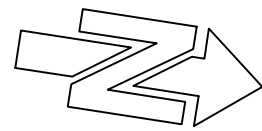
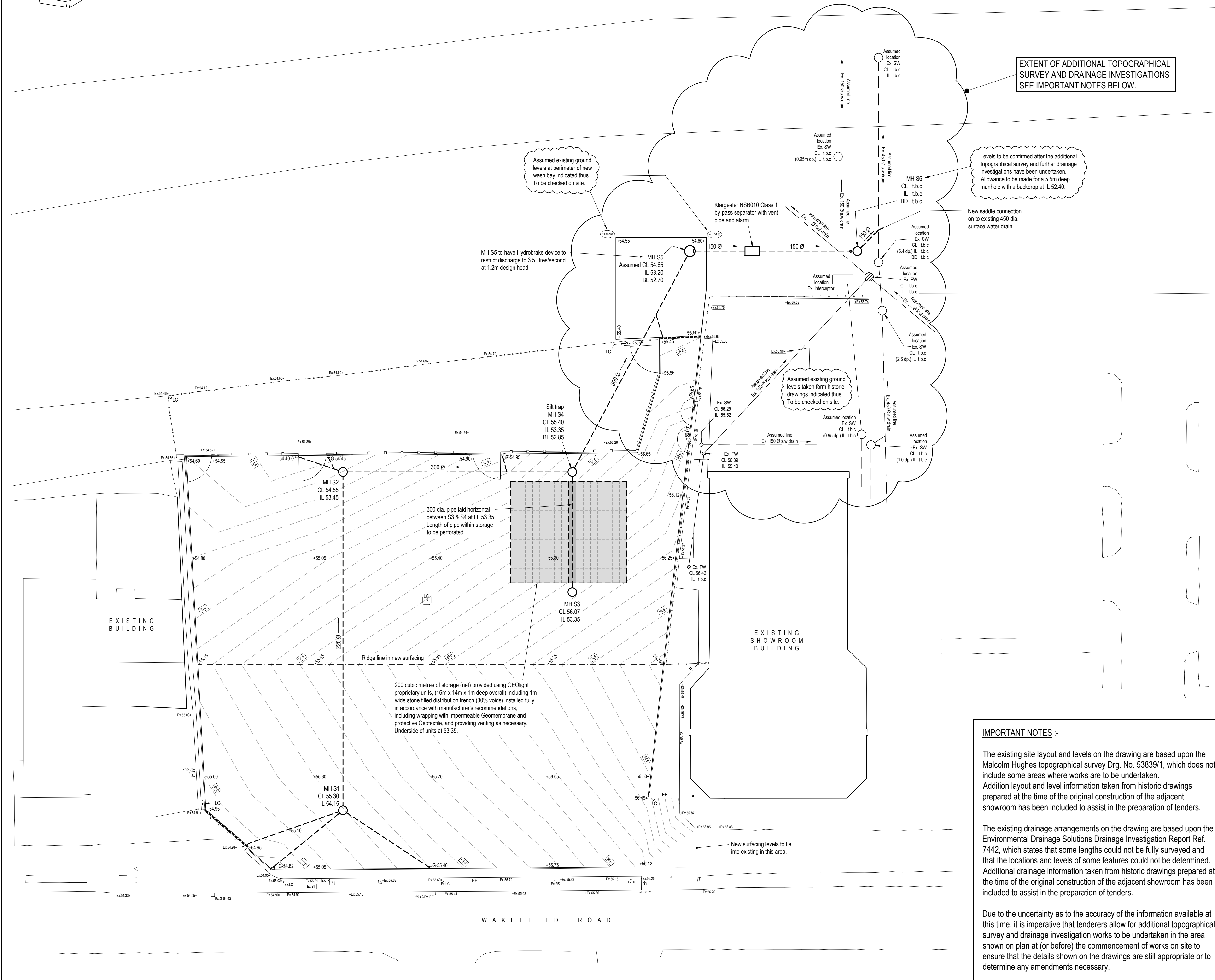




EXTENT OF ADDITIONAL TOPOGRAPHICAL SURVEY AND DRAINAGE INVESTIGATIONS  
SEE IMPORTANT NOTES BELOW.

Levels to be confirmed after the additional topographical survey and further drainage investigations have been undertaken. Allowance to be made for a 5.5m deep manhole with a backdrop at IL 52.40.

Assumed existing ground levels at perimeter of new wash bay indicated thus. To be checked on site.

MH S5 to have Hydrobrake device to restrict discharge to 3.5 litres/second at 1.2m design head.

Assumed existing ground levels taken from historic drawings indicated thus. To be checked on site.

300 dia. pipe laid horizontal between S3 & S4 at IL 53.35. Length of pipe within storage to be perforated.

200 cubic metres of storage (net) provided using GEOlight proprietary units, (16m x 14m x 1m deep overall) including 1m wide stone filled distribution trench (30% voids) installed fully in accordance with manufacturer's recommendations, including wrapping with impermeable Geomembrane and protective Geotextile, and providing venting as necessary. Underside of units at S3.35.

IMPORTANT NOTES :-

The existing site layout and levels on the drawing are based upon the Malcolm Hughes topographical survey Drg. No. 53839/1, which does not include some areas where works are to be undertaken. Addition layout and level information taken from historic drawings prepared at the time of the original construction of the adjacent showroom has been included to assist in the preparation of tenders.

The existing drainage arrangements on the drawing are based upon the Environmental Drainage Solutions Drainage Investigation Report Ref. 7442, which states that some lengths could not be fully surveyed and that the locations and levels of some features could not be determined. Additional drainage information taken from historic drawings prepared at the time of the original construction of the adjacent showroom has been included to assist in the preparation of tenders.

Due to the uncertainty as to the accuracy of the information available at this time, it is imperative that tenderers allow for additional topographical survey and drainage investigation works to be undertaken in the area shown on plan at (or before) the commencement of works on site to ensure that the details shown on the drawings are still appropriate or to determine any amendments necessary.

INFORMATION WITHIN THIS DRAWING IS NOT NECESSARILY PRODUCED TO SCALE. ALWAYS USE FIGURED DIMENSIONS AND CO-ORDINATES - IF IN DOUBT, ASK.

NOTES

- This drawing to be read in conjunction with Eastwood & Partner's drawing number 44407/012 & 016.
- All pipes shall be either :-
  - A - Vitrified clay to BS EN 295 with a minimum crushing strength as follows :-
    - 150 dia. - 40 kN/m
    - 225 dia. - 45 kN/m
    - 300 dia. - 72 kN/m**OR**
  - B - Class H concrete to BS 5911. **OR**
  - C - PVC to have BSI kitemark status (certified to WIS 4-35-01) Wavin or similar approved. Maximum pipe length to be 3m.
- All pipes are to be laid soffit to soffit at manholes unless noted otherwise.
- Pipes entering manholes and road gullies shall have a flexible joint within 600 of the inside of the manhole or gully joining with a short Rocker pipe.
- All pipes to be 100 dia. unless noted otherwise.
- All works and materials to be in accordance with "Sewers for Adoption" (6th edition), bedded with a Class S granular bed and surround as a minimum requirement. Pipes within highways with cover less than 1200 to have a Class Z concrete bed and surround. Pipes within paved areas with cover less than 600 to have a Class Z concrete bed and surround. Pipes within landscaped areas with cover less than 300 to have a Class Z concrete bed and surround.
- All trenches in roads and paved areas shall be backfilled with Type 1 DOT granular sub-base material.
- All cover levels are indicative only. Covers to be set to suit camber/gradient of existing and proposed surfacings.
- The invert levels at the proposed points of connection to existing drains shall be checked **before any new drains are constructed**. Any variation to the levels shown on the drawing shall be notified to Eastwood & Partners.

- Existing surface water drainage
- Existing foul drainage
- Surface water drainage
- ACO RoadDrain100 drainage channel with rodding access units and 150 Ø roddable sump outlets.

|     |                                                                                                                           |  |  |     |     |          |
|-----|---------------------------------------------------------------------------------------------------------------------------|--|--|-----|-----|----------|
| B   | Amended to suit Architect's revised site layout. Foul drainage omitted and surface water drainage system revised to suit. |  |  | MW  | SJE | 22.10.19 |
|     | A First Issue.                                                                                                            |  |  |     |     |          |
| REV | DESCRIPTION                                                                                                               |  |  | SIG | CHK | DATE     |

TRUSTFORD

WAKEFIELD ROAD, BARNLEY

EXTERNAL DRAINAGE LAYOUT

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|                                   |                |                  |                                 |          |  |
|-----------------------------------|----------------|------------------|---------------------------------|----------|--|
| SCALE WHEN PLOTTED AT A1<br>1:250 |                |                  | DRAWING STATUS<br><b>TENDER</b> |          |  |
| DRAWN<br>MW                       | CHECKED<br>SJE | DATE<br>10-10-19 | DRAWING NUMBER<br>44407/011     | REV<br>B |  |