



**BURIED UTILITIES RISK NOTE**

- Buried utilities are present on and in the vicinity of the site.
- The Contractor must satisfy themselves that they have seen utility returns for the area and that appropriate Risk Assessment Method Statement (RAMS) are in place and implemented to ensure that buried and/or overhead services are located prior to any works taking place.
- Any RAMS shall address safe procedures for protection and working in the proximity of services.

**DESIGNERS CDM NOTE - RESIDUAL RISKS IDENTIFIED**

The design Engineer(s) have analysed this design as the scheme has been developed, in order to identify if there are any significant residual risk hazards (i.e. unusual, unexpected, abnormal or difficult).

Residual risks **HAVE** been identified and are therefore shown on this drawing. These risks have not been possible to remove by design.

This statement assumes that a competent Contractor with the appropriate qualified staff will be employed for the works, and that they will be familiar with site wide construction risks and hazards that they can reasonably be expected to encounter as part of their work.

**NOTES**

- All dimensions and levels are in metres unless otherwise noted
- This drawing is to be read in conjunction with the relevant Architect's/Engineer's drawings, specifications and CDM documentation
- This drawing has been produced electronically and may have been photo reduced or enlarged when copied. Work to figured dimensions only (DO NOT SCALE - EXCEPT FOR PLANNING PURPOSES). All dimensions to be checked on site. Any errors or omissions to be reported to the engineer immediately.
- This drawing contains coloured lines / information that may not be clear if reproduced in black and white.
- Digital copies of this plan can only be considered accurate if supplied directly by Infrastruct CS Ltd.

**Construction Note**  
Manhole schedules - Invert level shown related to the deepest pipe within the chamber

**Drainage Key**

**Sewers**

- Perforated Pipe (private/non adoptable)
- Surface water drain (private/non adoptable)

**Chamber Key**

**FW/SW**

- P.C.C. units/brick\*

\* General note  
(Refer to standard details & longitudinal sections for chamber sizes. Size may need to increase dependent on number of incoming pipes/size of incoming pipes)

S1/F1	Manhole reference number
S	Surface water sump unit
Linear drainage channel	Linear drainage channel
Impermeable barrier to stop lateral movement of water	Impermeable barrier to stop lateral movement of water
Baffle to prevent rapid through flow of water through permeable paving	Baffle to prevent rapid through flow of water through permeable paving
FLL (XX.XX)	Finished Floor Level (FLL)
Concrete with open-graded subbase (impermeable surface)	Concrete with open-graded subbase (impermeable surface)
→	Flood exceedance routing

**Level Key**

+100.00	Proposed level
+100.00	Existing survey level (by others)
+100.00ex	Existing level
Fal	Direction of slope and approximate fall

**Kerbing Legend**

Kerb Ref	Type	Dimension	Notes
HB2	125x255	125mm upstand	
BN	125x150	25mm upstand eg vehicle crossover dropped kerb	
-	125x255/150	Dropper kerb either left or right drop as required	

- DESIGNER NOTE**  
Invert levels based on a slab thickness of 150mm. Subject to change when final slab design is made available.
- CDM RESIDUAL RISK ITEM**  
Drainage pipes, manhole rings covers and fittings. Risk of Manual handling injury.
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- CDM RESIDUAL RISK ITEM**  
Existing services likely within working area. Danger to site personnel and general public
- CDM RESIDUAL RISK ITEM**  
Works within confined spaces.
- DESIGNER NOTE**  
SuDS features sized for a 1 in 100 year event + 40% Climate Change
- DESIGN RISK ITEM**  
Soakage rate of 1.96 x 10-5 m/s taken from on site percolation testing to BRE365

PO1	APL	MBD	Initial Issue	15/12/21
REV	DRAWN	CHECK	REVISION COMMENTS	ISSUE DATE
DRAWING TITLE Drainage Design				SHEET NO. 1/1
PROJECT Land at Bunkers Hill Kidlington OX5 3BA				
CLIENT JPPC				
SCALE @ A1 1:100				ENGINEER MBD
PROJECT NUMBER 4598	STATUS S4	ISSUE PURPOSE TECHNICAL APPROVAL	DRAFT NJ	
PROJECT BUNK	ORIGIN ICS	PHASE 01	LEVEL XX	REVISION P01