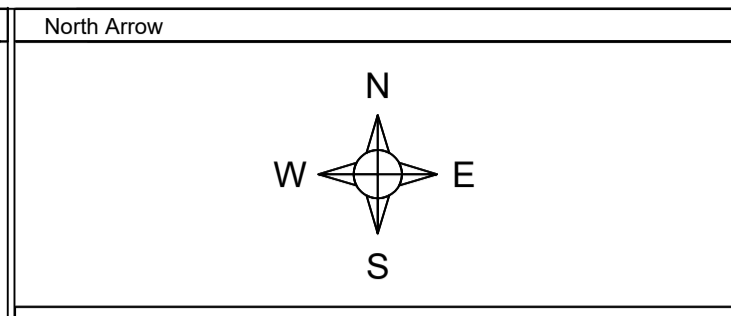
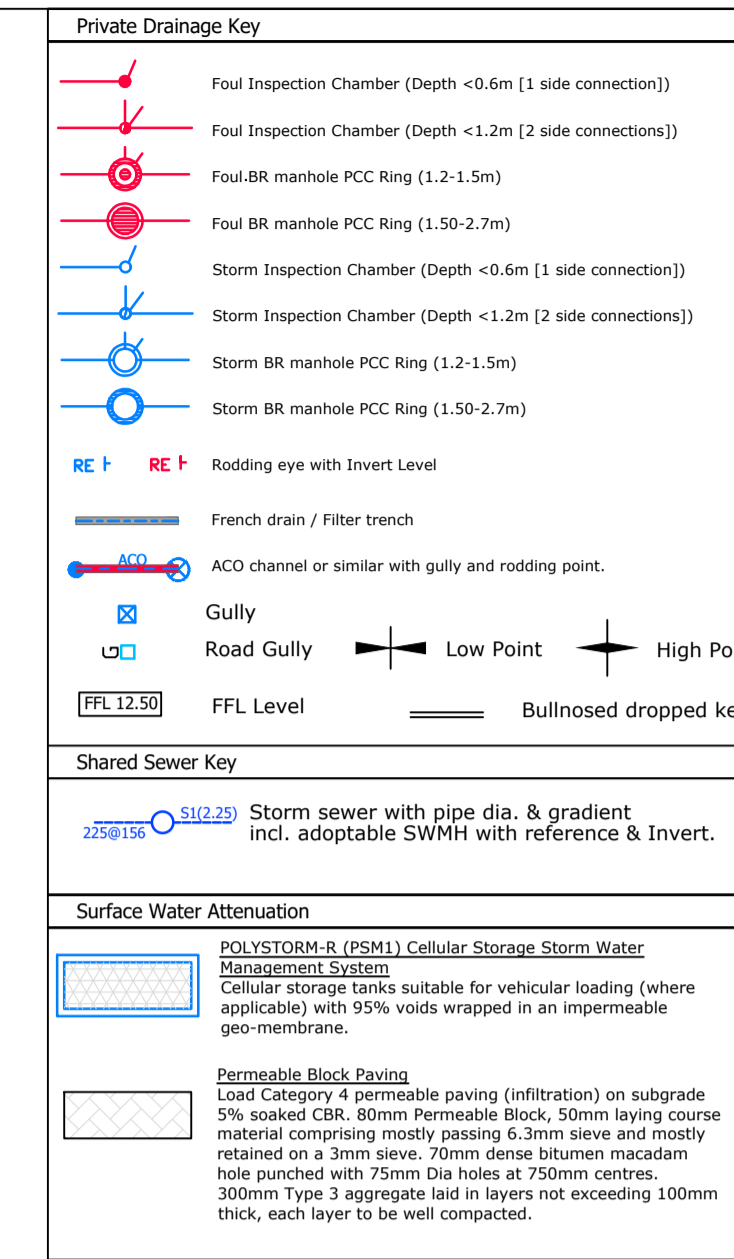


PHASE 0

MH No.	MANHOLE DIAMETER (mm)	MANHOLE TYPE	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH TO SOFFIT (m)	EASTING (m)	NORTHING (m)
S1	1350	Type C	22.500	21.583	0.892	540831.124	255730.843
S2	1350	Type C	22.467	21.475	0.971	540838.299	255747.521
S3	1350	Type C	22.918	21.307	1.311	540845.489	255761.531
S4	1200	Type B	23.288	21.141	1.847	540857.811	255783.964
S5	1200	Type B	23.211	21.075	1.836	540861.688	255801.091
S6	1350	Type C	22.640	21.016	1.474	540871.680	255823.607
S7	--	HEADWALL	22.500	20.979	1.371	540876.412	255826.565

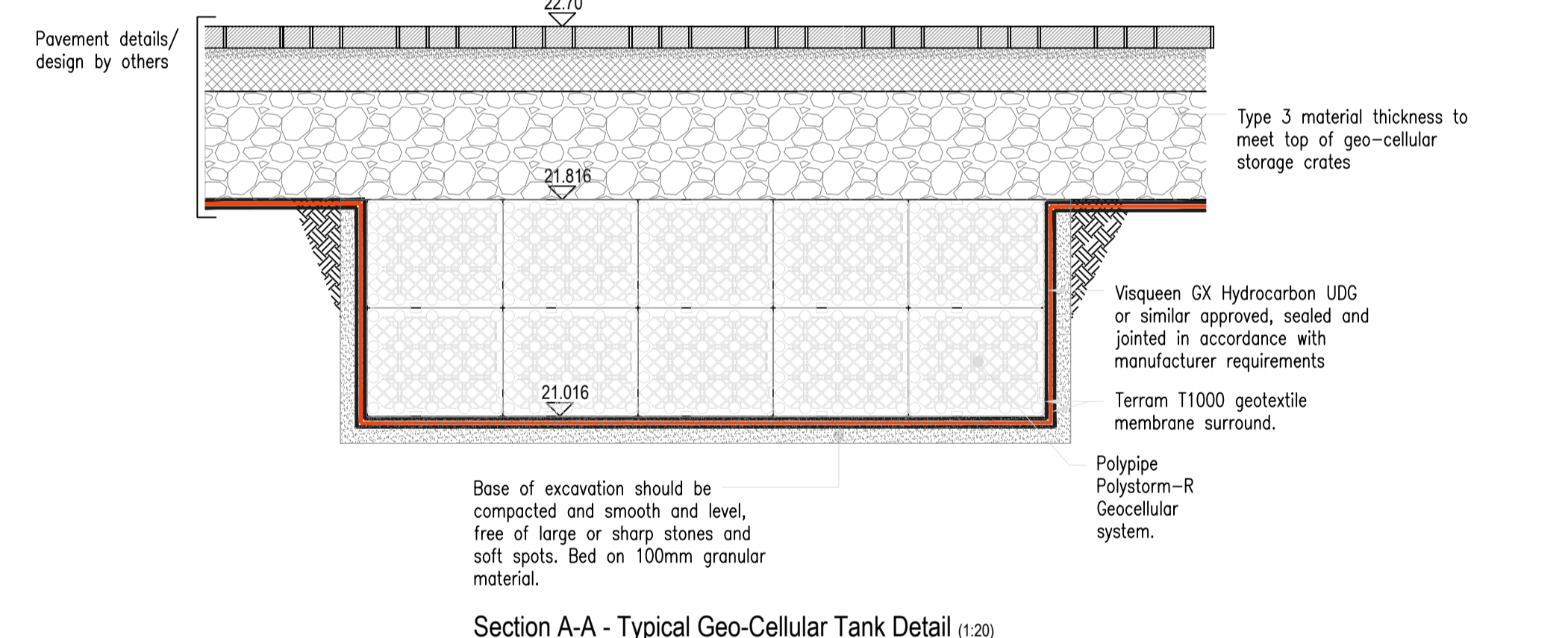
PHASE 0 (PRIVATE)

MH No.	MANHOLE DIAMETER (mm)	MANHOLE TYPE	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH TO SOFFIT (m)	EASTING (m)	NORTHING (m)
PS1	250	250 Inspection	22.500	22.041	0.359	540822.473	255733.402
PS2	250	250 Inspection	22.500	21.920	0.480	540822.521	255726.154
PS3	250	250 Inspection	22.500	21.800	0.600	540829.608	255724.661
PS4	250	250 Inspection	22.500	21.927	0.473	540844.496	255726.648
PS5	250	250 Inspection	22.500	22.006	0.394	540859.390	255734.534
PS6	250	250 Inspection	22.385	21.840	0.445	540849.892	255737.639
PS7	450	450 Inspection	22.880	21.939	0.641	540817.367	255750.226
PS8	450	450 Inspection	22.880	21.825	0.755	540824.168	255750.110
PS9	250	250 Inspection	23.000	22.730	0.170	540821.684	255770.809
PS10	450	450 Inspection	23.329	22.320	0.909	540839.243	255798.491
PS11	450	450 Inspection	23.110	21.490	0.875	540847.450	255810.760
PS12	450	450 Inspection	22.850	21.476	1.274	540863.212	255783.845
PS13	450	450 Inspection	22.850	21.776	0.974	540874.619	255785.079
PS14	450	450 Inspection	22.850	21.905	0.845	540869.410	255785.289
PS15	450	450 Inspection	22.871	21.562	1.208	540856.683	255770.383
PS16	450	450 Inspection	22.911	22.109	0.702	540879.783	255792.334
PS17	250	250 Inspection	22.753	22.394	0.260	540869.613	255797.469
PS18	450	450 Inspection	22.850	21.661	1.089	540874.766	255807.568
PS19	250	250 Inspection	22.367	21.767	0.501	540888.027	255809.997
PS20	450	450 Inspection	22.568	21.365	1.102	540874.240	255818.212
PS21	450	450 Inspection	22.85	21.580	1.170	540858.494	255829.784
PS22	250	250 Inspection	22.742	22.218	0.424	540854.523	255823.478
PS23	250	250 Inspection	22.85	22.541	0.209	540859.385	255819.206



- NOTES
- The contractor shall check all tie-ins for line and level with existing before commencing any works. The Engineer shall be notified immediately, in writing, should any errors be found.
  - Any discrepancies, of whatever nature, must be reported to the Engineer prior to the commencement or continuation of any further works.
  - All private drainage works to be in accordance with the requirements of Building Regulations 2010, Part H, "Drainage and waste disposal", (01st October 2015).
  - All pipes to be bedded and backfilled in accordance with Part H, Diagram 10. Shallow pipes shall be protected in accordance with Part H, Diagram 1.1.
  - Unless otherwise stated, all private drainage to be 100mm diameter. Gradients have been shown where there are pipe capacity issues and these should be regarded as minimums. Unless there are constraints dictating otherwise, gradients shall generally be 1 in 60. 100mm diameter pipes shall not be laid flatter than 1 in 60. 150mm diameter pipes shall not be laid flatter than 1 in 150.
  - All pipes, chambers and fittings to be installed strictly in accordance with the manufacturers instructions.
  - Pipes which run adjacent to buildings shall be installed in strict accordance with Part H, Clauses 2.23 to 2.25 and Diagram 8.
  - All private manholes, inspection chambers and drainage channels to comply with BS EN 24. Cover strengths to be:
    - Class D400 in heavy trafficked areas (access roads, service yards etc.)
    - Class C250 in lightly trafficked areas (car parks, driveways etc)
    - Class B125 in Non trafficked areas
    - Class A15 in landscaping areas
  - All drains in the vicinity of existing or proposed trees to be constructed in accordance with the requirements of HMC Practice Note 3.
  - Private drainage frames must be tied to manhole risers by use of manufacturer ties (e.g. Polypipe ref. FR500 fixing kit and FR501 black ties.) The ground works contractor will be held fully responsible for any accidents due to incorrect fitting or failure to use the correct manufacturers fixing equipment.
  - All existing land drains encountered on site during construction to be re-connected.
  - Should any departure from the slab level be considered, agreement shall be sought from the Engineer immediately and prior to commencement or continuation of any works, and should take full account of all restrictions to the slab level.
  - Garage slabs relate to the finished level of the concrete at the front entrance of the garage.
  - Where a drive slopes towards a garage there is to be a 75mm ramp up to the garage slab.
  - Maximum gradients of ganders to be 1 in 6 (unless stated otherwise), except for designed banking works.
  - All dimensions in metres unless otherwise stated.
  - As underlying ground conditions may be variable across the site the Contractor shall undertake onsite porosity tests at the location and depth of each soakaway. Tests should be undertaken in accordance with BRE365 and results forwarded to the Engineer to allow verification of designs.
  - All existing services, sewers and drains indicated on this drawing and any other related drawings are shown only indicatively, and shall have their positions and level confirmed on site by the Contractor.
  - The invert levels of all existing sewers, drains, ditches, tanks or other features and apparatus where a new connection is to be made shall have their precise position and level confirmed on site by the Contractor prior to commencement of any construction work. The results of the investigations shall be confirmed to MTC Engineering (Cambridge) Ltd so that the design can be verified.

ATTENUATION	AT-02
Lowest Cover Level (m)	22.700
Level top of Cells (m)	21.816
Base level of Cells (m)	21.016
Pipe invert (m)	21.016
Contributing area (m2)	2050
Dimension on Plan (m)	225M2 AREA
Cell Thickness (m)	0.8
Void Space (%)	95
Maximum Storage Volume (m3)	171m3



**SOAKAWAY PROTECTION:**  
Please ensure that during the construction phase all soakaways, gullies and gully laterals are protected from the ingress of silt or grit from the site. Placing a fine heavy duty geotextile under the gully grating, between it and the frame should suffice.

**NOTE:**  
At the location of the proposed lateral connection the contractor shall establish the position and depth of any existing services to prevent any clash in level and adjacent costs.

**FOR APPROVAL**

REV	DATE	DESCRIPTION/REASON FOR ISSUE	APPR

**MTC**  
ENGINEERING  
MTC Engineering (Cambridge) Ltd.  
Ground Floor, 24 High Street  
Whittlesford, Cambridgeshire, CB22 4LT  
Tel (01223) 837270, fax (01223) 835648  
E-mail office@mtcengineering.co.uk

**PROJECT**  
Burwash Manor, New Road,  
Barton, Cambridge

**TITLE**  
Planning Permission 21/02524/FUL  
Proposed Drainage Plan

ORIG	JTC	DATE	31.10.23
CHKD	SCALE	1:200 @ A1	
APPR	DRAWING NO	3144-04	
	REV -		

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