

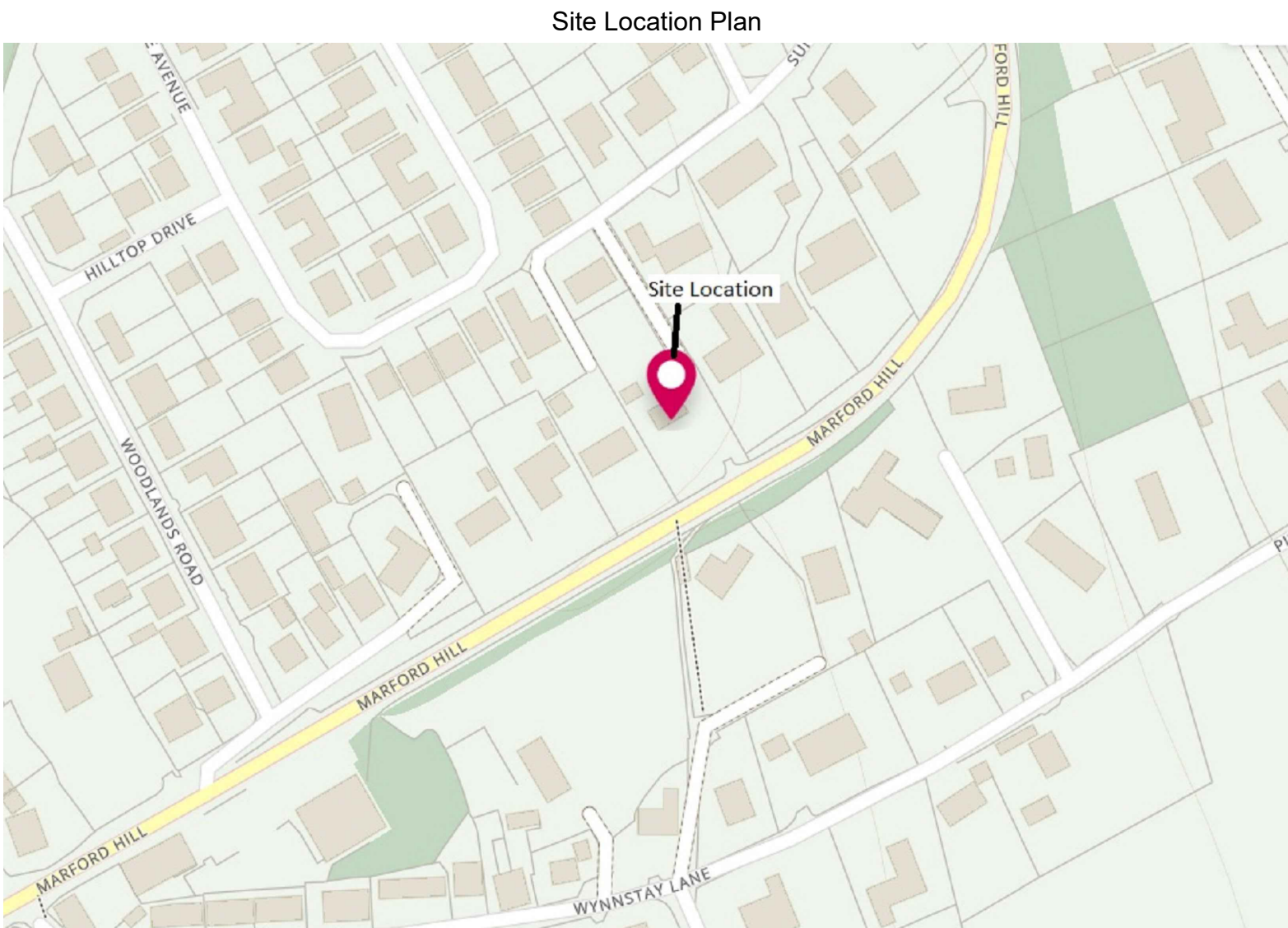
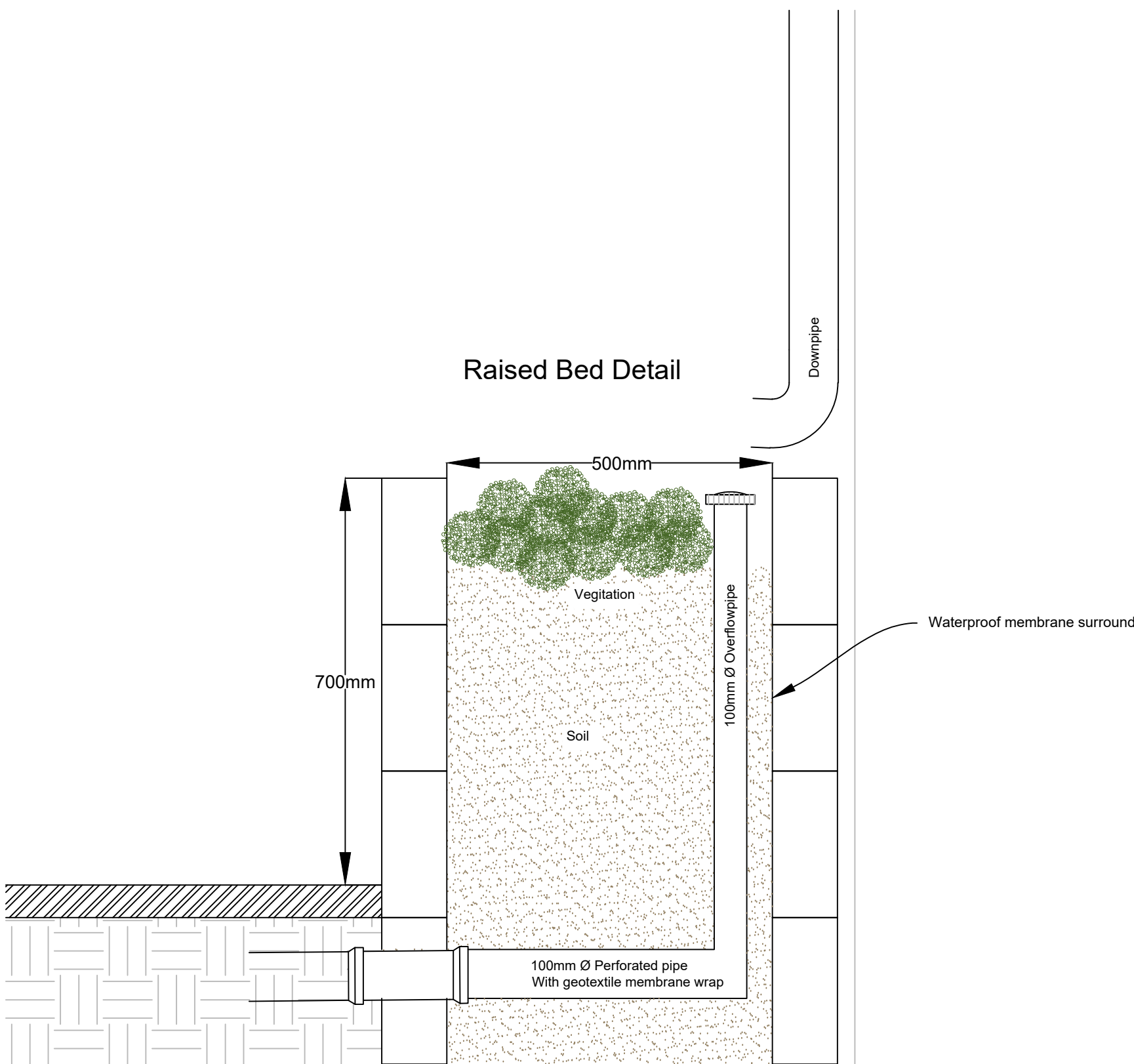


FIGURE B.21
TYPICAL INSPECTION CHAMBER DETAIL - TYPE 4 (Flexible material detail)
Maximum depth from cover level to soffit of pipe 2 m, non-entry
Not to scale

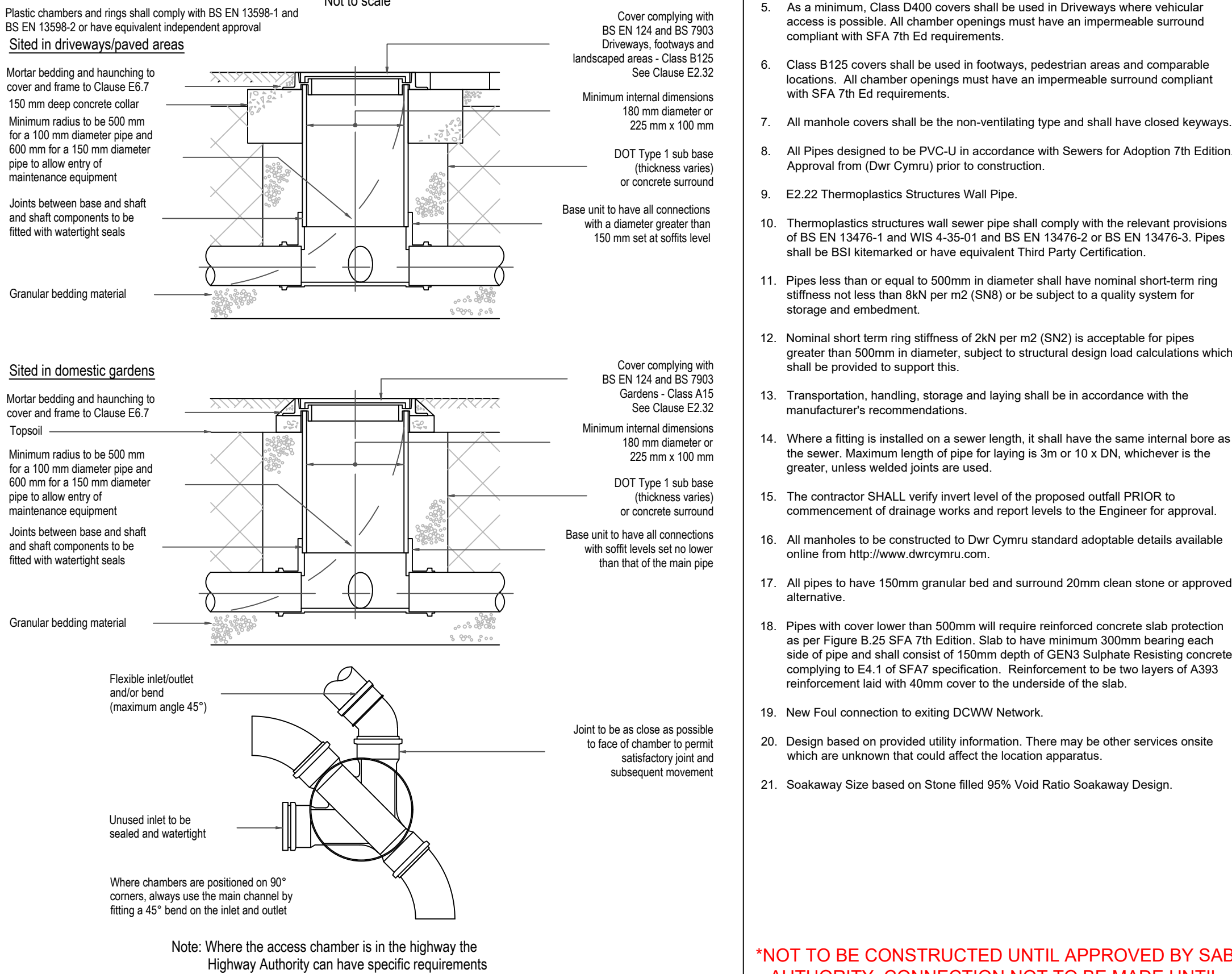
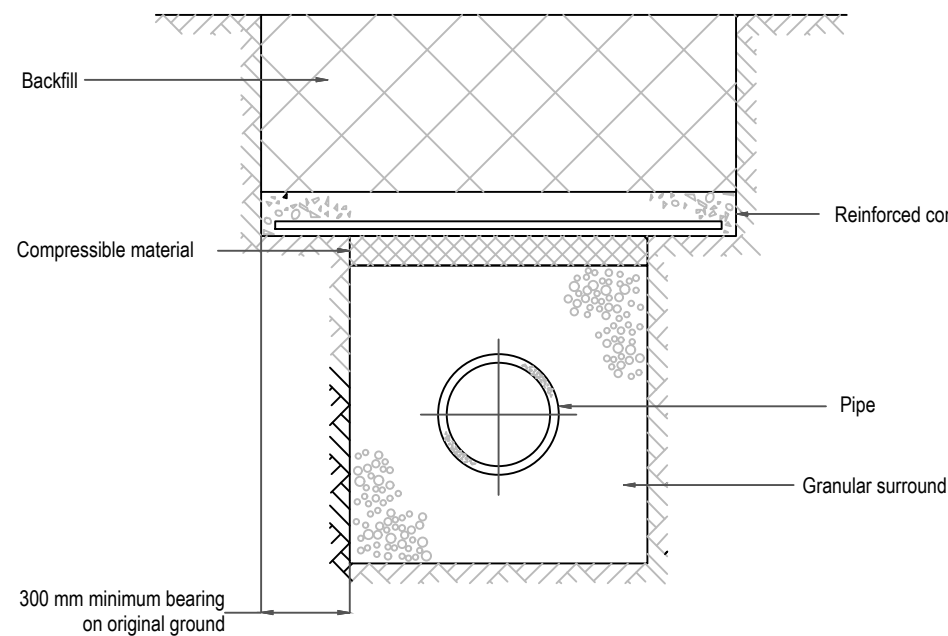


FIGURE B.25
PROTECTION OF PIPES LAID AT SHALLOW DEPTHS
Not To Scale

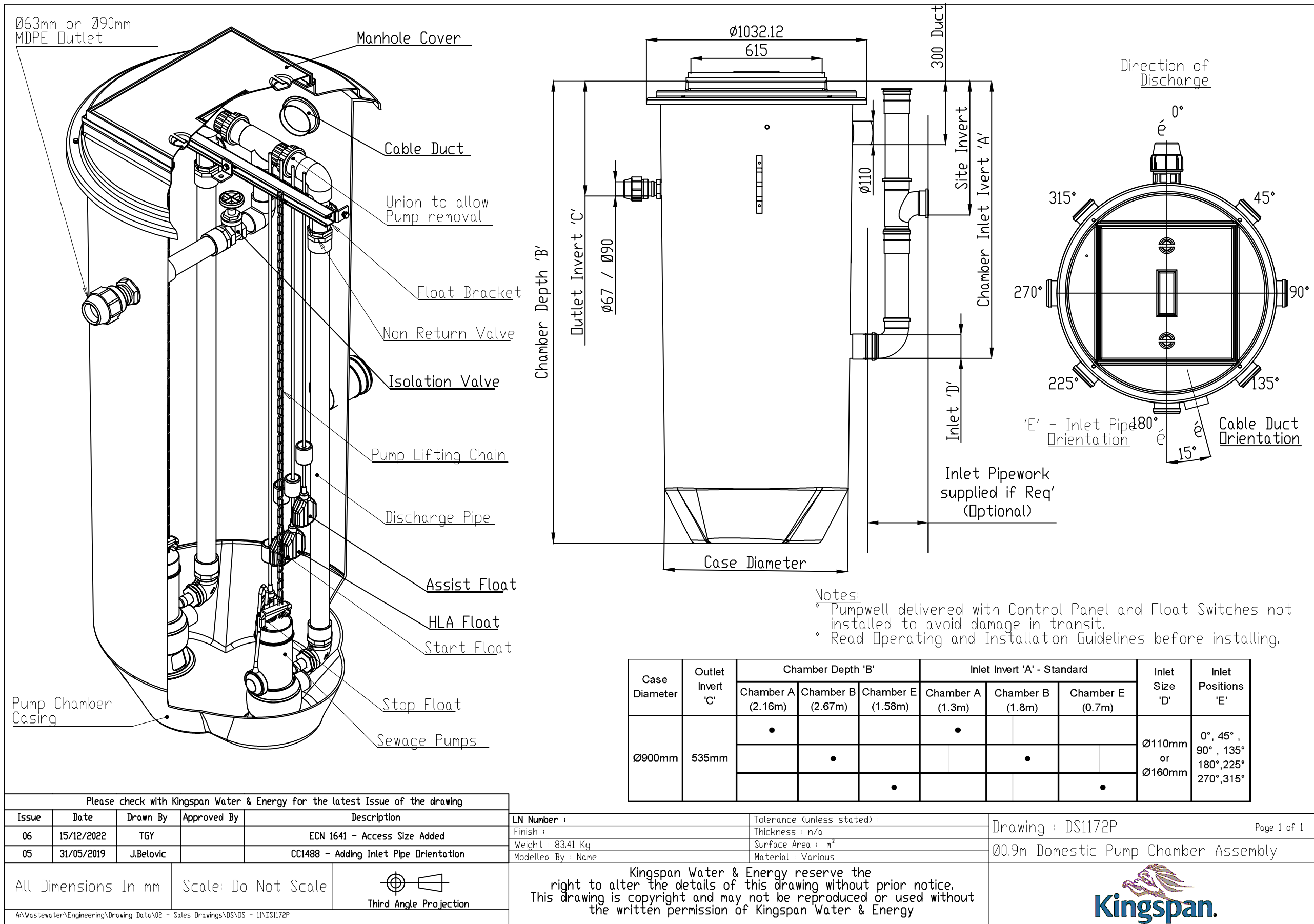


Surface Manhole Schedule

Node ID	CL (m)	Depth (m)	Sump (m)	Dia (mm)	Node Type	Manhole Type	Connections	Link ID	IL (m)	Dia (mm)	Link Type
AD1	71.780	0.600		450	Class B125	Type 4	0	C4.000	71.180	100	Circular
AD2	71.780	1.740	0.300	450	Class B125	Type 4	1	C4.000	71.077	100	Circular
3 - Soakaway	71.540	1.300			Class B125		1	C4.001	70.340	100	Circular
AD9	71.780	0.600		225	Class B125	Type 4	0	C3.000	71.180	100	Circular
AD10	71.780	0.800		450	Class B125	Type 4	1	C3.000	70.980	100	Circular
AD5	71.420	0.370		225	Class B125	Type 4	0	C3.001	70.980	100	Circular
AD6	71.420	0.470		225	Class B125	Type 4	1	C1.000	70.950	100	Circular
AD7	71.780	0.600		225	Class B125	Type 4	0	C1.001	70.950	100	Circular
AD8	71.420	0.620		450	Class B125	Type 4	1	C2.000	71.180	100	Circular
AD11	71.420	0.770		450	Class B125	Type 4	1	C1.002	70.800	100	Circular
12 - Water Harvesting Tank	71.420	0.820		450	Class B125	Type 4	1	C1.003	70.600	100	Circular
13 - Soakaway	71.420	1.300			Class B125		1	C1.004	70.120	100	Circular
AD14	70.640	0.700		450	Class B125	Type 4	0	C1.000	69.940	100	Circular
15 - Soakaway	69.610	1.110			Class B125		1	C1.000	68.500	100	Circular

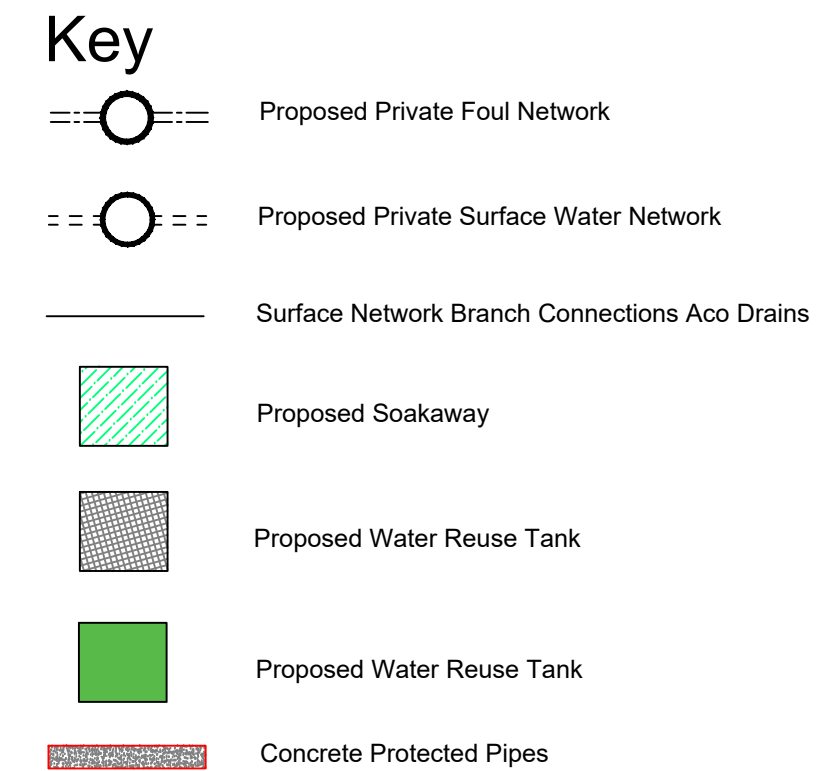
Foul Manhole Schedule

Node ID	CL (m)	Depth (m)	Dia (mm)	Node Type	Manhole Type	Connections	Link ID	IL (m)	Dia (mm)	Link Type
F1	71.420	0.500	450	Manhole	Adoptable	0	C1.000	70.920	100	Circular
F2	71.420	0.500	450	Manhole	Adoptable	0	C2.000	70.920	100	Circular
F3	71.420	0.610	450	Manhole	Adoptable	1	C1.000	70.810	100	Circular
F4 - Pump Chamber	71.420	Pipe IL 0.700 Chamber IL 1.580		Manhole	Adoptable	1	C1.001	70.810	150	Circular



- Drawing Notes**
1. Site Levels provided by Client. Levels Subject to change upon plot levels finalized.
 2. The developer must self-verify and certify that the design criteria, material standards and workmanship specifications for the proposed adoptable sewers are in accordance with those set out in "Sewers for Adoption" 7th Edition, The Ministers Standards and the requirements of the Statutory Sewerage Undertaker.
 3. E232 Manhole Cover and Frames. All chamber openings must have an impermeable surround compliant with SFA 7th Ed requirements. All access covers should comply to SFA 7th Ed dimensions and be supplied with spring/torsion assisted opening, plus have safety grilles fitted.
 4. Manhole covers and frames shall comply with the relevant provisions of BS EN 124, BS 7903 and Highways Agency Guidance Document HA 104/09. They shall be of a non-racking design which does not rely on the use of cushion inserts. All chamber openings must have an impermeable surround compliant with SFA 7th Ed requirements.
 5. As a minimum, Class D400 covers shall be used in Driveways where vehicular access is possible. All chamber openings must have an impermeable surround compliant with SFA 7th Ed requirements.
 6. Class B125 covers shall be used in footways, pedestrian areas and comparable locations. All chamber openings must have an impermeable surround compliant with SFA 7th Ed requirements.
 7. All manhole covers shall be the non-ventilating type and shall have closed keyways.
 8. All Pipes designed to be PVC-U in accordance with Sewers for Adoption 7th Edition. Approval from (Dwr Cymru) prior to construction.
 9. E2.22 Thermoplastics Structures Wall Pipe.
 11. Pipes less than or equal to 500mm in diameter shall have nominal short-term ring stiffness not less than 8kN per m² (SN8) or be subject to a quality system for storage and embedment.
 12. Nominal short term ring stiffness of 2kN per m² (SN2) is acceptable for pipes greater than 500mm in diameter, subject to structural design load calculations which shall be provided to support this.
 13. Transportation, handling, storage and laying shall be in accordance with the manufacturer's recommendations.
 14. Where a fitting is installed on a sewer length, it shall have the same internal bore as the sewer. Maximum length of pipe for laying is 3m or 10 x DN, whichever is the greater, unless welded joints are used.
 15. The contractor SHALL verify invert level of the proposed outfall PRIOR to commencement of drainage works and report levels to the Engineer for approval.
 16. All manholes to be constructed to Dwr Cymru standard adoptable details available online from <http://www.dwrcymru.com>.
 17. All pipes to have 150mm granular bed and surround 20mm clean stone or approved alternative.
 18. Pipes with cover lower than 500mm will require reinforced concrete slab protection as per Figure B.25 SFA 7th Edition. Slab to have minimum 300mm bearing each side of pipe and shall consist of 150mm depth of GEN3 Sulphate Resisting concrete complying to E4.1 of SFA7 specification. Reinforcement to be two layers of A393 reinforcement laid with 40mm cover to the underside of the slab.
 19. New Foul connection to existing DCWW Network.
 20. Design based on provided utility information. There may be other services onsite which are unknown that could affect the location apparatus.
 21. Soakaway Size based on Stone filled 95% Void Ratio Soakaway Design.

***NOT TO BE CONSTRUCTED UNTIL APPROVED BY SAB AUTHORITY. CONNECTION NOT TO BE MADE UNTIL APPROVAL AGREED WITH UTILITY PROVIDER.**



SCHEME:
Proposed New Development, High Barton, Manford, Wrexham

DRAWING TITLE:
Standard Details

DATE DRAWN:	11/01/2024	DATE CHECKED:	11/01/2024
SHEET:	1 of 2	SCALES:	As Shown
Drawing No.	CCDC0027/01/01	REV	C