



CIVIL / STRUCTURAL DESIGN RISK MANAGEMENT

Abnormal or unusual residual risks associated with the design outcomes shown on this drawing are:-

RSK LDE LTD has followed its Design Risk Management process for Hazard Elimination and Risk reduction in developing the designs shown on this drawing. Abnormal or unusual residual risks may be shown above where it is considered that such risk may not normally be expected by competent persons engaged on work of this nature or type.

See continuation X-X

Rain Gardens
Primarily used to collect rainfall from roof areas, private parking areas and shared surfaces. Connections from rain water pipes and gullies initially fill the rainwater garden, with excess flow being returned back into the surface water system (via silt trap).



- Drainage Legend:**
- Proposed SW rodding eye & drain
 - Proposed SW inspection chamber to be 450mm dia
 - Proposed private road gully with 1500 connecting pipe
 - Proposed linear drainage channel
 - Proposed FW mini access chamber to be 300mm dia up to a depth of 600mm max
 - Proposed FW inspection chamber & drain to be 450mm dia
 - Proposed Permeable Driveway Inc. Effective Depth of Soakaway Sub-Base. Design TSC by specialist
 - Proposed Permeable paving - Permeable paving to drain into private surface water drainage as infiltration isn't viable in these locations.
 - Proposed Water Butt Location
 - Proposed area of rain garden

Prior to any Adoptable drainage ground works being undertaken on site the contractor must confirm back to RSK the precise as-built or existing invert level, pipe diameter and condition of the receiving drainage system, watercourse and / or manhole in order to allow design reviewed if required. All proposed private drainage ground works must also prior to construction start on site first establish that a viable outfall connection can be made into the receiving drainage system. The contractor must also immediately advise RSK should any discrepancy or perceived conflict between as-built level and proposed design level information become apparent / identified during the implementation of any ongoing drainage / ground works construction.
Please telephone RSK - Land and Development Engineering on 01942 493255

- Surface Water drainage philosophy**
- Surface water drainage system is to drain via gravity to the existing Severn Trent Sewer to the south-eastern boundary.
 - The total surface water discharge rate is 3.1 l/s based upon 50% Urban Creeper as agreed under Planning App SMD2018/0509
 - Surface Water catchments allow for 10% Urban Creeper from plot footprint
 - CV value of 1 (summer) & 1 (winter) applied
 - PLOTS 8-18 & 44-50 to utilise infiltration via permeable driveways, based on an infiltration rate of 0.07272m/hr calculated from the soakaway testing results within the Phase II Site Investigation.
 - Below ground attenuation crates to be provided within the private drive area fronting Plots 38 & 43.
 - Design is based on FEH data.
 - Permeable paving to be utilised on all drives/shared driveways, for the areas which infiltration isn't suitable then the permeable paving is to drain back into the private drainage system.
- Foul Water drainage philosophy**
- Foul Water Network is to drain via gravity connection to the existing Severn Trent Foul Water Sewer to the south-eastern boundary.

Rev	Date	Amendment	Drawn	Chkd	Apprd
P3	14.01.28	Updated to suit site layout J1270-WS-TE104	DS		MAR
P2	20.11.25	Permeable paving added to private/shared driveways, water butts added as requested by the LPA			MAR
P1	30.09.25	First Issue	CH		MS

LDE
CIVILS STRUCTURES HYDROLOGY
an RSK company
14 Becham Court,
Pemberton Business Park,
Wigan, WN3 6PR
United Kingdom
Tel: +44 (0) 1942 493255
Email: info@lde.co.uk
Web: www.lde.co.uk



Client: **Daisy Bank Farm Team**

Project Title: **Private Drainage**

Status: **DETAILED DESIGN**

Drawn	Date	Checked	Date	Approved	Date
CH	SEP 25	MAR	SEP 25		
Scale	1:250	Orig Size	A0	Dimensions	
Project No.	882930	File Name	40-14		
Drawing No.	882930				40-14
Project No.	Orig	Val Sys	Loc Loc	Type	Rate

Scale 1:250
0 2.5 5 7.5 10 12.5m