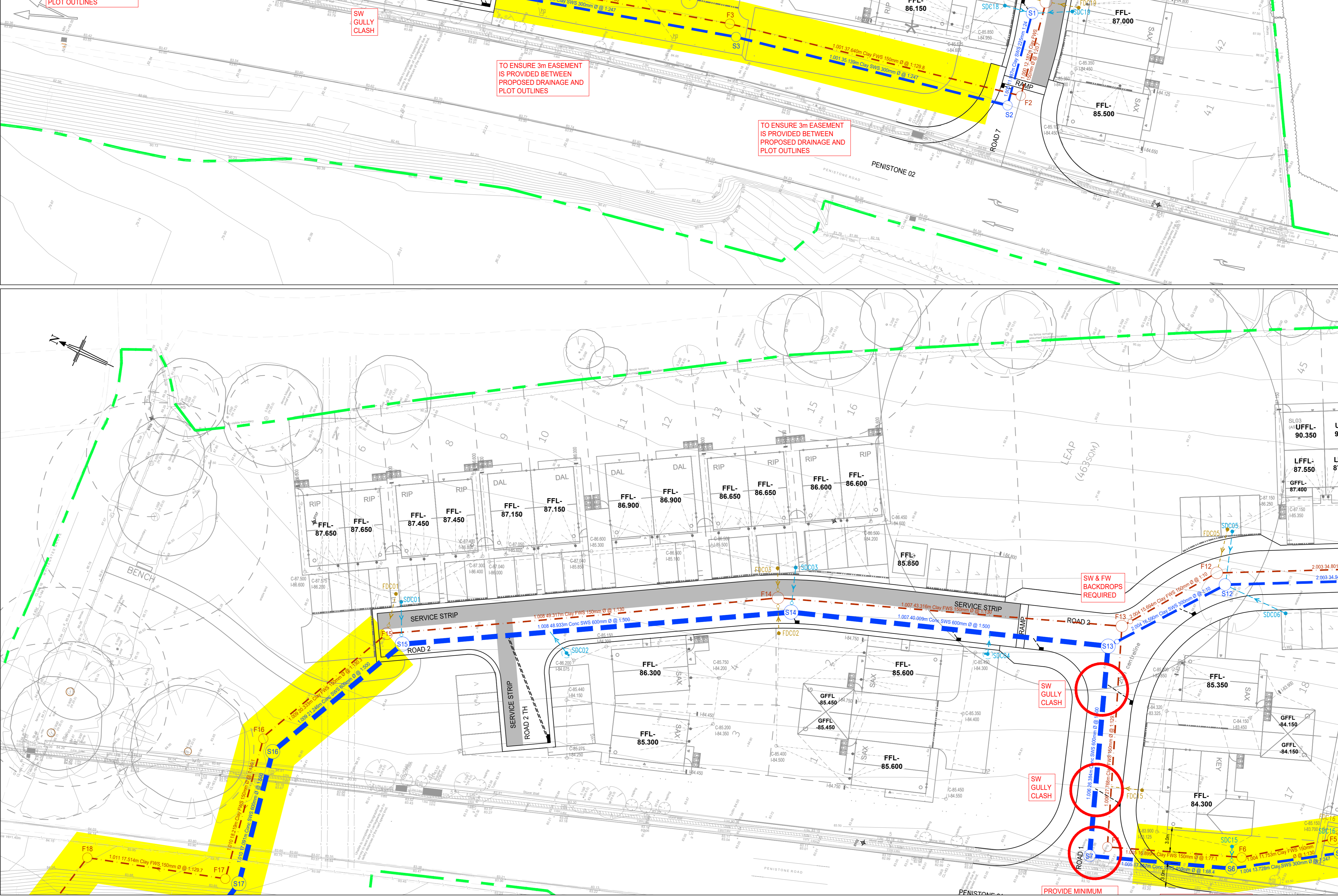
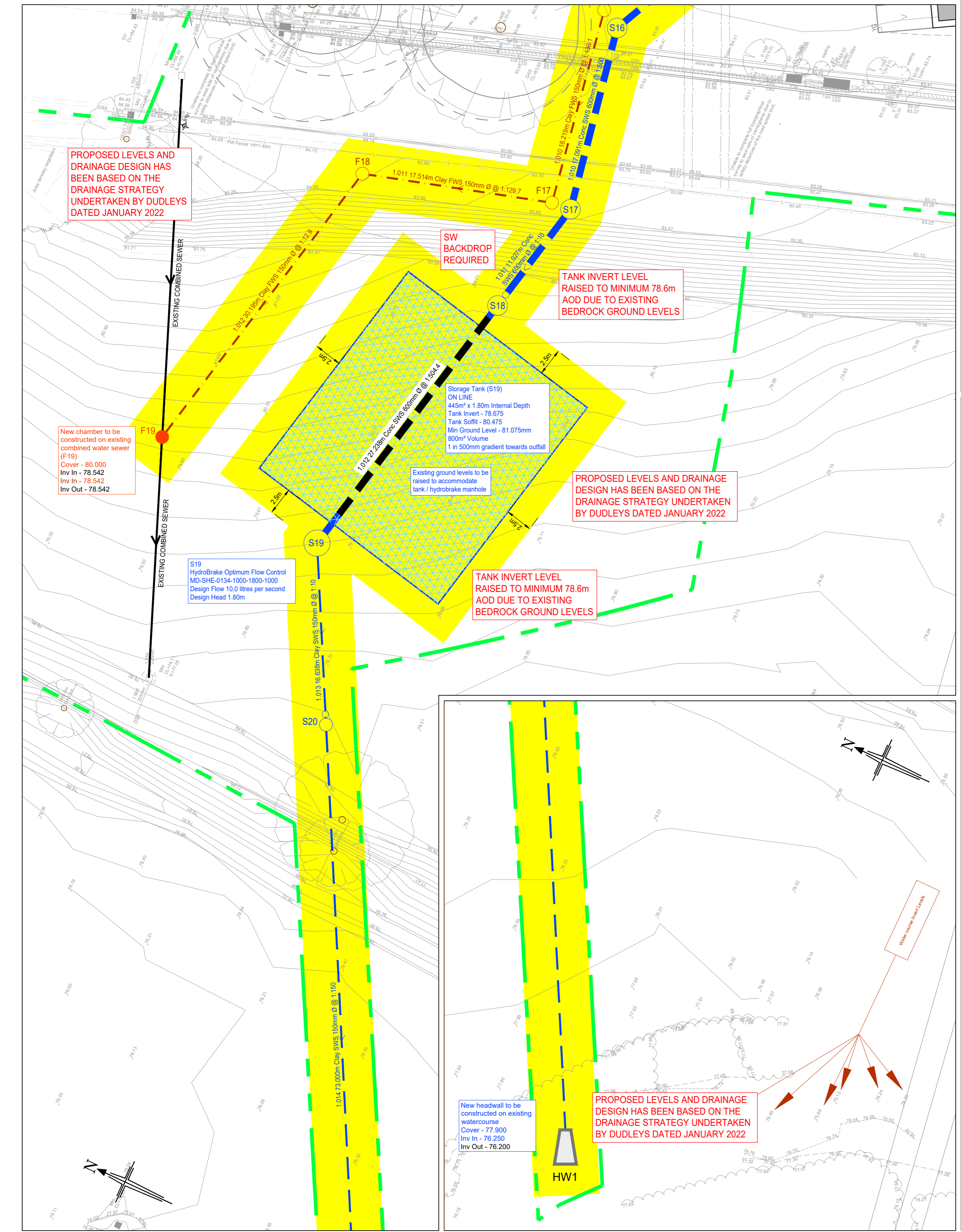


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- KEY:**
- Existing Surface Water Sewer and Manhole
  - Existing Foul Water Sewer and Manhole
  - Existing Combined Sewer and Manhole
  - Proposed Surface Water Sewer and Manhole
  - Proposed Surface Water Sewer and Manhole
  - Proposed Surface Water Flow Control Manhole
  - Proposed Surface Water Lateral Drain and Demarcation Chamber
  - Proposed Surface Water Lateral Drain and Demarcation Chamber with Backdrop
  - Proposed Private Surface Water Drain and Inspection Chamber (100mm Ø at 1 in 80 unless specified otherwise)
  - Rainwater Down Pipe
  - Roadside Eye
  - Yard Gully
  - ACO drainage Channel or Similar
  - Concrete Dished Channel and gully
  - Proposed Foul Water Sewer and Manhole
  - Proposed Foul Water Lateral Drain and Demarcation Chamber
  - Proposed Foul Water Lateral Drain and Demarcation Chamber with Backdrop
  - Proposed Foul Water Rising Man
  - Proposed Private Foul Water Drain and Inspection Chamber (100mm Ø at 1 in 40m at top of run and 1 in 80 minimum elsewhere unless specified otherwise)
  - Proposed Private Foul Water Mini Inspection Chamber
  - Soil Vent Pipe or Foul Direct Connection
  - Proposed Highway Drain and Manhole
  - Proposed Highway Drain and Manhole
  - Proposed Highway Gully and 150mm Ø Connection
  - Proposed Easement

- NOTES:**
1. All statutory undertakers engaged in highway and other works to be located and notified before work commences.
  2. A sewerage main through the works shall be protected at all times and clearly defined by suitable barriers and lights where necessary.
  3. The contractor is obliged to obtain necessary road opening and/or sewer connection licence prior to commencement of the works.
  4. One vertical joint per course of brick work shall be left open to allow drainage during construction.
  5. All statutory undertakers covers and frames to be adjusted to suit new manhole levels prior to commencement of work.
  6. All existing gullies and drain runs to be cleaned of debris and high pressure water jetted prior to surfacing of works.
  7. The existing manholes and culverts shown on this drawing are taken from various surveys, drainage plans and sewer maps. Some of the information shown is approximate and the locations shown are dependent on existing features and manhole locations shown on the survey. The exact depth and location should be verified on-site prior to commencing construction.
  8. All applicable cover works and materials to be in accordance with Sewer Service Guidelines (SSG) (2005), and the Water Authorities requirements and standards.
  9. All drainage works shall be addressed by the Water Authority to be subject to their approval prior to commencement on site.
  10. All hot tapping and repairable areas outside the adopted highway boundary to be detailed and indicated in pipe change systems and discharged into the surface water area before water structures on the public highway.
  11. Gullies should not be located in the area of dropped crossings.
  12. The chamber size of manholes with more than one connection in them may need to be increased and increment to accommodate the connections and level.
  13. Sewers to be laid in Class 'B' bedding (100mm 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 800mm in non-vehicular access areas then a concrete S100 should be provided above gullies and manholes. Refer to Sewer Service Guidelines (SSG) (2005) for details.
  14. Concrete bedding for pipes shall consist of aggregate from natural sources complying with the relevant provisions of BS 882 sized in accordance with the table above.
  15. All pipes with a diameter larger or equal to 375mm shall be concrete. Pipes with a diameter less than 375mm shall be HDPE or ductile iron.
  16. Unfilled clay pipes and fittings for sewers shall have flexible mechanical joints. Pipes for hot Taps and surface water sewers shall comply with current requirements of BS EN205 and BS 68 (Surface water open pipe).
  17. Manhole covers shall have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.
  18. All ground under floor and consolidated under the supervision and to the satisfaction of the Water Authority before any sewer works are carried out.
  19. The Water Authority is not obliged to accept foul drainage connected into the public sewer network or to accept an illegal system (leaky or not) or to accept an alternative method of disposal of foul drainage except as approved in writing by the Water Authority in accordance with the Local Authority Land Drainage Section with regard to the disposal of the foul drainage drainage asset.
  20. Cover slabs shall carry the BS 595 standard or as set by the Water Authority. Inspection. Where the clear opening of the manhole is less than 1.2m in highways and verges or less than 800mm in non-vehicular access areas then the cover slab to be the size of 600mm x 600mm for the Water Authority specification cover slab. Please refer to Concrete Pipe Systems Association (CPSA), Technical Bulletin TB001-2004 for alternatives.
  21. Suitable Resistant cement (C20-C25) and precast concrete products must be used or laboratory report proving that such products are not necessary.
  22. The acceptable covers should be a minimum of 1m and manholes 0.5m from both face and service margins.
  23. Sewers must have 50m clearance from trees and hedgerows, refer to Sewer Service Guidelines (SSG) (2005) for restrictions on tree planting adjacent to sewers).
  24. All private work to be in accordance with current building regulations.
  25. All sewerage services provided shall be to the satisfaction of the Water Authority.
  26. No building to be sited within 3.0m of a sewerage pipe.
  27. Where adoptable pipes have 150mm concrete bed and surround protection, all pipes to be provided with 150mm flexible liner.
  28. No services to be laid over or within 1.0m of an adoptable sewer.
  29. Private drainage connections not direct to manholes are to be made via 45 degree junction and not wyes.
  30. Bedding and backfill material to conform to the equipment of Water Industry Specification 428-02 (Table A2).
  31. Any proposed sewers located within 5 meters of the public sewer shall be ductile iron pipe work.



U	22.02.24	Details reviewed and amended following VE	NE	IE
C	05.12.23	Lateral clashes removed & private drainage updated	NE	IE
Rev:	Date:	Amendment:	Drawn:	Checked:
			DNB	CAH

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Client: Newnet Homes

Status:  Approved  Issued for Construction  As Built

Scale: 1:250  
 Size: A2 - 1189 x 841  
 Drawn: NB  
 Check: CME  
 Issue: Appvt

Project: Residential Development  
 Penistone Road, Fenay Bridge

Title: Drainage

Drawing No: 2249150001  
 Job No: 22-491  
 Revision: D  
 Date: 06.02.23

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 CHAS  
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