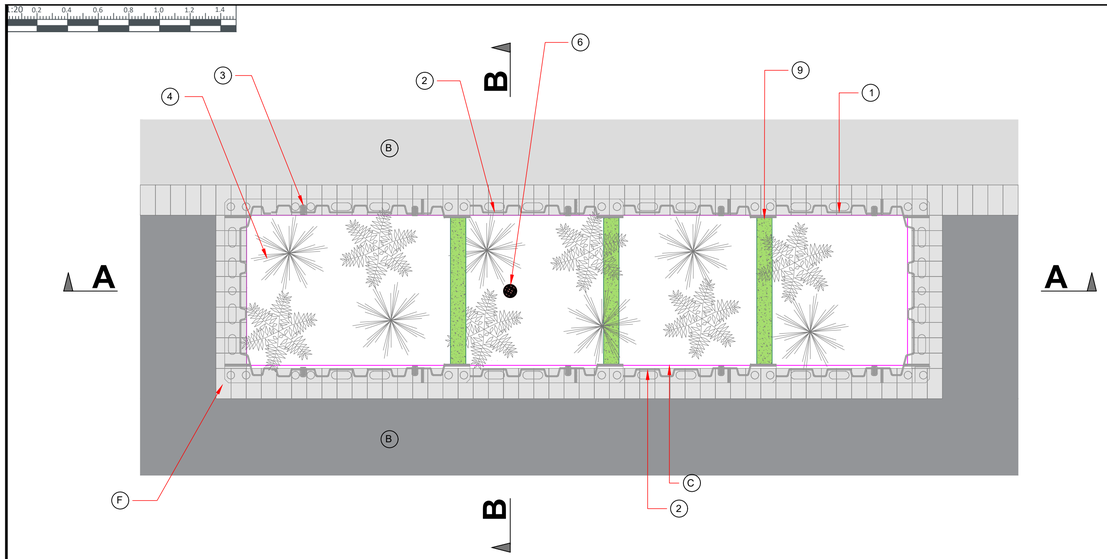
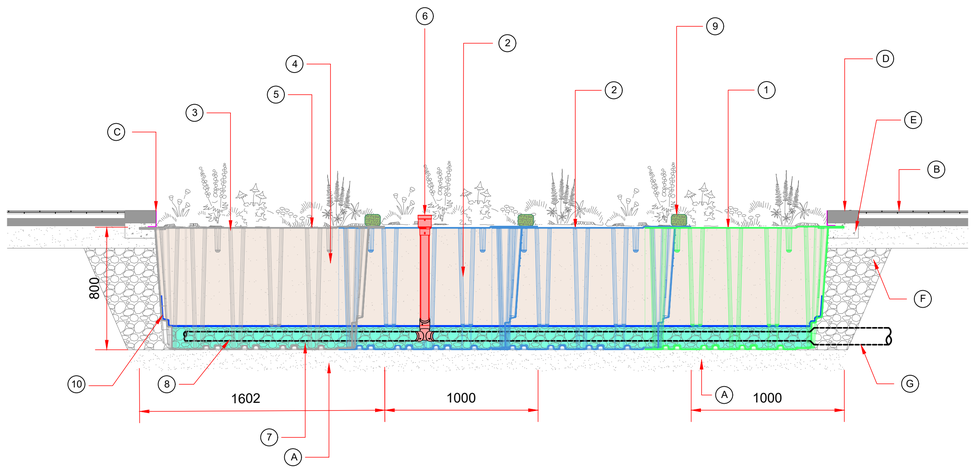
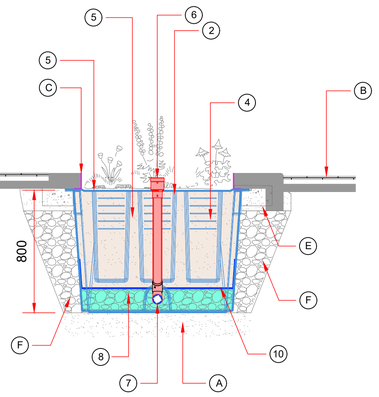


PLAN VIEW

PROPOSED TYPICAL PLANTER ARRANGEMENTS - FULL DETAILS TO BE PROVIDED BY MANUFACTURER INCLUDING SITE SPECIFIC LAYOUT, UNIT NUMBERS AND PIPE ARRANGEMENTS



SECTION A-A



SECTION B-B

PACKAGE INCLUDES THE FOLLOWING GREENBLUE URBAN PRODUCTS INDEX:

1. HYDROPLANTER START MODULE 'PLUG AND PLAY' RAIN GARDEN UNIT COMPLETE WITH EXCEEDANCE OVERFLOW AND DRAINAGE PIPE - GBUHPST1A
2. HYDROPLANTER CONTINUATION MODULE 'PLUG AND PLAY' RAIN GARDEN UNIT COMPLETE WITH EXCEEDANCE OVERFLOW AND DRAINAGE PIPE - GBUHPCM1A
3. HYDROPLANTER END MODULE 'PLUG AND PLAY' RAIN GARDEN UNIT COMPLETE WITH EXCEEDANCE OVERFLOW AND DRAINAGE PIPE - GBUHPEM1A
4. ARBORSOIL HYDRO BIORETENTION SOIL FOR USE WITHIN SUDS APPLICATIONS - ARBORSOIL HYDRO
5. ROOTSTART PROFESSIONAL MYCORRHIZA FUNGI ALLOW 200g PER TREE - RSPMF2.5LA
6. ROOTRAIN URBAN OVERFLOW SYSTEM (INCLUDED IN ITEM ①②, & ③) - RRURBINB
7. 60mm PERFORATED PIPEWORK (INCLUDED IN ITEM①②, &③) - GLPIPE60A
8. DRAINAGE LAYER AS PER INSTALLATION INSTRUCTIONS - GBUDRAIN3A
9. PRE-CAST CONCRETE WEIR WALL 75 X 100 X 1200
10. CLOSE WEAVE MESH FOR USE WITHIN SuDS APPLICATIONS TO TOP OF DRAINAGE LAYER AND 200mm UP THE SIDES OF THE PLANTER - GBUCWMA (INCLUDED IN ITEM①②, & ③))

NOTES:

GREENBLUE URBAN RECOMMEND TREES ARE NOT INSTALLED IN THIS PLANTER SYSTEM AS THE SOIL VOLUMES ARE NOT SUFFICIENT ENOUGH TO SUPPORT LONG TERM TREE GROWTH. SHRUBS AND PLANTS ARE RECOMMENDED ONLY.

A. BLINDING SAND BEDING

B. BUILD-UP TO SUIT ENGINEER DESIGNS AND REQUIREMENTS

C. ALUMINUM EDGING TO BOTH SIDES OF PLANTER TO PROVIDE BACKING TO CONCRETE HAUNCHES & PROVIDE REQUIRED DEPTHS

D. STANDARD BLOCK PAVING 200mm X 100mm X 80mm RUNNING ALONG THE PERIMETER OF THE PLANTER

E. CONCRETE HAUNCHING

F. MOT TYPE 1 BACKFILL SUPPORT BASE TO BE PROPERLY COMPACTED TO SIDES OF HYDROPLANTER OR FILL WITH CONCRETE IF ADEQUATE COMPACTION IS NOT AVAILABLE

G. DRAINAGE PIPE TO MAINS DRAIN OR NEXT STAGE OF SUDS TRAIN (110mm PERFORATED PIPE)

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER HBL DRAWINGS ISSUED FOR THIS PROJECT

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELATED DRAWINGS AND SPECIFICATIONS.
3. THE DRAINAGE CONTRACTOR IS RESPONSIBLE TO MAKING AN APPLICATION TO ANY SEWERAGE UNDERTAKER PRIOR TO CONSTRUCTION OF ANY CONNECTION INTO A PUBLIC MANHOLE.
4. THE ENGINEER IS TO BE NOTIFIED OF ANY DISCREPANCIES TO THE DETAILS SHOWN ON THE DRAINAGE AND ANY UNRECORDED CONNECTIONS NOT SHOWN ON THE DRAWINGS.
5. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING DIMENSIONS AND LEVELS AND FOR CONFIRMING THE GIVEN LEVEL OF OUTFALL INTO PUBLIC SEWER, WATERCOURSE OR OTHER OUTFALL PRIOR TO CONSTRUCTION WORKS COMMENCING.
6. UNTIL TECHNICAL APPROVAL HAS BEEN OBTAINED FROM THE RELEVANT AUTHORITIES ALL DRAWINGS ISSUED ARE AS PRELIMINARY AND NOT FOR CONSTRUCTION. SHOULD THE CONTRACTOR COMMENCE SITE WORK PRIOR TO APPROVAL BEING GIVEN, IT IS ENTIRELY AT THEIR OWN RISK.
7. TO PROTECT THE DRAINAGE SYSTEM FROM CONSTRUCTION SITE DERBIES, THE CONTRACTOR SHALL ENSURE THAT STOPPERS ARE SECURELY PLACED IN ALL CONNECTIONS IMMEDIATELY UPSTREAM OF THE TANK, ONLY TO BE REMOVED ONCE THE FINAL CLEANING OF THE ROADS/ DRAINAGE HAS BEEN COMPLETED.
8. THE DESIGN IS BASED ON THE INFORMATION AVAILABLE ON THE DATE OF ISSUE FROM OTHER PARTIES (E.G. ARCHITECT AND M&E ENGINEER). IT IS SUBJECT TO CHANGE RESULTING FROM UPDATES TO THE AVAILABLE INFORMATION FROM OTHERS.
9. NEW DRAINS AND SEWERS TO BE AS FOLLOWS:
   - 9.1. CONSTRUCTION AND MATERIALS OF PRIVATE SURFACE, FOUL & COMBINED WATER SEWERAGE SYSTEM TO BE IN ACCORDANCE WITH "BUILDING REGULATIONS - APPROVED DOCUMENT H" & "BS EN 752:2017 DRAIN AND SEWER SYSTEMS OUTSIDE BUILDINGS"
   - 9.2. CONSTRUCTION AND MATERIALS OF PUBLIC SURFACE, FOUL & COMBINED WATER SEWERS TO BE IN ACCORDANCE WITH "DESIGN & CONSTRUCTION GUIDANCE, SEWERAGE SECTOR GUIDANCE APPENDIX C" AND IN ACCORDANCE WITH LOCAL SEWERAGE UNDERTAKER
   - 9.3. MINIMUM PIPE SIZE FOR ADOPTABLE SURFACE WATER DRAINAGE IS 150mmDN
     - 9.3.1. 100mmDN AT MIN 1:100 FOR 10 DWELLINGS OR LESS
     - 9.3.2. 150mmDN AT MIN 1:150 FOR GREATER THAN 10 DWELLINGS
   - 9.4. MINIMUM PIPE SIZE FOR ADOPTABLE FOUL WATER DRAINAGE IS 100mmDN
     - 9.4.1. 100mmDN 1:40 WHERE 10 DWELLINGS OR LESS AND NO WC
     - 9.4.2. 100mmDN 1:80 WHERE GREATER THAN 10 DWELLINGS AND AT LEAST 1 WC
   - 9.5. ALL ROAD GULLY PIPEWORK SPURS TO BE 150mmDN UNLESS OTHERWISE SPECIFIED
10. LOAD CLASS SELECTION TO COMPLY WITH BS EN 124.
    - 10.1. LOAD CLASS A15 - AREAS INACCESSIBLE TO MOTOR VEHICLES
    - 10.2. LOAD CLASS B125 - FOOTWAYS, PEDESTRIAN AREAS ETC
    - 10.3. LOAD CLASS D250 - GULLY TOPS IN KERBSIDE CHANNELS OF ROADS
    - 10.4. LOAD CLASS D400 - CARRIAGEWAYS OF ROADS (HEAVY DUTY)
    - 10.5. LOAD CLASS E600 - AREAS IMPOSING HIGH WHEEL LOADS
    - 10.6. LOAD CLASS F900 - AREAS IMPOSING PARTICULARLY HIGH WHEEL LOADS
11. ALL FOUL DRAINS BENEATH BUILDINGS AND FROM SOIL VENT PIPES, GULLIES AND WC CONNECTIONS BE 100mmDN AT A GRADIENT NOT LESS THAN OF 1:40.
12. ALL FOUL CONNECTIONS TO BE FULLY TRAPPED AND EACH FOUL CONNECTION TO A BRANCH DRAIN TO HAVE FULL RODDING ACCESS (E.G. LOW-LEVEL RODDING ACCESS).
13. RAINWATER DOWN PIPES ARE TO CONNECT TO A DRAIN VIA A REST BEND.
14. WHERE DRAINAGE IS COMBINED A 'P' TRAP MUST BE PROVIDED ABOVE PROPOSED FLOOR SLAB LEVEL.
15. MINIMUM DEPTH OF COVER TO THE CROWN OF GRAVITY PIPES WITHOUT PROTECTION SHOULD BE AS FOLLOWS (IN ACCORDANCE WITH "DESIGN & CONSTRUCTION GUIDANCE, SEWERAGE SECTOR GUIDANCE APPENDIX C")
    - 15.1. 350mm - DOMESTIC GARDENS AND PATHWAYS WITHOUT ANY POSSIBILITY OF VEHICULAR ACCESS
    - 15.2. 500mm - DOMESTIC DRIVEWAYS, PARKING AREAS AND YARDS WITH HEIGHT RESTRICTIONS TO PREVENT ENTRY BY VEHICLES WITH A GROSS WEIGHT IN EXCESS OF 7.5 TONNES.
    - 15.3. 900mm - DOMESTIC DRIVEWAYS, PARKING AREAS AND NARROW STREETS WITH LIMITED ACCESS FOR VEHICLES WITH A GROSS WEIGHT IN EXCESS OF 7.5 TONNES.
    - 15.4. 900mm - AGRICULTURAL LAND & PUBLIC OPEN SPACE.
    - 15.5. 1200mm - HIGHWAYS AND PARKING AREAS WITH UNRESTRICTED ACCESS TO VEHICLE WITH A GROSS WEIGHT IN EXCESS OF 7.5 TONNES.
16. BACKFILL TO DRAINAGE TRENCHES UNDER CARRIAGEWAYS TO BE TYPE 1 SUB-BASE MATERIAL, ELSEWHERE BACKFILL TO BE FREE DRAINING READILY AVAILABLE COMPACTABLE MATERIAL FREE FROM RUBBISH, ORGANIC MATTER, FROZEN SOIL, CLAY LUMPS AND LARGE STONES. TO BE COMPACTED IN LAYERS NOT EXCEEDING 250mm THICK
17. A FLEXIBLE JOINT SHALL BE PROVIDED AS CLOSE AS IS FEASIBLE TO THE OUTSIDE FACE OF ANY STRUCTURE INTO WHICH A PIPE IS BUILT, COMPATIBLE WITH THE SATISFACTORY COMPLETION AND SUBSEQUENT MOVEMENTS OF THE JOINT. LENGTH OF THE NEXT PIPE (ROCKER PIPE) IS TO BE IN ACCORDANCE WITH THE TABLE BELOW
    - 17.1. 150-600mmDN - 600mm LONG ROCKER PIPE
    - 17.2. 601-750mmDN - 1000mm LONG ROCKER PIPE
    - 17.3. 751mmDN AND ABOVE - 1250mm LONG ROCKER PIPE
18. PIPE CROSSOVERS TO HAVE MINIMUM OF 300mm CLEARANCE BETWEEN OUTSIDE TOP OF THE LOWER PIPE AND OUTSIDE BOTTOM OF THE UPPER PIPE. WHERE THIS CANNOT BE ACHIEVED A SEPARATION, CONCRETE SURROUND IS TO BE FORMED WHICH WILL EXTEND NOT LESS THE 1000mm EACH SIDE OF THE CROSSING POINT. THE EXTENT OF THE CONCRETE SHOULD BE WITHIN 150mm OF A FLEXIBLE PIPE JOINT. THE CONCRETE SPECIFICATION SHOULD BE IN ACCORDANCE WITH THE STANDARD DETAILS FOR PIPE BED AND SURROUND AS ISSUED BY THE ENGINEER.
19. CONCRETE MIXES INDICATED ON THIS DRAWING ARE DESIGNATED MIXES CONFORMING TO BS 8500-1:2006. ALL CONCRETE TO BE SULPHATE RESISTANT. CONTRACTOR SHOULD ALLOWANCE FOR CARRYING OUT TESTING ONSITE TO CONFIRM SULPHATE LEVEL CLASSIFICATION.
20. ALL PRIVATE MANHOLES AND INSPECTION CHAMBERS TO BE CONSTRUCTED IN ACCORDANCE WITH "BUILDING REGULATIONS - APPROVED DOCUMENT H" & "BS EN 752:2017 DRAIN AND SEWER SYSTEMS OUTSIDE BUILDINGS"
21. ALL MANHOLES AND INSPECTION CHAMBERS TO BE ADOPTED TO BE CONSTRUCTED IN ACCORDANCE WITH "IN ACCORDANCE WITH "DESIGN & CONSTRUCTION GUIDANCE, SEWERAGE SECTOR GUIDANCE APPENDIX C" AND IN ACCORDANCE WITH LOCAL SEWERAGE UNDERTAKER.
22. CCTV SURVEY OF ALL THE DRAINAGE SHOULD BE CARRIED OUT ON COMPLETION OF THE BUILDING WORKS AND PASSED ON TO THE CLIENT.

REV.	DATE	DRAWN	DESCRIPTION	CHKD	APPRD
P03	07.09.26	AC	ISSUED FOR DISCHARGE OF CONDITION 16	AC	AC
P02	08.05.26	AC	ISSUED FOR TENDER	RJ	RJ
P01	27.02.26	AC	ISSUED FOR TENDER	AC	AC

STATUS DESCRIPTION: FOR INFORMATION — STATUS: S2

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PROJECT
SHELDON BAKERY
OPENSHAW, MANCHESTER

DRAWING TITLE
PROPOSED DRAINAGE DETAILS
SHEET 5

CLIENT
S.H. SHELDON WHOLESALE BAKERY

HBL REF.	DATE	SCALE(S)	
8885	05.08.25	AS SHOWN	A1

DRAWN	CHECKED	APPROVED
AC	AC	AC

DRAWING No. 8885-HBL-XX-XX-DR-C-5115 — REV. P03