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For Construction

This drawing is produced, together with any related data, to inform the setting out and construction of the works, subject to the grant of Technical Approval(s) and Consent(s). To be read in conjunction with all working drawings.

NOTES

- This drawing provides a range of typical details to be used as options for the the Strategic SuDS features shown drawings G277/25-29.
- All in-situ concrete and precast concrete components shall be designed to BRE Special Digest 1 Concrete in aggressive ground. Concrete shall be to BS8500.
- All Adaptable Drainage works to be constructed in accordance with SSG Design and Construction Guidance.
- Seek clarification from the Engineer regarding any contradiction between this drawing and the Specification.
- The use of this drawing does not absolve the client from his responsibilities under Health & Safety: The Construction (Design and Management) Regulations 2015.
- SuDS features liner detail and subsoil thickness specified in Table B are subject to groundwater monitoring.

Rev	Date	Description	Drawn	Check
F	28/07/22	Headwall details updated	DAB	SAM
G	19/08/22	Headwall invert levels updated	DAB	SAM
H	07/12/22	Headwall table details updated	DAB	SAM
I	17/03/23	Drawing status updated	DAB	SAM
J	10/08/23	SuDS A, E & Northern bio swale Table A updated	DAB	SAM
K	31/08/23	Inlet headwall A2, S81 & S82 pipe diameters updated	DAB	SAM
L	22/09/23	Highway basin outfall headwall invert updated	DAB	SAM
M	03/10/23	Inlet headwall A3 added	DAB	SAM

Status

FOR CONSTRUCTION

Client

Eastleigh Borough Council

Project

**One Horton Heath -
Segment 3**

Drawing Title

**Typical SuDS Drainage
Details**

Drawing No.

G277/30

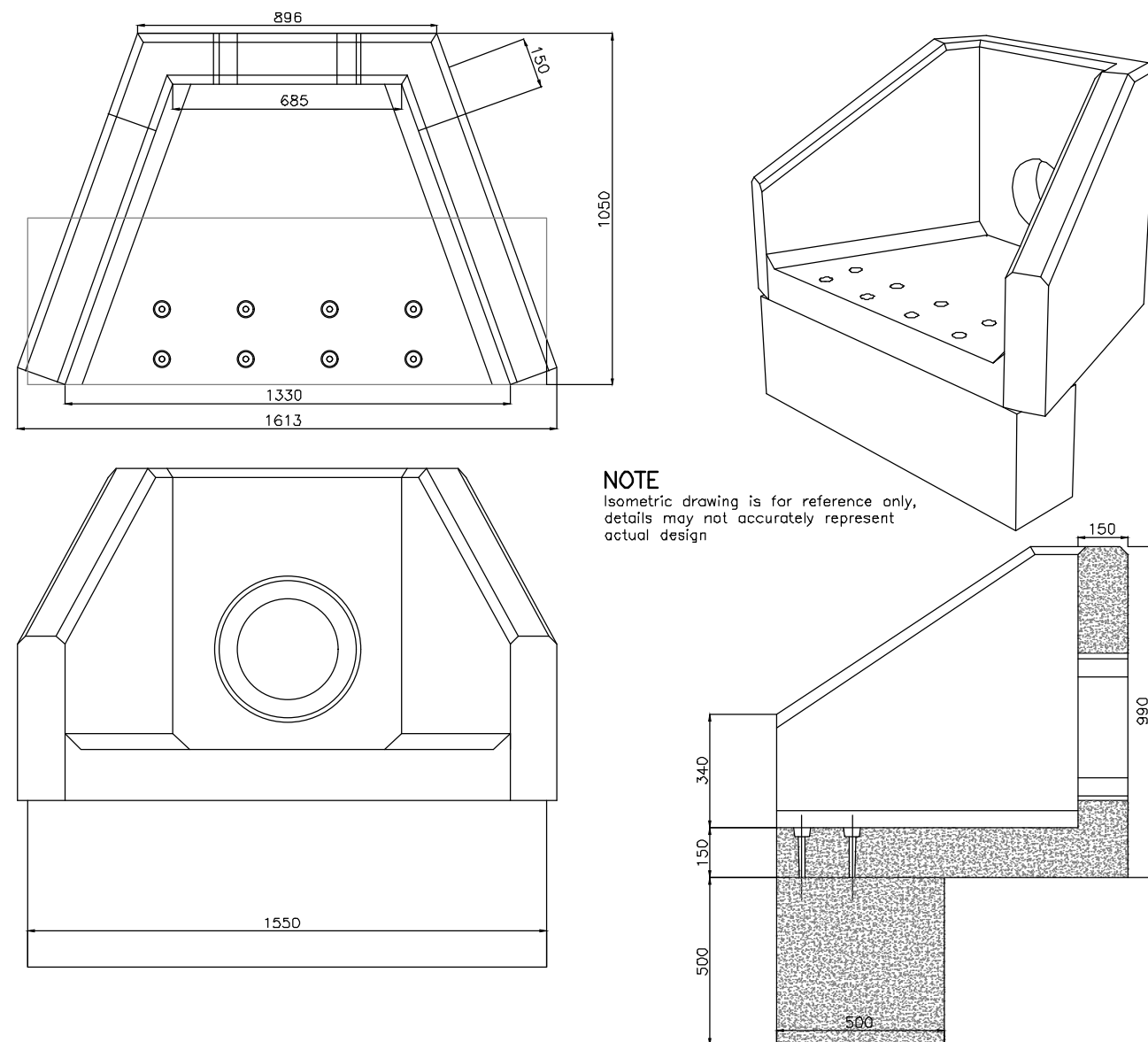
Rev M

Date: July 2021 Scale: 1:20 @ A1

E-Mail: DBuciak@pfaplc.com

Outfall Headwall Detail

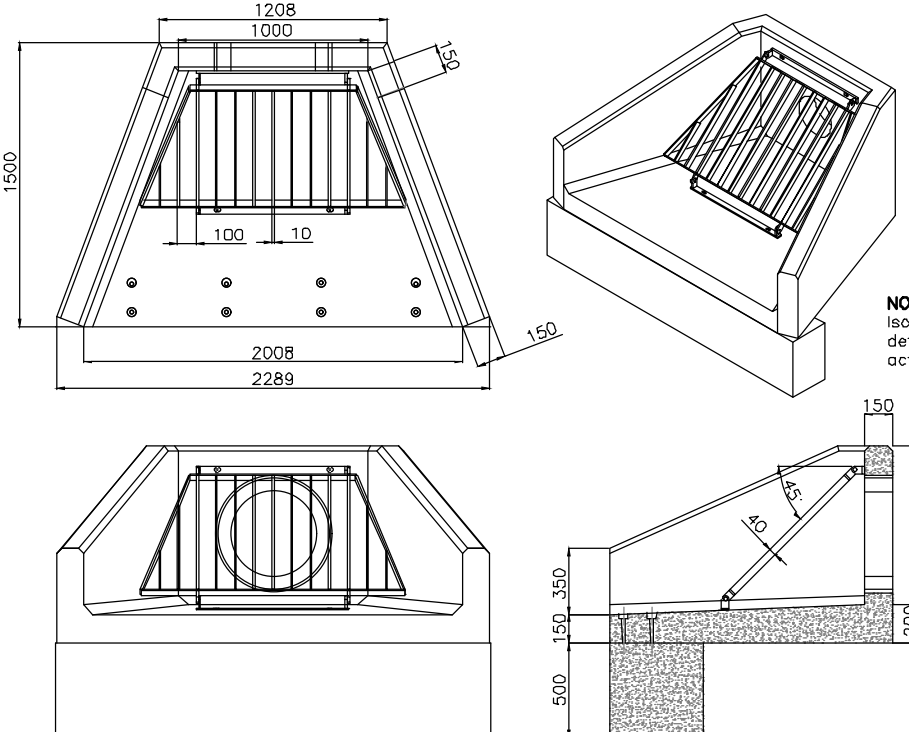
Athlon Type: SFA6B or similar approved



NOTE
Isometric drawing is for reference only, details may not accurately represent actual design

Inlet Headwall Detail

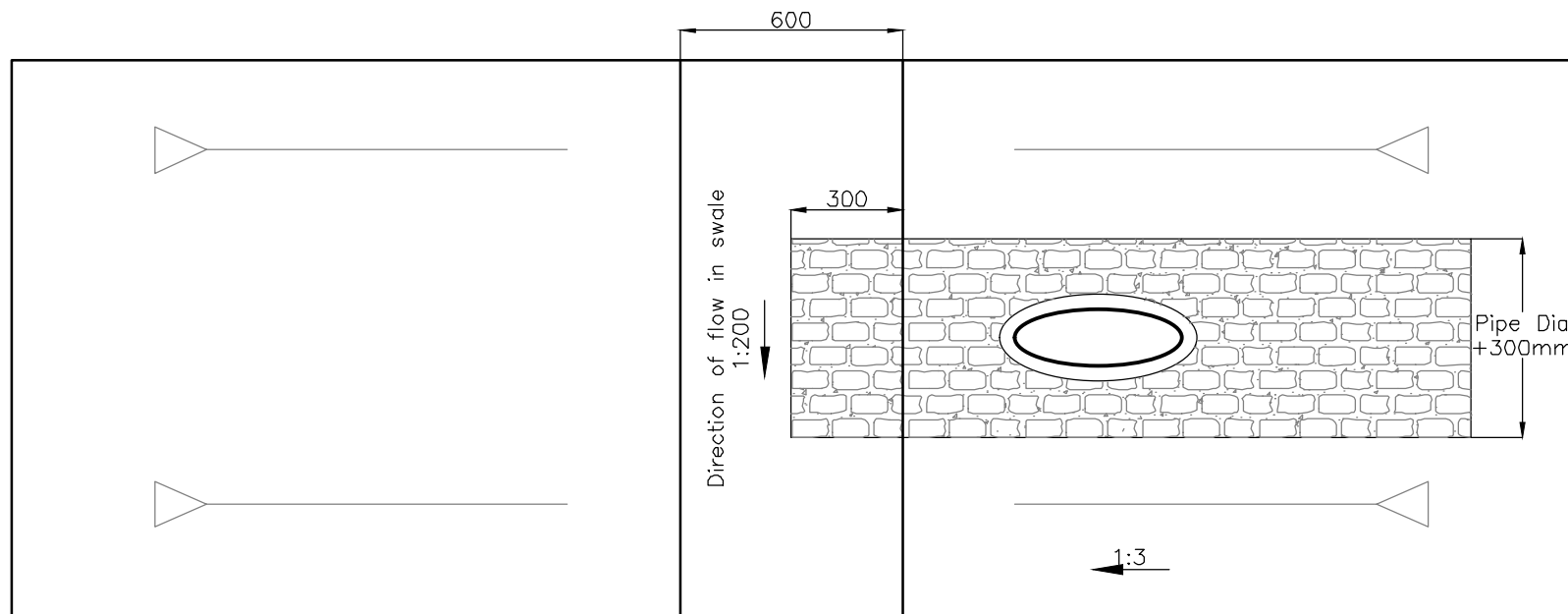
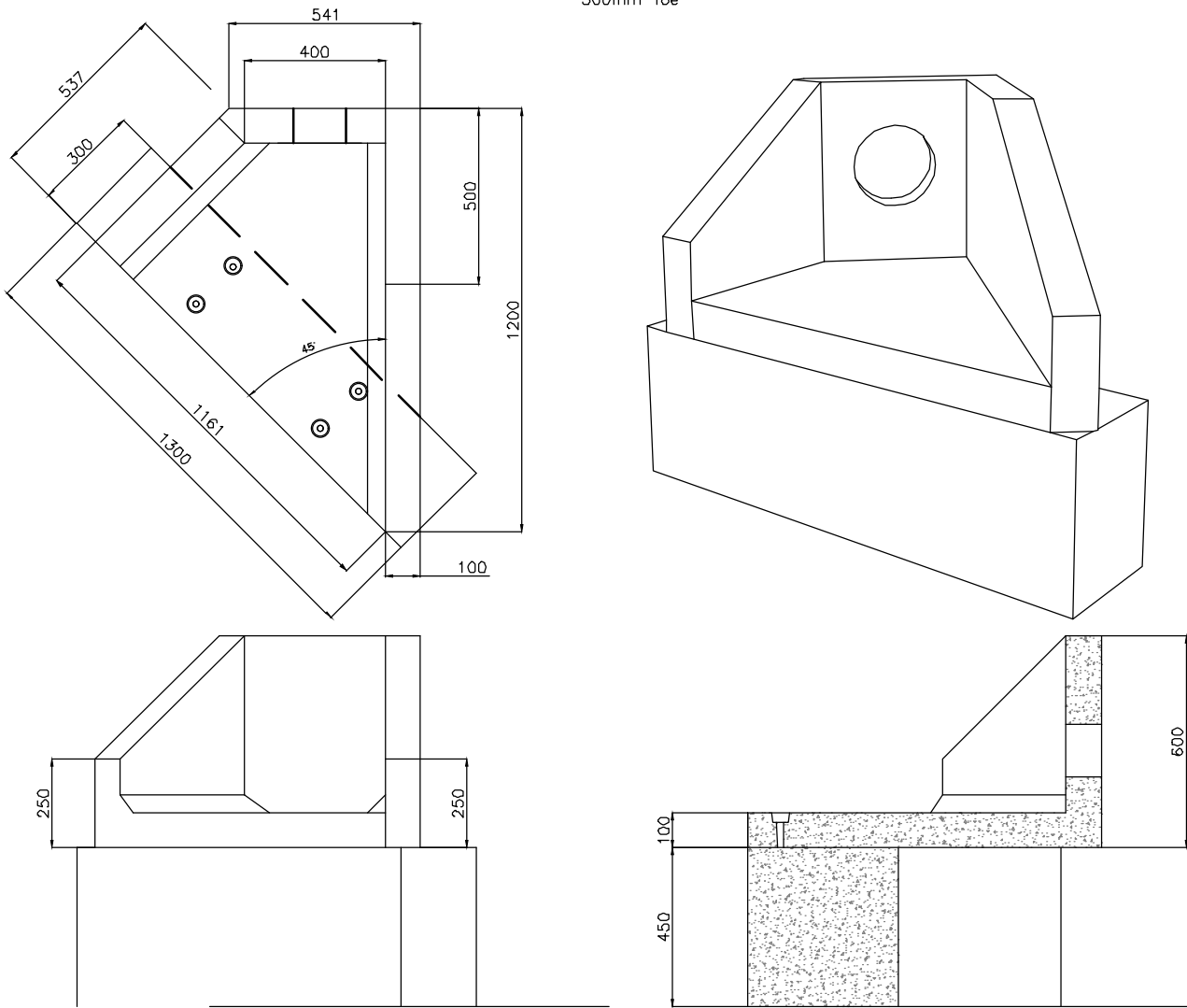
Athlon Type: SFA10B or similar approved (1:40)



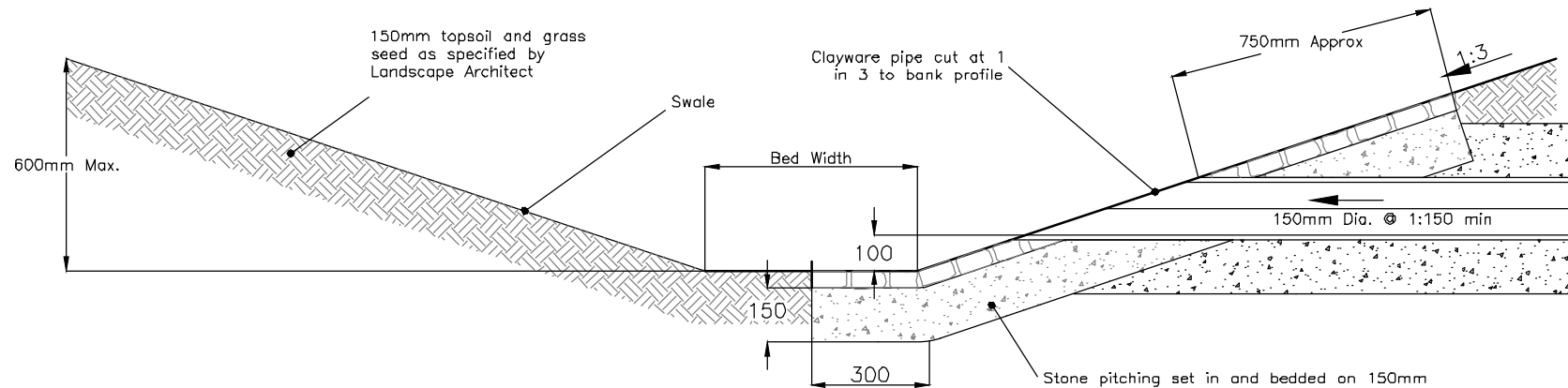
NOTE
Isometric drawing is for reference only, details may not accurately represent actual design

Typical Angled Outfall Detail

Precast concrete Athlon Type: AH4CA RH with 450 x 300mm Toe



Typical Gully Inlet to Swale
Plan View
Swale invert levels shown on drawing G277/27

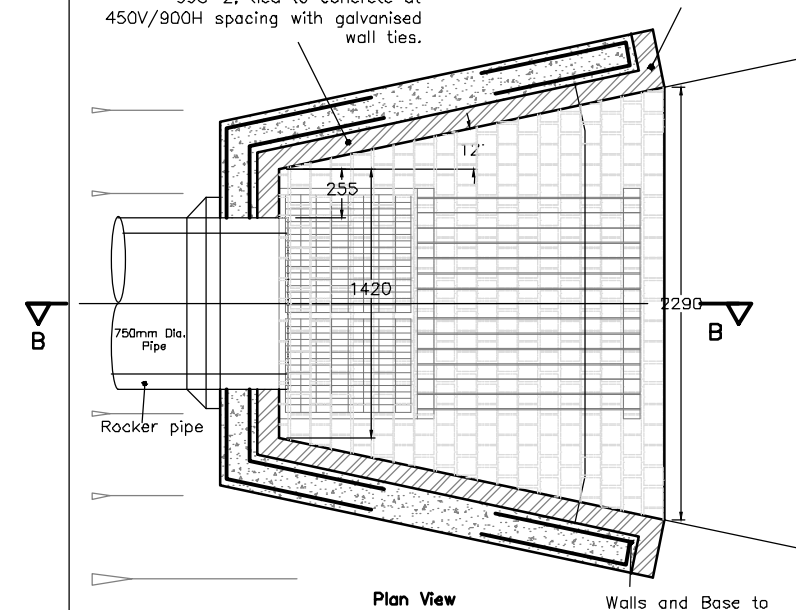


Typical Gully Inlet to Swale
Section A-A

Typical Basin Outlet/Inlet (A) Inlet Headwall for SuDS Feature L2

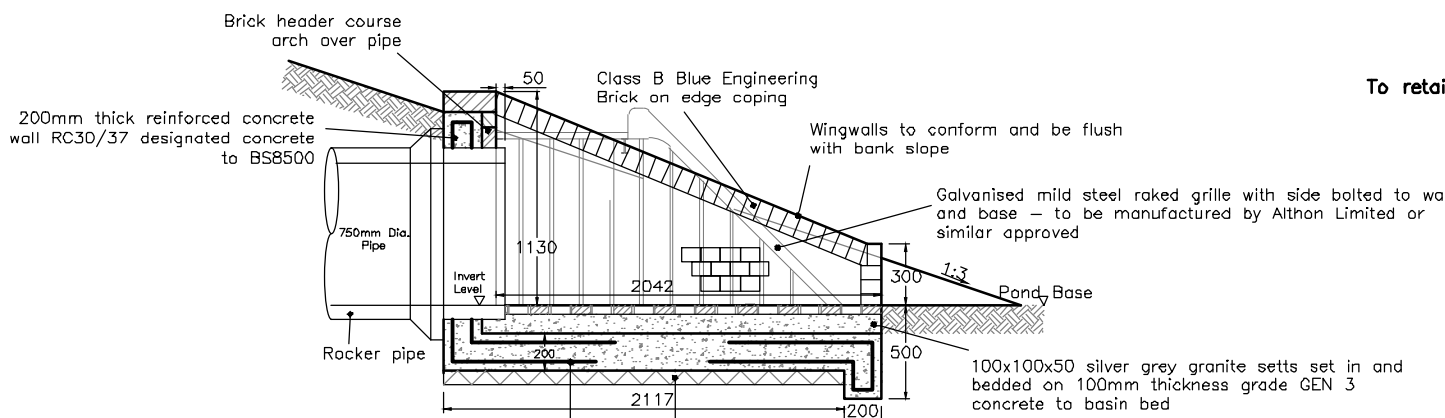
Walls to be faced with a single skin of Class B Blue Engineering brickwork on mortar designation (i) to BS EN 998-2, tied to concrete at 450v/900H spacing with galvanised wall ties.

Single skin brickwork facing to walls to be returned around ends.



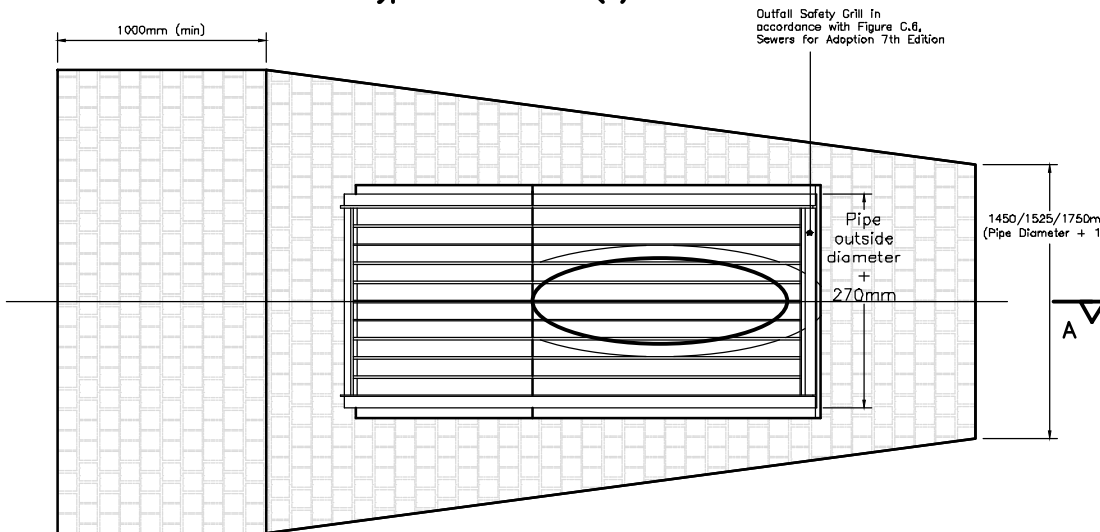
Plan View

Walls and Base to have A393 Mesh Reinforcement in both faces with 50mm cover

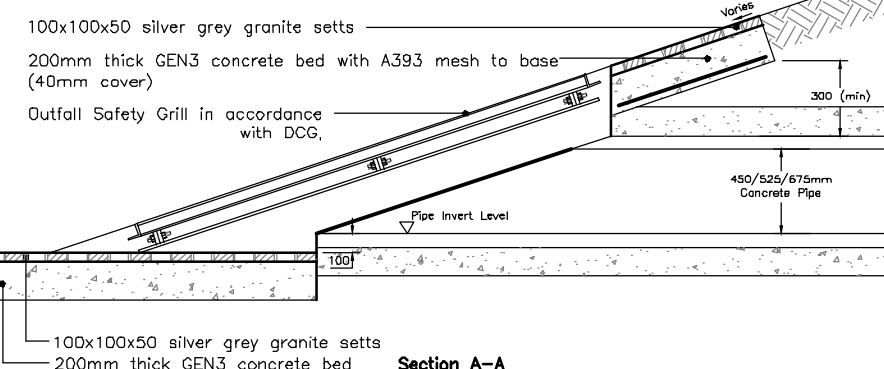


Section B-B

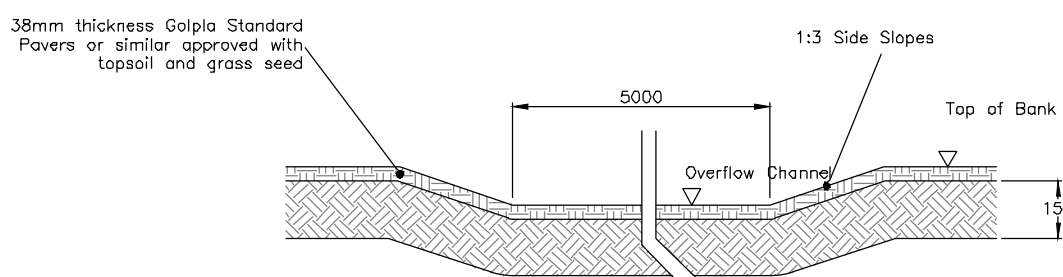
Typical Basin Inlet (B)



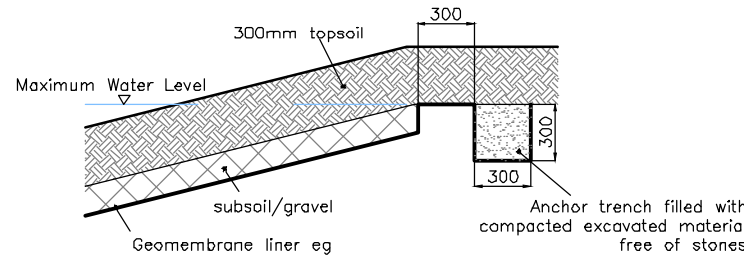
Plan View



Section A-A



Typical Emergency Overflow Weir
Golpla Grass Reinforcement System



Attenuation Pond Liner Detail
To retain permanent water level. Based on Figure 23.13 of CIRIA C753 "The SuDS Manual"

Table B: Liner Subsoil Thickness Requirements

SuDS Feature	Subsoil Thickness (m)
A	0.50
E	0.70
L1	1.15
L2	1.15
Northern Bio Retention Swale	1.0
Southern Bio Retention Swale	0.85
Highways Basin	1.15

Table D: SuDS Outlet Headwall Details

SuDS Feature	Headwall Type	Pipe Dia (mm)	Invert Level (m AOD)
A	Athlon SFA10b or Similar	300	15.41
E	Athlon SFA10b or Similar	300	15.20
Northern Bio-retention Swale	Athlon SFA6b or similar	150	16.45
Southern Bio-retention Swale	Athlon SFA6b or similar	150	15.92
Highways Basin	Athlon SFA10b or Similar	225	15.40
L1	Athlon SFA10b or Similar	300	18.60
L2	Athlon SFA10b or Similar	225	19.00

Table A: Watercourse Outfall Headwall Details

SuDS Feature	Headwall Type	Name	Pipe Dia (mm)	Invert Level (m AOD)	Top of Headwall (m AOD)
A	Athlon AH4CA LH	Outfall Headwall 1	300	14.775	15.175
E	Athlon AH4CA LH	Outfall Headwall 2	300	14.475	14.875
L1 & L2	Athlon AH4CA RH	Outfall Headwall 3	300	16.40	16.800
Northern Bio Retention Swale	Gabion basket (detail on Drawing G277/27 Rev G)	Outfall Gabion basket	150	14.98	N/A
Southern Bio Retention Swale	Athlon SFA6B	Outfall Headwall 4	150	14.70	15.445
Highways Basin	Athlon AH4CA RH	Outfall Headwall 5	225	14.97	15.37

Table C: SuDS Inlet Headwall Details

SuDS Feature	Headwall Type	Name	Pipe Dia (mm)	Invert Level (m AOD)
A	Typical Basin Headwall (B)	Inlet Headwall A1 Inlet Headwall A2	525 450	15.410 15.510
A	Athlon SFA6B	Inlet Headwall A3	225	15.410
E	Typical Basin Headwall (B)	Inlet Headwall E1	525	15.300
E	Typical Basin Headwall (B)	Inlet Headwall E2	675	15.300
Highways Basin	Typical Basin Headwall (B)	Inlet Headwall H1	450	15.423
L1	Athlon SFA10b or Similar	Inlet Headwall L2	225	18.750
L2	Typical Basin Outlet/Inlet (A)	Inlet Headwall L1	750	19.128
Northern Bio-reteion swale	Typical gully inlet to swale detail or Athlon's Swale Inlet Headwall-225/300	Inlet headwall NB1 Inlet headwall NB2	300 225	16.456 17.270
Southern Bio-retention swale	Typical gully inlet to swale or Athlon's Swale Inlet Headwall-225/300	Inlet headwall SB1 Inlet headwall SB2	225 300	16.815 16.407