BIRCHWOOD LANE

CL: 125.88
IL: 124.53

CL: 122.18
IL: 120.83

225Ø 1:167 100m

CL: 122.18
IL: 119.99

CL: 122.00
IL: 120.65

CL: 124.44
IL: 123.09

375Ø 1:15 128m

375Ø 1:119 148m

All attenuation currently accommodated in basins. Attenuation volume in swales is subject to detailed design. Swales provide additional SuDS benefits.

CL: 120.17
IL: 118.60

+116.50

CL: 116.02
IL: 114.45

New section of 150mm diameter foul sewer approx length 58m to be laid in Phase 1 with stub connection for future connection
CL: 115.60
IL: 113.70

Surface water discharge restricted to greenfield runoff rate for developable site area (assumed 80%), equating to 10 l/s, subject to approval from LLFA.

Attenuation basins
1in100 yr + 40 % CC
Volume: 1,420 m³, subject to detailed design.
Maximum water depth: 1-1.5m

+114.00
+113.50
+112.00
Volume: 310 m³
+114.00

450Ø 1:300

+114.00
+113.50
+112.00
Volume: 1,110 m³
+114.00
+111.00

Base
Maximum water level
Freeboard (300 mm)
Access Track

Additional footprint required for basin to tie into existing levels and accommodate access track. Ground levels required to be locally raised or bunds created to compensate for fall across basin. Allow for engineered 1:2 slopes in areas to achieve levels

Exact location of watercourse and connection level TBC.
Surface water pumping may be required, subject to confirmation of watercourse levels.

300Ø
300Ø
300Ø
300Ø
300Ø

MASTERPLAN LEGEND
Proposed site access
Birchwood Lane

KEY:

- Proposed foul water sewer
- Proposed foul water rising main
- Proposed surface water sewer
- Existing Severn Trent Water foul sewer
- Proposed attenuation basin
- Vortex flow control device
- Proposed swale
- Proposed headwall

NOTES:

1. Attenuation volumes are approximate and subject to change following layout details.
2. Additional basin footprint will be required to account for; access track and tie in to ground levels (not shown on plan).
3. SuDS features (swale) are shown for source control water quality treatment only
4. Attenuation basin locations and plan areas shown are indicative only and subject to final layout plan and confirmation of watercourse levels.
5. The feasibility of a gravity surface water drainage discharge to watercourse is to be determined at detailed design and is subject to confirmation of levels in and around the local watercourses. A pumped system may be required.
6. Discharge rates shown as 10 l/s, based on the greenfield runoff rate for the developable area (assumed 80%). Discharge to watercourse is subject to LLFA approval.
7. Localised raising of levels around attenuation basins or the construction of bunds may be necessary to compensate for the fall across the attenuation basin.
8. Tie in levels to existing ground will extend the basin footprints currently shown. Total attenuation footprint areas to be determined at detailed design stage.
9. Basin boundary offset from watercourse to be confirmed by LLFA.

REV	DESCRIPTION	SIG	CHK	DATE
P01	First Issue.	JSS	CH	13.05.2024

AVANT HOMES

BIRCHWOOD LANE, SOMERCOTES

DRAINAGE STRATEGY

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ECE PROJECT No	SCALE AT A1	STATUS	SUITABLE FOR
48974	1:500	S0	Initial

DRAWING NUMBER: 48974 - ECE - XX - XX - DR - C - 0001 (Project - Originator - Zone - Level - Type - Role - Number)
REV: P01