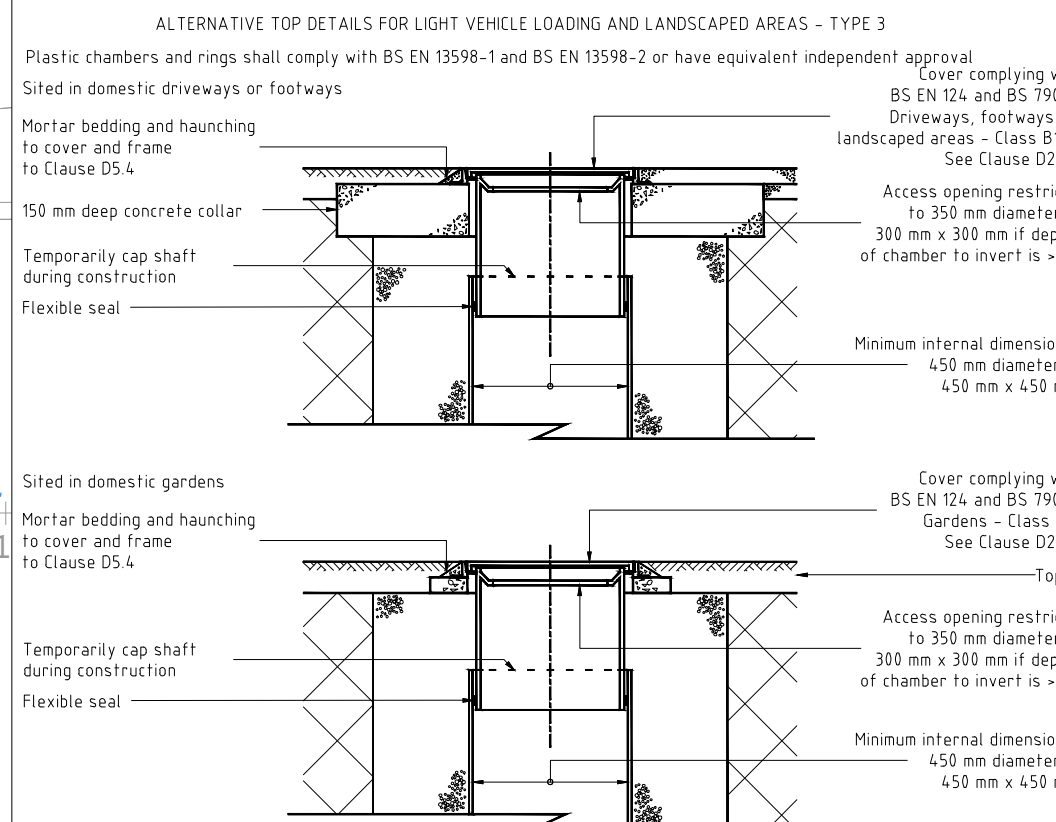
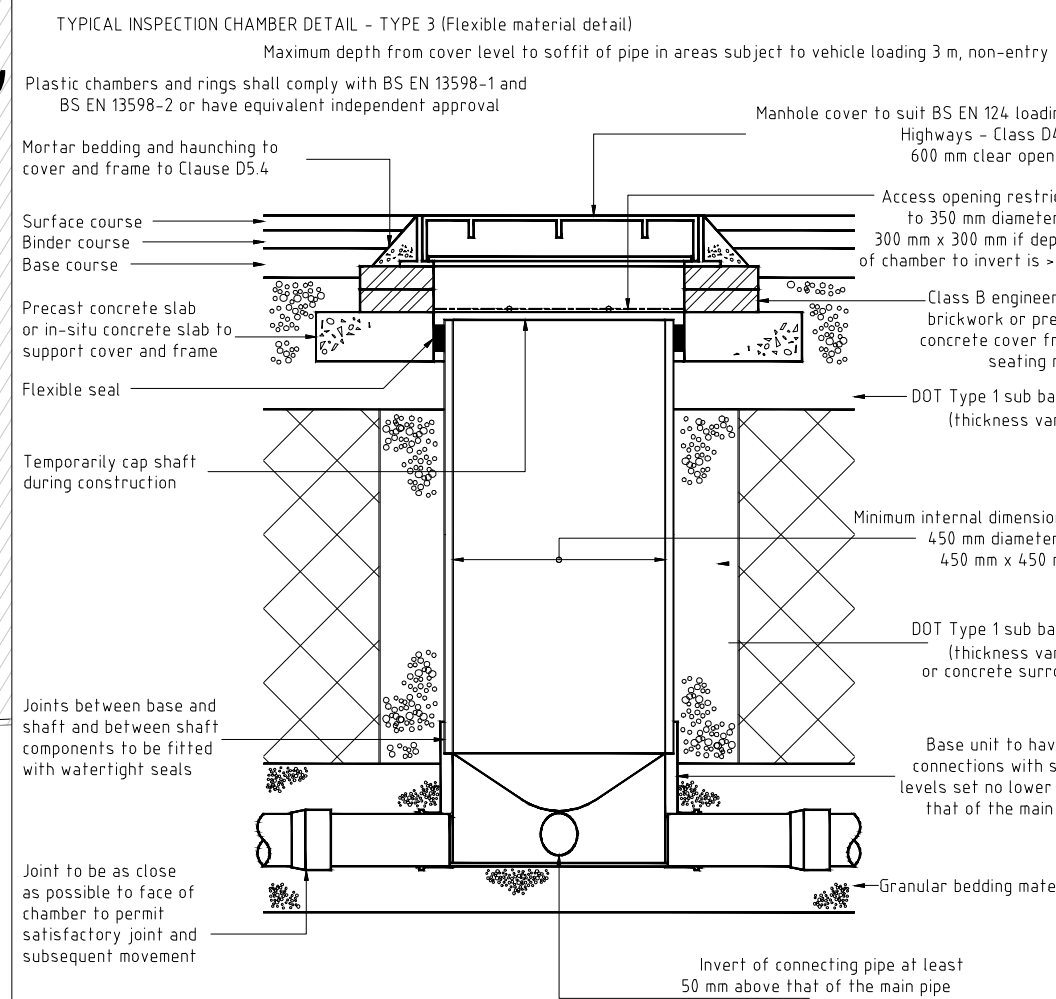
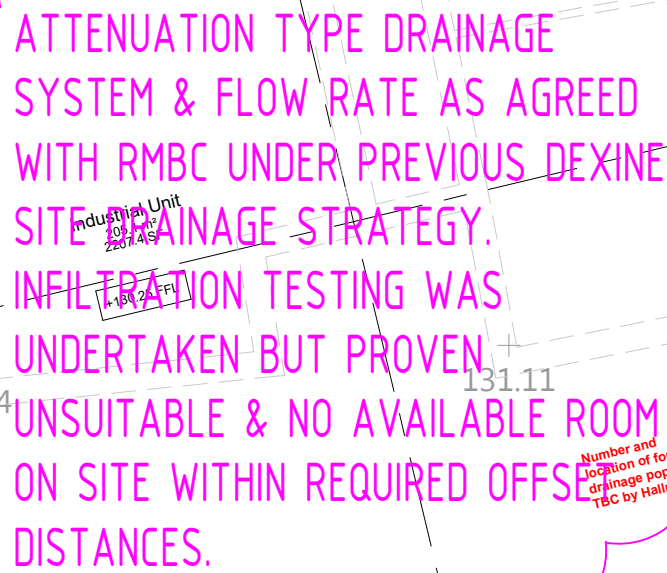




inspection chamber typical detail 1:25

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 TJB&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 a/w stated.

0.3 All levels to SITE DATUM.

0.4 Refer to architects details for SBM.

0.5 Contractor to confirm SMD/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 CDM 2015.

1.0 HIGHWAYS/ACCESS ROADS & PRIVATE DRIVES.

1.1 N/A.

2.0 DRAINAGE

2.1 To be read in conjunction with TJB 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 Code. H and BS EN 752-4.

2.4 Class S granular bed and surround to all new sewers.

2.5 Sewers must have min 150mm concrete surround:-

- adoptable assets with less than 12m of cover under highways or driveways;
- private assets with less than 900mm of cover under private roadways.

2.6 All conc including pipes & manholes to be sulphate resisting unless otherwise agreed in writing by eng.

2.7 Foot water must be to the following gradients in accordance with B. Regs and Sewers for Adoption:

- 100p at gradients not less than 190 where at least 1 WC is connected and not less than 140 where no WC is connected.

-150p foot gradients to be not less than 1:50 with at least 5 WCs connected.

2.8 Surface water must be to the following gradients in accordance with B. Regs:

- 100p at gradients not less than 1:60.
- 150p foot gradients to be not less than 1:50.

2.8 Adoptable surface water must be to the following gradients in accordance with Sewers for Adoption:

- 100p at gradients not less than 1:60.
- 150p foot gradients to be not less than 1:100.

2.9 Work required on United Utilities sewers such as S106 connections, or S104 adaptations, to be in strict accordance with UNITED UTILITIES DEVELOPER CONSTRUCTION and or CONNECTION DETAILS, and only with prior approval from United Utilities

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	750.
750-900	900.

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

150-600p	0.6m.
-600-700p	1.0m.
>750p	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/carparks.

3.3 Manhole covers and frames shall conform 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 5.7.11) comprising minimum strength for location as follows:

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

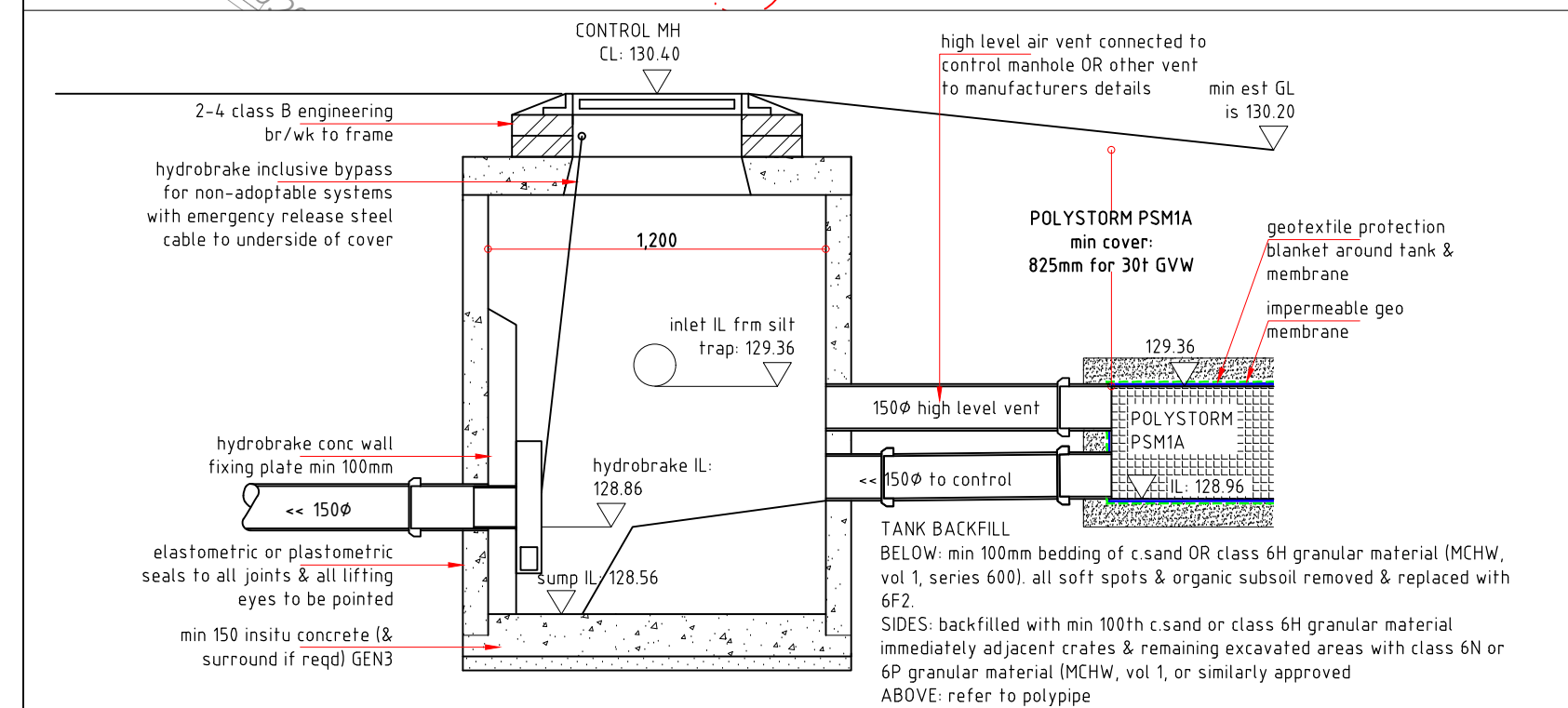
3.6 All manhole covers shall be the non-venting type unless indicated otherwise and shall have closed keyways.

3.7 Manhole frames (clause 5.6.1) 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 sealed 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 slab and the top ring to be no greater than 675mm. A mortar fillet shall be provided where the corners to an opening in a slab are chamfered 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	Not suitable. No available area for infiltration on Site within B Regulation offset distances. Previous infiltration tests on the wider Site indicated low rates.
2. to a surface water body	NO	Too distant.
3. to a SW sewer, highway drain, or another drainage system	NO	Not available.
4. to a combined sewer	YES	Combined sewers available for connection and previously agreed with RMBC for connection of all Site drainage.

IMPLEMENTATION SCHEDULE FOR DRAINAGE & ATTENUATION STORAGE TANKS		
DRAINAGE SYSTEM	IMPLEMENTATION/ COMPLETION	REASON
General SITE drainage pipes & manholes installed but gullies either covered or connections capped to isolate from construction SW flows.	Construction phase	To ensure connections are available for plot drainage when finished & to ensure construction debris does not enter the system.
General PLOT drainage pipes, manholes & gullies to completed parts of the site only & not subject to further construction flows & debris.	Pre-habitation Phase	To ensure adequate drainage of finished parts of the Site.
Site attenuation tank, control chamber & hydrobrake.	Post Construction Phase ONLY	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.

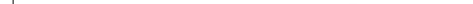
CIRIA C753 TABLE 213 OPERATION & MAINTENANCE REQUIREMENTS FOR ATTENUATION STORAGE TANKS		
MAINTENANCE SCHEDULE	REQUIRED ACTION	TYPICAL FREQUENCY
Regular maintenance	Inspect and identify any areas that are not operating correctly. If required, take remedial action	Monthly for 3 months then annually
	Remove 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

DRAINAGE KEY

	EXISTING FOUL SEWER		
	EXISTING COMBINED SEWER		
	EXISTING SURFACE WATER SEWER		
	PROPOSED FOUL SEWER		
	PROPOSED COMBINED SEWER		
	PROPOSED SURFACE WATER SEWER		
	MANHOLE		M
	INSPECTION CHAMBER		
	COVER LEVEL		
	INVERT LEVEL		
	SEWER BACKDROP		B
	SOIL & VENT PIPE		SV
	SOIL PIPE		S
	RAIN WATER PIPE		RW
	SURFACE WATER GULLY		SW
	FOUL GULLY		F

AMENDMENTS/ ISSUES			
1	updated re layout & tank type/levels	dec 2024	tjt
0	original for approval	jan 2024	tjt
REVISION	REASON/ CHANGE	DATE	BY

PLANNING ONLY
NOT FOR CONSTRUCTION

T J BOOTH ASSOCIATES		20A Eastgate Street
		Rochdale
CONSULTING CIVIL & GEOTECHNICAL ENGINEERS		Lancashire
		OL16 1DH
		Tel: 01706 868288

hallmark developments / dexine mills, spotland rd
new office
drainage plan & details

FILE NAME:	dwg-tjba-hallmark-dexine site-200918
------------	--------------------------------------

SCALE: 1 : 100 & as indicated @ A2