N

IC300
CL: 168.20
IL: 167.90

<< 100Ø min 1:100

IC300
CL: 168.20
IL: 167.69

Retaining Wall

RWP

REFUSE STORE

BUTCHERY

KITCHEN

SVP to arch details

ACCESSIBLE WC & BABY CHANGE

FGL 165.10

DELIVERY

Delivery Entrance

SERVERY

FFL 165.25

SHOP

CAFé

< 100Ø 1:40

IC450
CL: 167.49
IL: 166.00

PERMEABLE CAR PARK AREA

IMPERMEABLE ACCESS & TURNING AREA

control MH 1200Ø
CL: TBC
ovflw IL: 162.74
inlet IL: 162.30
hydrobrake IL: 161.84
sump: ~161.49

polystorm PSM1A
3m x 15m x 0.8m
GL: TBC
TANK TOP: 162.74
IL: 161.94

SWG

Motorcycle Parking

FGL 165.10

Entrance

ENTRANCE

FGL 165.10

OUTDOOR TERRACE AREA

PERMEABLE TERRACE AREA

Outdoor Terrace Area

IC450
CL: 165.10
IL: 164.45

< 100Ø perforated land drain >>

in ground rain garden crates with perforated pipe to invert. roof area to discarge direct to rain garden surface piped through retaining wall

IC600
SILT TRAP
CL: 164.50
IL: 163.15

<< 150Ø min 1:100

100Ø perforated land drain min 1:100 >>

<< 100Ø perforated land drain min 1:100

Cycle Parking

IC450
CL: 165.00
IL: 164.30

IC450
CL: 165.30
IL: 164.22

100Ø 1:80 >>

IC450
CL: TBC
IL: 163.50

< 150Ø

< 100Ø

100 channel drain

FGL 165.10

FGL 164.30

Vehicular Access Point

SW CULVERT 67m @ 1:26.7

<< EX SW CULVERT 67m @ 1:26.7

<< EX SW CULVERT

CULVERT MH2
CL: 163.68
IL: 161.43

connection into ex culvert at suitable location/invert

CULVERT MH1
CL: 165.53
IL: 163.74

Pedestrian Access Point

< 100Ø 1:80 then 45° BD to IL

connection into ex UU combined sewer via external backdrop & soffit to soffit connection swept into path of flow

UU MH 5601
CL: 165.52
IL: 162.47

<< UNITED UTILITIES 225Ø VC ~1:34

GENERAL NOTES
0.0 THIS DRAWING IS COPYRIGHT & IS SENT TO YOU IN CONFIDENCE IT MUST NOT BE COPIED, USED OR DISCLOSED, IN WHOLE OR IN PART, TO THIRD PARTIES WITHOUT WRITTEN PERMISSION. IT REMAINS THE PROPERTY OF T.J.B.A. AND MUST BE RETURNED ON REQUEST
0.1 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT CONTRACTUAL DOCUMENTS.
0.2 All dims in mm unless o/w stated.
0.3 All levels to SITE DATUM.
0.4 Refer to architects details for SBM.
0.5 Contractor to confirm SOP/SOL's prior to ordering material/ construction.
0.6 Do not scale, the contractor must verify all dims prior to commencing shop drawings or work on site.
0.7 All work to be carried out in accordance with with HSE guidance & CDM 2015.
0.8 The dwgs take precedence over the OTHER specifications, if in doubt seek clarification.
0.9 All services above & below ground to be located, identified, de-commissioned, diverted or protected as necessary prior to and during the course of the work & reinstated on completion fully in accordance with relevant codes of practice & statutory undertakers requirements.

WORKMANSHIP
The contractor is responsible for the design & construction of all temporary works on Site.
All workmanship & materials to comply with UK Building Regulations & British Standards / Codes of Practice.
All materials to be stored, mixed & fixed in accordance with manufacturers instructions & recommendations.
All Site Work shall comply with the Health & Safety at Work Regulations.
The designer shall be notified of all circumstances that may cause a material change in the specified works

1.0 HIGHWAYS/ACCESS ROADS & PRIVATE DRIVES.
1.1 By others.
2.0 DRAINAGE.
2.1 To be read in conjunction with T J Booth Associates drainage calculations.
2.2 Manhole cover levels indicative only, to be adjusted to suit final finish site levels.
2.3 Sewers/manholes to be constructed in accordance with the water authorities sewers for adoption (edition as applicable), B. Regs. Approved Doc. H, and BS EN 752-4.
2.4 Class S granular bed and surround to all new sewers.
2.5 Sewers must have min 150th concrete surround if:
-adoptable assets with less than 12m of cover under highways or driveways;
-private assets with less than 900mm of cover under private driveways.
2.6 All conc including pipes and manholes to be sulphate resisting unless otherwise agreed in writing by eng.
2.7 Foul water must be to the following gradients in accordance with b.regs and Sewers For Adoption:
-100Ø at gradients not less than 1:80 where at least 1 WC is connected and not less than 1:40 where no WC is connected.
-150Ø foul gradients to be not less than 1:150 with at least 5 WCs connected.
2.8 Surface water must be to the following gradients in accordance with b.regs:
-100Ø at gradients not less than 1:100.
-150Ø foul gradients to be not less than 1:150.
2.9 No construction work to be undertaken on the United Utilities network unless approval granted under either S106 or S104 as appropriate.
3.0 MANHOLES
3.1 Manhole diameters to be in accordance with SFA clause 2.9.3, and according to largest manhole pipe diameter:

Pipe dia	MH dia
<375	1200;
375-700	1500;
750-900	1800.

5.2 Rocker pipes (clause 5.6.6.2) to be the following lengths:

150-600Ø:	0.6m;
>600-700Ø:	1.0m;
>750Ø:	1.25m.

3.2 Inspection chambers/manholes to have min 150granular surround in soft landscaping areas and not less than 150 conc surround to driveways/car parks.
3.3 Manhole covers and frames shall comply with the relevant provisions of bs. en 124 and shall be of non-rocking design which does not rely on the use of cushion inserts.
3.4 Cover sizes to be in strict accordance with adoptive undertakers standard requirements.
3.5 Cover strength (clause 5.7.1.1) comprising minimum strength for location as follows:

Roads/Highways	D400 Vehicle Impact;
Car Parks	C250 Light Vehicle loading
Footway/Driveway	B125 Occasional vehicle loading;
Gardens	A15 Pedestrian & cyclist ONLY.

3.6 All manhole covers shall be the non-venting type (unless indicated otherwise) and shall have closed keyways.
3.7 Manhole frames (clause 5.6.7) to be set to level, bedded and haunched externally over the base and sides of the frame in mortar, in accordance with the manufacturers instructions. The frame shall be seated on not less than 2 courses of class B engineering brick, on precast concrete masonry units or on precast concrete cover frame seating rings to regulate the distance between the top of the cover and the top rung to no greater than 675mm. A mortar fillet shall be provided where the corners fo an opening in a slab are chanfered and the brickwork is not flush with the edges of the opening.

NPPF HIERARCHY OF SURFACE WATER DISCHARGE OPTIONS

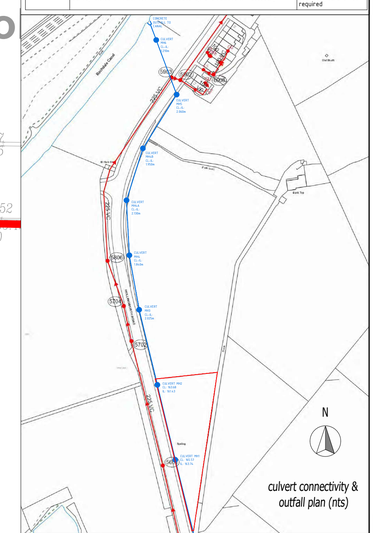
DISCHARGE TYPE	METHOD ADOPTED	REASONING
1. into the ground (infiltration)	NO	Site investigation confirmed infiltration not suitable, ref BEK Site Investigation Report, ref: BEK-22019-250223-JFC, pages 4, 43 & 44.
2. to a surface water body	NO	Not identified locally.
3. to a SW sewer, highway drain, or another drainage system.	YES	Culverted watercourse noted to the west side boundary.
4. to a combined sewer	NO	Combined sewers available on site for FW only.

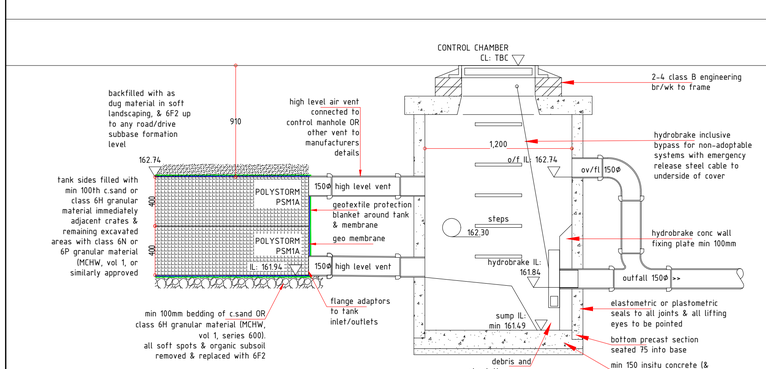
IMPLEMENTATION SCHEDULE FOR DRAINAGE SYSTEMS, ATTENUATION TANKS & SOAKAWAYS

IMPLEMENTATION PHASE	ACTION	REASON
Construction phase	All drainage pipes, gullies & manholes installed must be either covered, plugged or connections capped to isolate from construction SW flows.	To ensure construction debris does not enter the system while allowing general construction of the drainage system ready for plot completion.
Pre-habitation Phase	Only finished plots & associated drainage pipes, manholes & gullies may be brought online as long as they will not be subject to further construction flows & debris from upstream works.	To ensure adequate drainage of completed parts of the Site, while protecting the wider drainage system to parts of the Site still under construction from potential blockages.
Post Construction Phase	Site attenuation tank, control chamber/Hydrobrake or soakaways may only be brought online after construction of the Site has finished, and construction debris and silt entering the system is mitigated.	To ensure protection of the attenuation tank & hydrobrake, and to ensure they are not subject to SW flow overloaded with silt/debris which could damage or reduce long term storage capacity.
	All silt traps, control chambers and accessible soakaways to be checked for silt/debris, and cleaned accordingly	To ensure the system is free from silt/debris accumulation prior to sign off.

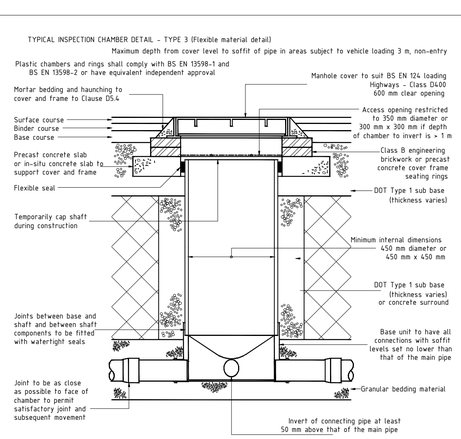
CIRIA C753 TABLE 21.3 OPERATION & MAINTENANCE REQUIREMENTS FOR ATTENUATION STORAGE TANKS

MAINTENANCE SCHEDULE	REQUIRED ACTION	TYPICAL FREQUENCY
Regular maintenance	Inspect and identify any areas that are not operating correctly. If required, take remedial action	Monthly for 3 months then annually
	Remove debris from the catchment surface (where it may cause risks to performance)	Monthly
	For systems where rainfall infiltrates into the tank from above, check surface of filter for blockage by sediment, algae or other matter; remove and replace surface infiltration medium as necessary	Annually
	Remove sediment from pre-treatment structures and/or internal forebays	Annually, or as required
Remedial actions	Repair/rehabilitate inlets, outlet, overflows and vents	As required
Monitoring	Inspect/check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed	Annually
	Survey inside of tank for sediment build-up and remove if necessary	Every 5 years or as required

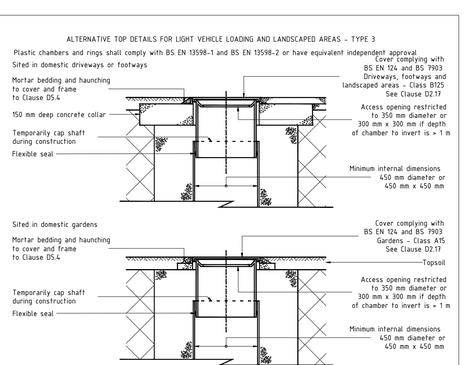




control manhole & attenuation general arrangement details 1:25



typical inspection chamber details (not to scale)



PLANNING

AMENDMENTS/ ISSUES

REVISION	REASON/ CHANGE	DATE	BY
rev 2	planning issue, minor corrections title & scale	oct 2026	ds
rev 1	updated as per LLFA comments	sept 2026	ds
rev 0	original	april 2026	ds

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drainage plan & details

FILE NAME: dwg-tjba-davies-bank top farm shop-291225

SCALE: 1 : 100 @ A1