General Notes

1. Access Cover Grades BSEN 124 : 1994

Class D400 - Carriageway and parking areas.
Class B125 - Footways etc.

2. Access cover for Type B manhole to have a minimum clear opening of 600 x 600mm

2.1. Access covers located on bends or within junctions to be treated with non-slip coating, such as 'GripTop' by Saint Gobain, or similar approved

3. Permissible chamber diameters for manhole Type B

Diameter of largest pipe in Manhole(mm).	Chamber section diameter(mm).
Less than 375	1200
375 - 450	1350
500 - 700	1500
750 - 900	1800

4. Pipes built into manholes shall have a flexible joint as close as feasible to the external face of the structure and the length of the first pipe and rocker pipe shall be as shown.

Nominal diameter(mm).	Rocker Pipe length(m).
150 - 600	0.60
675 - 750	1.00
825 & Over	1.25

5. All pipes entering the bottom of the manhole to have the same soffit level unless otherwise shown on plan

6. The channel shall be preformed half round channel.

7. Where a future connection is shown in the manhole schedule the pipe shall be supplied with a stopper and subjected to to an air test.

8. All work to be carried out in connection with sewers and manholes to be in accordance with the Health and Safety guideline No. 2 'Safe Working in Sewers and Sewage Works' and United Utilities safe system of work for entry into confined spaces.

9. All components to be kite marked 2001. Any conflict between the proposals and 'United Utilities Addendum/Sewerage Sector Guidance, United Utilities addendum shall override.

10. Drainage pipelines shall be constructed using Class M concrete pipes

Notes

1. ANY drainage works constructed prior to issue of Technical Approval is entirely at the risk of the Contractor/Client.
2. The Contractor is to comply fully with the CDM regulations in the course of constructing the works.
3. All adoptable foul sewer drainage works must comply with 'Design and Construction Guidance for Foul and Surface Water Sewers, Version 2.1' and to the Satisfaction of United Utilities.
4. All foul and storm water drainage which are not subject to adoption as public sewers under a Section 104 Agreement must be constructed in accordance with the latest Building Regulations, BS8301, and, where appropriate, the relevant agreement certificates.
5. Drainage installation to also be carried out in accordance with BS EN 752: Drain and Sewer Systems Outside Buildings and BS EN 12056: Gravity Drainage Systems Inside Buildings.
6. 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 the works and take adequate precautions for their protection.
7. Any manhole covers/valves/inspection covers in existing carriageway/verges to be adjusted where necessary to suit design levels.
8. Where the works involve the obstruction of a footway, the Contractor shall provide an alternative safe footway properly signed, guarded and lit.
9. Prior to the 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. The Contractor shall also employ best practice and lay drainage upstream from the designated outfall point.
10. All drain and sewer pipes to be laid soffit to soffit, unless shown otherwise.
11. All private lateral connections shall be 100mmØ unless shown otherwise
12. 100mm Ø private foul water drainage shall be laid no flatter than 1:80. 100mmØ private surface water drainage shall be laid not flatter than 1:100. 150mmØ pipework shall be laid no flatter than 1:150.
13. All pipes with cover more than 600mm to be laid in Class S surround in pedestrian areas and more than 900mm in trafficked areas; for cover less than 600/900mm, pipes to be laid in Class Z surround. If pipework is below an RC slab, Class W or Y Surround should be used.
14. All pipes under foundations to be laid in Class Z surround.
15. The initial below ground lateral/branch pipes shall be nominal 100mmØ and laid no flater than 1:40 for foul and 1:60 for surface water. Where necessary, to avoid clashes lateral connections may be laid to nominal falls and ramp at 45 degrees to manhole invert or pipe junction.
16. Selected fill for backfilling shall consist of uniform readily compactible as-dug material, free from vegetable matter, rubbish, frozen soil and material retained on a 40mm sieve.
17. Where branch pipes are to connect directly onto a main run provide above ground rodding access at head of branch run. All gullies to be trapped and roddable. Proposed basement gully drains are to be laid no flatter than 1:100.
18. Contractor to refer to Health & Safety Executive Note 47 - Avoiding Danger from Underground Services and Document G56 - Avoiding Danger from Overhead Electirc Lines.
19. The Contractor shall be responsible for the traffic safety and management associated with the construction of the works.
20. Highways in the vicinity of the works must be kept free from mud, debris and dust falling from vehicles or the wheels of vehicles connected with the works.
21. 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 cleared.
22. The contractor shall allow for the temporary and permanent support and diversion works as necessary, to all existing services to the satisfaction of the public utilities.
23. All SVP/RWP locations are shown as indicative only. M&E consultant to confirm all SVP/RWP locations and termination positions of vent pipes.
24. The contractor is to co-ordinate manhole positions and levels with landscape drawing requirements in hard landscaped areas to tie-in with the finishes proposed.
25. Manhole to manhole runs should be kept straight and not be extended in length without reference to the Engineer.
26. The contractor is to position cover slabs/manhole openings to allow access over benching from the bottom of ladder/step iron/ rungs. Manhole covers shall be set to the same level and fall as adjacent ground.
27. Do not scale from the drawings, work only from stated dimensions or setting out details.
28. All levels are in metres above Ordnance Datum.
29. Sewers and manholes to be abandoned to be filled in accordance with United Utility requirements. Prior to abandonment, contractor to prove all connections. Where existing live connections are to be retained the contractor shall ensure that new connections are made prior to the abandonment of the sewer.
30. All redundant connections in existing manholes shall be sealed and the haunching made good.
31. Cement grout for filling drains which are to be abandoned shall be mixed in the relevant proportions as indicated in Table E 2 of the Design and Construction Guidance. Alternatively, foamed concrete may be used for filing of abandoned sewers and sewer connections, subject to the approval of United Utilities.
32. Any existing live manholes that will be located within the proposed works shall be surveyed to ascertain their structural condition and suitability. If deemed necessary, special protection and/or replacement may be required as directed.
33. Any existing live drains and sewers that will pass under the proposed buildings shall be surveyed, probed, traced, rodded, jetted and CCTV'd to ascertain structural condition at the commencement of the works. If deemed necessary, special protection may be required as directed.

REV	DATE	DESCRIPTION	DF (CE)
P00	04.03.2022	ISSUE FOR STAGE 2 TENDER	DF (CE)

REVISIONS

CLIENT
PROPERTY ALLIANCE GROUP LTD

ALLIANCE

London *Office* —
163 Tower Bridge Road,
London SE1 3LW
P /+44 (0) 7999 968 245
E / info@bgeeng.com
bgeeng.com —

BG&E

PROJECT
RENAISSANCE
CIVIL
GENERAL

STATUS
ISSUED FOR INFORMATION
NOT TO BE ISSUED FOR CONSTRUCTION

DRAWN	DESIGNED	CHECKED	APPROVED
PB	JP (CE)	DF (CE)	LJK

DATUM	GRID	SCALE
OSGB36	BNG	NTS AT A1 SIZE

TITLE
GENERAL NOTES

PROJECT No.	DRAWING No.	REV.
L20081	REN-BGE-C-GEN-005	P00

3/4/2022 1:51 PM

© BG&E Pty Limited