Site Details

264,996m² / 26.5ha : Development area

6,572m² / 0.66ha : Existing impermeable area

109,618m² / 10.96ha : Proposed impermeable area

115.6 l/s : Existing Qbar storm discharge rate

4.3l/s/ha : Existing Qbar / hectare storm discharge rate

Development impermeable areas to be drained into the storm sewers via filter drains, attenuation basins and rain garden with minimum SUDs treatment to Ciria753, to unnamed watercourse.

Minimum pipe cover to soffits to be per the Sewer Sector Guidance Appendix C B5.1.7:
- 0.35m - domestic gardens and pathways without vehicle access
- 0.5m - domestic driveways, parking areas and yards for vehicles <7.5T gross weight
- 0.9m - domestic driveways, parking areas, shared spaces with limited access for vehicles >7.5T gross weight
- 0.9m - agricultural land and public open space
- 1.2m - highway and parking areas with unrestricted access for vehicles >7.5T gross weight

Any pipes with cover to soffit less than those stated above are to have a Class Z concrete pipe bed & surround.

Internal foul drain pipe minimum gradients:
- 1:80 from SVP & WC to IC
- 1:40 from Basin & Sink to IC

Refer to Architect's/M&E drawings for pipe sizes and setting-out information.

Maximum Drainage Chamber Depths:
- Ø315mm PPIC - 1.2m - Type 4 (BS EN 13598-2)
- Ø450mm PPIC - 3.0m - Type 3/4 (BS EN 13598-2)
- Ø600mm PPIC - 3.0m - Type 3 (BS EN 13598-2)
- Ø1200mm Concrete - 6.0m (with standard detail)

All drainage to be constructed in accordance with Sewer Sector Guidance and Building Regulations Part H.

A CCTV and level survey of the as-built drainage to OS Datum and Grid is to be undertaken by the Contractor and provided to the Engineer for final approval.

Sewer details shown have been taken from STW Water sewer records. Contractor to validate drainage locations and levels prior to commencement of the works.

Construction Note:
It is essential that new drainage associated with the development is laid from the outfall(s) into the site. This is essential to avoid unforeseen obstructions along drainage route (such as unrecorded services). If the drainage is laid from the site out to the outfall, it can result in significant abortive works to relay and overcome such obstructions.

Flow Control Chamber	Catchment Area ha	Proposed Discharge Rate 1:100+40%CC
S19	1.783	7.0 l/s
S66	5.527	23.3 l/s
S101	2.507	10.70 l/s
S121	1.145	4.90 l/s

NOTES

1. Invert levels of the existing ditch TBC prior to any construction works by the Contractor and Non-return flap valve installed to headwall
2. Storm discharge from site restricted to 7.0 l/s l/s for up to a 1in100 year+40% climate change storm event, using a flow control chamber. Subject to LLFA approval.
3. New headwall construction subject to OWC by LLFA
4. New culverts to be installed where required subject to OWC approval by LLFA

SAFETY, HEALTH AND ENVIRONMENTAL HAZARD INFORMATION BOX

THE HAZARDS NOTED BELOW ARE IN ADDITION TO THE NORMAL HAZARDS AND RISKS FACED BY A COMPETENT CONTRACTOR WHEN DEALING WITH THE TYPES OF WORKS DETAILED ON THIS DRAWING.

CONSTRUCTION RISKS

EXISTING UNNAMED WATERCOURSE
EXISTING HIGHWAY
EXISTING SERVICES

MAINTENANCE / CLEANING RISKS

NONE RELEVANT TO THIS DRAWING.

DEMOLITION RISKS

NONE RELEVANT TO THIS DRAWING.

LEGEND

- Proposed Finished Floor Level (PLOT FFL 54.000)
- Development Boundary
- Sewer Easement
- Private Surface Water Sewer
- STW Combined Water Sewer
- STW Foul Rising Main
- STW Combined and Private Surface Water Manholes
- Existing Watercourse

Adoptable Drainage

- 1200mm Dia. Inspection Chamber
- 2700mm Dia. Flow Control Chamber
- S104 Surface Water Sewer
- S104 Headwall
- S104 Foul Water Sewer
- S104 Foul Water Rising Main
- S38 Surface Water Sewer

Domestic Drainage

- 450mm dia. IC Max Depth 3.0m
- 600mm dia. Catchpit
- Domestic Storm Water Sewer
- Filter Drain - 150mmØ Perforated Pipe surrounded by Clear Filter Stone
- Domestic Foul Water Sewer
- Foul/Surface Water Lateral Inspection Chamber
- Foul/Surface Water Lateral Connections

General Notes

1. DO NOT SCALE.
2. This drawing is to be read in conjunction with all other relevant drawings and details.
3. Should there be any conflict between the details indicated on this drawing and those on other drawings the Engineer should be informed PRIOR to construction on site.
4. Until technical approval has been obtained from the relevant Authority, it should be understood that all drawings issued are Preliminary and NOT for construction. Should the Contractor commence site work prior to such approval being given it is entirely at their own risk.
5. Sketch proposals are for illustrative purposes only and as such are subject to detailed site investigation including ground conditions / contaminants, drainage, design and planning / density negotiations.
6. All dimensions are in millimetres unless otherwise stated.
7. The Farrow Walsh Consulting Designers Risk Assessments for this project must be reviewed PRIOR to the commencement of any works on site.

NOTES

1. This drawing to be read in conjunction with all other relevant Engineers and Architect's details.
2. All work is to be carried out in accordance with the current British Standards, codes of practice and building regulations.
3. The design of any temporary works required shall be the responsibility of the Contractor.
4. Do not scale this drawing. All dimensions are in millimetres unless noted otherwise. Any discrepancies are to be recorded and reported to the Engineers immediately.
5. All work is to be to the satisfaction of the Engineer.
6. The Contractor is responsible for and must take all necessary precautions to ensure the stability of the works at all times during construction.
7. All workmanship and materials are to be to current British Standards.
8. All services are to be located and protected as necessary by the Contractor prior to the commencement of the works.
9. Any existing details which are shown on this drawing are for guidance only and are to be checked on site by the Contractor. Any variations are to be recorded and reported to the Engineer immediately.

General Drainage Notes

1. Information shown is for APPROVAL purposes only and not to be used for construction.
2. This drawing to be read in conjunction with all other relevant Engineers and Architect's details.
3. All work is to be carried out in accordance with the current British Standards, codes of practice and building regulations.
4. The exact position, level, size and use of existing sewers to be confirmed on site. Any discrepancies to be reported to the Engineer prior to commencement of works.
5. All uncovered and shallow pipework to be protected against construction traffic as part of the Contractors temporary works requirements.
6. Proposed drainage passing through new foundations to be sleeved with cast-in oversized pipework.
7. Exact location line and level of existing stubs to existing manholes in the road to be confirmed on site prior to construction.
8. See Architect's details for all setting out dimensions to buildings and boundaries etc.
9. All connections to road gullies and channels shall be 150mm nominal bore pipework. Connections to RWPs to be 100mm nominal bore pipework subject to confirmation of RWP sizes and/or design flow. No pipe work to be downsized in the direction of flow.
10. Connections to foul terminal fittings to be 100mm nominal bore pipework subject to confirmation of above ground pipe diameters and/or design flow. No pipe work to be downsized in the direction of flow.
11. All un-noted pipework to be 100mm dia. Unless subject to the notes above.
12. All pipework to be U-PVC type in accordance with WIS 4-35-01 unless otherwise noted.
13. All pipes connecting to adopted manholes up to and including 300mm dia. to be U-PVC.
14. All pipes connecting to adopted manholes greater than 300mm dia. to be Concrete.
15. All pipes under buildings without suspended floors shall have Class S bedding.
16. All pipework entering and exiting manholes to be connected with pipe soffits level.
17. Pre-formed channels to be used at all manholes.
18. High strength concrete benching to be steel trowelled to a dense smooth face neatly shaped and finished to all branch connections and laid in accordance with the specification.

NOTE: DRAWING IS FOR APPROVAL AND SUBJECT TO DETAILED DESIGN

Rev	Description of updates	Drawn	Checked	Appr'd	Date
A3	Plan has been updated to suit the latest development layout.	JR	EC	DM	10.11.23
A2	Rising main outfall has been updated as per client instruction	JR	JD	JD	22.05.23
A1	Issued for Approval.	JR	OP	JD	15.03.23

Revision Schedule

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FOR APPROVAL

Client: Redrow Homes Limited

Project: Burbage Field Farm, Bullfurlong Lane, Hinckley

Title: Drainage Strategy Sheet 2 of 7

Drawn:	Checked:	Approved:	Date:	Scale:
JR	OP	JD	March 2023	1:500 @ A1

Drawing No. FW2285-D-400-02 Revision: A3

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