

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.

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 where encountered (such as 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.

Location of Public Sewers have been taken from record drawings which should be fully substantiated by the contractor prior to commencing works on site

All manholes covers located within carriageways shall have no slip covers to prevent motorcycles/cycles losing control

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

All adaptable drainage works to follow the requirements of Water UK - Design and Construction Guide (DCG).

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.

Drainage Strategy

Foul Drainage

Gravity system discharging into existing private foul drain in pub grounds. A common landlord indicates this will not have been adopted in 2012, and so a build close to agreement will not be required.

Surface Water Drainage

Roof runoff to discharge to new crate soakaway in carparking area. Hardstanding/perimeter path to fall at surface to bowls pitch, as existing, to drain via infiltration.

System to have fail safe exceedance overflow into bowling green gully.

DESIGN RISK ITEM

Surface Water system designed for a 1 in 100 year event plus an allowance of 40% for climate change.

Impermeable areas have had an additional 10% added for urban creep.

A site specific soakage rate of 4.1 x 10-5/ m/s has been utilised for the soakaways.

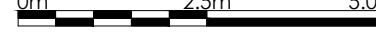
Soakage rate based on the worst result encountered from 3 tests to BRE365.

- CDM RESIDUAL RISK ITEM**
- Overhead cables within site area.
- CDM RESIDUAL RISK ITEM**
- Works within public Highway.
- Danger to site personnel and general public
- CDM RESIDUAL RISK ITEM**
- Existing services likely within working area.
- Danger to site personnel and general public
- CDM RESIDUAL RISK ITEM**
- Drainage pipes, manhole rings covers and fittings.
- Risk of Manual handling injury.
- CDM RESIDUAL RISK ITEM**
- Contact with waste water when making drainage connections.
- Risk of infection from Wells disease etc.
- CDM RESIDUAL RISK ITEM**
- Above Ground activities.
- Possibility of objects falling from operations at high level onto persons working or passing below.
- CDM RESIDUAL RISK ITEM**
- Works within confined spaces.

Surface Water Network						
Manhole Reference	Invert Level (m)	Cover Level (m)	Depth (m)	Chamber Details	Cover Loading	
S0	9.300	10.00	0.70	Crates	-	
S1	9.360	10.00	0.64	PPIC S/T Ø450	B125	
S2	9.552	10.10	0.55	PPIC Ø450	B125	
S3	9.656	10.10	0.44	Rod. Eye	B125	
J1	9.488	-	-	Junction	-	
S4	9.588	10.10	0.51	Rod. Eye	B125	
						Grade 1 in
						Pipe DIA (mm)
						Length (m)

- 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.

Drainage Key	
Sewers	
	Foul water drain (private/non adaptable)
	Surface water drain (private/non adaptable)
	Perforated Pipe
	Existing foul water drain (private/non adopted)
Chamber Key	
FW/SW	
	Mini access chamber (mac) - 300mmØ
	PPIC - 475mmØ*
	P.C.C. units/brick*
	Adaptable demarcation manhole within 1m of boundary
	Manhole Depth: 1.25m to 1.5m* Depth: 1.55m to 3.0m*
* General note (Refer to standard details & longitudinal sections for chamber sizes. Size may need to increase dependant on number of incoming pipes/site of incoming pipes)	
RE	Surface water rodding eye
	Rain water down pipe (roddable access)
	Soil vent pipe/soil stack
	Silt Trap (ST) with removable silt bucket
S1/F1	Manhole reference number
	Cellular soakaway (refer to drawing for sizes)
FFL	Finished Floor Level (FFL)
	500mm French Drain
	Black paving - standard (permeable)

P05	NJ	RJW	Linear drainage added to access points, FFL updated as per architectural design information	10/09/24
P04	RSI	RJW	Soakage note removed	02/07/24
P03	FM	RJW	Soakaway resized and relocation to minimise impact on club during construction	26/06/24
P02	FM	RJW	Soakage rate updated	24/06/24
P01	RSI	RJW	Initial issue	20/06/24
REV	DRAWN	CHECK	REVISION COMMENTS	ISSUE DATE
DRAWING TITLE				SHEET NO.
Drainage Design				1/1
PROJECT				
Hurst Bowling Club Reading RG10 0SJ				
CLIENT		 Infrastruct CS Ltd		
Hives Architects				
SCALE @ A1				
1:100				
				
PROJECT NUMBER		STATUS		ENGINEER
5933		S2		RJW
		ISSUE PURPOSE		DRAFT
		INFORMATION		NJ
				APPROVED
				MBD
PROJECT	ORIGIN	PHASE	LEVEL	TYPE
HURS	ICS	01	XX	DR
NO.			REVISION	
0200			P05	