Connect to existing Wessex Water foul sewer. Approval required

Offsite Rising Main

See offsite rising main inset for continuation

Pumping Station.
Pump rate approx 2.5l/s
(based on 55 houses)
To be accessed from public highway.
No Dwellings to be located within 15m of pump chamber

Attenuation Pond 1

Greenfield Catchment	15812m2
Greenfield runoff rate QBar (@5.9l/s/ha)	9.3l/s
Greenfield runoff rate 1 year (@4.6l/s/ha) + 20% Betterment	5.8l/s
Permanent Water Level	120.95m
Minimum Bank Level	122.25m
Maximum Water Level	121.95m
Maximum Water Volume (1 in 100 YRP +45% CC)	943m3
Side Slopes 1 in 3	
Cut Volume	975m3
Fill Volume	513m3
Area	2089m2

Maximum Flood Extent at 121.95mAOD

Surface water outfall to existing ditch

Flood compensation area
Volume 1070m3

Swale.
1m wide base,
1 in 4 side slopes,
minimum Depth 0.7m

Play Area

Sports Court

Recreation Ground

Pond

122.5m

123.3m

122.6m

BIDDESTONE LANE

Drainage Strategy Key

- Site Boundary
- Surface Water Catchment boundary
- Proposed Foul Sewer
- Proposed Foul Rising Main
- Proposed Surface Water Sewer
- Filter Trench
- Proposed Private Foul Drainage
- Proposed Private Surface Water Drainage
- Grass Maintenance Strip (minimum 3.0m wide)
- Bank Slope from 1 in 3
- 3m Aquatic Bench @ 1:15 (0-0.2m deep)
- Permanent Water (max 1.0m deep, 1:3 slopes)

Note

The proposed Drainage System shown is indicative and is subject to the development of the Masterplan for the site and also the detailed design in accordance with the appropriate standards and approval from the relevant authorities.

To provide water quality benefits and source control the use of the following features may be considered;

- Swales,
- Rain Gardens,
- Filter Drains,
- Filter Strips,
- Permeable Paving,
- Water butts,
- Conveyance ditches.

Flows from the development will be restricted to Qbar for all events up to and including the 100 year with a 45% allowance for climate change

All outfalls to watercourses are to be fitted with suitable controls to prevent flood waters flowing back in to the proposed drainage systems.

Maximum water level is for the 100 year + 45% climate change

Survey of existing foul sewers required to confirm location and depths.

0 10 20 30 40 50 60 70 80 90 100
Scale 1:1000 Metres
A1

0 10 20 30 40 50
Scale 1:500 Metres
A1

A 04.04.2025 Compensation Area increased
Revision

Project: Yatton Keynell

Client: Gh Cotswold Homes

Drawing: Drainage Strategy

Scale: 1:500 @ A1 | Date: March 2025 | Drawn by: JP

Drawing No: 617-P-050 | Rev: A

PHOENIX DESIGN Partnership Ltd.
Unit 9, Westway Garage, Marksbury, Bath. BA2 9HN tel. 01761 479950
Suite 7, Unit Three, Melin Cornwg Business Parc, Upper Boat, Pontypridd, CF37 5BE. tel. 029 2049 0771
email. enquiries@phoenixdp.co.uk www.phoenixdp.co.uk

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Drg.Status: PLANNING