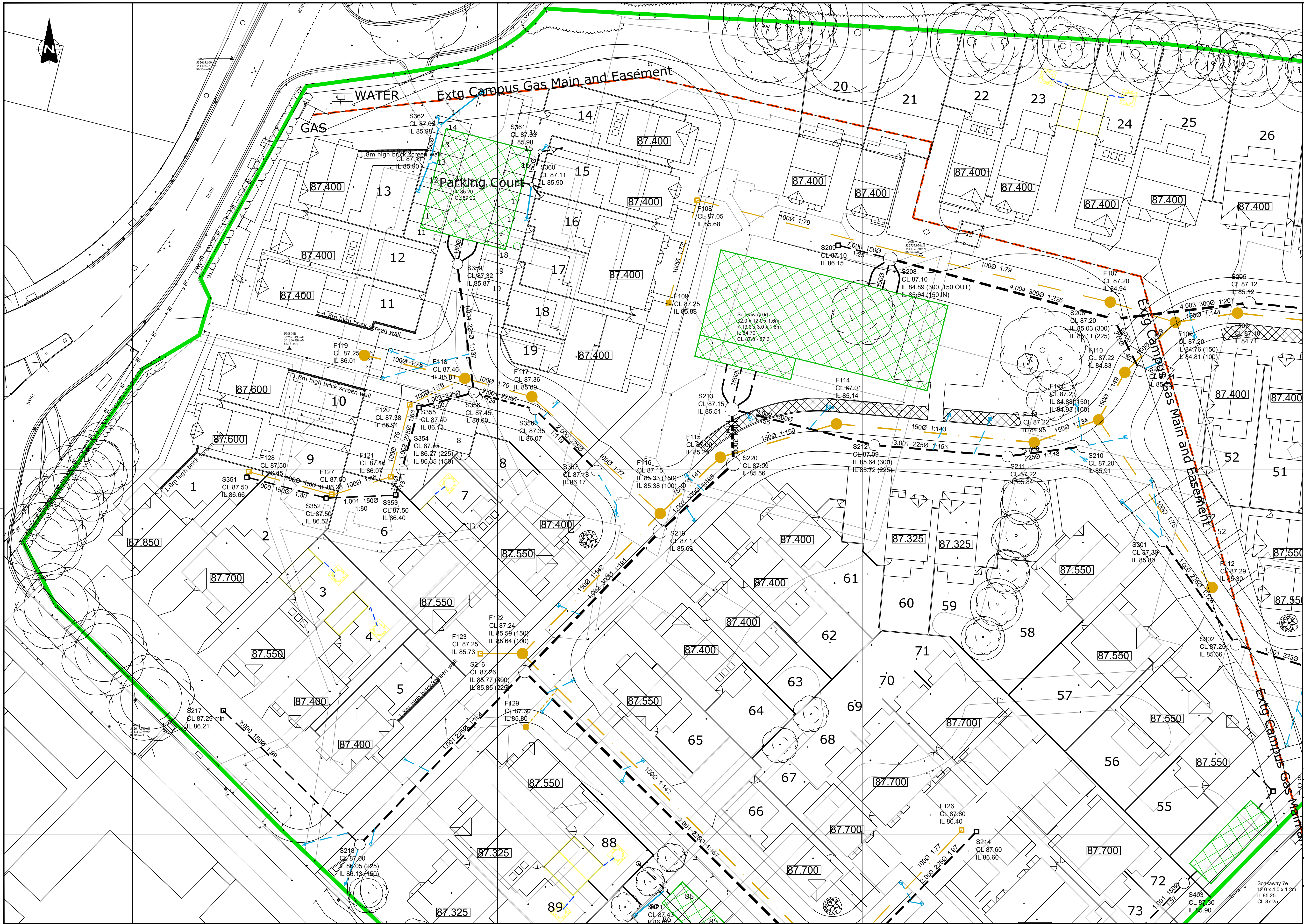




- NOTES:
1. Do not scale from this drawing. If in doubt refer to the Engineer for clarification.
 2. All levels in mAOD unless otherwise specified. All dimensions in metres unless otherwise specified.
 3. Scheme layout from DS Jones & Co drawing DSJ10408.10.
 4. Drainage works adoptable by Dwr Cymru shall comply with *The Welsh Ministers standards for new gravity foul sewers and lateral drains or Sewers for Adoption 7th Edition (SfA)* as appropriate.
 5. Private drainage works shall comply with the *Building Standards part H*, SHW and with FCC requirements as appropriate.
 6. Private drainage layouts are shown on dwgs 109540-521 - 532.
 7. Drainage construction details are shown on dwgs 109540-510 - 513.
 8. Trunk-sewer long sections are shown on dwgs 109540-533 - 536.
 9. Manhole cover levels are listed to match the wearing-course finished surface. Where new roads are constructed initially to base-course, gully gratings and manhole covers are to be set to match (40mm lower than shown) unless instructed otherwise.
 10. All mortar, in-situ or precast concrete must use sulphate-resisting Portland cement or alternative as per clause E2.9 (SfA). The BRE SD1 ratings are DS-1 and AC-1.
 11. Manhole covers for adoptable manholes in estate roads to be rated at D400 (to BS EN124) and kite-marked. Covers to inspection chambers in driveways or other off-road areas to be rated at B125 and kite-marked.
 12. All pre-cast concrete manholes to be to BS EN1916:2002 / BS 5911-1:2002 and kite-marked.
 13. Manhole cover frames shall be seated on between 2-4 courses of Class B engineering brickwork or pre-cast concrete seating rings to regulate the height between the cover surface and the underside of the cover slab. Mortar to cover frames shall be a polyester resin mortar (cl. E6.7, SfA) in all roads except residential cul-de-sacs, for which cement/sand (1:3) mortar may be used.
 14. Manhole covers and access openings shall be orientated to ensure adequate chamber access in relation to the manhole's internal layout.
 15. All Vitrified Clay pipes to be to BS EN 256 and kite-marked. VC pipe strength class to be minimum 34kN/m in accordance with Table 5, BS EN295-1 for pipes up to 150 dia.
 16. All concrete pipes to be to BS EN1916 and BS5911-1 and kite-marked. Concrete pipe strength to be Class 120 in accordance with Table 8 BS5911-1.
 17. PE and PVCu pipes to comply with *Sewers for Adoption 7th Edition*.
 18. Bedding fill for Type S bed & surround to be mixed gravel in accordance with WIS 4-08.01, sized as below:
- | Pipe Dia | Aggregate size |
|----------|--------------------|
| 100 | 10mm (single-size) |
| 150 | 5 - 14mm |
| 225-300 | 5 - 14 / 20mm |
19. Sewers beneath roads and communal parking areas to be backfilled above the bed & surround with Type 1 or Type 2 granular fill laid and compacted in layers not exceeding 0.3m thick up to the underside of the pavement construction. Sewer lengths beneath landscaped areas may be backfilled with selected excavated fill laid and compacted in layers to suit the material, subject to the Engineer's prior approval of the proposed backfill material.

- KEY:
- Surface-water sewer & manhole/inspection chamber
 - S.104 foul-water sewer & manhole/inspection chamber
 - Proprietary cellular infiltration & storage feature
 - S104 boundary
 - Dwr Cymru easement
 - Finished floor level

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Client

Edwards Homes Ltd

Project

Plas Coch North Quarter
Glyndwr University, Wrexham

Title

S.104 Drainage layout
Sheet 1 of 3

Drawn	Checked	Approved
T Dawe	G Pellegrino	D Weir
Original dep. size	Date	Scale
A1	Aug 2021	1:250
Drawing Status	Drawing Number	Rev.
Approval	109540-501	-

Not approved for construction

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