

1. All highway or drainage works assumed to be private. Any works on adopted highways or drainage prior to issue of Technical Approval is entirely at the risk of the Contractor/Client.
2. At the commencement of works on site the contractor is to carry out trial pits and liaise with Utility Companies in order to establish the exact position of all existing statutory utility plant in the vicinity of works and take adequate precautions for their protection.
3. All manhole covers/valves/inspection covers in existing carriageway/verges to be adjusted where necessary to suit design levels.
4. Where the works involve the obstruction of a footway, the Contractor shall provide an alternative safe footway properly signed, guarded and lit.
5. The Contractor is to comply fully with the CDM Regulations 2015 in the course of constructing the works.
6. The Contractor shall ascertain the CBR of the subgrade in order to determine the required sub-base/capping thickness.
7. Prior to laying any material the subgrade must be inspected and any soft spots removed and filled with 6F2 capping material.
8. Prior to construction of any drainage works, the Contractor is to confirm the invert levels of existing manholes and sewers. Any variations from the designed levels shown on the drawings shall be reported to the Engineer in advance of construction works commencing.
9. All drain and sewer pipes to be laid soffit to soffit, unless shown otherwise.
10. Contractor to refer to Health & Safety Executive 'Note 47-Avoiding Danger from Underground Services' and 'Document G56 - Avoiding Danger from Overhead Electric Lines'.
11. Where the deposits of debris and mud are unavoidable, warning signs must be exhibited whilst work is in progress and affected carriageways/footways must be regularly cleaned.
12. All levels are in metres above Ordnance Datum.
13. All foul and storm water drains which are not subject to adoption as public sewers must be constructed in accordance with the latest Building Regulations, BS8301, and, where appropriate, the relevant agreement certificates.
14. Private drainage pipework to be 100mm^ø unless shown otherwise on Engineering Layout Plans.

All domestic drainage to comply with the British Standard BS EN 752:2008 'Drain and Sewer Systems Outside Buildings' and Part H of the Building Regulations 2010(2015 Edition).

Pipe bedding as specified by the drainage manufacturer. All pipes that pass under buildings to have a minimum 100mm granular surround. Where drains pass through external walls the pipe is to be lintelled over with a minimum 50mm clear space around the pipe. The opening masked with rigid sheet material to prevent ingress of fill or vermin. It is important that the void is also filled with a compressible sealant to prevent ingress of gas.

Class D400 for areas with frequent vehicular usage such as roads.
Class C250 for areas with light vehicular usage such as car parks.
Class B125 for pavements and pedestrian areas.
Class A15 for areas inaccessible to motor vehicles.



REQUIRED TREATMENT PLANT FOR THE PROJECT MARKED IN RED ABOVE



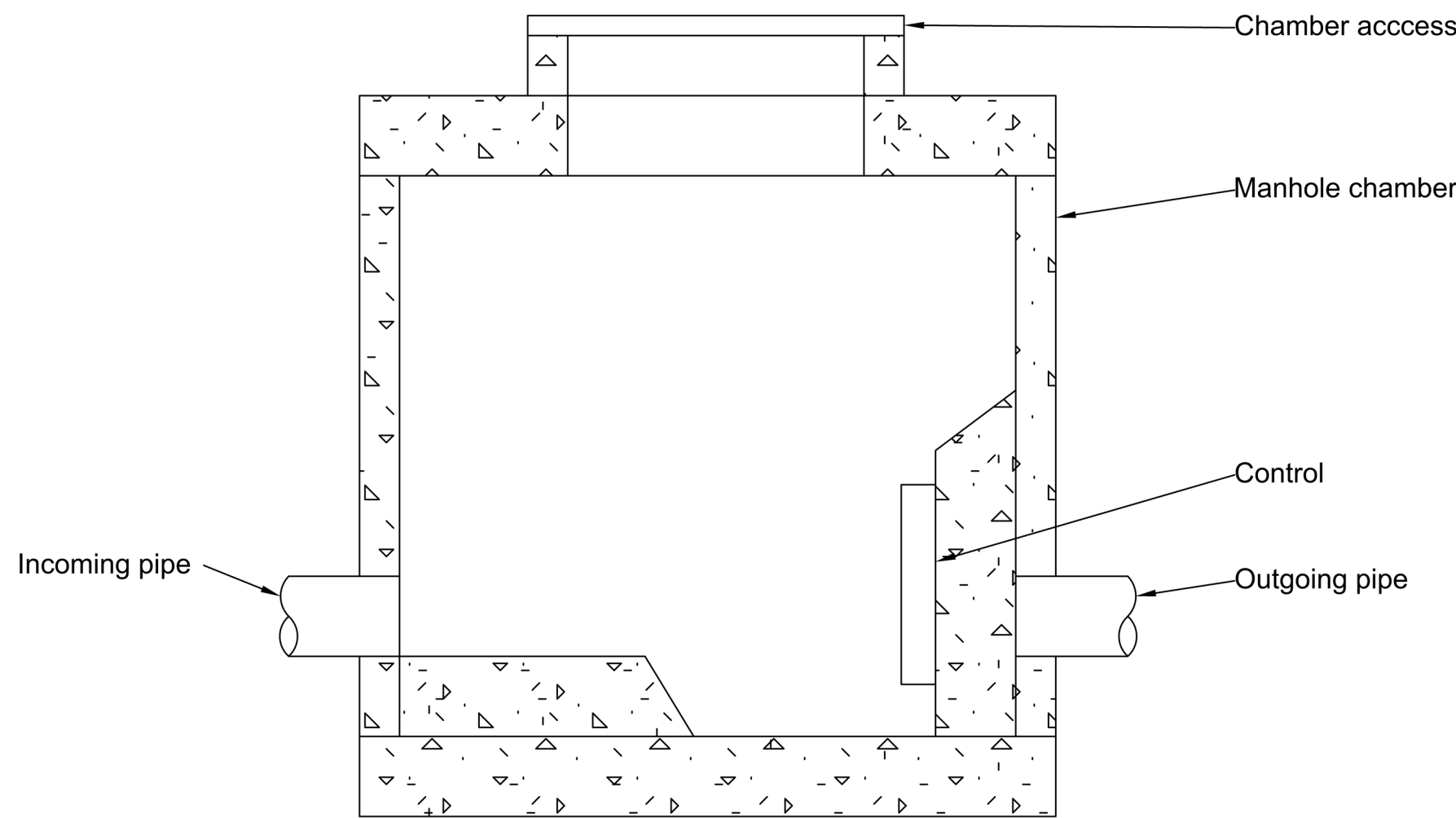
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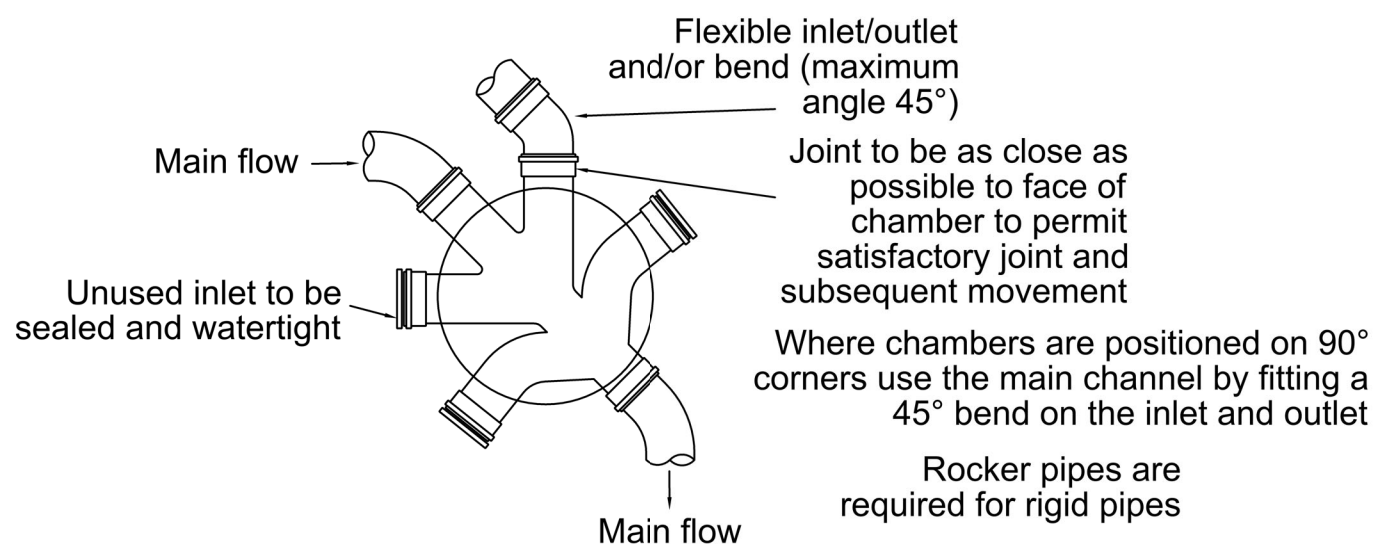
C25/30 CONCRETE TO
BE POURED AS PER
INSTALLATION GUIDE.
CONCRETE COVER TO
BE 300mm ALL
AROUND AND UPTO
COVER LEVEL TO
AVOID FLOATATION
MAX AGGREGATE SIZE
20mm
SLUMP CLASS S1

NTS

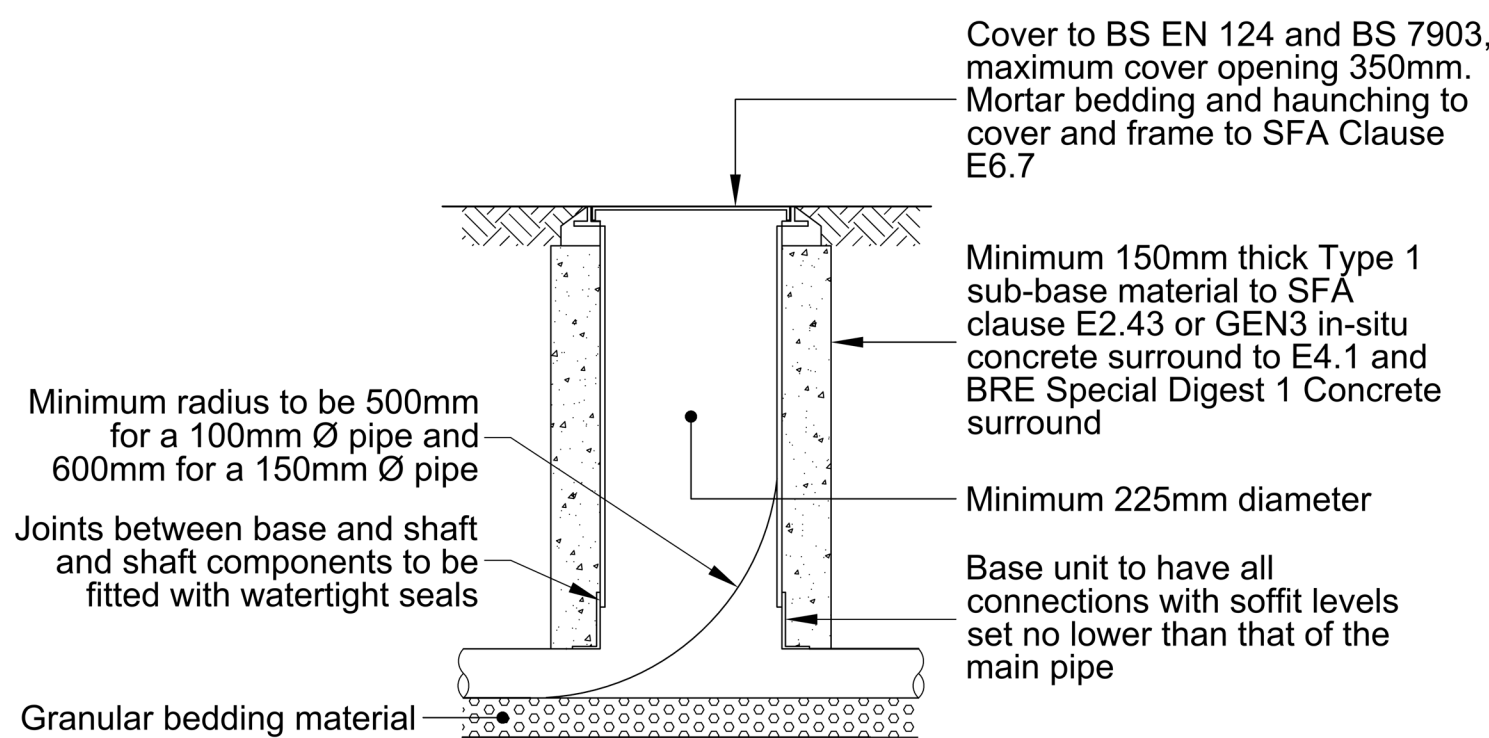
Drawing Number							
project	originator	zone	level	type	role	number	rev
MP-A1-MM-15							05



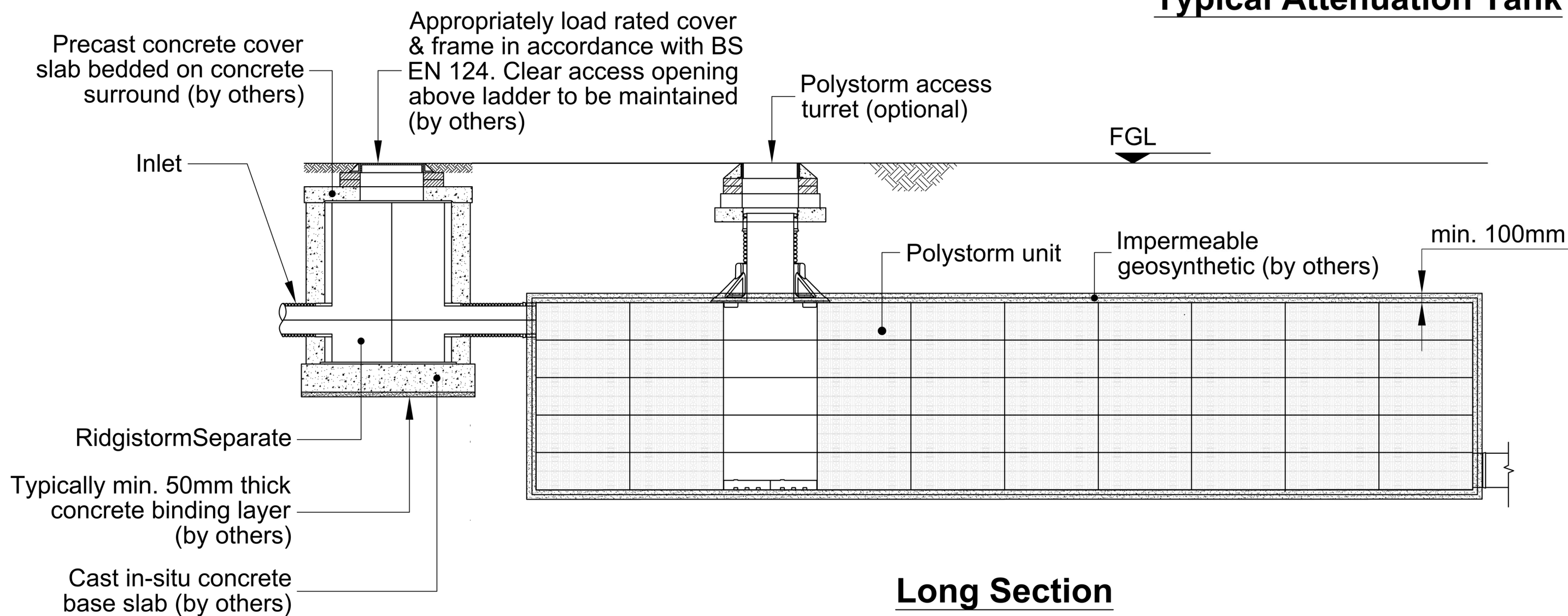
Typical control chamber
(Design to be specified by manufacturer)



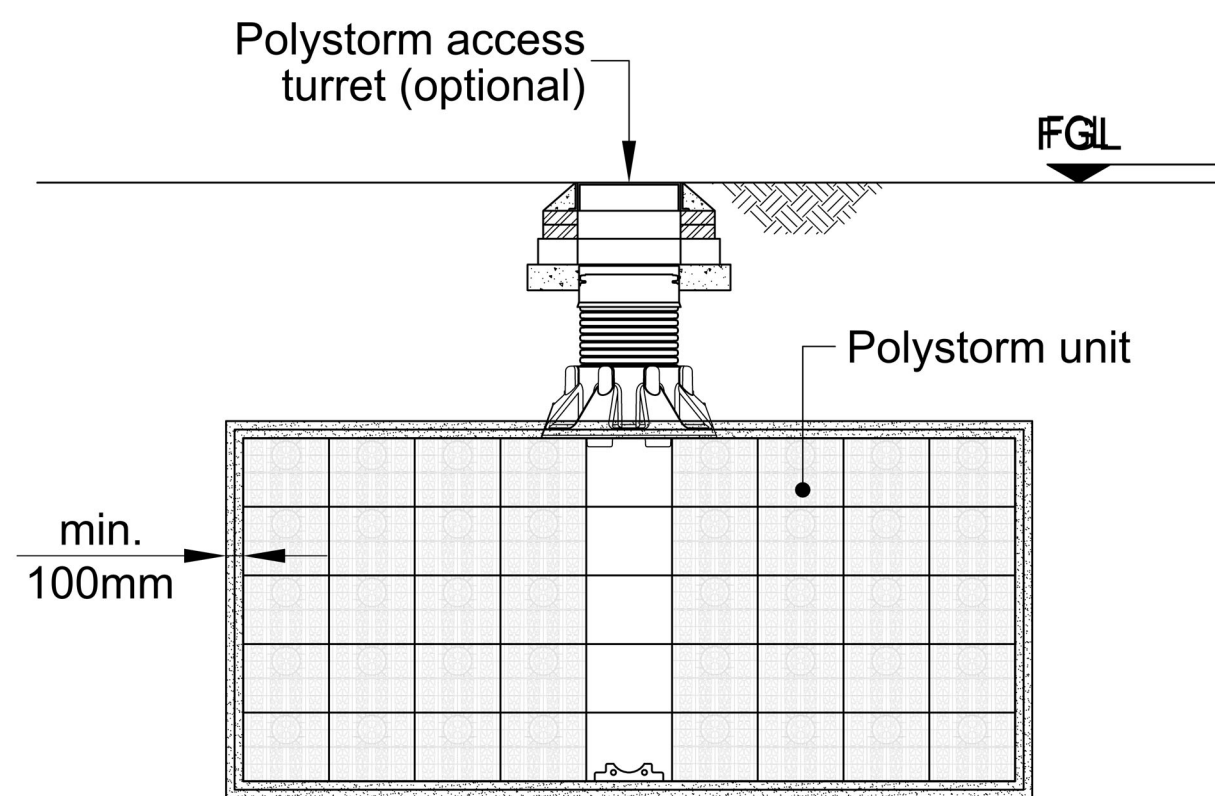
Typical base layout of Type 3 chambers



Typical Inspection Chamber
(no vehicle access)



Long Section



Cross Section

- GENERAL NOTES
1. FOUL DRAINAGE SYSTEM DESIGNED BY OTHERS.
 2. PROVIDE SILT TRAP TO MANUFACTURER DETAILS.
 3. SOAKAWAY CRATES ARE DESIGNED FOR 1:100 YEARS EVENT WITH 40% INCREASE DUE TO CLIMATE CHANGE. PROVIDE 1:200 BED SLOPE.
 4. PROVIDE NON-RETURN VALVES AS PER MANUFACTURER DETAILS.
 5. CONTRACTOR TO CONFIRM THE APPROVAL FOR THE TYPE OF PIPE AND BEDDING BEING USED WITH THE ADOPTING AUTHORITY PRIOR TO ANY CONSTRUCTION COMMENCING.
 6. PROVIDE HERRINGBONE DRAINAGE SYSTEM FOR THE PERMEABLE ROAD AND DIVERT TO SOAKAWAY.
 7. MANHOLE DEPTH GREATER THAN 1M TO BE MADE OF PPC RINGS OR BRICKWORK.
 8. THE CONTRACTOR IS TO ALLOW FOR JET WASHING ALL LENGTHS OF EXISTING SEWERS WHICH ARE TO BE RETAINED.
 9. ALL PRIVATE DRAINAGE WORKS TO BE IN ACCORDANCE WITH PART H OF THE CURRENT BUILDING REGULATIONS AND BS EN 752.
 10. ALL RWP, SVP AND FOUL DRAINAGE POSITIONS, INCLUDING UNDERSLAB GULLIES, ARE TO BE CONFIRMED BY THE ARCHITECT.
 11. CONTRACTOR IS TO ALLOW FOR ALL ABANDONED DRAINAGE RUNS AND MANHOLES / SOAKAWAYS TO BE FULLY GROUTED UP OR REMOVED AS NECESSARY.
 12. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ENGINEERS, ARCHITECTS AND SUB-CONTRACTORS DRAWINGS AND DETAILS.
 13. ANY DISCREPANCIES ARE TO BE REPORTED TO ADKINS CONSULTING ENGINEERS IMMEDIATELY.
 14. SEWAGE TREATMENT PLANT AND ATTENUATION TANK INSTALLATION PROCEDURE TO BE CONSULTED WITH MANUFACTURER.

RevID	Issue ID	Issue Name	Issue Date	Issue Initials	Status	Approved by
01	01	FOR APPROVAL	17/07/2017	AAA	FA	AAA
02	02	FOR APPROVAL	08/10/2017	AAA	FA	AAA
03	03	FOR APPROVAL	08/11/2017	AAA	FA	AAA
04	04	FOR APPROVAL	19/11/2017	AAA	FA	AAA
05	05	FOR APPROVAL	19/11/2017	AAA	FA	AAA
06	06	FOR APPROVAL	11/08/2017	AAA	FA	AAA

Scales @ A1	Issuing Office	Project No.
1:100	Kent	101M220716

Client Approval	
A - Approved	
B - Approved with Comments	
C - Do Not Use	
Status	Purpose of Issue

Originator	Adkins Consultants Ltd 130 Ashford Rd, Bearsted, Maidstone ME14 4AF
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Project	SPECIALIST FIREARMS COMMAND SCO19, WHARF ROAD, GRAVESEND
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Layout Title	Details
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Client	METROPOLITAN POLICE SERVICE (MPS)
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Drawing Number							
project	originator	zone	level	type	role	number	rev
MP-A1-MM-16							05