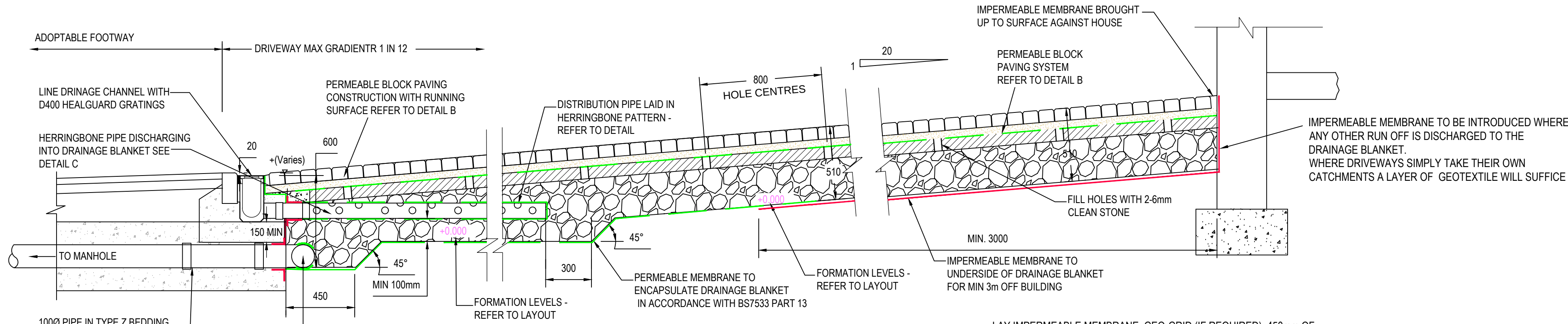


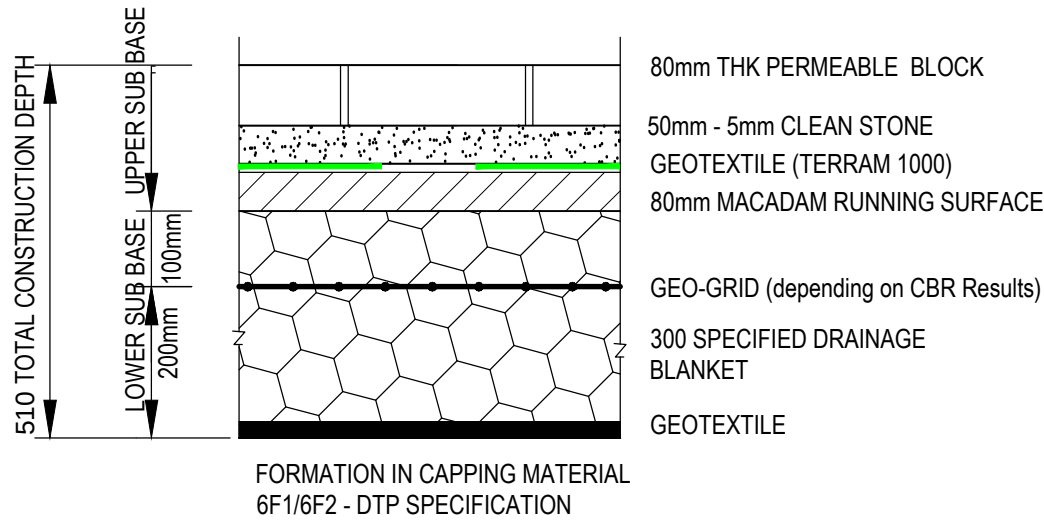


DETAIL A
PERMEABLE DRIVEWAY WITH
SUMP DRAIN OUTLET

SCALE: 1:20

(+0.000 = FORMATION LEVEL REFER TO DRAINAGE LAYOUT)

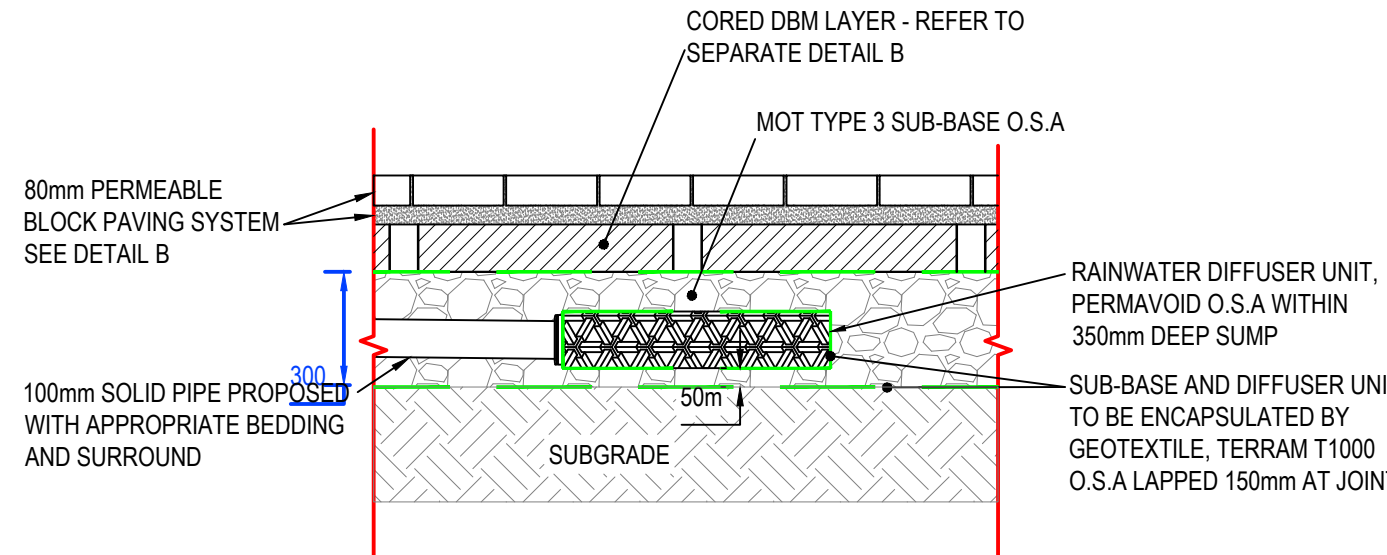
LAY IMPERMEABLE MEMBRANE, GEO-GRID (IF REQUIRED), 450mm OF SUB-BASE & GEO-GRID.
LAY 80mm OF DENSE BASE COURSE DENSE BITUMEN MACADAM (DBM) TO BS4987 OVER SUB BASE.
FOLLOWING CONSTRUCTION WORKS:
CLEAN THE DENSE BITUMEN MACADAM (DBM) SURFACE.
CUT 20/50mm DIAMETER HOLES @800 CENTRES THROUGH THE DBM SURFACE INTO THE SUB-BASE.
FILL HOLES WITH 2-6mm CLEAN STONE.
LAY TERRAM 1000 GEOTEXTILE (O.S.A.), 50mm LAYING COURSE AND PERMEABLE BLOCKS.



GRADING OF GRANULAR LOWER SUB BASE MATERIAL	
SIEVE SIZE	% PASSING
100mm	100
63mm	90-100
37.5mm	60-80
20mm	15-30
10mm	0-5

SUB BASE SPECIFICATION FOR DRAINAGE BLANKET
THE GRANULAR SUB BASE MATERIAL SHALL CONSIST OF CRUSHED GRAVEL, ROCK OR CONCRETE POSSESSING WELL DEFINED EDGES. IT MUST BE SOUND, CLEAN, NON FRIABLE & FREE FROM CLAY OR OTHER DELETERIOUS MATTER. THE MATERIAL MUST BE NON PLASTIC WHEN TESTED IN ACCORDANCE WITH BS:1377.
THE MATERIAL MUST HAVE A MINIMUM 10% FINES VALUE OF 150K/N WHEN TESTED IN ACCORDANCE WITH BS:812 PART 3.
THE SELECTED TEST SAMPLES SHALL NOT BE OVEN DRIED AND SHOULD BE SOAKED IN WATER AT ROOM TEMPERATURE FOR 48 HOURS BEFORE TEST.

DETAIL B
PERMEABLE PAVING DETAIL
(WITH RUNNING SURFACE)

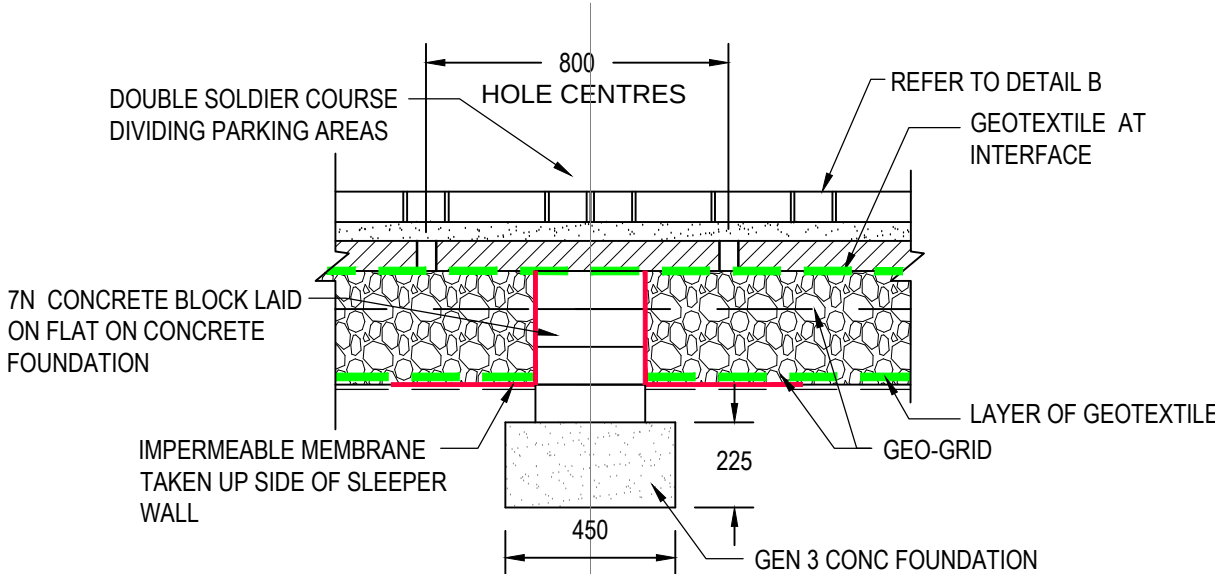
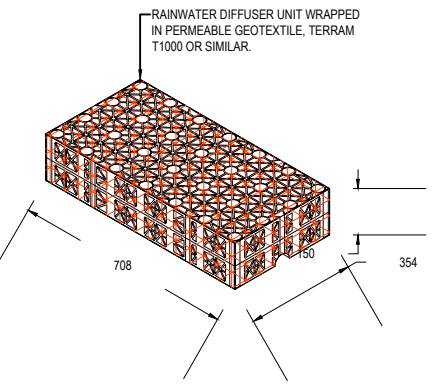


DETAIL C
DIFFUSER UNIT WITHIN SUMP OF
PERMEABLE PAVING

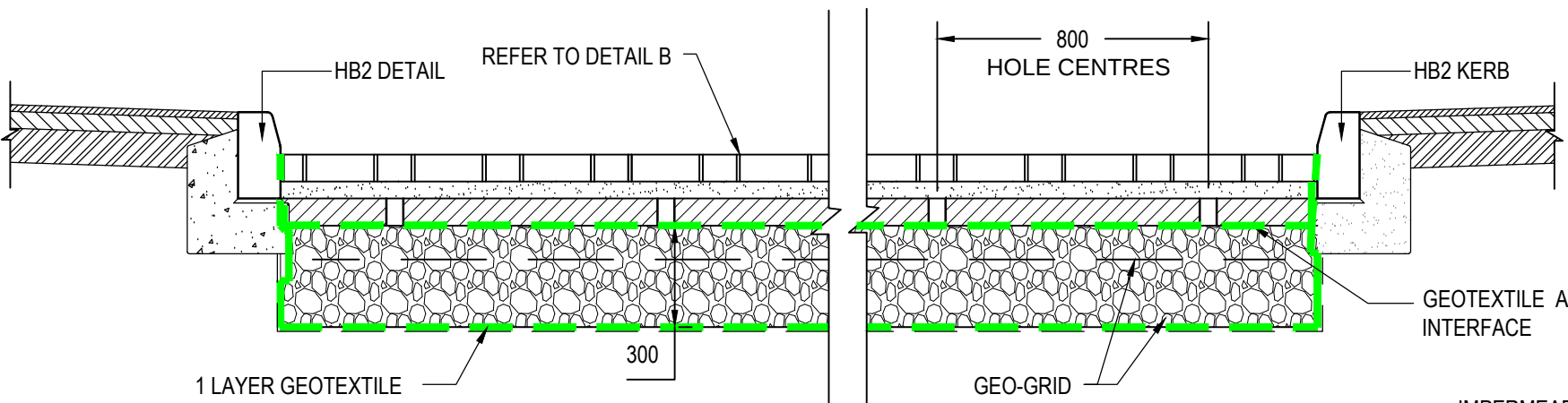
SCALE 1:20

DETAIL C
150mm THICK RAINWATER DIFFUSER
UNIT ISOMETRIC DETAIL

N.T.S.



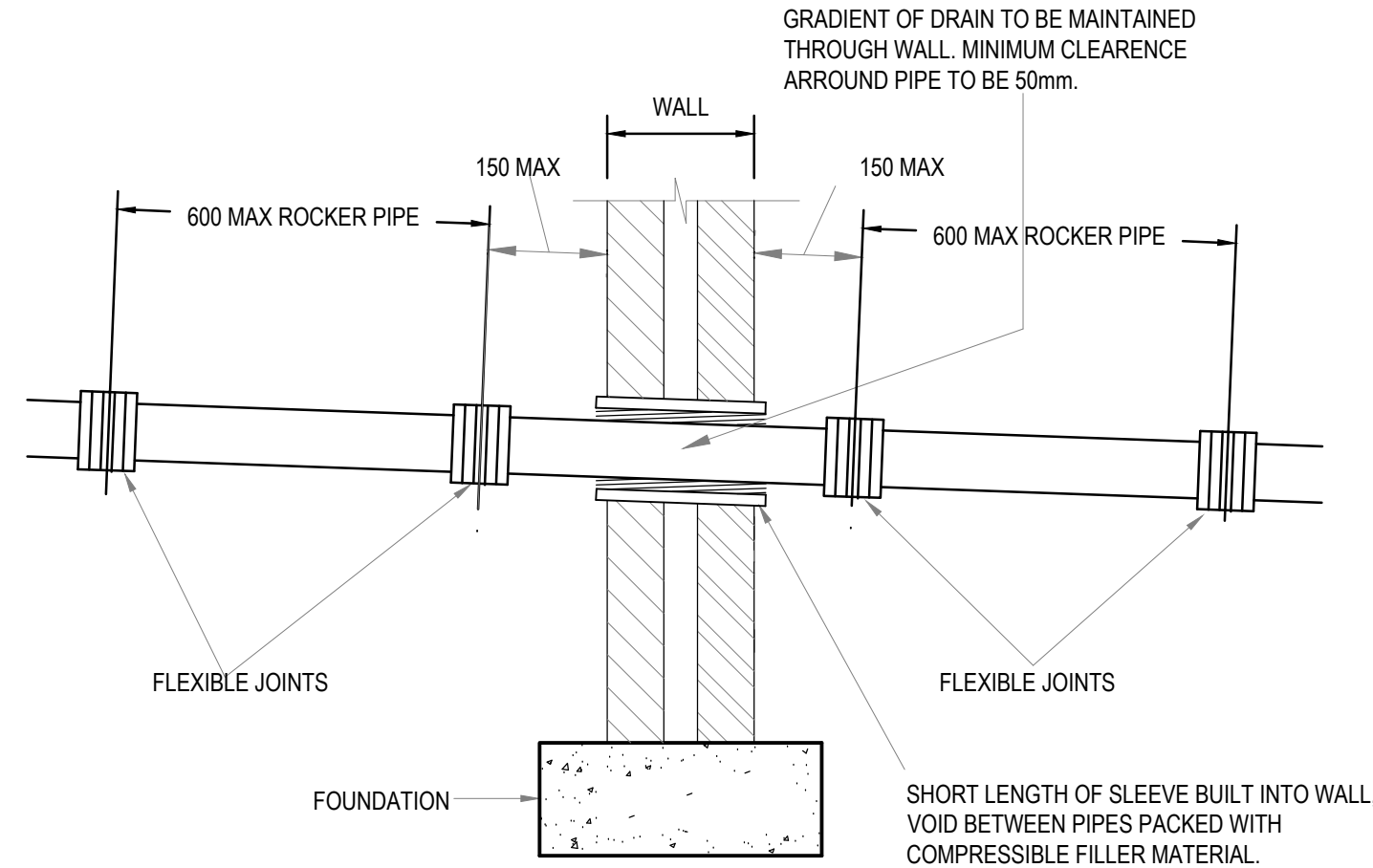
DETAIL G
PERMEABLE PARKING DETAIL
(WITH DIVIDING WALL)



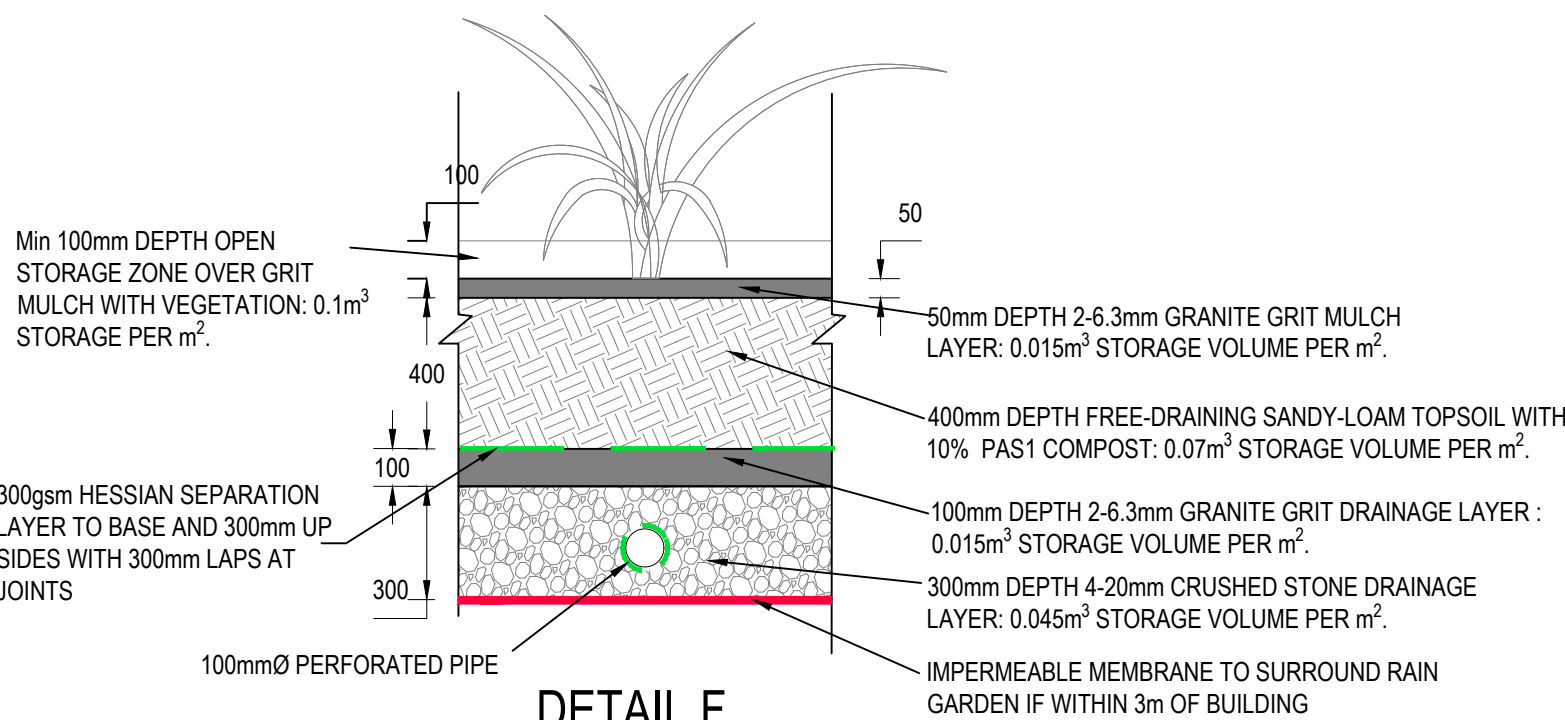
DETAIL D
PERMEABLE PARKING DETAIL
(WITH RUNNING SURFACE)

LAY GEOTEXTILE, 450mm OF SUB-BASE & GEO-GRID.
LAY 80mm OF DENSE BASE COURSE DENSE BITUMEN MACADAM (DBM) TO BS4987 OVER SUB BASE.
FOLLOWING CONSTRUCTION WORKS:
CLEAN THE DENSE BITUMEN MACADAM (DBM) SURFACE.
CUT 20/50mm DIAMETER HOLES @800 CENTRES THROUGH THE DBM SURFACE INTO THE SUB-BASE.
FILL HOLES WITH 2-6mm CLEAN STONE.
LAY PERMEABLE GEOTEXTILE, 50mm LAYING COURSE AND PERMEABLE BLOCKS.

IMPERMEABLE MEMBRANE TO BE INTRODUCED WHERE ANY OTHER RUN OFF IS DISCHARGED TO THE DRAINAGE BLANKET. WHERE DRIVEWAYS SIMPLY TAKE THEIR OWN CATCHMENTS A LAYER OF GEOTEXTILE WILL SUFFICE

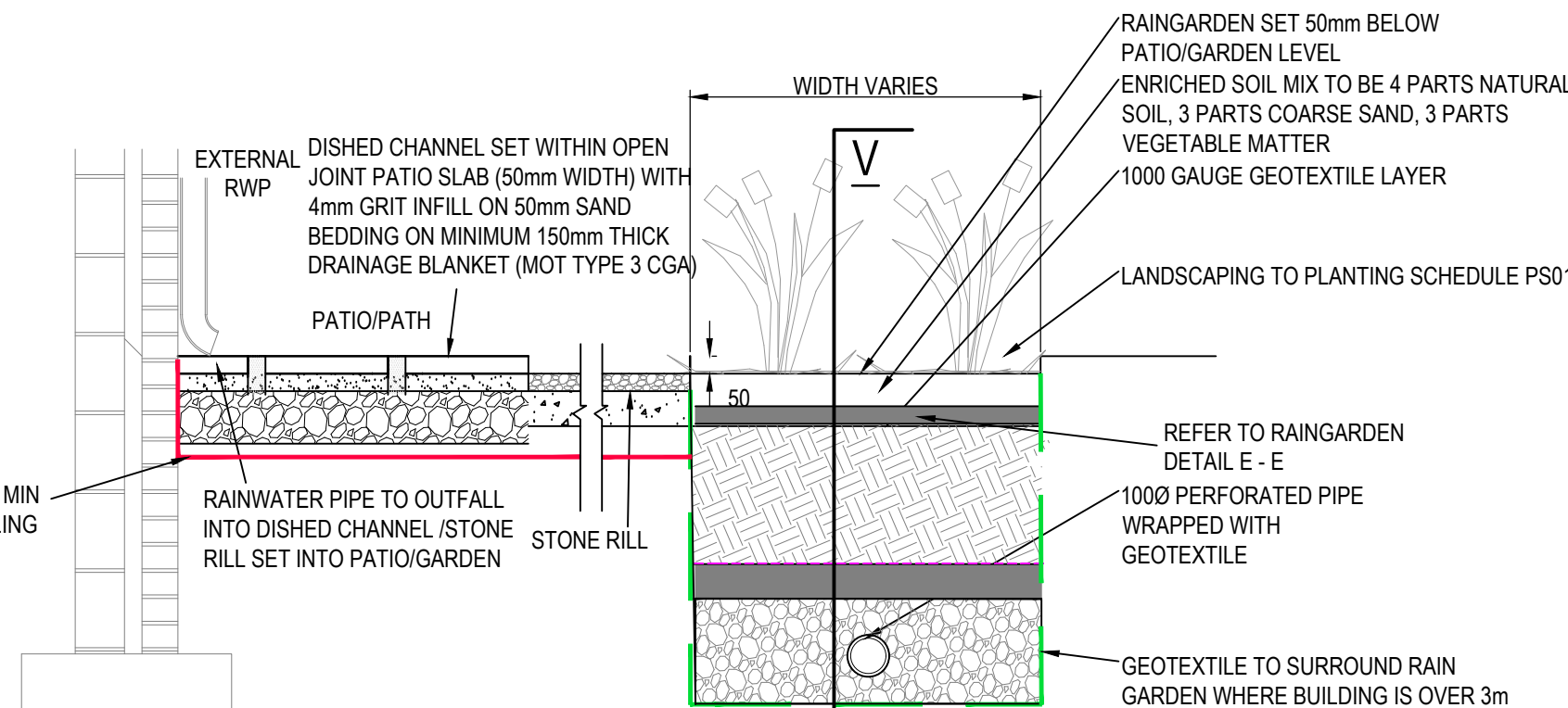


DRAINAGE THROUGH RETAINING WALL DETAIL



DETAIL F
BIO RETENTION/RAIN GARDEN
TO PLOTS SECTION V-V

SCALE 1:20



DETAIL E
RWP TO RAIN GARDEN TO PLOTS

SCALE 1:20

NOTES:

- MH COVERS AND FRAMES TO CONFORM TO BS EN 124:
-HIGHWAYS AND FOOTWAYS TO FRONT OF BUILDINGS (D400)
-FOOTWAYS TO REAR OF BUILDINGS (C250)
- TYPE S BEDDING AND SURROUND TO ALL PIPES EXCEPT IN THE FOLLOWING CIRCUMSTANCES, IN WHICH TYPE Z BEDDING AND SURROUND ARE TO BE USED:
-IN BACK GARDENS OF HOUSES WHERE DEPTH TO CROWN OF PIPE IS LESS THAN 0.35m
-IN AREAS OF THE REAR OF FLATS AND PARKING WHERE DEPTH TO CROWN IS LESS THAN 0.9m
-IN AREAS OF ROAD WHERE DEPTH IS LESS THAN 1.2m.
- ALL EXISTING MANHOLE INVERTS TO BE CHECKED AND REPORTED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF DRAINAGE WORKS. EXISTING PIPE CONNECTIONS ARE TO BE CCTV SURVEYED AND INSPECTED BY THE ENGINEER AND LOCAL AUTHORITY. IF THE PIPE CONNECTION IS FOUND TO BE DAMAGED OR IN DISTRESS, THE CONTRACTOR IS TO CARRY OUT REMEDIAL WORKS OR PROVIDE A NEW CONNECTION TO THE EXISTING SEWER (PIPE SIZE AND GRADIENT TO BE DETERMINED BY THE ENGINEER).
- ALL ADOPTABLE THERMOPLASTIC STRUCTURED WALL SEWER PIPE SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 13476-1 AND BS EN 13476-2 OR BS EN 13476-3. PIPES SHALL BE BSI KITEMARKED OR HAVE EQUIVALENT THIRD PARTY CERTIFICATION. PIPES LESS THAN OR EQUAL TO 500mm DIA. SHALL HAVE A SHORT-TERM RING STIFFNESS OF NOT LESS THAN 8kNm² (SN8).
- ALL JOINTING IN ACCORDANCE WITH MANUFACTURERS TECHNICAL ADVICE & SPECIFICATION.
- ALL NON ADOPTABLE DRAINAGE TO BE THE STANDARD UPVC 110mm, 160mm DRAINAGE AND MANUFACTURED TO BS-EN 1401 AND BS 4660 UNLESS NOTED OTHERWISE.
- ALL STORM WATER DRAINAGE TO BE A MINIMUM OF 150mm DIAMETER UNLESS OTHERWISE NOTED.
- SOIL & VENT PIPE LOCATION AND NUMBER TO BE CONFIRMED WITH ARCHITECT.
- THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS DRAWINGS, TOGETHER WITH THEIR LATEST SPECIFICATIONS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER (VALE CONSULTANCY) AS SOON AS POSSIBLE.
- FIGURED DIMENSIONS ONLY TO BE USED. ANY QUERIES OR DISCREPANCIES TO BE REFERRED TO THE ENGINEER (VALE CONSULTANCY) IMMEDIATELY.
- PRIOR TO ORDERING ANY MATERIALS THE CONTRACTOR IS TO CONFIRM MANUFACTURER/PIPE MATERIAL AND GRADE PROPOSED WITH WATER AUTHORITY.
- TEMPORARY WORKS DESIGN BY OTHERS.
- DESIGN RISK ASSESSMENTS AND METHOD STATEMENTS ARE TO BE PROVIDED TO THE PRINCIPLE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ANY WORKS.
- ARCHITECT TO CONFIRM EXTERNAL LEVELS TO ALL AREAS PRIOR TO THE COMMENCEMENT OF WORKS.
- FOR HIGHWAY RAIN GARDEN DETAILS REFER TO DRAWING 23218/705, 706 & 707.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH DRG No. 23218_501, 502, 503 & 504.

PRELIMINARY

01	RGP	NRC	MJ	17.02.26	PRELIMINARY
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rev.	drawn	chd.	NRC	approved	date	description
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Client
ADEPT CONSULTANTS

Project
**TWYN GLAS,
TREDEGAR, BLAENAU GWENT,
NP22 3EP**

Title
**PLOT SPECIFIC
DRAINAGE CONSTRUCTION DETAILS
SHEET 2**



date	drawn	checked	approved
17.02.26	RGP	NRC	MJ

scale @ A1
AS SHOWN

status	drg. no.	rev.
P	23218_511	01

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