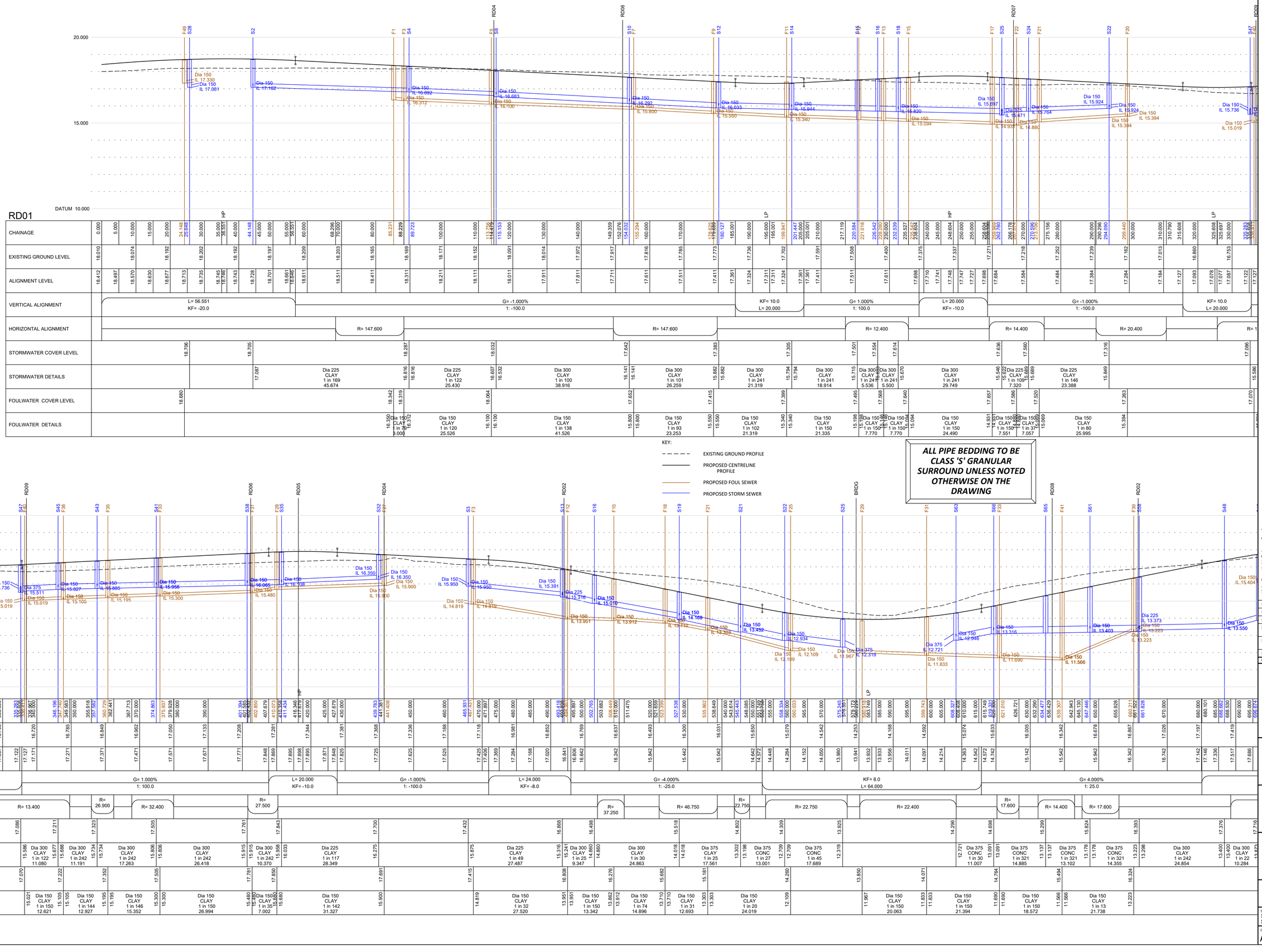

ALL PIPE BEDDING TO BE CLASS 'S' GRANULAR SURROUND UNLESS NOTED OTHERWISE ON THE DRAWING

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DRAINAGE NOTES:

1. Do not scale.
2. Refer to all other Project Drawings and supporting notes.
3. All adoptable drainage works to be constructed as detailed in Sewers for Adoption, 7th edition or as stipulated in the Water Authorities Addendum.
4. All public sewers are to be the subject of a Section 104 agreement of the Water Industry Act 1991.
5. Invert levels of existing manholes and sewers are to be checked on site before construction commences and results reported to engineers.
6. The Contractor is responsible for maintaining continuity of flow for all existing sewers within the site boundary and limit of works for the duration of the project.
7. All manhole ironworks to comply with BS EN124, and be stamped with BSI Kitemark. Covers to suit loading as below;
   - -Carriageways and Roads - D400
   - -Driveways and Verges - C250
   - -Footways and Pedestrian Areas - B125
   - -Gardens/Landscaping - A15
8. All sewer pipes, up to, and including 225mm are to be vitrified clay to BS EN295. All sewer pipes 300mm diameter and above to concrete pipes to BS EN1916.
9. All drainage shall be installed and tested strictly in accordance with the Manufacturers' printed instructions, BS EN 752, BS EN 1601, Local Water Authority requirements and the Building Regulations.
10. All bedding shall be Class S unless noted otherwise.
11. All trenches under existing and proposed public highways are to be backfilled with thoroughly compacted Type 1 granular sub-base material.
12. Drainage laid beneath roads and areas of vehicular access (car parking etc) with less than 1200mm of cover shall be encased in concrete bed and surround with associated movement joints. Drainage laid beneath paths, footways and pedestrian areas with less than 900mm of cover shall be similarly treated.
13. Chambers with outgoing pipes greater than 600mm diameter shall be fitted with guard bars, safety chains or other approved safety devices.
14. The use of precast concrete products made with sulphate resisting cement is mandatory, unless a laboratory report proves such precautions are not necessary.
15. All gully connections to use a minimum diameter pipe of 150mm and to be surrounded by a minimum of 150mm of grade C8/C10 concrete over its full length (which should not exceed 15m) and its connection to the carrier system.
16. All sewers to be abandoned must be surveyed to identify any lateral connections that are still live with any found to be reported to the Engineer.
17. All laterals to be 150mm laid at 1:80 (surface) or 1:60 (foul) unless otherwise stated.
18. All private drains to be 100mm diameter unless otherwise stated.
19. All foul and storm water drains which are not to be adopted as public sewers shall be in accordance with Document H of the Building regulations, together with NHBC Standards Chapter 5.3 and BS8301.
20. Where pipes pass through footings, retaining or screen walls, lintels to be provided over drains.
21. Where inverts are less than 0.6m deep inspection chambers (min dia. 190mm) or access fittings (225 x 100mm) to be used, elsewhere proprietary plastic, brick or pcc is to be used and sized in accordance with Table 11 of Document H of the Building Regulations [<0.6m to invert min DN300, >0.6m to invert min DN475].
22. All gullies connected direct to drains to be roddable.
23. Rainwater downpipes to be easily removable for rodding or to be provided with rodding access at ground level.
24. Unless noted otherwise FW IC's and RE's to be 0.6m below DPC level, SW IC's and RE's to be 0.45m.
25. Adequate precautions in accordance with Approved Document H and manufacturers's recommendations to be taken to protect drains (particularly plastic) at shallow depths.
26. Catchpits to be as IC's but with 300mm sump below outgoing pipe invert level except where detailed elsewhere.
27. Trees and shrubs of a large size or heavy canopy with a moderate or high water demand must not be planted within any sewer easement.
28. Gullies within and adjacent to area of site works to be suction cleansed at commencement and completion of works.
29. 1m deep root barrier of an approved type to be installed vertically along the back edging kerb of all areas of footway/ demarcation to protect from both proposed and future plantation.

PERMITTED PIPE MATERIALS

CLAYWARE (FOR SEWERS 150mm & 225mm)

All clayware pipes to be vitrified clay to BS EN 295-1:1991 and of minimum crushing strength of 45kN Class 200 for diameters of 225mm. For 150mm diameter pipes a minimum crushing strength of 28kN shall be used.

CONCRETE (FOR SEWERS 300mm AND ABOVE)
All concrete pipes are to be pipe strength Class 120 to BS 5911-1:2004 unless indicated otherwise on the drawings.

Rev	Date	Description	Drawn	Checked
P6	11.20	Drainage amended	JS	SL
P5	11.20	Drainage amended	SM	SL
P4	11.20	Drainage amended	SM	SL
P3	10.20	RD01 horizontal alignment updated with vertical alignment and drainage layout amended to suit	SM	SL
P2	06.20	RD01 horizontal alignment updated with vertical alignment and drainage layout amended to suit	SM	SL
P1	05.20	First issue	SM	SL

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WATER LANE, ANGMERING

Title
LONG SECTIONS SHEET 1

Status
FOR APPROVAL

Scale	Date	Drawn	Checked
1:500 H @ A1 1:100 V	MAY 2020	SM	SL

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Revision: P6