

General Notes

Do not scale this drawing. If in doubt, consult with the Engineer

- This drawing is to be read in conjunction with all other relevant Engineers, Architects and Specialist design drawings and specifications.
- All dimensions and levels are in metres unless noted otherwise.
- This drawing is for information purposes and all information displayed is subject to detailed design.
- Cover levels noted are indicative or best design levels. Constructed levels should take into account as-built surfacing levels and gradients.
- The Contractor shall be responsible for checking all fit-ins for line and level with existing foul and surface water systems before commencing any works.
- The Engineer shall be notified immediately, in writing, should any errors or discrepancies be found prior to the commencement or continuation of any works. All work to be carried out in accordance with current British Standards, Building Regulations and NHBC Standards.
- All drainage work is to be strictly in accordance with the requirements of the Building Regulations 2010, Approved Document Part H, "Drainage and waste disposal".
- It is the responsibility of the Contractor to execute the works at all times in strict accordance with the requirements of the Health and Safety at Work Act 1974, and the C.D.M. Regulations 2015. The Contractor will be deemed to have allowed for full compliance, including full liaison with the Principle Contractor, within his rates.
- All existing land drains encountered on site during construction are to be re-connected.
- Should any departure from the proposed slab or external levels be considered, agreement shall be sought from the Engineer immediately and prior to the commencement or continuation of any works. Proposals should take full account of all restrictions to the slab level.
- Temporary protection to be provided to drainage work during construction as necessary.
- Power supply to separator/treatment units, alarm, panel, vent etc to be provided by contractor in accordance with manufacturers recommendations.
- Topographical survey shown is based upon OS mapping surveys - no topographical survey yet available.
- Architects layout shown is based upon MHA architect Layout drawing no. 1JD02 SK001 This layout may be subject to change and is intended for indicative purposes only.

Specification Notes

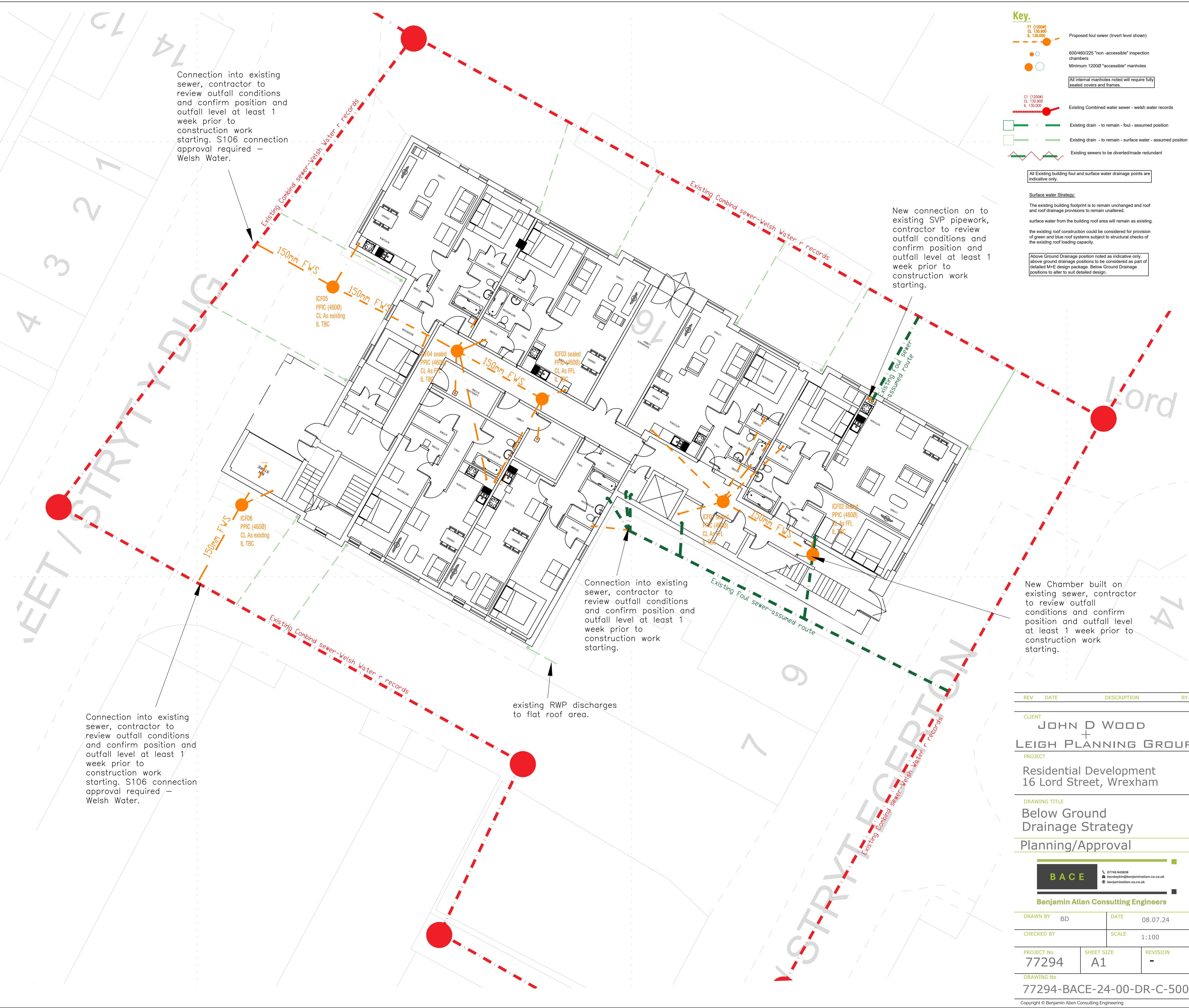
- The following types of pipe may be used unless noted or agreed otherwise:
 - Pipes up to 300mm diameter to be Structured Walled to BS EN 13476, Polypropylene to BS EN 1852 or PVC-U to BS EN 1401.
 - Pipes 300mm diameter or over to be Concrete to BS 5911.
- Both Clay and Concrete pipes shall be strength class 120 (100/150mm min crushing strength 28kN/m). Thermoplastic pipes shall have a minimum ring stiffness of SM4.
- Pipes which run adjacent to buildings shall be installed in strict accordance with Part H, Clauses 2.23 to 2.25.
- All pipes, chambers and fittings shall be installed, bedded and backfilled in accordance with the manufacturers instructions subject to the following minimum requirements:

| Pipe Location | Cover to crown | Clay/Concrete Pipe Bedding | Plastic Pipe Bedding | Backfill |
|---------------------------|----------------|----------------------------|----------------------|--------------------------|
| Roads (HGV) | >1.2m | Class S | Class S (S1or2) | Type 1 Granular |
| | <1.2m | Class 'A' (Concrete) | Class 'A' (Concrete) | |
| Drives / car parking | >0.9m | Class S | Class S (S1or2) | Type 1 Granular |
| | <0.9m | Class 'A' (Concrete) | Class 'A' (Concrete) | |
| Hard and soft Landscaping | >0.6m | Class S | Class S (S1or2) | Suitable as dug material |
| | <0.6m | Class 'A' (Concrete) | Class 'A' (Concrete) | |

- The first flexible joint in pipes adjoining a manhole shall be a maximum length of 600mm from the inside face of the manhole, connecting to a rocker pipe. The length of the rocker pipe shall be as follows:

| Pipe diameter | Length of Rocker pipe |
|---------------|-----------------------|
| 150-600mm | 600mm |
| 675-750mm | 1000mm |
| over 750mm | 1250mm |

- All manholes and inspection chambers situated in areas subject to vehicular loading to have class D400 covers and frames to BS EN124 and those not subject to vehicular loading to have class minimum class B125 covers and frames.
- Drainage frames must be tied to manhole risers by use of manufacturers ties (eg. Polypipe ref FR500 (long tie) and FR501 (black ties)). The ground works contractor will be held fully responsible for any accidents due to incorrect fitting or failure to use the correct manufacturers fixing equipment.
- All drains in the vicinity of existing or proposed trees to be constructed in accordance with the requirements of NHBC Practice Note 3.



Connection into existing sewer, contractor to review outfall conditions and confirm position and outfall level at least 1 week prior to construction work starting. S106 connection approval required – Welsh Water.

New connection on to existing SVP pipework, contractor to review outfall conditions and confirm position and outfall level at least 1 week prior to construction work starting.

Connection into existing sewer, contractor to review outfall conditions and confirm position and outfall level at least 1 week prior to construction work starting.

Connection into existing sewer, contractor to review outfall conditions and confirm position and outfall level at least 1 week prior to construction work starting. S106 connection approval required – Welsh Water.

existing RWP discharges to flat roof area.

Key.

- FI (1200) CL 130.900 E 130.000 Proposed foul sewer (invert level shown)
- 600/460/225 "non-accessible" inspection chambers
- Minimum 1200/3 "accessible" manholes
- All internal manholes noted will require fully sealed covers and frames.
- CI (1200) CL 130.900 E 130.000 Existing Combined water sewer - Welsh water records
- Existing drain - to remain - foul - assumed position
- Existing drain - to remain - surface water - assumed position
- Existing sewers to be diverted/made redundant

All Existing building foul and surface water drainage points are indicative only.

Surface water Strategy.
The existing building footprint is to remain unchanged and roof and roof drainage provisions to remain unaltered.
surface water from the building roof area will remain as existing.
the existing roof construction could be considered for provision of green and blue roof systems subject to structural checks of the existing roof loading capacity.
Above Ground Drainage position noted as indicative only, above ground drainage positions to be considered as part of detailed M+E design package. Below Ground Drainage positions to alter to suit detailed design.

New Chamber built on existing sewer, contractor to review outfall conditions and confirm position and outfall level at least 1 week prior to construction work starting.

| REV | DATE | DESCRIPTION | BY |
|-----|------|-------------|----|
| | | | |

CLIENT
JOHN D WOOD
LEIGH PLANNING GROUP

PROJECT
Residential Development
16 Lord Street, Wrexham

DRAWING TITLE
Below Ground Drainage Strategy
Planning/Approval

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|------------|---------------------------|------------|----------|
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