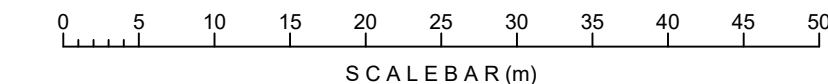
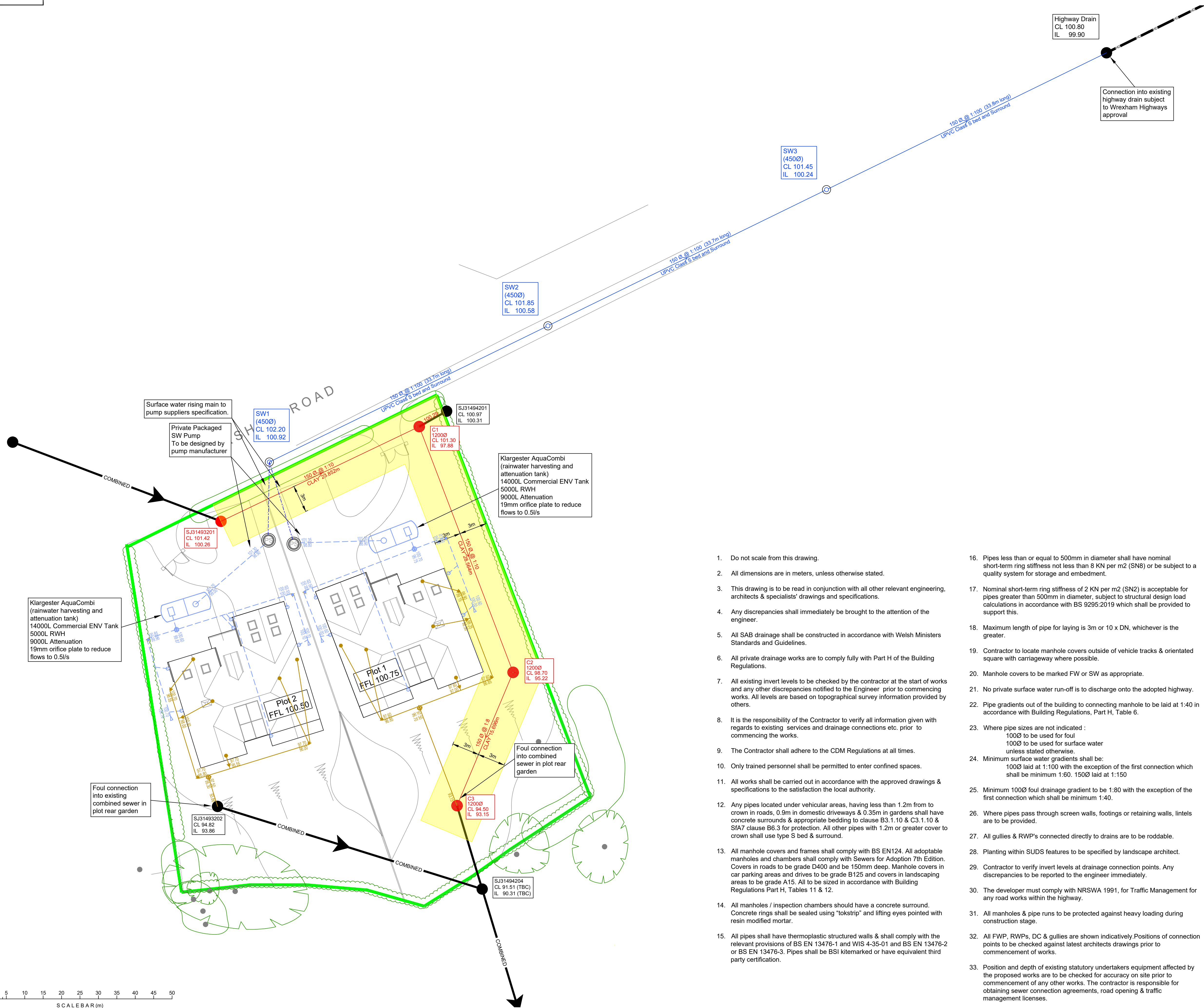


DO NOT SCALE



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Legend

- Site Boundary
- Existing Combined Sewer
- Proposed Private Surface Water
- Proposed Private Foul
- Adoptable SABS Surface Water
- SW Rising Main
- Private Packaged SW Pump Station (designed by others)
- Plot Slab Level
- Combined Sewer Diversion
- 1400L Commercial ENV Tank
- 6m Sewer Easement

PLANNING



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Client

PAUL WOOLLAM

Project

BERSHAM ROAD, BERSHAM,  
WREXHAM.

Title

Private Drainage Layout

| DRAWING NUMBER | SCALE at A1 | 1:200 | DATE    | 12.09.23 | REVISION |
|----------------|-------------|-------|---------|----------|----------|
| 8134 / 08      | DRAWN       | PW    | CHECKED | AJ       | -        |

- Do not scale from this drawing.
- All dimensions are in meters, unless otherwise stated.
- This drawing is to be read in conjunction with all other relevant engineering, architects & specialists' drawings and specifications.
- Any discrepancies shall immediately be brought to the attention of the engineer.
- All SAB drainage shall be constructed in accordance with Welsh Ministers Standards and Guidelines.
- All private drainage works are to comply fully with Part H of the Building Regulations.
- All existing invert levels to be checked by the contractor at the start of works and any other discrepancies notified to the Engineer prior to commencing works. All levels are based on topographical survey information provided by others.
- It is the responsibility of the Contractor to verify all information given with regards to existing services and drainage connections etc. prior to commencing the works.
- The Contractor shall adhere to the CDM Regulations at all times.
- Only trained personnel shall be permitted to enter confined spaces.
- All works shall be carried out in accordance with the approved drawings & specifications to the satisfaction of the local authority.
- Any pipes located under vehicular areas, having less than 1.2m from to crown in roads, 0.9m in domestic driveways & 0.35m in gardens shall have concrete surrounds & appropriate bedding to clause B3.1.10 & C3.1.10 & SFA7 clause B6.3 for protection. All other pipes with 1.2m or greater cover to crown shall use type S bed & surround.
- All manhole covers and frames shall comply with BS EN124. All adoptable manholes and chambers shall comply with Sewers for Adoption 7th Edition. Covers in roads to be grade D400 and be 150mm deep. Manhole covers in car parking areas and drives to be grade B125 and covers in landscaping areas to be grade A15. All to be sized in accordance with Building Regulations Part H, Tables 11 & 12.
- All manholes / inspection chambers should have a concrete surround. Concrete rings shall be sealed using 'tokstrip' and lifting eyes pointed with resin modified mortar.
- All pipes shall have thermoplastic structured walls & shall comply with the relevant provisions of BS EN 13476-1 and WIS 4-35-01 and BS EN 13476-2 or BS EN 13476-3. Pipes shall be BSI kitemarked or have equivalent third party certification.
- Pipes less than or equal to 500mm in diameter shall have nominal short-term ring stiffness not less than 8 KN per m2 (SN8) or be subject to a quality system for storage and embedment.
- Nominal short-term ring stiffness of 2 KN per m2 (SN2) is acceptable for pipes greater than 500mm in diameter, subject to structural design load calculations in accordance with BS 9295:2019 which shall be provided to support this.
- Maximum length of pipe for laying is 3m or 10 x DN, whichever is the greater.
- Contractor to locate manhole covers outside of vehicle tracks & orientated square with carriageway where possible.
- Manhole covers to be marked FW or SW as appropriate.
- No private surface water run-off is to discharge onto the adopted highway.
- Pipe gradients out of the building to connecting manhole to be laid at 1:40 in accordance with Building Regulations, Part H, Table 6.
- Where pipe sizes are not indicated :  
100Ø to be used for foul  
100Ø to be used for surface water unless stated otherwise.
- Minimum surface water gradients shall be:  
100Ø laid at 1:100 with the exception of the first connection which shall be minimum 1:60. 150Ø laid at 1:150
- Minimum 100Ø foul drainage gradient to be 1:80 with the exception of the first connection which shall be minimum 1:40.
- Where pipes pass through screen walls, footings or retaining walls, lintels are to be provided.
- All gullies & RWP's connected directly to drains are to be roddable.
- Planting within SUDS features to be specified by landscape architect.
- Contractor to verify invert levels at drainage connection points. Any discrepancies to be reported to the engineer immediately.
- The developer must comply with NRSWA 1991, for Traffic Management for any road works within the highway.
- All manholes & pipe runs to be protected against heavy loading during construction stage.
- All FWP, RWP's, DC & gullies are shown indicatively. Positions of connection points to be checked against latest architects drawings prior to commencement of works.
- Position and depth of existing statutory undertakers equipment affected by the proposed works are to be checked for accuracy on site prior to commencement of any other works. The contractor is responsible for obtaining sewer connection agreements, road opening & traffic management licenses.