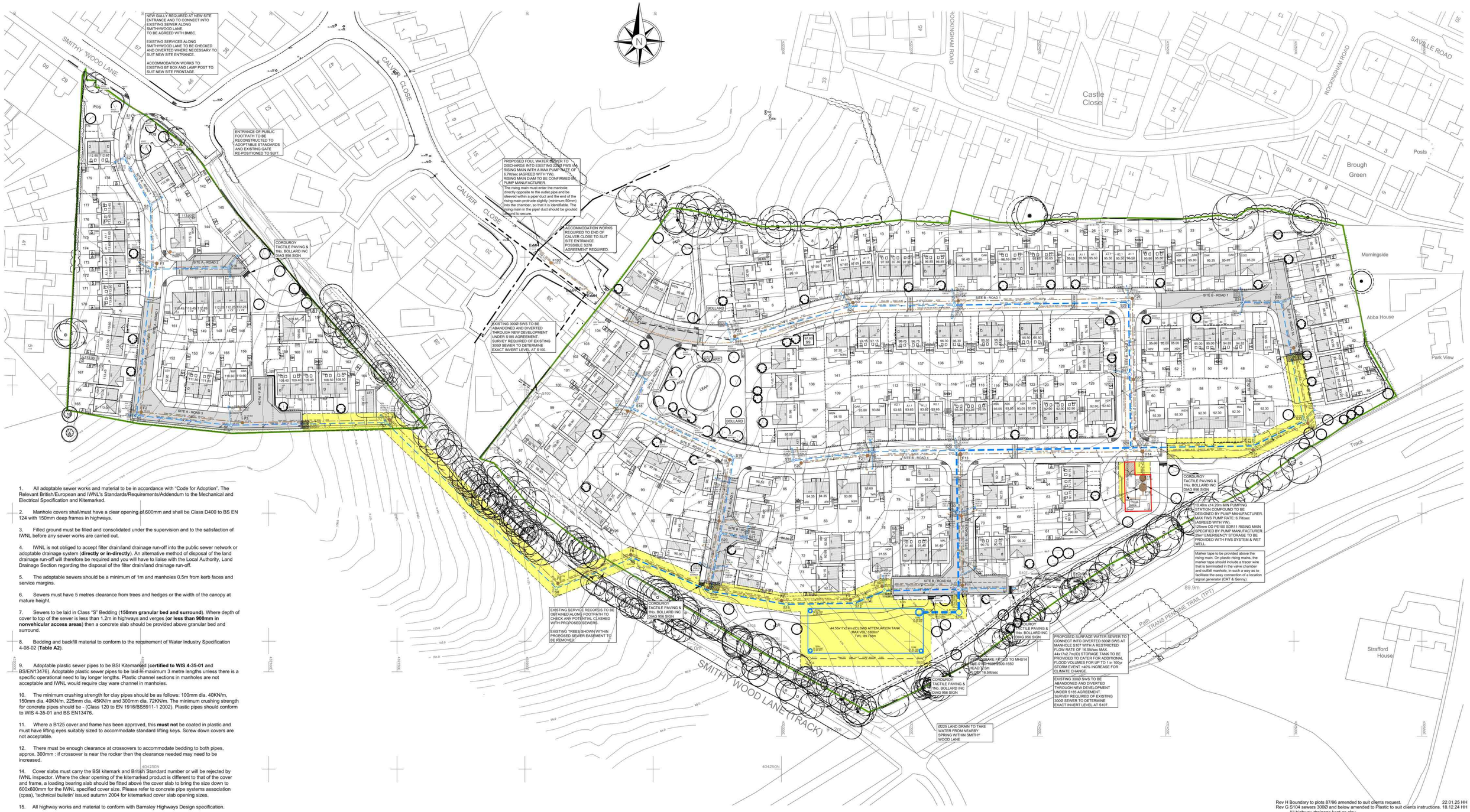

1. All adoptable sewer works and material to be in accordance with "Code for Adoption". The Relevant British/European and IWNL's Standards/Requirements/Addendum to the Mechanical and Electrical Specification and Kitemarked.

2. Manhole covers shall/must have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.

3. Filled ground must be filled and consolidated under the supervision and to the satisfaction of IWNL before any sewer works are carried out.

4. IWNL is not obliged to accept filter drain/land drainage run-off into the public sewer network or adoptable drainage system (**directly or in-directly**). An alternative method of disposal of the land drainage run-off will therefore be required and you will have to liaise with the Local Authority, Land Drainage Section regarding the disposal of the filter drain/land drainage run-off.

5. The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.

6. Sewers must have 5 metres clearance from trees and hedges or the width of the canopy at mature height.

7. Sewers to be laid in Class "S" Bedding (**150mm granular bed and surround**). Where depth of cover to top of the sewer is less than 1.2m in highways and verges (**or less than 900mm in nonvehicular access areas**) then a concrete slab should be provided above granular bed and surround.

8. Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (**Table A2**).

9. Adoptable plastic sewer pipes to be BSI Kitemarked (**certified to WIS 4-35-01** and BS/EN13476). Adoptable plastic sewer pipes to be laid in maximum 3 metre lengths unless there is a specific operational need to lay longer lengths. Plastic channel sections in manholes are not acceptable and IWNL would require clay ware channel in manholes.

10. The minimum crushing strength for clay pipes should be as follows: 100mm dia. 40KN/m, 150mm dia. 40KN/m, 225mm dia. 45KN/m and 300mm dia. 72KN/m. The minimum crushing strength for concrete pipes should be - (Class 120 to EN 1916/BS5911-1 2002). Plastic pipes should conform to WIS 4-35-01 and BS EN13476.

11. Where a B125 cover and frame has been approved, this **must not** be coated in plastic and must have lifting eyes suitably sized to accommodate standard lifting keys. Screw down covers are not acceptable.

12. There must be enough clearance at crossovers to accommodate bedding to both pipes, approx. 300mm : if crossover is near the rocker then the clearance needed may need to be increased.

14. Cover slabs must carry the BSI kitemark and British Standard number or will be rejected by IWNL inspector. Where the clear opening of the kitemarked product is different to that of the cover and frame, a loading bearing slab should be fitted above the cover slab to bring the size down to 600x600mm for the IWNL specified cover size. Please refer to concrete pipe systems association (cpsa), 'technical bulletin' issued autumn 2004 for kitemarked cover slab opening sizes.

15. All highway works and material to conform with Barnsley Highways Design specification.

16. Gully cover and frames shall be D400 ductile iron and comply with European standard BS EN 124. Those sighted in accessways and mews courts must be suitable for use in pedestrian areas.

17. Precast concrete manhole units shall comply with the relevant provisions of BS EN 1917 and BS 5911-3 and shall be manufactured from concrete with a Design Chemical Class DC-4.

18. Precast concrete manhole components shall comply with the relevant provisions of BS EN 1917 and BS 5911-3.

19. Corbel slabs shall comply with the requirements of BS 5911-3:2010+A1:2014 Table 5 and Figure 8.

20. Cover slabs should be installed with a minimum 300mm cover to finished levels to comply with National Specifications.

21. CBR's to be undertaken on road formation at 20m intervals, using a 600mm diameter plate and off the line of any drainage trenches. The results of which are to be provided to BMBC Engineer for review.

22. All Highway drainage to be CCTV surveyed and provided to BMBC Highways Engineer prior to Part 1 and prior to final surfacing.

23. Root barriers required for any trees sited within 3m of the prospectively adoptable highway.

24. Aco-drains to be sited 100-200mm from back of adoptable highway. To be filled with tarmac/concrete/block paving to developers preference.

25. No unbound material (ie. loose chippings) to be sited within 2m of the prospectively adoptable highway.

26. Footpath width to be increased locally where bollards are sited to provide min 1.2m width to both sides of bollard.

S104 Key

- Land Ownership Boundary
- S104 Foul Water Sewer
- S104 Foul Water Manhole
- S104 Surface Water Sewer
- S104 Surface Water Manhole
- S104 Drainage Easement
- Extent of Pumping Station Compound
- Extent of Rights of Perpetuity for access to Pumping station compound

Rev H Boundary to plots 87/96 amended to suit clients request. 22.01.25 HH
Rev G S104 sewers 300Ø and below amended to Plastic to suit clients instructions. 18.12.24 HH
All highway drainage kept as clay.
Rev F Plots levels & 1st lateral levels updated to suit latest engineering layout 31.10.24 HH
Rev E Site A-Road 2 to be adopted. 18.10.24 HH
Rev D Updated to suit latest road & sewer design. S20 invert level amended. 14.10.24 HH
Cover levels added and easement amended to suit IWNL comments.
Rev C SWS overflow manhole numbered 03.09.24 HH
Rev B Updated to suit approved planning layout 23.07.24 HH
Rev A 1st lateral details added. 13.09.23 HH

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Client
AVANT HOMES

Project
SMITHYWOOD LANE & CALVER CLOSE, DODWORTH

Detail
S104 AGREEMENT PLAN

Dwn	Chkd	Date	Scale	Dwg No.
HH		SEPT-23	1:500@A0	E22/8004/024H