

This drawing is to be read in conjunction with all relevant architects' engineers and specialist sub-contractors drawings and the specification.

11 All setting out to be in accordance with the schedules. any discrepancies between the engineers and the architects drawings to be referred to the architect before proceeding. Dimensions must not be scaled.

13 All private drainage is to be in accordance with BS EN 752-1-2-3-4, BS EN 12581-1, BS EN 1610 and all relevant sections of approved document H of the building regulations (2015 Edition).

14 Where drainage pipework is to be flexibly jointed extra strength vitrified clay it should be to BS EN 295-1, Hephworth 'Superstee' or equivalent.

15 Where drainage pipework is plastic i.e. PVC-U it shall be to BS EN 14011-1 Osma or equivalent. Private pipework to be type SN4 and all adoptable pipework to be type SN6.

16 Where drainage pipework is cast iron it shall be to BS EN 877 and for ductile iron it shall be to BS EN 598.

17 All concrete pipework shall be to BS EN 1916 and BS 5911-1. Manholes and fittings shall be to BS 5911 parts 3 and 4 and BS EN 1917.

18 All materials for adoptable drainage are to be Kitemarked as appropriate.

19 Where drains pass through foundations or connect to manholes, flexible pipe joints are to be provided within 150mm of the face of the structure and within a further 600mm to form a rock pipe.

20 Where pipes pass through street walls, footings or retaining walls, lintels are to be provided.

21 Where pipelins pass within 1.0m of buildings or walls the foundations are to be taken down below the bottom of the trench. Where pipelins are more than 1.0m away from foundations the trench shall be backfilled with concrete to a point that makes a 45° angle line taken from the bottom corner of the trench foundation.

22 Where pipe to invert does not exceed 600mm and the pipe size does not exceed 100mm diameter, 300mm dia polypropylene access chambers may be used. Elsewhere, proprietary polypropylene or precast concrete manholes are to be used.

23 Where connections are to be made to existing manholes / sewers, invert levels, pipe sizes and orientation should be checked prior to the commencement of works and any variance reported to the engineer immediately. Where necessary connections are to be made on or off site the contractor is to check the line and level of any services / mains, to ensure that no clashes exist prior to works commencing.

24 Where pipelins cross, each is to be surrounded with grade STA mass concrete for a distance not less than 1.0m centred on the crossing point. Length of surround to be extended as necessary to within 150mm of the next nearest flexible joints.

25 For private drainage, concrete protection is to be provided where the effect of the weight of the cover / slab is to be more than 1.2m in trafficked areas and 0.6m in soft landscaped or pedestrianised areas.

26 The contractor is to ensure that protective measures are taken to ensure that drainage pipework and fittings are not damaged by site traffic prior to over site filling operations being completed around buildings.

27 The top run of each private foul drainage network is to be laid to fall no slacker than 1:40, the head of each run is to be vented to atmosphere in accordance with approved document H.

28 All surface water drainage to be min 100mm dia, laid at a gradient no slacker than 1:80. And all foul water drainage to be min 100mm dia. unless stated otherwise.

29 The contractor is to ensure that all pipework connections are arranged to direct flows down into the main channel in the direction of the main flow. Where necessary 3/4" dia. pipe is to be used on oblique connections inside the main channel where the main channel exists or the oblique connections are arranged outside the chamber to be able to divert flows down the main channel. Connections brought in perpendicular to the main channel shall be made to the main channel at the main channel flow shall be from any connections with WC's to ensure a flush through the main channel is achieved.

30 The contractor is to ensure that when preformed polypropylene manhole bases are used that they are orientated such that the main flow is through the main channel of the base. This should be achieved by incorporating long radius bends outside of the manhole.

31 The contractors attention is drawn to the need to ensure that any low level areas (including previously compacted filled areas), in particular under the building footprint and immediately around the outside, are re-compacted to ensure localised differential settlement does not occur.

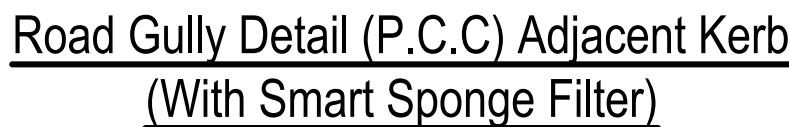
32 Where new connections are to be made into existing manholes or sewers, all invert levels, pipe orientation and sizes should be checked on-site prior to the commencement of the works, with any variance reported to the engineer immediately. Where necessary connections are to be made either on or off-site, the contractor is to check the line and level of any existing services / mains, to ensure that no clashes exist prior to the works commencing.

33 Porous paving surface finish 'to the architects spec'. Any alteration to the extents of the porous paving may have an adverse effect upon the Surface water drainage design and must therefore be discussed with the engineer.

34 For bespoke attention task detail, please refer to Tubosider detail EN21 2809, T1071547 and accompanying design information. Tubosider task to be installed to manufacturers instructions.



1. The Permeable blocks should not be laid until the building construction is finished to avoid damage by construction vehicles and activity.
2. The contractor should ensure that there is a level base course for the Permeable blocks and clean stone bedding before the surfacing is laid to correct level and bed.
3. A suitable impermeable geo-membrane with taped joints is to be laid at the base of the permeable sub-base layer to protect the sub-base from any migrating salts permeating from the layers below (1mm thick with taped joints).
4. If a protective layer is used to the porous sub-base during the construction phase then the contractor can consider using one of the following 2 methods.
 - a) A sacrificial layer of crushed material can be laid during the construction phase and removed before the stone bedding and blocks are laid. Or;
 - b) An AC20 Binder Layer 100/150 to BS EN13108-1 can be laid. This can then be left in place and cores drilled out with 75mm holes at 0.75m centres through asphalt into and into sub-base, filled with 5mm clean stone and covered with geotextile.



Note:

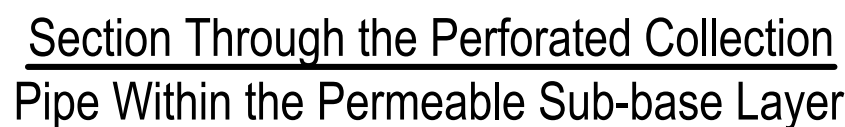
1. Tail to have a minimum 150mm ST4 Concrete Surround for the first 750mm below Road level.
2. The smart gully adaptor is to be installed in accordance with the manufacturers recommendations.



P.C.C. Catchpit Section Detail



SCALE = 1:20



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