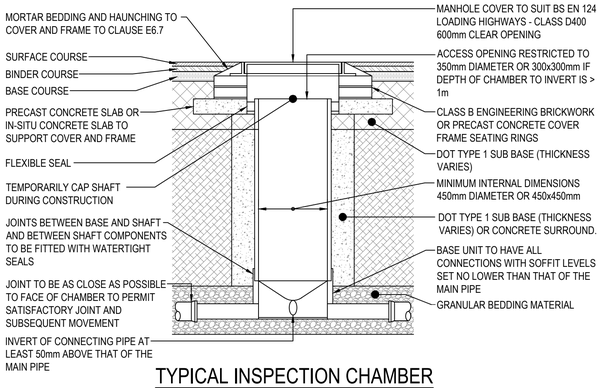
Sheet ACAD - A1 rev. C



TYPICAL INSPECTION CHAMBER DETAIL - TYPE 3

(REFER TO FIG. B.16 OF SEWERS FOR ADOPTION 7th ED)
(DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 3m)
(FLEXIBLE MATERIAL DETAIL)

PIPE DIA.	ROCKER PIPE LENGTH
150 - 600	0.60m

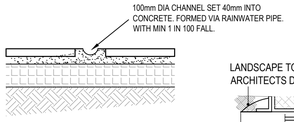
ROCKER PIPE DETAILS FOR INSPECTION CHAMBERS, MANHOLES & CATCHPITS

DRAINAGE CHANNEL NOTES:

1. DRAINAGE CHANNELS TO BE ACO QMAX LINEAR DRAINAGE AS SUPPLIED BY ACO POLYMER PRODUCTS LTD, EQUAL OR SIMILAR APPROVED BY JUBB TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

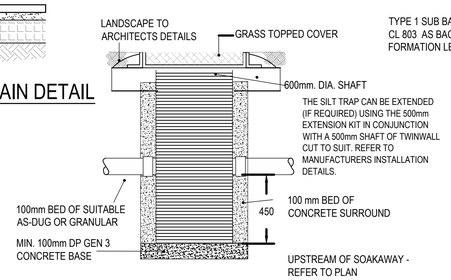
2. FOUNDATION FOR CHANNELS TO BE LAID ON A ROLLED SUB-BASE LAYER OF 100mm MINIMUM THICKNESS.

3. DRAINAGE CHANNELS ARE TO BE INSTALLED WITH SPECIFIC MANUFACTURERS INSTALLATION GUIDE FOR UNIT SPECIFIED. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER IMMEDIATELY.



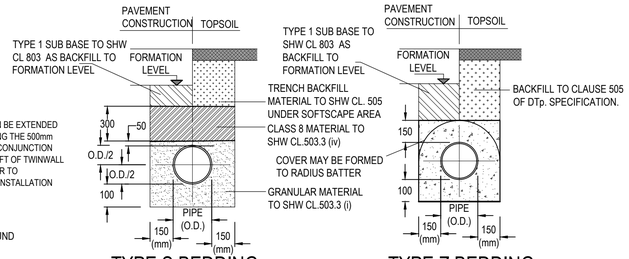
TYPICAL CHANNEL DRAIN DETAIL

SCALE 1:20



TYPICAL UPVC CATCHPIT CHAMBER CONSTRUCTION

SCALE 1:20



TYPE S BEDDING

GRANULAR BED AND SURROUND UNDER ROAD
(BEDDING FACTION = 2.2)
SCALE 1:20

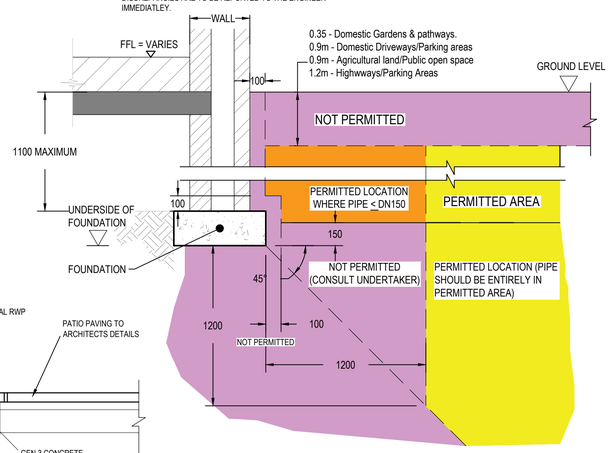
TYPE Z BEDDING

CONCRETE BED AND SURROUND
(BEDDING FACTION = 2.6)
SCALE 1:20

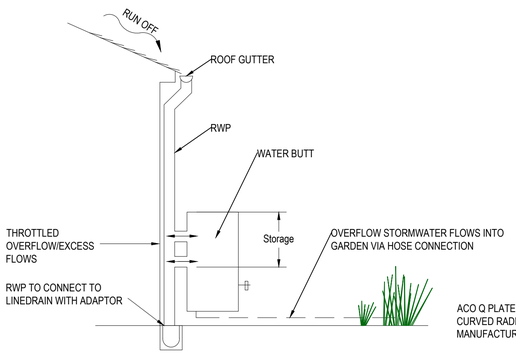
NOTES:
1. REFER TO SHW TABLE 5/3 AND SHW TABLE 6/1
2. BEDDING BENEATH AND AT SIDES OF THE PIPE TO BE WELL COMPACTED IN ACCORDANCE WITH CL 505.
3. CONCRETE CRADLES AND ARCHES MAY BE EXTENDED TO THE SIDES OF THE TRENCH.
4. GEOTEXTILES MAY BE USED WHERE DIRECTED OR APPROVED BY THE ENGINEER TO CONTAIN BEDDING MATERIAL IN CERTAIN SOILS EG. RUNNING SAND.
5. IN VERY WET CONDITIONS, WHERE DIRECTED OR APPROVED BY THE ENGINEER A TEMPORARY LAND DRAIN MAY BE LAID WITHIN THE GRANULAR BED.

NOTES: (TYPE Z ONLY)
6. WHERE PIPES WITH FLEXIBLE JOINTS ARE USED, THE 6. CONCRETE PROTECTION IS TO BE INTERRUPTED OVER ITS FULL CROSS SECTION AT INTERVALS NOT EXCEEDING 5 METRES (OR AS DIRECTED BY THE ENGINEER) BY A SHAPED FORMER OF BITUMEN IMPREGNATED COMPRESSIBLE FILLER. THESE INTERRUPTIONS SHALL COINCIDE WITH PIPE JOINTS. SEE DIMENSIONS FOR PIPE BEDDING TABLE FOR THICKNESS OF COMPRESSIBLE FILLER.
7. CONCRETE TO BE FND4 WHERE FLEXIBLE PIPES ARE USED. CARE MUST BE TAKEN TO PREVENT THE PIPES FROM FLOATING.

BEDDING DETAILS

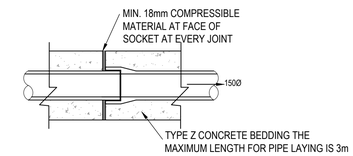


DRAINAGE DETAIL IN CLOSE PROXIMITY OF FOUNDATIONS (DETAIL IN ACCORDANCE WITH SFA FIGURE B1)



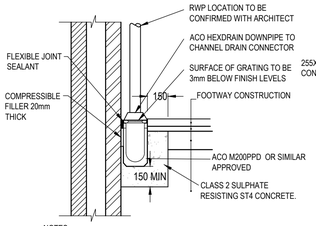
WATER BUTT PRINCIPAL

SCALE (NTS)



TYPE Z BEDDING ELEVATION

CONCRETE BED AND SURROUND
SCALE 1:20

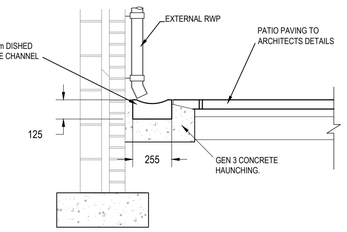


NOTES:

1. DRAINAGE CHANNELS TO BE ACO M200PPD OR SIMILAR APPROVED
2. FOUNDATION FOR CHANNELS TO BE LAID ON A ROLLED SUB-BASE OF 150mm MINIMUM THICKNESS.
3. GRATING LOAD CLASSIFICATION TO BE C250/ D400
4. RWP'S TO HAVE ACO HEXDRAIN CONNECTORES TO CHANNEL GRATINGS - REFER TO MANUFACTURERS GUIDELINES

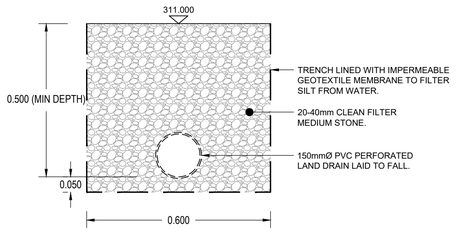
RAINWATER PIPE/DRAINAGE CHANNEL CONNECTION DETAIL

SCALE (NTS)



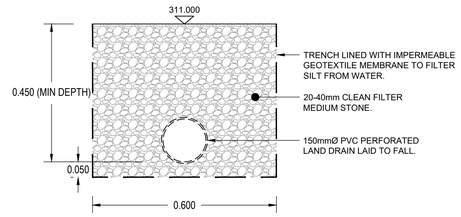
RWP CONNECTION DETAIL TO DISHED CHANNEL

SCALE 1:20



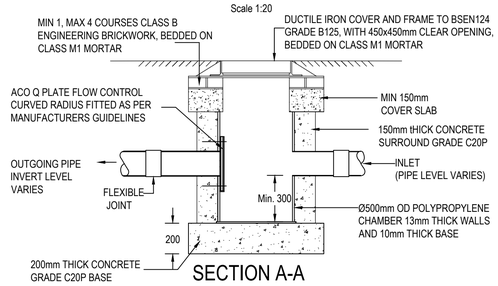
FILTER DRAIN STANDARD DETAIL GFS#1

Scale 1:10



FILTER DRAIN STANDARD DETAIL GFS#2

Scale 1:10

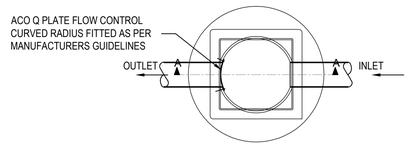


SECTION A-A

Scale 1:20

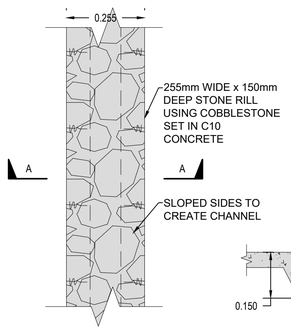
Ø500mm POLYPIPE CATCHPIT INSPECTION CHAMBER INCORPORATING FLOW CONTROL AND DEBRIS DEVICE

Scale 1:20



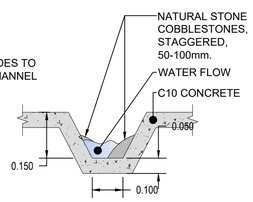
PLAN ON ORIFICE FLOW CONTROL

Scale 1:20



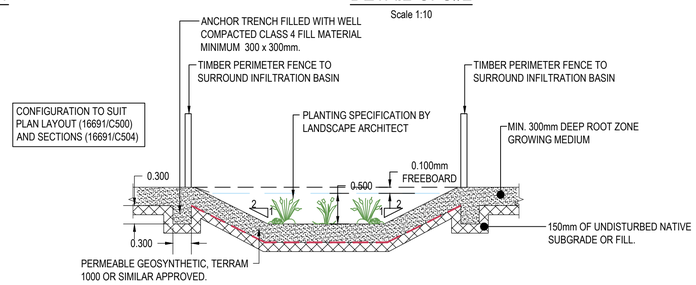
STONE RILL DETAIL

SCALE 1:10



SECTION A-A

SCALE 1:10



TYPICAL SECTION THROUGH RETENTION BASIN

SCALE 1:50

GENERAL NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. ALL LEVELS ARE SHOWN IN METRES UNLESS NOTED OTHERWISE.
3. DO NOT SCALE FROM THE DRAWING. USE FIGURED DIMENSIONS ONLY.
4. ANY DISCREPANCIES TO BE REPORTED IMMEDIATELY TO THE ENGINEER.
5. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SUBCONTRACTORS AND SPECIALISTS DRAWINGS AND SPECIFICATIONS.
6. EXISTING SERVICES HAVE NOT BEEN SHOWN BUT ARE PRESENT - THE CONTRACTOR IS TO LIAISE WITH ALL STATUTORY AUTHORITIES PRIOR TO THE COMMENCEMENT OF ANY WORKS.
7. TEMPORARY WORKS DESIGN BY OTHERS.
8. DESIGN RISK ASSESSMENTS AND METHOD STATEMENTS ARE TO BE PROVIDED TO THE PRINCIPLE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ANY WORKS.

APPROVAL

rev.	drawn	chkd.	apprvd.	date	description
05	RM	RM	SH	SH	30.08.23	REFERENCES TO PLANTING SCHEDULE 16691-PS01 OMITTED (SUPERSEDED). LANDSCAPE ARCHITECT APPOINTED
04	RM	RM	SH	SH	16.08.23	FILTER STRIP DETAILS ADDED AND RETENTION BASIN DETAIL AMENDED
03	RM	RM	SH	SH	07.06.23	SOAKAWAY AND RAINGRADEN DETAIL REMOVED. FOR RAIN GARDEN AND CRATE ATTENUATION DETAILS REFER TO DRAWING NO. 16691/C504
02	RM	RM	SH	SH	20.04.23	AMENDMENT TO INFILTRATION BASIN ANNOTATION AND TITLE BLOCK
01	RM	RM	SH	SH	24.03.23	ISSUE FOR SAB APPROVAL

Client
MERTHYR TYDFIL COUNTY BOROUGH COUNCIL

Project
NEW BUILD CLASSROOMS
TY DYSGU PRIMARY SCHOOL,
DOWLAIS

Title
DRAINAGE DETAILS
SHEET 1 OF 2

Vale Consultancy
CONSULTING CIVIL & STRUCTURAL ENGINEERS
29 Bocam Park, Old Field Road, Pencoed, Bridgend CF35 5LJ.
Phone: 01656 863794 Email: enquiries@vale-consultancy.co.uk

date	drawn	checked		approved	
24.03.23	RM	SH	24.03.23	SH	24.03.23

scale @ A1	project no.
AS SHOWN	16691

status	drg. no.	rev.
A	16691/C503	05

ORIGINAL DRAWING SIZE 841 x 594

10 0 10 20 50 100mm NATURAL SCALE

DRAWING STATUS
A - Approval, AB - As-Built, C - Construction, D - Draft, P - Preliminary, T - Tender

A1