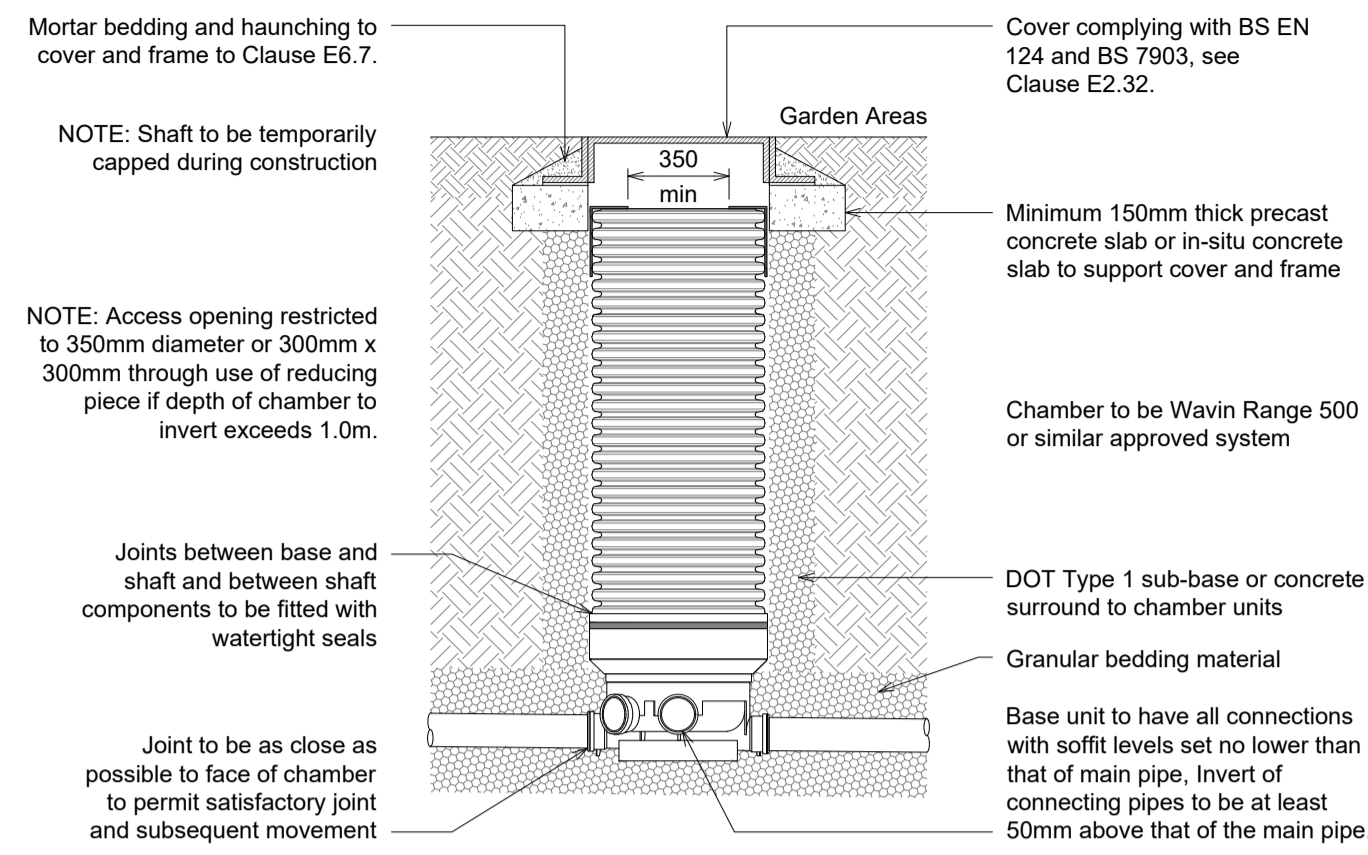


Typical Type 3 Chamber Detail (Non-Entry)

scale 1:25

- Maximum depth of cover level to soffit of pipe 30m
- For individual access cover grades see schedules.



NOTE: Plastic chambers and rings in areas subject to vehicle loading shall comply with BS EN 13598-2, in all other areas they are to comply with BS EN 13598-1 or BS EN 13598-2 or have equivalent independent approval.

Clause E6.6 - Pipes and Joints Adjacent to Structures

- Where rigid pipes are used, a flexible joint (rocker pipe) shall be provided as close as is feasible to the outside face of any structure into which a pipe is built, within 150mm for pipe diameters less than 300mm. The design of the joints shall be compatible with any subsequent movement.
- The recommended length of the next pipe (rocker pipe) away from the structure shall be as shown in Table E.12.

Table E.12 Rocker Pipes

Nominal Diameter (mm)	Effective length of Rocker Pipe (mm)
150	600

Text taken from Figure B.14

- Stub pipes into structures shall be of rigid material.
- No incoming branch is to be less than 90° from the outgoing direction of flow, all pipes entering the bottom of the manhole are to have level soffits.

Clause E6.7 - Setting Manhole Covers and Frames

- Manhole frames shall be set to level, bedded and haunched externally over the base and sides of the frame in mortar, in accordance with the manufacturers instructions.
- Frames for manhole covers shall be bedded in a polyester resin based mortar in all situations where covers are sited in NRSWA Road Categories I, II or III (i.e. all except residential cul-de-sacs).

Table E.6

NRSWA road category	Description	Minimum frame depth (mm)
I	Trunk roads and dual carriageways	150
II	All other A roads	150
III	Bus services	150
IV	All other roads except residential cul-de-sacs	150
-	Residential cul-de-sacs	100

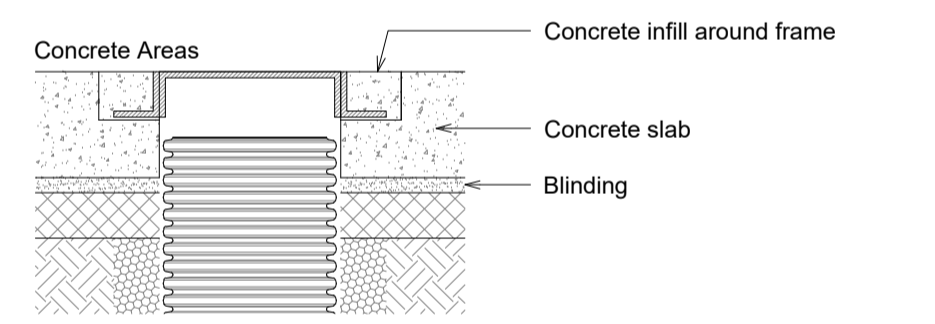
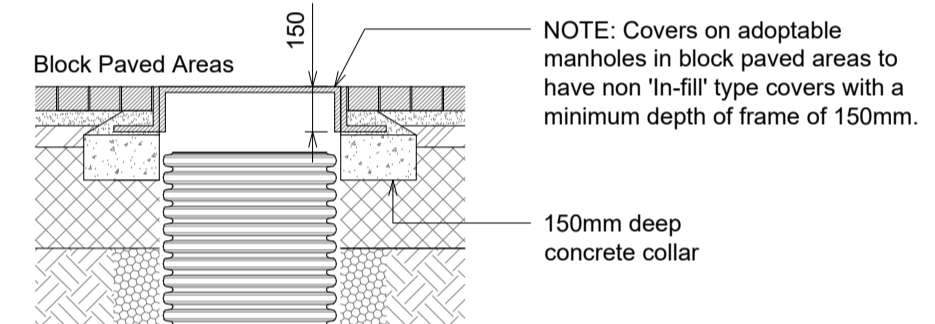
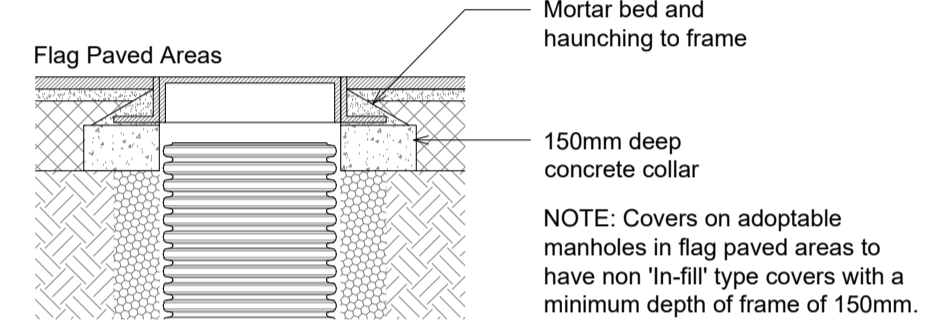
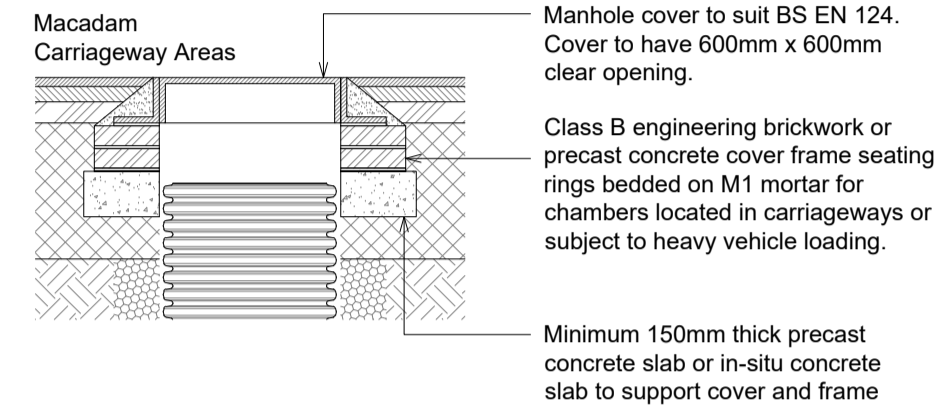
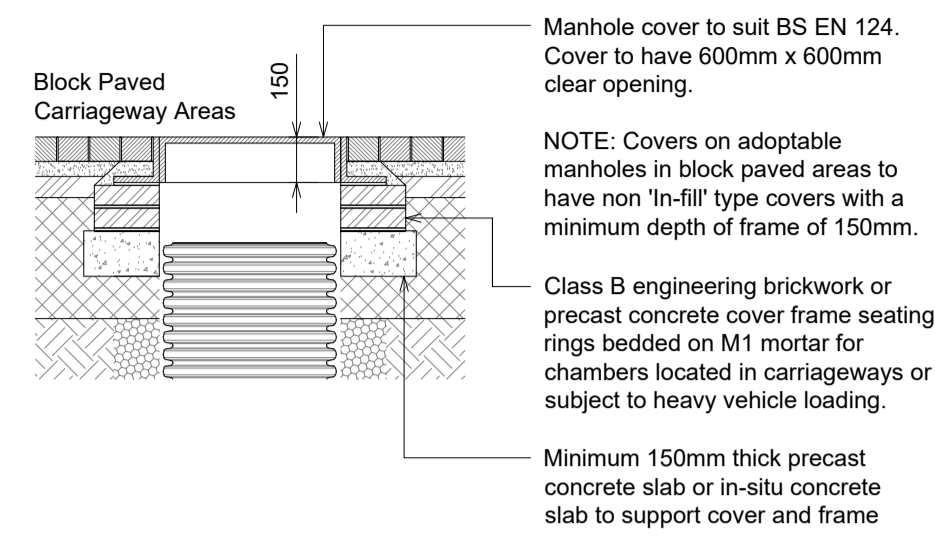
Clause: E2.32 Manhole Covers and Frames

- Manhole covers and frames shall comply with the relevant provisions of BS EN124, BS7903 and Highways Agency Guidance Document HA 104/09. They shall be of a non-rocking design which does not rely on the use of cushion inserts.
- Manhole covers on foul-only sewers shall be of low leakage types in order to prevent excessive surface water ingress.
- As a minimum, Class D400 covers shall be used in carriageways of roads (including pedestrian streets), hard shoulders and parking areas used by all types of road vehicles.
- Minimum frame depths for NRSWA road categories I to IV shall be as Table E.6.

Type 3 Alternate Cover Details

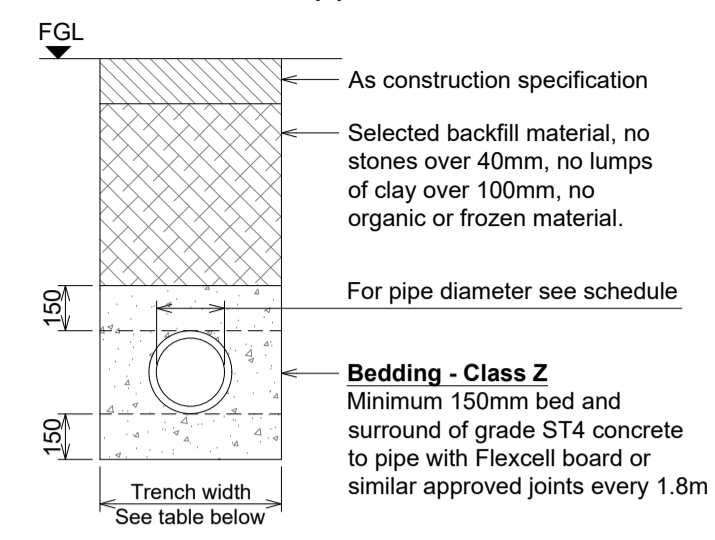
scale 1:25

All covers to comply with BS EN 124 and BS7903, see Clause E2.32. All covers to have mortar bedding and haunching to cover and frame to Clause E6.7



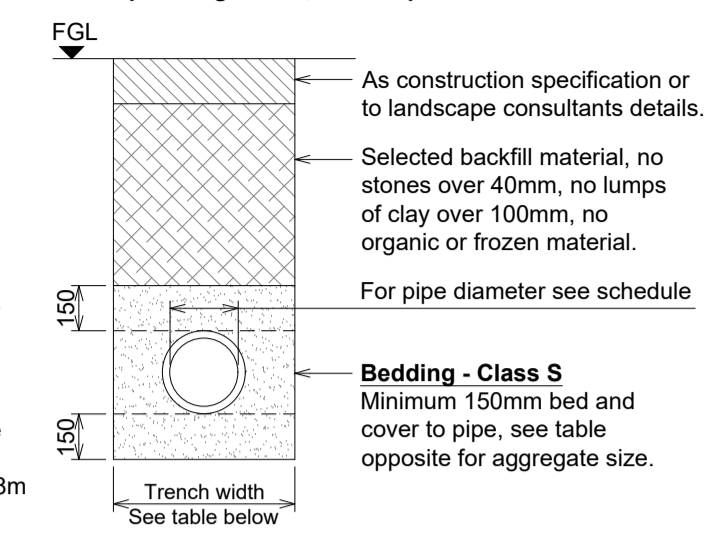
Pipe Bedding - Class Z

Areas subject to vehicle loadings. Less than 1.2m cover to pipe.



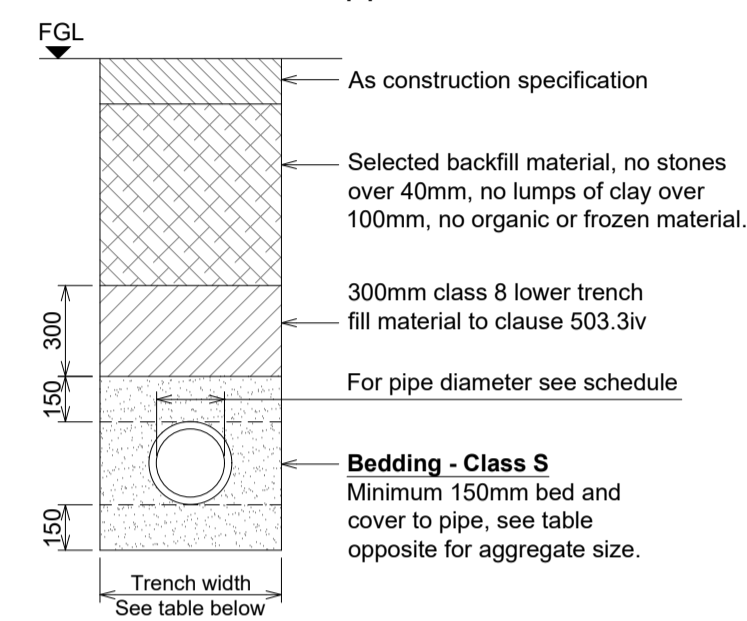
Pipe Bedding - Class S

Areas not subject to vehicle loadings. Use in private gardens, landscaped areas etc.



Pipe Bedding - Class S

Areas subject to vehicle loadings. Greater than 1.2m cover to pipe.



PIPE BEDDING MATERIAL - CLASS S	
Pipe Ø (mm)	Suitable Materials: (Aggregate to BS 882)
100	10mm nominal single sized aggregate
150	10 to 14mm nominal single sized aggregate
225 to 525	10 to 14mm or 20mm nominal single sized aggregate
Over 525	10, 14, 20 or 40mm nominal single sized crushed rock

TRENCH WIDTH	
Pipe Ø (mm)	Trench Width (mm)
100	450
150	450
225	600
300	600
375	750
450	750
525	900
600	900
750	1200
900	1350
1050	1500

Pipe surround material shall where required, be placed and compacted over the full width of the trench in layers not exceeding 150mm before compaction, to a finished thickness of 300mm above the crown of the pipe.

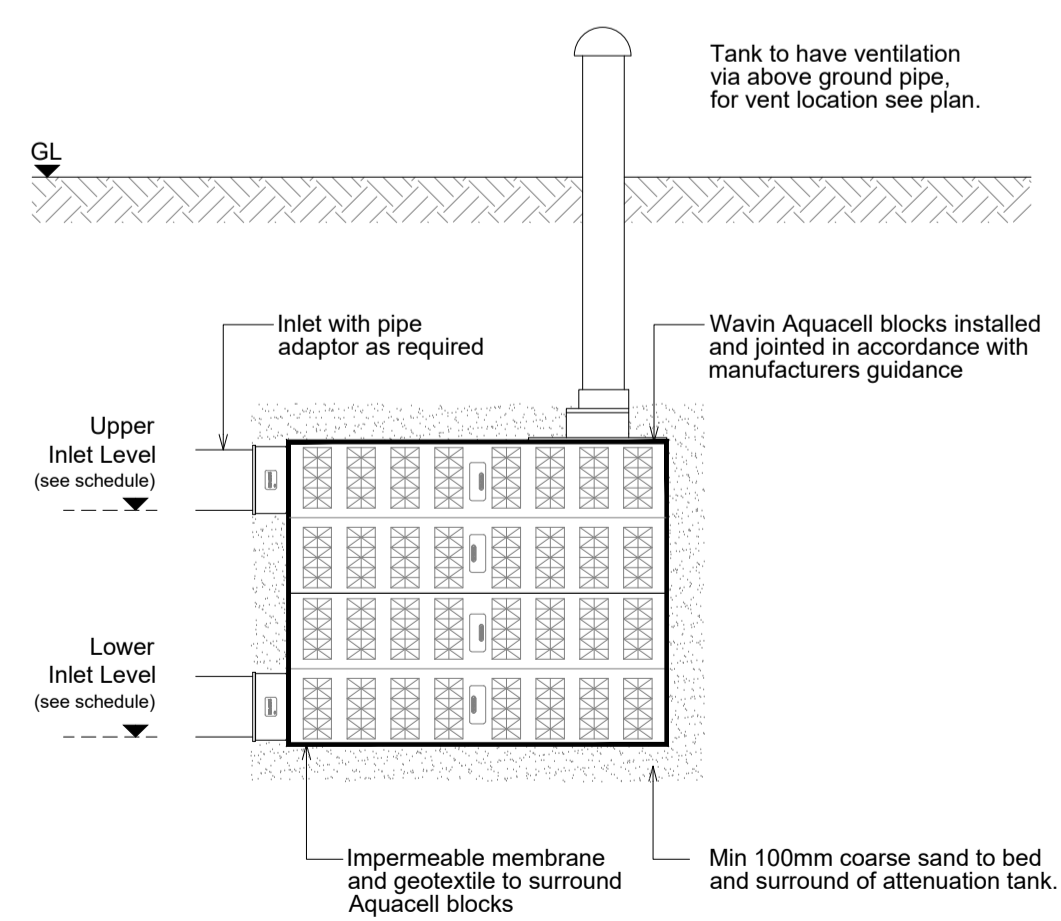
Where excavations have been supported and the supports are removed they shall be withdrawn progressively as backfilling proceeds in a manner that minimises the danger of collapse, all voids formed behind the supports are to be carefully filled and compacted.

Pipe jointing surfaces and components shall be kept clean and free from extraneous matter until the joints have been made or assembled, care should be taken to ensure that there is no ingress of grout or other material into the joint after the joint has been made.

Pipes should be cut in accordance with the manufacturers recommendations to provide a clean square profile without splitting or fracturing the pipe wall and to ensure minimal damage to any protective coatings, where necessary, the cut ends of pipes shall be formed to the tapers and chamfers suitable for the type of joint to be used.

Section: Cellular Attenuation Tank (AquaCell)

scale 1:20



AquaCell Installation Notes: (Contractor to consult manufacturers literature for full details)

- Excavate the trench to the required depth ensuring that the plan area is slightly greater than that of the AquaCell units.
- Lay 100mm bed of coarse sand, level and compact.
- Lay the geotextile over the base and up the sides of the trench.
- Lay the impermeable membrane on top of the geotextile over the base and up the sides of the trench.
- Lay the AquaCell units parallel with each other. In multiple layer applications, wherever possible, continuous vertical joints should be avoided. AquaCell units can be laid in a 'brick bonded' formation (i.e. to overlap the joints below). For single layer applications use AquaCell Clips and for multi layers use AquaCell Clips and AquaCell Shear Connectors (vertical rods).
- Wrap the Impermeable membrane around the AquaCell structure and seal in accordance with the manufacturers recommendations.
- If side connections into the AquaCell units are required, (other than the preformed socket), use the appropriate Flange Adaptor. Fix the flange adaptor to the unit using self-tapping screws. Drill a hole through the Flange Adaptor and connect the pipework.
- In order to prevent silt from entering the tank, clogging the inlet pipework and reducing the tank capacity, it is recommended that a silt trap / catchpit is installed upstream of the tank inlet.
- Wrap and overlap the geotextile to cover the entire AquaCell structure protecting the impermeable membrane.
- Lay 100mm of coarse sand between the trench walls and the AquaCell structure and compact being careful not to damage the blocks or either of the membranes.
- Lay 100mm bed of coarse sand over the geotextile and compact.
- Backfill tank with suitable clean material, free of organic matter and debris.

DRAINAGE NOTES

- The location of any existing drains and sewers are to be accurately located and reported prior to any work commencing on site.
- All materials, workmanship and construction to be in accordance with the requirements of 'Sewers for Adoption - 7th Edition' and published addendum and corrigendum.
- Channel drains shown are only to collect surface water run-off from hard paved areas and door thresholds and are not intended to collect groundwater or run-off from gardens and landscaped areas.
- All abandoned pipework to be completely removed or grout filled unless stated otherwise.

NOTES

- The Contractor should check all dimensions on site.
- It is the Contractors responsibility to ensure compliance with building regulations and current codes of practice.
- Drawings cannot take into account any drains or underground works not locatable by visual survey of the site.
- Commencement of any building works prior to full building regulation approval is entirely at the clients risk.

A		First issue to client	18/08/2023
Rev	Description	Date	
PROJECT: Proposed residential development on land adjacent to Claremont Terrace, Sandwich Road, Woodnesborough, Sandwich, Kent CT13 0LY.			
CLIENT: Mr Richard Bent Esq			
SCALE: 1:20 DATE: 18/08/2023 SIZE: A1			
DRAWING: Sheet 2		STATUS: PRELIMINARY	
T-2022-074-05		A	
Copyright and other intellectual property rights in this document and all related documents, drawings, etc., including calculations, is invested in Tridax Ltd and cannot be used or reproduced for any other purpose than that for which they were created without the express permission in writing by Tridax Ltd. In first instance ring 01304 820777.			